

**Human resources capacity building in Thailand:  
Government responses to the impact of skill labour shortage  
on economic development**

**Nakarin Chalapati**

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**Faculty of Business and Law**

**Swinburne University of Technology**

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## **Abstract**

Thailand is said to be stuck in the Middle Income Trap (MIT), a phenomenon where a country that has attained a certain level of economic growth is unable to progress further. Therefore, addressing the issue of skill labour shortage is crucial for Thailand to achieve its objective of becoming a high-income country. A skilled labour workforce plays a crucial role in economic growth by helping increase productivity of the country. Yet there is a general perception that Thailand does not meet its human resources capacity building to enable economic progress. There are several factors that cause shortages of skilled labour in Thailand, such as demographic change, economic structural change, and the mismatch between education policy and the requirements of the labour market.

Based on extant literature, this study has identified three key themes relating to skill labour shortage – education and training policies, migration policies, and substitute workforces – which are explored in the Thai context. Based on these themes, policy responses from the Thailand Government and media have been analysed, employing a qualitative research approach of documentation analysis, data triangulation and thematic analysis, which were found to be the most suitable methodologies. The data for the study were specifically sought from newspaper articles during the period 1992 to 2014. The collected data were then triangulated with government policies, prime ministerial policy statements, academic journal articles, and reports of international organisations to find the answers to the research questions.

The data analysis revealed that the three key policy themes – education and training policies, migration policies, and substitute workforces – are critical to human resources capacity building to enable further economic development in Thailand. The study in particular identified a systematic process where these themes generated a set of policy discourses; and based on these discourses, policy outcomes that require attention by policymakers are presented. In exploring the data further, the relevance of illegal migrant workers/Hill-Tribe/refugees surfaced as a new additional supportive workforce group to address the skill labour shortage issue, which has not yet been explored by extant literature.

Based on this qualitative analysis, a model for reducing the skill labour shortage in Thailand has been developed and presented in Chapter 9. The policy outcomes addressed in this research will contribute to a better understanding of human resources capacity building, and in particular to develop appropriate policies for addressing Thailand's skill labour shortage.

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## Declaration

I, Nakarin Chalapati, certify that this thesis contains no material which has been accepted for the award to the candidate of any other degree or diploma, except where due reference is made in the text of the examinable outcome. Also, to the best of my knowledge, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the examinable outcome. Furthermore, where the work is based on joint research or publications, the relative contributions of the respective workers or authors are disclosed.

In addition, this thesis has been edited by Jeanette Walton. The editing addressed only style and grammar, and not its substantive content.

Nakarin Chalapati  
Faculty of Business and Law  
Swinburne University of Technology, 2015

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# Chapter 1: Introduction

## 1.1 Introduction

After the 1997 Asian financial crisis (AFC), Thailand's competitive advantages of cheap labour cost and abundant natural resources was in direct competition with other countries in the region, such as China, Vietnam, Indonesia and the Philippines, especially in the labour-intensive industries (Abelman et al. 2001; Witte 2000; World Bank 2012). Labour costs in Thailand are often too high, which influence the labour-intensive industries to relocate their production lines from Thailand to such countries.

Based on the literature (Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012), there is concern that Thailand is stuck in the Middle Income Trap (MIT) (Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012; Likitkijksomboon 2015; Phasuk & Wann 2013).<sup>1</sup> This means that the country cannot develop its economy further to become a higher-income country, based on the World Bank's (2015b) gross national income (GNI) measurements. The ideal solution for Thailand to come out of the MIT is to move up the economic value chain from labour-intensive to technology-intensive industries.

However, the key obstacle preventing Thailand from progressing up the economic value chain to achieve its economic development goals is the shortage of skilled labour (Jantapong & Tansri 2012; JETRO 2006; Baker & Phongpaichit 2005). Technology-intensive industries need a skilled labour workforce; hence, Thailand needs to develop and upgrade its labour workforce in order to achieve economic growth.

This thesis aims to investigate human resources capacity building in Thailand by focusing on government responses to the impact of skill labour shortage on economic development. The purpose of this thesis is to explore critical factors that contribute to the skill labour shortage using thematic analysis of the Thai Government's various policy responses to this issue in the period from 1992 to 2014.

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<sup>1</sup> According to the World Bank (2015b), the low-income countries are those with a gross national income (GNI) per capita of US\$1,045 or less in 2014; the lower-middle-income countries are those with a GNI per capita of US\$1,046–\$4,125; the upper-middle-income countries are those with a GNI per capita of US\$4,126–12,735; and the higher-income countries are those with a GNI per capita of US\$12,736 or more.



This chapter provides an introduction for this thesis. It includes the research problem, research objective and research questions; rationale; timeline; ASEAN integration; definitions; and the thesis structure. All of these sections are aimed at delivering an understanding of the background of this thesis topic.

## **1.2 Research problem, research objective and research questions**

Yin (2003) has stated that identifying research questions is an important stage in the study of a phenomenon. That is, researchers should know what is being studied and what kinds of questions are being asked to secure responses to address the phenomenon. Research questions are the heart of research design, with Maxwell (1996, p. 49) pointing out that they are “what you specifically want to understand by doing your study”. In other words, research questions are “what you want to learn”, while hypotheses or propositions are “what you think is going on” (Maxwell 1996, p. 53). Research questions help researchers to have a clear idea of what data to collect and how to analyse it (Maxwell 1996). Therefore, the research questions should not be too general or too diffuse – they should cover areas such as the purpose of the study, what is already known in the study, and provide sufficient content knowledge for the building of the conceptual framework for the study (Maxwell 1996).

Research questions aim to address a specific research problem, and the research problem can be expressed in a form to indicate the method of investigation (Maxwell 1996; Yin 2003). In this study, the investigation of the research phenomenon is both deductive and inductive; the research problem is designed to enable the building of a theoretical framework for the generation of new theory. Through this study’s document analysis and extant literature, the Thai Government’s ability to address its skill labour shortage is examined.

This study’s research problem therefore addresses the Thai Government’s ability to meet its human resources capacity building, to enable economic progress. Hence, the research objective is to explore and identify how the Thai Government responds to its skill labour shortage to achieve its economic development goals.

Based on this research objective and the current gap in literature on holistic government policy formulation and implementation relating to skill labour shortage, this study addresses the main research question:

What are the Thai Government’s policy responses to the skill labour shortage to meet its economic development goals?

Based on extant literature, three themes; education and training policies, migration policies and substitute workforces, were identified that addresses the government policy responses to Thailand's skill labour shortage. Based on these themes, sub-research questions were identified as follows:

1a. What kind of education and training policies has the Thai Government implemented that respond to the skill labour shortage?

1b. What are the education and training policy suggestions from society for addressing skill labour shortage?

2a. What kind of migration policies has the Thai Government implemented that respond to the skill labour shortage?

2b. What are the migration policy suggestions from society for addressing skill labour shortage?

3a. What kinds of substitute workforces does the Thai Government need to address the skill labour shortage?

3b. How does the Thai Government maximise the use of substitute workforces to address skill labour shortage?

### **1.3 Rationale**

The modern economic development of Thailand began in 1972 when the country started its third NESD plan (1972-1976), which stated that the new focus of economic growth would be on the industrial sector (The NESD Plan 3 1972-1976). Before then, Thai economics was mostly based on agriculture; the country's main revenue came from agricultural and natural resource products such as rice, rubber, maize, teak and tin (Ouyyanont 2012; Stubbs 2005; Warr 1993), and most of the labour workforce was in the agricultural sector. For example, employment in agriculture was 83% in 1960, and 79% in 1966 of the total employment (The NESD Plan 1 1961-1966).

In 1972, Thailand began to shift its economic structure from agriculture to industry (Mukhopadhyay & Thomassin 2010). The Thai Government attracted both local and international investors to invest in its industrial sector; these investors brought capital and new knowledge to the Thai economy, particularly in the labour-intensive industries (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999; Warr 1993). The labour-intensive

industries that were invested in at the time of 1970s included textile, apparel, agricultural products and electronics; and focused on producing large amounts of low-technology (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999; Mukhopadhyay & Thomassin 2010; Warr 1993). They therefore only required a labour workforce with more basic skills in areas such as literacy and numeracy.

Thailand's competitive advantage of an extensive, low-cost labour workforce was a push factor that attracted these foreign investors (Dixon 1999; Mukhopadhyay & Thomassin 2010; Warr 1993). The expansion of the industrial sector therefore began to increase and overtook the agricultural sector, leading to a large influx of the labour workforce shifting from the agricultural to industrial sector. This growth in the industrial sector leveraged a large amount of foreign income via exports, with Thailand enjoying prosperous economic growth for the next 20 years.

However, 1997 was a turning point for Thailand when the nation was affected by the AFC. After experiencing continuous economic growth in the previous 20+ years, a large number of Thai businesses went bankrupt from the AFC, especially banks and financial firms after the Thai Government reaction with the floating of the foreign exchange rate of Baht currency (see Chapter 5).

The AFC alerted the Thai policymakers that Thailand had reached middle-income status and had to move up the economic value chain in order to maintain further economic growth. The country had to restructure its economic framework that had been based on labour-intensive industries to skilled-intensive industries such as automotive, computer, advanced technology and electronics (Branine 2011; Decharuk, Leelapornchai & Udomkerdmongkol 2009; Stubbs 2005). If the nation is to achieve high-income status, it requires a skilled labour workforce knowledgeable in areas such as information technology, with an ability to use foreign languages. Cheap labour costs was no longer a competitive advantage for Thailand, as there were many countries that were emerging as new attractive locations for foreign investors because of their cheaper labour costs, such as China, Vietnam and India (World Bank 2012). The World Bank (2012) identified Thailand's need to establish a skilled-intensive labour workforce as a prerequisite and a necessity for it to avoid the MIT.

## **1.4 Timeline**

The timeline of this research covers the period of 1992 to 2014. Even though 1997 was a turning point, in order to fully understand Thailand's modern economic development and the

impact of the skill labour shortage, this research examines the five years prior to the AFC, as well as during and after it, up until 2014. The year 1992 is an ideal starting point for this research, as the term, 'skill labour shortage', was mentioned as an issue in the NESD Plan 7 (1992-1996).

The end point of 2014 for this research timeline coincides with the overthrowing of the elected government of Prime Minister Yingluck Shinawatra by a military coup. This research examines government policies on skill labour shortage from when the term first appeared in the country's NESD plan in 1992, through to the end of the Yingluck Government in 2014. There are reasons to support this timeline, which are as follows.

Firstly, skill labour shortage was first recognised among Thai policymakers, the private sector and politicians around the late 1980s and early 1990s. The term first appeared in a newspaper article in 1989; according to *Shortage of engineers stifling industrial growth* (1989), Paron Issarasena, the President of Federation of Thai Industries (FTI) warned the government that the shortage of skilled labour such as qualified engineers and technicians would retard the country's industrial growth. There was also another prediction about a skill labour shortage in the construction industry, according to *Skilled labour export policy review urged* (1989).

The shortage of skilled labour was noticed officially by the government at around this time as well. In the Policy Statement of Prime Minister Anand Panyarachun (Anand Panyarachun's Policy Statement 1991), it was stated that the government would organise education and career training both inside and outside school in order to solve the skill labour shortage, to enable national development. The term 'skill labour shortage' also appeared in the seventh NESD plan (1992-1996), where it was noted that the shortage of skilled labour including technicians and professionals in various fields would be bottlenecks for the future development (The NESD Plan 7 1992-1996).

Secondly, the requirement of the labour market is a significant factor. Thailand had already passed the first economic structural change in 1972 when The NESD Plan 3 (1972-1976) started. The country transformed its economic structure from agricultural to a labour-intensive industrial base. This economic structural change brought significant success to Thailand (Mukhopadhyay & Thomassin 2010; Ouyyanont 2012; Stubbs 2005) – economic growth increased sharply during this 1970s period. However, the study's timeline could not include this earlier period because the requirements of the labour market at that time did not focus on

a skilled labour workforce. That is, the industries needed unskilled manpower rather than a skilled labour workforce, as demanded by the nation's industrial focus.

One of Thailand's most attractive factors for foreign investors was the large, cheap labour workforce. At that time of 1970s, as a low-income nation, Thailand did not need a skilled labour workforce to stimulate economic growth. The labour market only needed unskilled and/or low-skilled workers. Therefore, the government mainly focused on the improvement of basic skills such as literacy and numeracy of the Thai population, which filled the requirements of the labour-intensive industries.

Thirdly, the AFC in 1997 first brought to the Thai Government's attention the demand for a second economic structural change in the country's economic structure. As previously stated, the country has been perceived as being caught in the MIT, which reduces its competitive advantage. Therefore, to progress to a high-income nation, Thailand needs the necessary skilled labour workforce to support high-end industries.

### **1.5 The ASEAN integration**

The Association of Southeast Asian Nations (ASEAN) will become a single market in 2015 – the ASEAN Economic Community (AEC).<sup>2</sup> Thailand is a member of this organisation with nine other nations in the Southeast Asian region: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore and Vietnam. This single market will create free movement of capital, technology and labour within the region, which is expected to stimulate greater economic growth for all members in the ASEAN. Thus, all ASEAN members need to prepare themselves by improving policies and performances to be ready for when the AEC becomes fully effective in 2015. Having the right industrial policy framework and providing the necessary factors to enable and operate such policy will be crucial to remaining competitive within the ASEAN. The current financial crisis in Greece is a relevant example of a nation's inability to compete within a regional group due to industry policies that are not well-developed.

The demand for a skilled labour workforce will grow parallel with the ASEAN's economic advancement, which impact on individual member nations including Thailand. In Thailand, there is concern that this regional integration may further emphasise the skill labour shortage

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<sup>2</sup> According to ASEAN (2008) and reaffirmed by ASEAN (2015), the AEC will become a regional economic community. The key principles of AEC are: a single market and production base; a highly competitive economic region; a region of equitable economic development; and a region fully integrated into the global economy. One of the cooperative mechanisms of the AEC involves human resources development and capacity building.

in Thailand, as economic resources, including labour, may shift to the richer ASEAN nations such as Singapore or Malaysia (Vichiennoi 2012). Other countries in the ASEAN, including the richer nations of Brunei, Malaysia and Singapore, are also facing issues with regard to skill labour shortage. These richer nations in particular may therefore poach skilled labour from other developing countries in the ASEAN, and harm the overall region's economic growth (International Labour Organization 2008). The AEC regional integration may also bring in investment and skilled workers from neighbouring nations to Thailand. Hence, to take advantage of this potential inflow, the Thai Government needs to prepare its Thai workforce to be skilful. If such changes are not introduced, Thailand may well remain in the MIT where the country only attracts low-end manufacturing industries.

## **1.6 Definitions**

### **1.6.1 Skilled labour**

Based on the literature, there are various definitions and categories relating to skilled labour which are dependent on the personal perceptions of each scholar. For example, Martinez-Fernandez and Choi (2012) identified three types of skilled labour: higher-skilled such as professionals, managers and technicians; medium-skilled including clerks, trade workers and machine operators; and lower-skilled such as agricultural and fishery workers, elementary occupations, and service workers. In contrast, Jantapong and Tansri (2012) defined three types of overall labour: skilled labour, which is someone with a Bachelor degree and over; semi-skilled labour as someone with a Year 12 qualification or a certificate or diploma in vocational education; and unskilled labour, which is someone with a Year 9 qualification and lower.

In relation to the 'highly skilled worker' definition, Iredale (2000) identified this as university graduates or very experienced workers in a particular field; while Skeldon (2002) believed there are three key identifiers: educational background; professional qualifications; and work experience. Skeldon (2002) also argued that students in tertiary education can also be classified as 'highly skilled', even though they may lack work experience. In contrast with this, Iguchi (2002) argued that such students that have not yet completed their studies, and neither have work experience nor explicit knowledge of technology, are in the middle of the learning process, and are therefore are not qualified to work in some areas, without supervision. In line with this, Iguchi (2002) classified highly skilled workers have to have at least one of the following categories: educational background (university degree); professional qualification; work experience in occupations or vocational activities; combinations of at least two of the previous categories; and company-specific knowledge.

Based on such literature, the definition of 'skilled labour' in this thesis includes higher-skilled and medium-skilled (or semi-skilled) workers. In terms of education, any person who has a Year 12 qualification, a certificate or a diploma in vocational education, or a Bachelor degree and over, was identified as skilled labour because they have qualifications that are higher than basic education which requires only basic literacy and numeracy. In addition, work experience also has an influence on this study's skilled labour definition. Any workers who are holding senior positions should also be counted as skilled workers. In contrast, 'low-skilled labour' is defined as any worker with Year 9 qualifications and lower, because they have only received basic education.

The definition of 'skill labour shortage' is reasonably straightforward. That is, the shortage of skilled labour occurs when there is no adequate skilled workforce to meet the requirements of the labour market (International Labour Organization 2013; Richardson 2007). In Thailand, as mentioned earlier, a shortage of skilled labour has been encountered, which is the key obstacle for the nation's economic development.

### **1.6.2 Economic development**

The term 'economic development' relates to the accomplishment of sustainable development in the standards of living of a nation (Porter 2000). Economic development needs to be associated with economic, cultural and political factors to effect structural and institutional transformations of societies for the purpose of economic progress and poverty alleviation (Todaro & Smith 2009). It is perceived as involving many aspects such as maintaining sustainable and generous development growth, increasing income levels, poverty alleviation, increasing employment, improving income distribution, providing basic social services (education, housing and sanitation), enhancing labour and capital productivity, and participating in global markets (Musai 2011; Todaro & Smith 2009).

In other words, economic development can help to improve the standard of living of people. The government is an important player in the economic development process, often making decisions to transform the economic structure and to develop and improve all areas of the public structure such as economic, political and social wellbeing for better living conditions for the nation's people (Nafziger 2005; Robbins 2012; Todaro & Smith 2009).

It has also been pointed out that structural transformation is the prerequisite behind economic development (Memedovic & Lapadre 2010). Such structural change can shift an economy from primary production to skilled-intensive, which helps create employment. Hence, structural transformation is the driving force behind the industrial shift for economic progression. When

a country's industrial sector moves up the value chain from manufacturing to skill- and technology-intensive, there is a greater demand for skilled workers. Thus, the country's human capital needs to be educated and trained for such new knowledge and updated technologies.

## **1.7 Thesis structure**

In Chapter 2, the discussion is based on investigating the relationship between foreign direct investment (FDI), economic growth and skilled labour in achieving economic development. Chapter 2 also aims to discuss topics such as factors attracting FDI, the knowledge spill-overs of multinational corporations (MNCs) and the absorptive capacity of a host country<sup>3</sup>, which are the main contributing factors that affect economic growth and development.

Chapter 3 aims to examine government policy responses from both developed and developing countries on skill labour shortage. Based on the extant literature, and document analysis of government policies, these policy responses have been categorised into three main themes: education and training policies; migration policies; and substitute workforces. In each main theme, there are a variety of policy discourses that are discussed, and specific assumptions that have been developed as guidelines to analyse the discourse outcomes of each policy theme in Chapters 6 to 8.

Chapter 4 provides a discussion on this study's conceptual framework, research methodologies and research methods. As this research is qualitative and Thailand was selected as the case study, the research methodologies best suited to study the phenomenon of skill labour shortage were narrative inquiry and case study approaches. The research aims to investigate the various policies of the Thai Government in addressing its skill labour shortage; hence, the data is from various sources. Research methods are documentation analysis, data triangulation, and thematic analysis.

In Chapter 5, the causes and effects of skill labour shortage on Thailand's progression to achieve economic development are discussed. This chapter aims to explain how local factors such as economic structural change, a decline in population growth, and mismatches between education policy and the requirements of the labour market underpin Thailand's MIT predicament. In addition, a general background on the Thai economy since before 1960s until 2014 is provided.

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<sup>3</sup> Host country is a country who receives new knowledge or technology transfers through FDI from MNCs (Keller 2004).



Chapter 6 strives for answers to the study's first set of sub-research questions – What kind of education and training policies has the Thai Government implemented that respond to the skill labour shortage? What are the education and training policy suggestions from society for addressing skill labour shortage? – Hence, the education and training policies of the Thai Government from 1992 to 2014 are analysed and discussed.

In Chapter 7, the migration policy of the Thai Government from 1992 to 2014 is analysed and discussed, in answer to the study's next set of sub-research questions: What kind of migration policies has the Thai Government implemented that respond to the skill labour shortage? What are migration policy suggestions from society for addressing skill labour shortage?

The focus of Chapter 8 is then on substitute workforces, striving for answers to the last set of sub-research questions: What kinds of substitute workforces does the Thai Government need to address skill labour shortage? How does the Thai Government maximise the use of substitute workforces to address skill labour shortage?

Chapter 9 next provides data analysis and discussion of the study's three main policy themes: education and training policies; migration policies; and substitute workforces. The policy discourse outcomes of each policy theme in addressing skill labour shortage are also discussed. This chapter concludes with a series of theoretical frameworks with research propositions to address each of the identified themes, as well as a final theoretical model for reducing the skill labour shortage in Thailand.

Chapter 10 provides the conclusions and recommendations to this thesis, including a research overview, summary of data analysis and policy implications, implications for future studies, and limitations of the study.

## **1.8 Summary of the chapter**

Thailand is facing a skill labour shortage problem which is a barrier to its economic development. In line with this, the country is losing its competitive advantage on labour-intensive industries to neighbouring countries. Hence, Thailand needs to increase its competitive advantage in the global market by moving up the economic value chain to technology-intensive industries. This thesis therefore focuses on human resources capacity building in Thailand, especially the impact of the skill labour shortage on economic development.

This introductory chapter has provided background knowledge on this thesis, including the research problem, research objective and research questions; rationale; timeline; ASEAN integration; definitions; and the overall structure. This chapter's background information has been used to explain the significance of conducting this thesis, while the outcomes of this study, as discussed in others chapters, are expected to provide an overall improved understanding of human resources capacity building.

## **Chapter 2: Foreign Direct Investment, Economic Development and Skilled Labour**

### **2.1 Introduction**

In this chapter, the relationship between FDI, economic growth and skilled labour in achieving economic development will be discussed. The discussion will also involve investigating the relationship between FDI, government policies and knowledge spill-overs of MNCs, which are the main contributing factors that affect economic growth and development (Borensztein, Gregorio & Lee 1998; Kok & Ersoy 2009; Lall & Narula 2004; Noorbakhsh, Paloni & Youssef 2001; OECD 1999; Wint & Williams 2002).

The chapter starts by examining the relationship between FDI and economic growth via three key elements: funding; technology/knowledge transfer and production spill-overs; and increasing exports and access to new markets. The relationship between a skilled workforce and economic growth is next discussed, providing the context of the importance of a skilled workforce to economic growth. The factors that attract FDI are then reviewed, based on the extensive literature available.

In the sections that follow, the relationship between FDI, MNCs, the role of government, and knowledge spill-overs will be examined. These discussions will emphasise the influence of knowledge spill-overs while addressing the following questions: How do MNCs contribute to the host country's economic growth through their FDI? What is the government's reaction in knowledge spill-overs? Lastly, a general discussion of absorptive capacity will be provided. In the knowledge spill-overs activity, skilled labour is a very important factor for the host country to absorb the transfer of new technology and knowledge (Borensztein, Gregorio & Lee 1998; Lall & Narula 2004); thus, the discussion will cover the essential elements in relation to absorptive capacity.

### **2.2 Foreign direct investment and economic growth**

Noorbakhsh, Paloni and Youssef (2001) observed that during the 1950s, the availability of natural resources in developing countries was the key attractive factor for FDI. Later in the 1960s, FDI in most developing countries moved from natural resources to the manufacturing sector; then in the 1980s, the FDI shifted again into services and technology-intensive manufacturing (Noorbakhsh, Paloni & Youssef 2001).

Studies show that for developing countries, FDI is an important tool contributing to economic growth, such as providing funding for skills development; leveraging new technology; improving organisational and managerial practices; increasing export and accessing international markets; creating employment and improving local productivity (Borensztein, Gregorio & Lee 1998; Enderwick 2005; Kok & Ersoy 2009; Kottaridi & Stengos 2010; Lall & Narula 2004; Noorbakhsh, Paloni & Youssef 2001; Thee 2001; Wong & Tang 2011).

Yet FDI is not only beneficial to developing countries, as confirmed by developed countries such as those in the Organisation for Economic Co-operation and Development (OECD) which aggressively pursue it. FDI is seen as a significant driver in the economic growth of OECD countries (Andraz & Rodrigues 2010). According to Todaro and Smith (2009), the importance of FDI resides in its ability to fill gaps between the domestically available resources of savings, foreign exchange, government revenue and human capital skills, and the desired level of these resources necessary to achieve growth and development targets.

There are notable differences between economic development and economic growth: economic development focuses on changing the process or the way that output or products and services are produced; while economic growth focuses on increasing the quantity of the nation's production or income per capita (Nafziger 2005; Robbins 2012). Despite such differences, Acemoglu (2012) argued that small changes in economic growth can have a proportionately greater impact on the wellbeing and living standard of a country, which remains at the core of economic development.

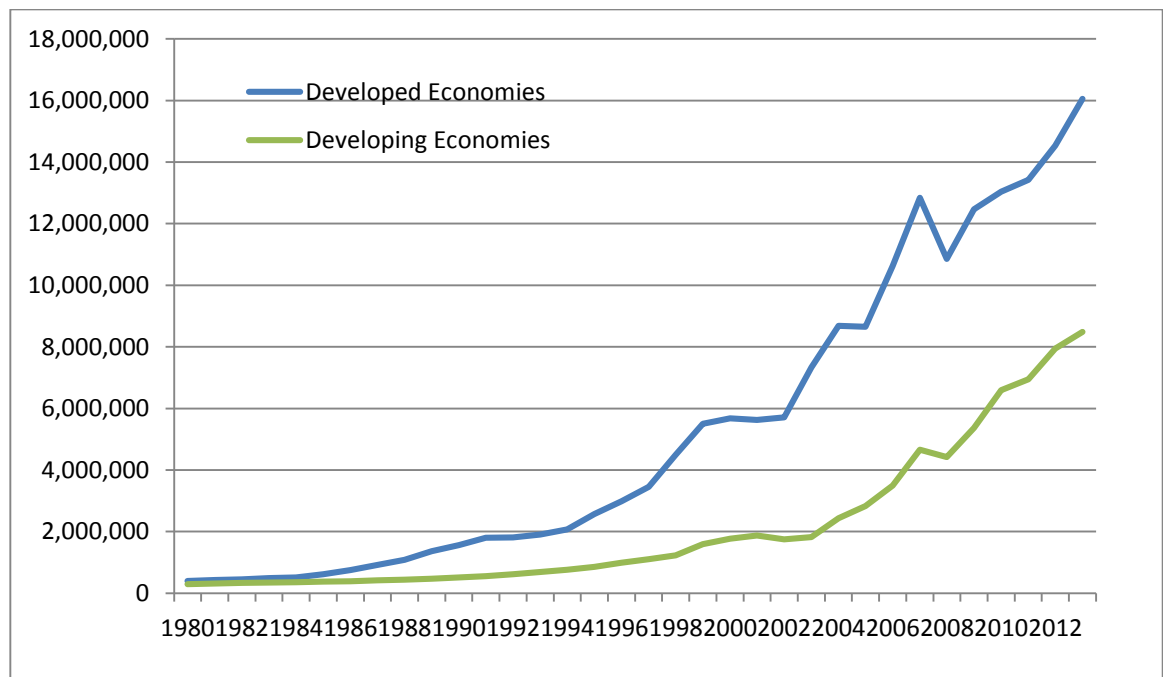
In this study, to unravel the relationship between FDI and economic development, a comprehensive understanding first needed to be established of how FDI drives economic growth. In doing so, this study identified three key areas within the extant literature detailing the role of FDI in economic growth: funding; technology/knowledge transfer and production spill-overs; and increasing exports and access to new markets.

### **2.2.1 Funding**

Looking first at the role of FDI in providing funding for economic growth, the foreign activities of MNCs – inherently linked with the process of shifting operations offshore – generate significant capital flows into both developing and developed countries (Afriyie 1998; Lall & Narula 2004; Morris & Aziz 2011; Noorbakhsh, Paloni & Youssef 2001; OECD 1999; Todaro & Smith 2009). FDI, compared with other types of international capital flows such as portfolio investment and bank lending, is a stable source of finance (OECD 1999). For example, during

the AFC in 1997, portfolio investment and bank lending decreased from US\$110 billion in 1996 to \$14 billion in 1997, while FDI in Southeast Asia remained unchanged (OECD 1999).

Graph 2.1 below shows the growth of FDI inward stocks in both developed and developing economies from 1980 to 2013. The amount of foreign capital inflows to the developing economies has a significant impact on gross domestic product (GDP) growth rates. In line with this, the World Investment Report 2006 (United Nations 2006) showed MNCs as the most important factor behind FDI – in 2005, MNCs hired 62 million workers, created more than US\$4 trillion of exports, and generated US\$4.5 trillion in value add. This is a very high impact on economic growth. Such capital flows between countries generate significant economic activity, providing an external stimulus for developing domestic business activities (Afriyie 1998; Enderwick 2005; OECD 1999).



**Graph 2.1: Foreign direct investment inward stocks 1980-2013 (US\$ million)**

Source: UNCTAD (2015) -

<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>

Moreover, the inflow of foreign capital will reduce the need for borrowing, which will help to reduce the debt service ratio<sup>4</sup>. If a country has a high debt service ratio, it will negatively affect

<sup>4</sup> 'The debt service ratio is the ratio of debt service payments made by or due from a country to that country's export earnings' (<http://stats.oecd.org>).

the country's economic growth because the country will have to pay its foreign debt with its export revenue (Metwally 2004). Therefore, foreign capital inflows will reduce the country's need to borrow for investment by transferring capital, including knowledge and technology, to the host country. The investment of foreign capital will increase domestic productivity, which most local firms cannot create themselves (OECD 1999).

The relationship between FDI, capital and economic growth has been established empirically across a number of studies. Afriyie (1998), for example, argued that foreign capital has the capacity to address capital shortfalls often evident in developing countries. In addition, Alfaro et al. (2004) pointed out the advantages of FDI. Firstly, this investment leads to organisational improvements such as reorganising structures, buying new machines and hiring more staff. Secondly, the existence of financial resources can nurture an increase in potential entrepreneurs who could possibly also become exporters. Thirdly, the accessing of foreign funding can provide opportunities to both existing local firms to enlarge their capacities to produce industry-relevant inputs, and new local firms to start production to supply upstream and downstream inputs for the industry.

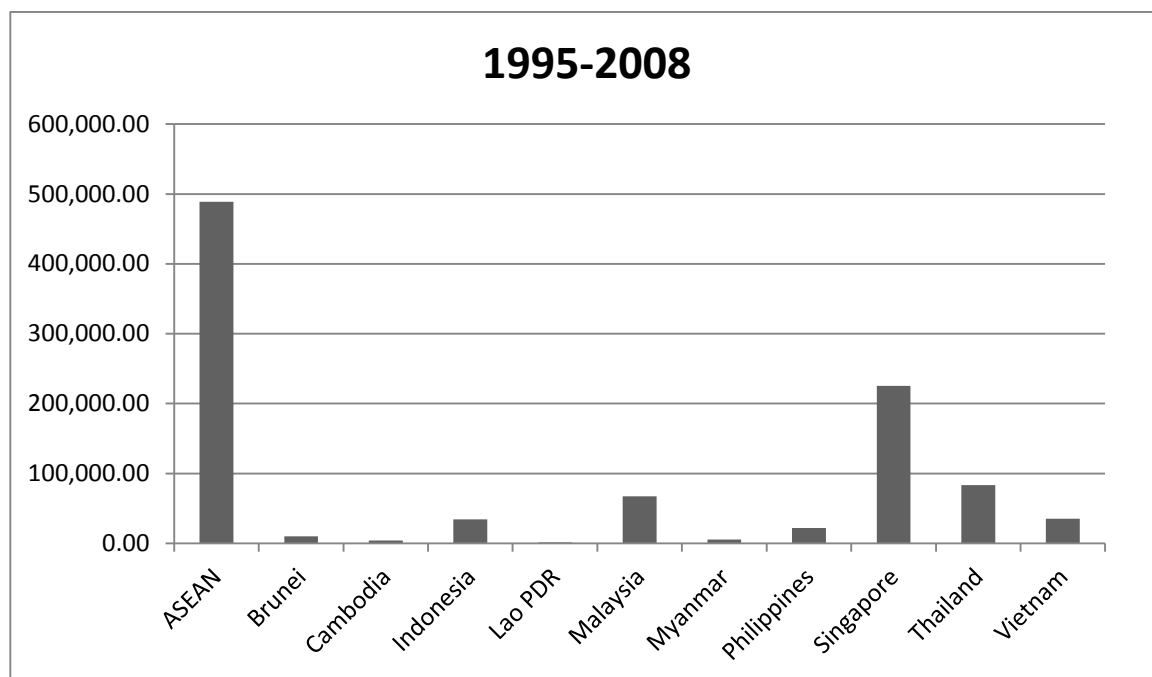
Similarly, Todaro and Smith (2009) suggested that FDI is an important source of funding that has the capacity to fill the gap between domestic savings and targeted investments. The benefits of these capital inflows for economic growth revolves around expanding the productive capacity of the host country by directing investments in new technology, and the training and hiring of new staff often required when setting up facilities (Alfaro et al. 2004; Metwally 2004; OECD 1999). Such expansion also has the potential to increase the level of global competitiveness in the host country (OECD 1999), in tandem with knowledge and technology transfer – generating the ability of industries to expand internationally (OECD 1999). MNCs, for example, could use their worldwide networks to export products to their global affiliates; thus, the host country will increase its export revenue which leads to economic growth (OECD 1999).

Enderwick (2005) points to the importance of FDI in industries such as automotive which requires large amounts of capital to invest. Such capital inflows for the automotive industry could have a significant impact on the host country's economy. Enderwick (2005) also gave an example of a study on the automotive industry's FDI in Brazil, Mexico, India and China, which demonstrated positive impacts in the areas of productive capacity, labour productivity growth and spill-overs. The automotive industry is an enormous industry which involves diverse areas

such as the transfer of knowledge and technology, increases in exports and new markets, and increases in domestic productivity and employment. The industry generally requires large amounts of capital to operate, and most developing countries' domestic savings cannot fulfil these production needs. Therefore, foreign capital is essential to helping developing countries set up an automotive industry via the transfer of capital, knowledge and technology.

Another example that highlights the importance of the relationship between FDI and capital to economic growth is the rapid export-led growth of ASEAN countries. Prior to the mid-1980s, natural resources was a critical element that assisted economic growth in ASEAN (Reinhardt 2000). After the inflow of FDI into ASEAN countries commenced in the 1980s, such as to Singapore, Malaysia, Indonesia, the Philippines and Thailand, the nations' attention shifted to labour-intensive manufacturing (Numnak 2005; OECD 1999; Rae & Witzel 2008; Reinhardt 2000). These inflows of FDI were mostly from Japan and East Asia's newly industrialised countries (NICs) such as Taiwan, South Korea and Hong Kong; particularly in the electronic and garment industries which led to rapid economic growth in ASEAN in the late 1980s (OECD 1999; Reinhardt 2000). Without such foreign capital, economic growth rates in ASEAN would not have increased as rapidly as they have (Athukorala & Waglé 2011; OECD 1999; Reinhardt 2000).

Graph 2.2 below shows the FDI inflows into ASEAN countries from 1995 to 2008. It indicates that Malaysia, Singapore and Thailand have been the main three FDI recipient countries in ASEAN during this period. Between 1995-2008, Singapore had the largest share of FDI at 46.1%, followed by Thailand (17.0%) and Malaysia (13.8%); while the other ASEAN nations had shares of less than 10% each (ASEAN 2009).



**Graph 2.2: FDI inflows into ASEAN countries (US\$ million)**  
**Source: ASEAN (2009); UNESCAP (2010)**

In Singapore, manufacturing and services are the two major industries which have been heavily invested in by MNCs, receiving a large amount of FDI. The importance of both industries has been described by the Singapore Economic Development Board as the twin engines of the country's economic growth (Wong & Tang 2011). In 2008, it was reported that FDI in Singapore had a share of 89.7% (\$16,183 million) in the manufacturing and services sectors, compared with a share of 10.3% by local investment (\$1,863 million) (Wong & Tang 2011).

From these general discussions, it could be concluded that foreign capital can help the inadequacy of domestic saving to fill the investment gap (Enderwick 2005; Lall & Narula 2004; OECD 1999). Such foreign capital can help increase global competitiveness levels, complying with increases in productivity and the potential to generate exports, which in turn brings more revenue back into the country, and help generate economic growth (Metwally 2004; OECD 1999).

### **2.2.2 Technology/knowledge transfer and production spill-overs**

The second key factor which also plays an important part in FDI as a contributor of economic growth is technology/knowledge transfers and production spill-overs. Technology diffusion is a significant factor in economic development, providing a competitive edge to a nation (ADB 1995; Ricken & Malcotsis 2011). FDI through MNCs will transfer technology, knowhow and



managerial skills to the host country, which cultivates economic growth (Borensztein, Gregorio & Lee 1998; Lall & Narula 2004; Metwally 2004; Noorbakhsh, Paloni & Youssef 2001; Todaro & Smith 2009).

Developed countries such as Germany, Switzerland, Sweden, Spain, Ireland, Japan and Korea have increased standards of living even though they have high wages, labour shortages, lack of natural resources, and appreciating currencies; technology is the reason for these long-term growth economies (ADB 1995; Ricken & Malcotsis 2011). Kok and Ersoy (2009) also pointed out that the proactive and effective 'best practice' of international transfers is essential to economic growth, and FDI plays a major role in driving this successful economic growth through knowledge and technology transfers to local firms (Alfaro et al. 2004). However, developing countries also need to create a local capacity, along with scientific research skills, to develop their own technology (ADB 1995).

Ferretti and Parmentola (2010) noted that knowledge transfers or spill-overs do not automatically happen when FDIs are introduced to a nation. It also depends on factors such as MNC strategies, characteristics of the local firms, channels used for knowledge and technology transferring, and domestic technology investments (Keller 2004; Lall & Narula 2004). Local absorptive capacity is also a main factor as confirmed by Lall and Narula (2004), who believed this needs to be developed to attract FDI and increase technological spill-overs from MNCs. Technology transfers via FDI are of most benefit to developing countries – exports may encourage economic growth in the long term, while potential technology transfers support sustainable development by increasing local capabilities (OECD 1999).

FDI, through the existence of MNCs, can improve local productivity by training local staff who may later move to local firms, providing new technologies or technical assistance, encouraging the need for local inputs to benefit local upstream and downstream businesses, and creating pressure on local firms to improve their efficiencies (Ferretti & Parmentola 2010). In addition, the subsequent increase of domestic production will lead to further economic growth and development of the economy, including skill and technology growth, which can provide the country with a competitive advantage (Andraz & Rodrigues 2010).

Hanson (2001) believed that the inflows of FDI by MNCs can also encourage the development of domestic upstream and downstream industries by establishing forward and backward linkages. That is domestic upstream and downstream industries have opportunities to supply

inputs to the FDI firms; and the foreign firms could help domestic firms to upgrade their technologies and skills, nurturing improved productivity, which then leads to economic growth.

It has been argued that human capital is the main factor in knowledge and technology transfers (Keller 2004; Xu 2000). In a study of 69 developing countries over the two decades, it was indicated that FDI stimulates greater economic growth when the host country reaches a minimum threshold stock of human capital, which is 0.52 years of male secondary school attainment (Borensztein, Gregorio & Lee 1998)<sup>5</sup>. In turn, Xu (2000) argued that in order to benefit from FDI, the minimum threshold stock of human capital the host country is required to reach is 1.9 years of male secondary school attainment. Xu used data from the Bureau of Economic Analysis (BEA) of the US Department of Commerce, involving 40 countries from 1966-1994, including 20 developed countries and 20 less-developed countries<sup>6</sup>. Xu (2000) believed that these minimum threshold differences between the two studies are because Borensztein, Gregorio and Lee's estimate number focuses on the existence of MNCs in a host country, while his relates to knowledge and technology transfers by MNCs.

Moreover, these differences may be because Borensztein, Gregorio and Lee used data from developing countries only, while Xu used data from both developed and developing countries. Thus, the result from Borensztein, Gregorio and Lee's study could indicate a lower level of minimum threshold stock of human capital than Xu's study because the number of educated in a developing country's population is lower than in a developed country. However, both studies demonstrate that the higher the number of minimum threshold stock of human capital in the host country, the greater the impact of knowledge and technology transfers from FDI into domestic economic growth.

From the above discussion on technology/knowledge transfers and production spill-overs, we may summarise that while FDI can stimulate economic growth in the short run, and exports can encourage economic growth in the long run, a country cannot achieve sustainable economic development without the existence of knowledge and technology transfers.

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<sup>5</sup>Borensztein, Gregorio and Lee (1998) used the data from OECD's publication *Geographical Distribution of Financial Flows to Developing Countries*; however, they did not specify the list of the 69 developing countries that provided the data.

<sup>6</sup>The 40 countries were Canada, Costa Rica, Dominican Republic, Mexico, Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Venezuela, Hong Kong, India, Israel, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, UK, Australia, and New Zealand.

However, to manage foreign knowledge and technology transfers effectively, local absorptive capacity is the key to success, as human capital is the most important factor in the process.

### **2.2.3 Increasing exports and access to new markets**

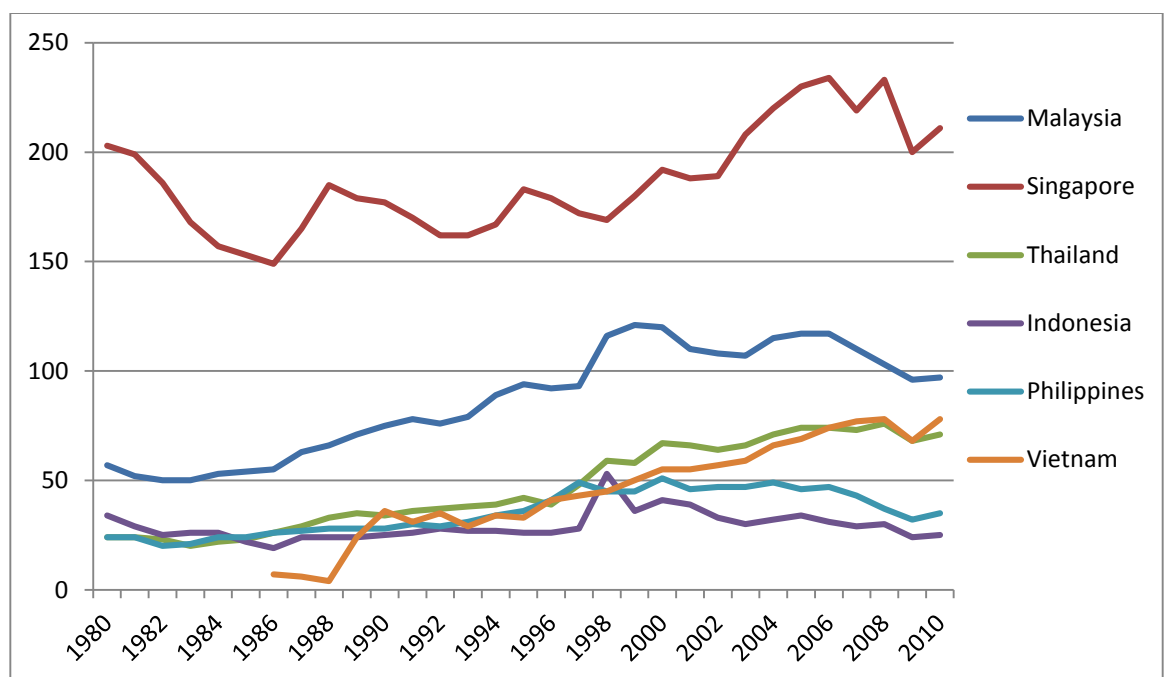
Increasing exports and international markets is the last factor which is stimulated by the role of FDI on economic growth. Andraz and Rodriques (2010) suggested that there is an interrelationship between FDI, exports and the growth of a domestic market, which complement each other. The inflow of FDI cultivates economic growth in the domestic market through an increase in exports; it also brings in capital, new ideas, and knowledge and technology (OECD 1999). Such growth in the volume and quality of exports provides stimulus for specialisation in goods and services, which often leads to an expansion of domestic production both upstream and downstream, which then encourages economic growth in the domestic market, culminating in further attraction of FDI (Andraz & Rodrigues 2010). Moreover, the host country's increased revenue from exports can help the country to pay off its foreign debt (Metwally 2004). In addition, the study by Andraz and Rodriques (2010) provided sufficient evidence to suggest that FDI stimulates economic growth in the short run, while exports encourage economic growth in the long run.

It has been argued that MNCs are more export-oriented than local firms (Kneller & Pisu 2004); thus, they are more likely to use FDI to expand the export industry via new international markets – of benefit to the host country's export capacity and economic growth (Metwally 2004). It has also been argued that higher productivity and more sophisticated technology based on FDI will create competitiveness among the local firms, which could lead to knowledge spill-overs (Kneller & Pisu 2004).

ASEAN is generally perceived as a successful regional body, after achieving relatively high economic growth since the 1980s; the FDI has been the key factor in spearheading this export-led growth (OECD 1999). As an example, Thailand and Malaysia have transformed their economic structures from agricultural to industrial, and are now manufacturing goods exporters (Daquila 2005; OECD 1999; Szirmai 2012). These two countries are also similar in terms of achieving economic growth via export-led industries, particularly electronic goods and computer parts (OECD 1999; Reinhardt 2000). As another key ASEAN member, Singapore is often regarded as the most successful; its growth in exports has doubled GDP growth since 1980. Singapore has been receiving the most FDI in the region; thus enabling the country to expand its export capacity (Wong & Tang 2011; Yew, Yong & Tan 2010). In line with these ASEAN nations, Vietnam is also growing rapidly – exports growth has been increasing every

year since the 1990s. The garment and textiles industries have played an integral role in Vietnam’s export development (Mirza & Giroud 2004) – both industries are labour-intensive, and the country has a large enough population to meet this demand. It is has previously been revealed that one-fifth of FDI in Vietnam relates to intraregional flows from main players; Singapore, Malaysia and Thailand (Mirza & Giroud 2004).

Graph 2.3 displays the GDP share of goods and services in ASEAN countries from 1980-2011. It compares the Philippines, Indonesia, Malaysia, Singapore, Thailand and Vietnam – all original members excluding fast-growing Vietnam.



**Graph 2.3: Exports of goods and services in ASEAN countries (% of GDP)**  
Source: World Bank (2015) - <http://data.worldbank.org/indicator>

In summary, an expansion of new markets and export activities is likely to increase productivity, based on both FDI export-led industries that help develop local upstream and downstream businesses supplying inputs for the industries, and the direct and indirect creation of competitiveness among local firms which can lead to knowledge spill-overs. As previously discussed, a skilled workforce is the most important factor in the knowledge spill-overs, which will be further examined in the next section.

### **2.3 Skilled workforce and economic development**

Economic development is the main focus for most governments, people's standard of life can be increased via the development of the nation's economy (Acemoglu 2012). In turn, a skilled workforce is an influential driver of economic development, leverage both the creation and application of knowledge (World Bank 2012). The economic progression of a nation depends on the ability of its skilled workforce to invent, innovate and adapt – abilities that are dependent on the availability of skills via education and work experience, as well as work attitudes (Banks 2010). It has also been suggested that a skilled workforce together with good education and health, and other positive human abilities increase productivity (Todaro & Smith 2009). In addition, Abella (2006) argued that a skilled workforce is the key to economic development, rather than the natural resource. That is, labour workforce has to be effective or skilful to manage the capital, knowledge and technology, in order to influence the economic development of a nation. To be skilful or effective, human beings need to be trained or to have received proper education and valuable work experience. The impact of education and skills on economic development is described in an International Labour Organization (ILO) report as follows:

Education and skills are critical for enhanced productivity, employment growth and social development. A good-quality workforce equipped with the knowledge, skills and attitudes required by the economy can drive national competitiveness and spur economic development (International Labour Organization 2008).

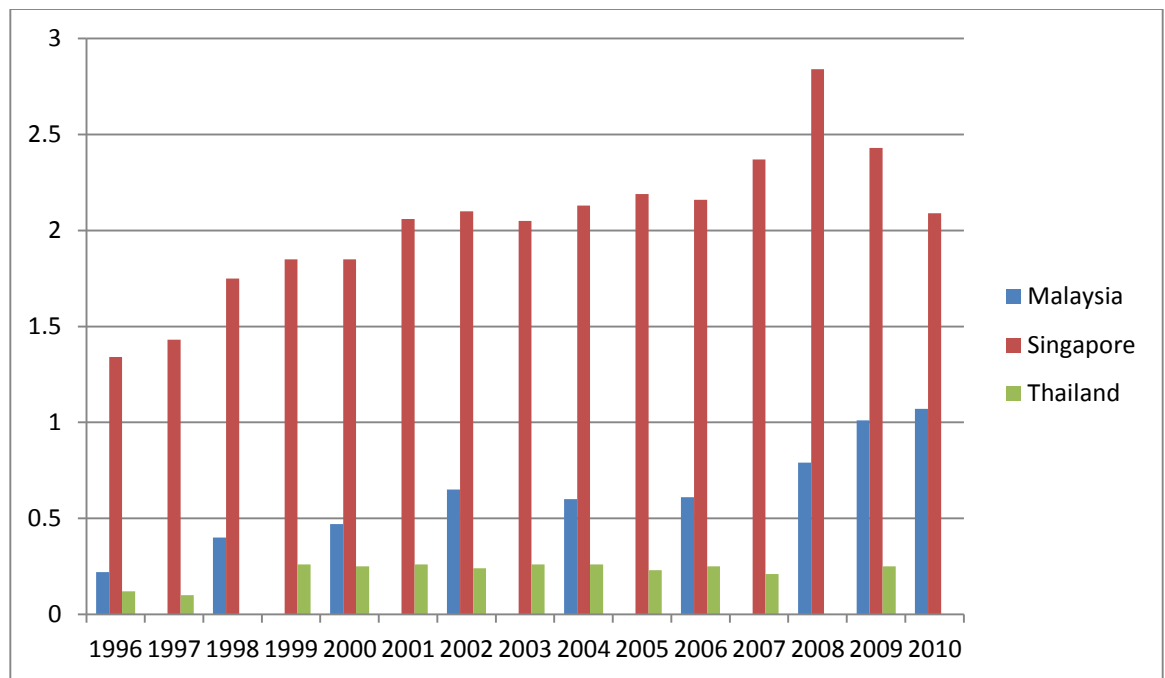
Education consistently plays a crucial role in developing skilled workforces, with Young (2011) suggesting that investment in education helps build a knowledge economy and a knowledge society. He also stated that investment in higher education and research and development (R&D) can lead to high quality of research and high-value-added export industries. In line with this, it has been suggested that if a nation has low levels of education in its human capital, this can have an adverse effect on economic growth and may lead to increased poverty (OECD 2002).

In contrast, if a country is keen to invest in its labour workforce via education, and that investment is effective, then the country will achieve faster economic growth (Brown, Lauder & Ashton 2008; Ho & Ge 2011; Kalirajan & Shantakumar 1998; Lowell 2001; Osman-Gani & Chan 2009). To achieve economic development, an effective labour workforce is necessary to upgrade existing skills and to learn new skills. The requisite skills are significant in terms of a

country's capability to produce new technology and innovation, which leads to the creation of jobs and further economic development of the country (Banks 2010; Galagan 2010; Nieuwenhuis 2012; Richardson 2007). Countries with a highly skilled workforce can produce higher levels of national income and higher rates of economic growth (Richardson 2007). Given that an effective and skilful workforce is a must for economic development, and that both developed and developing countries are in pursuit of this scarce resource, there is global competition to attract skilled labourers (Abella 2006; Iredale 1999). Thus, skill labour shortage is the main obstacle, particularly in developing countries, to achieving economic development.

In line with the need for a skilled workforce, Tremblay (2005) argued that R&D and innovation are the main driving forces of sustainable economic growth, especially in knowledge-based economies. Thus, a link between R&D investment, innovation, economic growth and development must be established in order to achieve long-term growth and development (Nieuwenhuis 2012; Tremblay 2005). Hence, a skilled workforce plays an important role in R&D and innovation, in order to progress economic development. The following graphs show the relationship between GDP and the skilled workforce such as researchers and technicians in R&D, including the amount of expenditure in R&D.

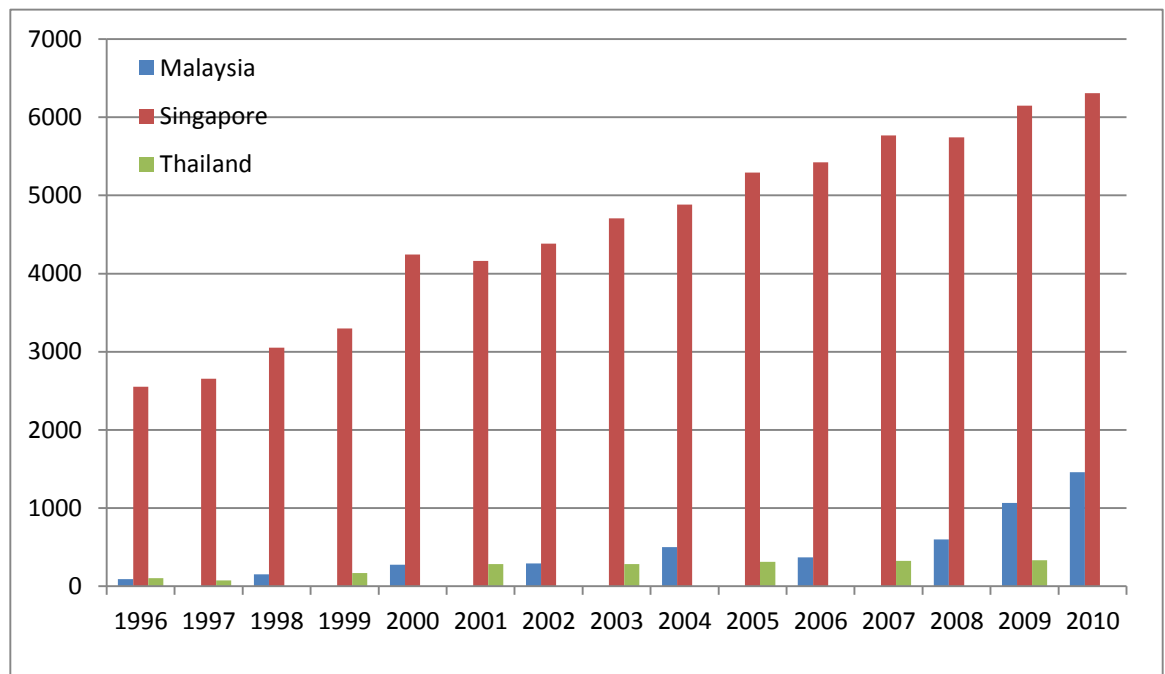
Graph 2.4 compares R&D expenditure in Thailand, Singapore and Malaysia. It shows that R&D expenditure by the percentage of GDP in Singapore is very high compared with Malaysia and Thailand. Singapore also has the highest percentage of R&D; for example, its R&D expenditure in 2009 was 2.43%, followed by Malaysia at 1.01% and Thailand at 0.251%.



**Graph 2.4: Research and development expenditure between 1996-2010 in Malaysia, Singapore, and Thailand (% of GDP)**

Source: World Bank 2012 - <http://www.worldbank.org>

Graph 2.5 shows the number of researchers (per million) in the R&D sector across Thailand, Singapore and Malaysia. R&D researchers are defined as professionals engaged in the conception or creation of new knowledge, products, processes, methods or systems, and in the management of the projects concerned. Postgraduate PhD students engaged in R&D are also included. In 2009, Thailand had 332 researchers, compared with 1,065 researchers in Malaysia and 6,150 in Singapore. This graph indicates that Thailand is far behind both Singapore and Malaysia in maintaining and growing a skilled workforce including R&D researchers.

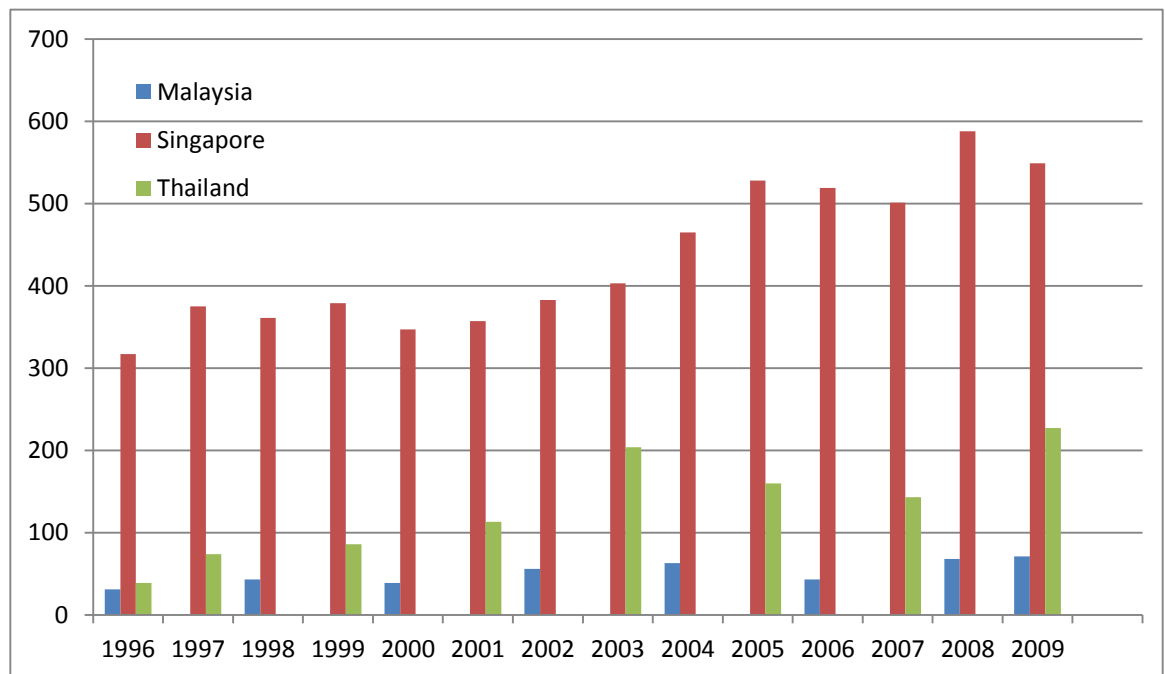


**Graph 2.5: Researchers in research and development between 1996-2010 in Malaysia, Singapore, and Thailand (per million people)**

Source: World Bank 2012 - <http://www.worldbank.org>



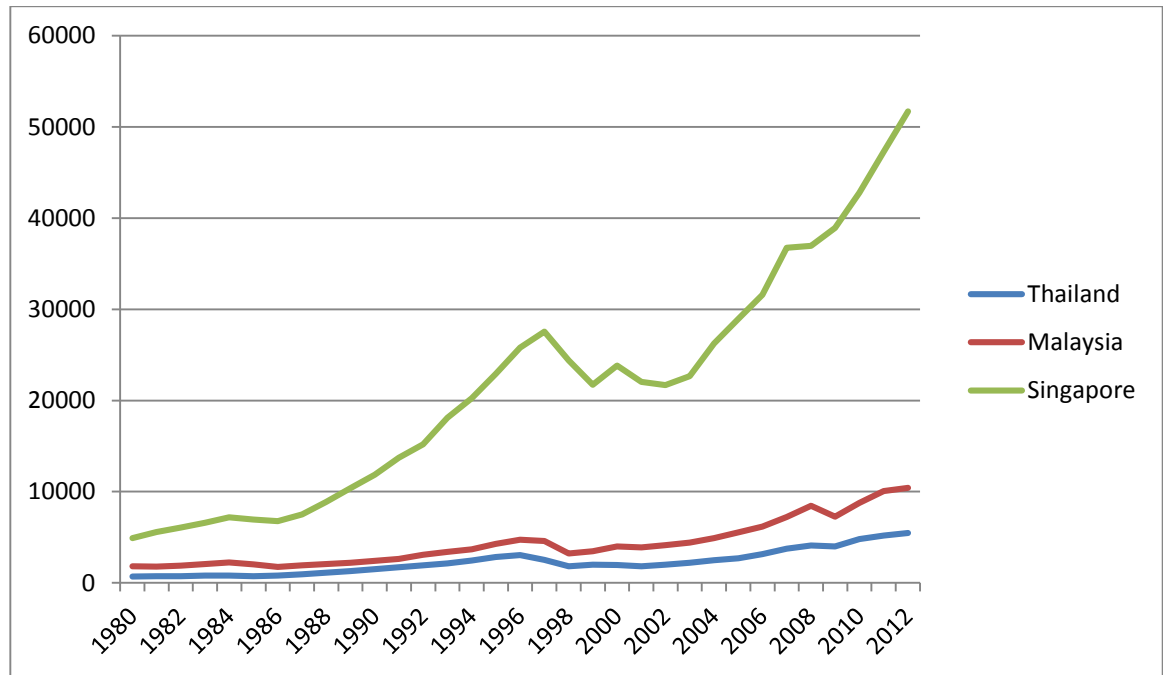
Graph 2.6 shows the number of technicians in R&D across Thailand, Singapore and Malaysia. R&D technicians and equivalent staff are those whose main tasks require technical knowledge and experience in engineering, physical and life sciences (technicians), or social sciences and humanities (equivalent staff). They generally participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, normally under the supervision of researchers (World Bank 2015). The graph indicates that Singapore is again the leader ahead of Malaysia and Thailand in terms of a skilled workforce involving R&D technicians. However, Thailand has more of this type of skilled workforce than Malaysia.



**Graph 2.6: Technicians in research and development between 1996-2009 in Malaysia, Singapore, and Thailand (per million people)**

Source: World Bank 2012 - <http://www.worldbank.org>

Graph 2.7 compares GDP per capita in Singapore, Malaysia and Thailand from 1980 to 2013. Dividing GDP per capita by each nation's population, the graph clearly indicates that Singapore is far ahead of both Malaysia and Thailand.



**Graph 2.7: GDP per capita in Singapore, Malaysia and Thailand 1980-2012**  
Source: World Bank (2015) - <http://data.worldbank.org/indicator>

The above graphs indicate that Singapore, which spends more on R&D and has more researchers and technicians, experiences greater economic growth than Thailand and Malaysia. Both Thailand and Malaysia with lower skilled workforces, also have less GDP growth than Singapore. Interestingly, Thailand has more R&D technicians than Malaysia, yet spends less on R&D and has lower economic growth than Malaysia. This indicates that the number of technicians does not always equate to strong economics; R&D expenditure and R&D researchers are more influential than R&D technicians.

Based on the extant literature, the importance of a skilled labour workforce to attract and develop both inward and outward FDI and promote sustained economic growth is illustrated in Figure 2.1.

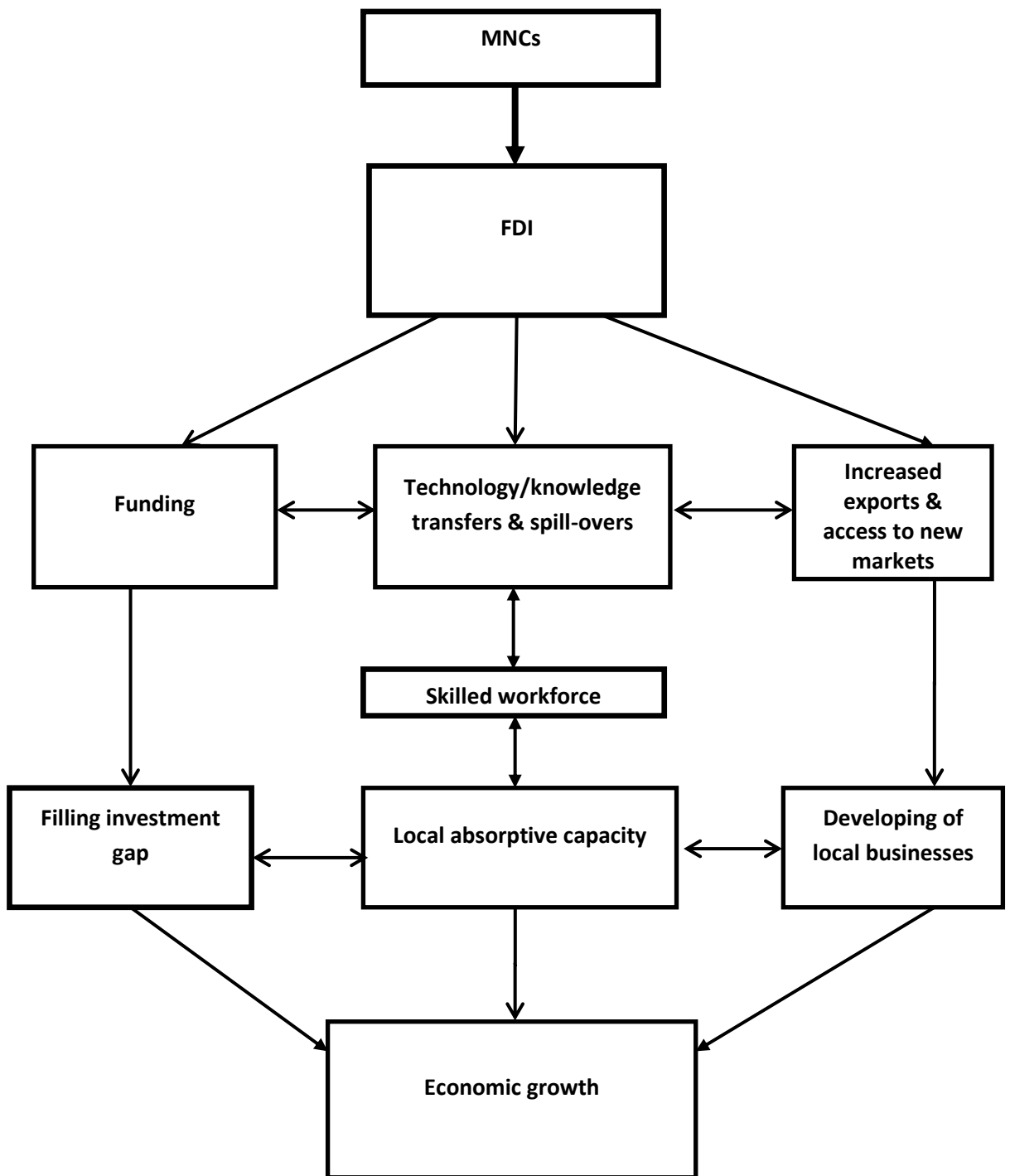


Figure 2.1: The relationship between FDI, skilled workforces and economic growth

## **2.4 Factors attracting foreign direct investment**

As discussed and illustrated in Figure 2.1, FDI is an important input or resource to enhance economic growth; thus, most nations seek to improve their capacity to attract FDI. Understanding FDI influencers is therefore integral to a nation's capacity building capabilities in this area.

There are many theories supporting MNCs decision over location of investment, including the eclectic paradigm suggested by Dunning (1993). This paradigm is based on three main factors – ownership, location and internalisation – which can increase competitive advantages for MNCs. The effectiveness of MNCs to operate in foreign countries depends on the nature and extension of their ownership; moreover, the offers on tax incentives, lower wages and natural resources by host countries can also create competitive advantages. In addition, Dunning noted that the internalisation of markets by MNCs is better suited themselves than licensing or cooperating with local firms. Dunning (1993) elaborated further:

The paradigm suggests that the configuration of these ownership, location and internalisation (OLI) advantages will vary according to country, nature of activity and firm-specific characteristics; but that the propensity of corporations to engage in foreign production will be the most pronounced the greater their (relative) competitive advantages, and the more they find it profitable to create or add value to these advantages themselves from a foreign location (p.81).

Other researchers such as Kok and Ersoy (2009) have suggested that for MNCs, there are three main basic factors which influence the decision over FDI location: the profitability of business; the integration of the subsidiaries' projects with the global strategies of investors; and the supportive environment of the host country . 'Appropriate' domestic policies can also stimulate FDI inflow and increase its benefits, and can reduce barriers for domestic businesses (Kok & Ersoy 2009).

Velde (2001) believed that government policies relating to FDI can be divided into three categories. Firstly, policies affecting the locational decision of foreign investors, which can encourage foreign investors to select locations for their investments; for example, financial and tax incentives, effective administrative processes, improving export processes, improving infrastructure, privatisation, and financial. Secondly, policies affecting established foreign investors, which cover the areas of tax, R&D, staff training, labour market, trade, and

competitiveness. In line with this second category, Filippov and Kalotay (2011) recommended that governments maintain policies on securing established FDI in their countries when there is an economic downturn. Thirdly, policies affecting the response of local corporations, which focus on the ability to absorb knowledge spill-over by local firms; therefore, the areas of human resources skills, technological knowledge, labour mobility, cooperating with foreign firms, and supply management are covered.

There are many types of government policies to attract FDI, such as undervalued currency, property protection, privatisation of trade, currency convertibility, and reducing favouritism of various conditions for local companies (Ferretti & Parmentola 2010). However, the most popular FDI attraction policy relates to tax and duty exemptions for MNCs, where investors choices may include partial or complete exemption, investment in specific industries, and investment in designated areas (Ferretti & Parmentola 2010; Hanson 2001). Moreover, there are two other main factors that attract FDI: market size and income levels (Wint & Williams 2002). It was noted in another study that market size is the most determinant factor that attracts FDI in ASEAN (Yew, Yong & Tan 2010). Hence, when ASEAN integrates into a single market, it could create a larger competitive market which may attract further FDI inflows. It has therefore been suggested that Indonesia, the Philippines, Malaysia and Thailand need to improve their infrastructure and human capital in order to attract high-technology FDI (Yew, Yong & Tan 2010).

While a number of theories and factors supporting the mobility of FDI have been discussed, there are also some factors in host countries which are unattractive for FDI, such as higher taxes, political instability, corruption, and lack of physical, legal, culture, personal qualities and institutional infrastructures (Chatterji & Montagna 2008; Hanson 2001; Hanson 1996). For example, in Indonesia some of the factors that have discouraged FDI inflow include high facilitation payments required to realise an FDI project, the high cost of infrastructure services and leasing land, the lack of transparency and lengthy approval process, and the shortage of an adequate skilled labour force (Thee 2001).

When choosing to invest in a foreign country, there are many factors to consider including: natural resources and geography; size of the market; position of the economy; cultural and political environment; prices and transport costs; government policies; income levels; market growth rates; inflation rates; quality of infrastructure; fiscal incentives; global networks; domestic capital increases; large initial FDI stock; employment increases; foreign technology; organisational structure; human capital development; R&D activities; wage differences

between local and foreign companies; spill-overs from multinational activities; and outsourcing (Hanson 2001; Kok & Ersoy 2009; Wint & Williams 2002; Wong & Tang 2011). Other factors such as growth of domestic markets, stable macroeconomic environment, liberalisation policies (e.g. cost of labour, financial reform and regional integration schemes), availability of energy, and a generally supportive business environment (e.g. promotion schemes for foreign investors, reducing corruption, improving red-tape, and good quality of life for expatriates) are also important to attract FDI (Noorbakhsh, Paloni & Youssef 2001). As an example, the removal of restrictions on foreign ownership and provision of easier investment approval procedures have been the key elements to attracting FDI since the mid-1980s in Malaysia (Athukorala & Waglé 2011).

Another particularly important factor that should be discussed in relation to attracting FDI is a skilled workforce – this is often deemed the most attractive determinant (Chatterji & Montagna 2008; Hanson 1996; Kottaridi 2005; Noorbakhsh, Paloni & Youssef 2001). In an example from Portugal, Andraz and Rodrigues (2010) observed in their study that the country initially relied on labour-intensive industries such as textiles, footwear, ceramics and cork, ship repairing, food and beverages, and leather. Yet when Asian economies started to become more globally competitive in the labour-intensive industries (since mid-1990s), Portugal shifted to higher-skilled industries such as automotive components, electronics, software and pharmaceutical products. The Portuguese Government realised that it needed a structural transformation to focus on the quality of exports, which was via higher-skilled industries rather than just labour-intensive industries, in order to help economic growth (Andraz & Rodrigues 2010). Moreover, national policies need to concentrate on the main driving forces of FDI, and foreign capital inflow barriers need to be liberalised to attract FDI, such as tax policy, tariff barriers and labour market policy. Yet Andraz and Rodrigues (2010) also observed in their Portuguese study that such policy changes are still heavily reliant on the availability of qualified, skilled workers, particularly those who know foreign languages, and have backgrounds in technological and financial areas.

In relation to Singapore, while Wong and Tang (2011) noted various factors including location, infrastructure and investment incentives as FDI stimulants, a skilled workforce was still perceived as the most important factor, particularly to take on modern technology and an international business network. It was also suggested in their study that the Singaporean Government encourage local companies to join with foreign partners to assist in

transnationality of local companies, and focus on the development of the necessary manpower skills in order to increase local capacity for MNCs (Wong & Tang 2011).

As advanced technology is rapidly developing and many businesses are changing to industries that are capitalised, knowledgeable and skilful, MNCs are particularly attracted to developing countries with a well-educated human capital pool. Such skilled workers can help MNCs gain competitiveness in the local market, and assist in the locating of their more technical business sections such as finance, R&D, accounting, training, parts production, and distribution into suitable locations (Noorbakhsh, Paloni & Youssef 2001). The growth of FDI in many less-developed countries (LDCs) is often associated with the growth of a skilled workforce (Chatterji & Montagna 2008). Hanson (2001) confirmed in his study that countries with a larger supply of skilled workforce would attract more foreign investment. MNCs can encourage the development of a skilled workforce both at the macroeconomic level by influencing education or migration policies, and at the firm level by providing training to their local staff (Chatterji & Montagna 2008).

Noorbakhsh, Paloni and Youssef (2001) argued that it is often difficult to specify 'a single locational determinant' because countries that offer a combination of these may be most attractive to MNCs. In line with this, Kok and Ersoy (2009) believed that there is no 'true' FDI determinant :

A large number of studies have been conducted to identify the determinants of FDI, but no consensus has emerged, in the sense that there is no widely accepted set of explanatory variables that can be regarded as the 'true' determinants of FDI (p.106).

Apart from key determinants such as the eclectic paradigm suggested by Dunning (1993) as discussed above, the minor determinants for attracting FDI in each country are varied such as tax incentives, political stability, and cultural factors. The host country's government should design appropriate domestic policies to establish an attractive business environment for both domestic and foreign investors (Kok & Ersoy 2009).

In another research example from Turkey, where a combination of FDI determinants are prevalent, Apaydin (2009) suggested four outstanding factors for attracting FDI to Turkey as well as Central and South-Eastern Europe, and the Middle East: (1) size of the domestic market – a larger market often equates to a greater demand for goods and services; (2) openness of the economy to foreign trade – more convenient for foreign investors to import necessary

materials, capital goods and equipment into the country, and export their finished products out; (3) attractiveness of the domestic market – often indicated by the positive relationship between GDP growth and FDI; and (4) political stability. Negative factors that can stop FDI were also observed including: high costs of setting up; unprotected intellectual property rights; nonstandard accounting systems; ineffective legal system; lack of infrastructure; ineffective FDI incentives; and family business structure (particularly relevant in Turkey) (Apaydin 2009). Turkey's economy is large compared with most other countries in Eastern Europe and the Middle East, and its skilled and highly educated workforce is one of the factors that makes Turkey more attractive to foreign investors (Apaydin 2009).

There are clearly many types of FDI such as natural resources-seeking, labour-intensive manufacturing, servicing and high technology-intensive, and there are both positive and negative determinants relating to the attraction of FDI. Each country has its own competitive advantages for attracting FDI, including natural resources, cheap labour, internal infrastructure, tax and tariff incentives, location, size of domestic market, and openness of the economy. To effectively attract FDI, all countries should use a combination of their relevant advantages and policies, as discussed above.

Yet one of the most important factors – possibly the most important – for attracting FDI is the quality of a country's human capital. The inadequacy of human capital, especially in terms of quality, has often been noted as the main barrier to attracting FDI in developing countries (Chatterji & Montagna 2008). Countries that mostly rely on low-cost and low-skilled labour or natural resources generally experience economic growth slowdown; it is often difficult for them to attract high-value-added FDI, such as semiconductor industry (Noorbakhsh, Paloni & Youssef 2001).

## **2.5 Foreign direct investment, multinational corporations, role of government, and knowledge spill-overs**

MNCs are responsible for most industrial growth in developing countries (Ozawa 1992). Lall and Narula (2004) observed that MNCs are constantly globally searching for lower-cost and more productive bases including in new markets. Todaro and Smith (2009) also noted that most MNCs are seeking investment locations that will provide them with the best opportunity to maximise their profits. Such MNC investments can also lead to knowledge spill-overs in the host country. Market size is one of the main determinants for attracting MNCs and also has a heavy influence on knowledge spill-overs (Lall & Narula 2004; Wint & Williams 2002). Lall and Narula (2004) observed that MNCs usually invest their most truncated subsidiaries in countries



with a small market and weak local industry. In contrast, MNCs invest their least truncated subsidiaries such as R&D departments in countries with larger markets and stronger local technological capacity. Hence, market size plays a significant role in knowledge spill-overs.

The term 'knowledge spill-over' is defined as knowledge, usually technological and market knowledge, from foreign investors transferring to local companies (Ferretti & Parmentola 2010). It has been argued that knowledge is one of the most important factors for MNCs in the competitive world (Martins & Antó'nio 2010), and that there are two main types: explicit knowledge, which is formally based such as training or technical reports; and tacit knowledge, which is informally based such as personal experiences. Knowledge transfers or spill-overs are often dependent on the experiences and skills of participants to share the knowledge, which is also based on the trust created among them (Martins & Antó'nio 2010).

FDI and international trade are generally perceived as the two main mechanisms leveraging the knowledge spill-over process or technology diffusion (Keller 2004; Xu 2000); and both are economic instruments generally applied by MNCs. For host countries, Lall and Narula (2004) argued that MNCs are the most important sources for capital and technology. When expanding their investments into a foreign country, MNCs are seeking a well-established infrastructure and higher skills from the host country, and local capabilities including a skilled workforce are the main factors. Lall and Narula (2004) pointed out that the key to attracting FDI and increasing MNC knowledge spill-overs is the development of local capacities and capabilities; thus, a skilled workforce is a significant influencer.

There are three main channels where a knowledge spill-over from a foreign corporation to domestic companies is likely to occur: (1) where the existence of FDI in the local markets creates and inspires R&D activities for local enterprises; (2) when staff from MNCs work closely with local firms; (3) when foreign and local firms work on joint projects, such as transfer of knowhow, staff training and joint research projects (Ferretti & Parmentola 2010). Drilling down into technology transfers, Borensztein, Gregorio and Lee (1998) specified three main factors that influence these knowledge spill-overs: (1) when high-technology products are imported; (2) when foreign technology is adopted; and (3) when a skilled workforce exists.

Aligning with the three main channels, Ferretti and Parmentola (2010) proposed that a knowledge spill-over also depends on two main economic conditions. Firstly, FDI motivation; for example, if MNCs focus on technology-seeking FDI, then the knowledge spill-over would be transferred from local firms to MNCs, but if MNCs focus on less value-added industries, then

there would not be much benefit in local companies obtaining the knowledge. Secondly, absorptive capacity of the local firms, which enables an effective knowledge spill-over. To achieve absorptive capacity, the local firms need to invest in R&D activities and a skilled workforce (see next section for further discussion on absorptive capacity).

Governments also play an important role in knowledge spill-overs, mainly through the provision of supportive policies. For example, Kokko and Blomstrom (1995) suggested that the host country's competitive levels need to be significant to encourage MNC technology transfers. When a local market is competitive, it generally means that the technology gap between the local and foreign firm is narrower, so the foreign firm is likely to bring in extra new technology to strive for a competitive advantage. Therefore, governments in host countries should implement policies that encourage technology transfers, such as supporting local investment policies, stimulating competitive market policies, and improving education policies.

Migration policies can also have an impact on knowledge spill-overs (Chatterji & Montagna 2008). For example, in Hungary the mobility of highly skilled workers is a by-product of FDI which has leveraged technology transfers (Inzelt 2008). The moving of business-related migrants such as foreign companies' executives can assist in the transfer of knowhow and technology to host countries.

Education policies also have an influence on knowledge spill-overs – they develop local capabilities which can encourage MNCs to introduce more advanced technologies (Kokko & Blomstrom 1995; OECD 1999). Reinhardt (2000) noted that Malaysia and Thailand are not able to take full advantage of knowledge spill-overs because both countries have low levels of qualified entrepreneurs and labour, and R&D activities – reflecting their lack of education policies. As Kottaridi (2005) also pointed out that a skilled workforce is one of the main influencers (apart from trade restrictions, tax incentives and investment policies) on FDI, policymakers should focus on improving education and training programs to cultivate this.

Industry is also another policy area that has an impact on knowledge spill-overs. It has been argued that the interaction of FDI and MNCs does not guarantee economic growth of host countries, unless the local industries are able to leverage knowledge spill-overs; it is the government's duty to develop a proactive industrial policy in order to increase the competitiveness of local industries (Lall & Narula 2004).

In addition, the process of knowledge spill-overs is more effective when there is nothing preventing the mobility of MNCs between the home country head office and their local subsidiaries in the host countries (Ferretti & Parmentola 2010). That is, the vertical and horizontal linkages are connected between the subsidiaries and the foreign parent enterprise.

It should also be noted that knowledge spill-overs are not only relevant between foreign firms and their local subsidiaries, but can occur among local companies. As Ferretti and Parmentola (2010) noted, the existence of MNCs in the local market can have a positive impact on other domestic corporations; for example, trained staff may move from foreign firms to domestic companies, bringing their expertise; there could be active knowledge transfers as MNCs cooperate with local firms; and local firms could focus on increasing their efficiencies when faced with additional competition.

## **2.6 Absorptive capacity**

As part of the knowledge spill-over, the host country needs to have a skilled workforce to absorb knowledge and skills spill-overs via FDI, to increase economic growth. It has been argued that to benefit from the technology transfer, a country needs to acquire a minimum skilled workforce threshold (Xu 2000). Keller (2004) believed that there are two major determinants in relation to absorptive capacity: human capital and R&D expenditure. That is necessary for a firm to invest in R&D to understand new technologies and innovation, often meaning access to external technologies; and human capital is needed to facilitate these new technologies. There is also an argument that the local capability to develop technology depends on the combination of economic policies and the existence of an adequately skilled workforce (Thee 2001). Therefore, host countries can increase their competitiveness and attract FDI by promoting policies that develop skills and capabilities for their labour workforce.

It has also been suggested that policymakers should focus on improving education policies and training programs for their skilled workforces, which would be beneficial to economic development on a long-term basis (Kottaridi 2005). As previously mentioned, a skilled workforce has the most influence on knowledge spill-overs. Thus, education plays an important role in improving the quality of a labour workforce to achieve absorptive capacity (Noorbakhsh, Paloni & Youssef 2001).

In addition, skills and capabilities development can influence higher quality FDI, as well as increase the quantity of it (Noorbakhsh, Paloni & Youssef 2001). Some believe a government's duty to create capacity for transferring technology from MNCs by providing technology

infrastructure, supporting training and R&D organisations, and encouraging firm-university relationships in order to gain high-quality FDI (Lall & Narula 2004). Countries may suffer slow economic growth if they rely too heavily on low-cost, low-skilled labour, or natural resources industries (Noorbakhsh, Paloni & Youssef 2001). It has consistently been emphasised that the effectiveness of FDI depends on the level of human resources in the host country (Borensztein, Gregorio & Lee 1998). If the host country has a very low skill level among its workers, then the contribution of FDI to economic growth is also likely to be low (Borensztein, Gregorio & Lee 1998).

The economic development of most developing countries is reliant on their ability to adopt and implement new technologies from developed countries via FDI. To achieve this, developing countries need to have effective human capital to enhance the absorptive capability for new technologies (Borensztein, Gregorio & Lee 1998). Policymakers should therefore design policies that aim to develop human capital skills and attract technological- and knowledgeable-oriented FDI, in order to sustainably develop their country's economy.

There are also other obstacles to achieving absorptive capacity. An OECD study in Indonesia, Malaysia, Philippines and Thailand, found that foreign investors are often hesitant to share their technologies and knowledge with local partners, possibly because they could be business competitors in the future (OECD 1999). Generally, many foreign firms with high-level technologies are also reluctant to invest in countries with restrictive policies. Moreover, the competitiveness of global markets and unsettled industrial targets may cause poor linkages between export-oriented foreign investors and local suppliers; necessary inputs may be imported into the host country due to lack of quality and competitive pricing (OECD 1999). Therefore, local firms could have less opportunity to enhance their absorptive capacities. In addition, if host countries promote industries which have not previously existed locally, it could be difficult for local firms to absorb the new technology. Host countries should therefore set their industrial targets based on existing local industries, which will benefit both the foreign investors and local firms (OECD 1999).

The OECD study also suggested that local market-oriented investments is the right channel for technology transfers, rather than export-oriented investments (OECD 1999). MNCs that focus on the local market-oriented would have more contacts with local suppliers than export-oriented MNCs. In line with this, Kokko and Blomstrom (1995) believed that foreign firms are more likely to transfer technologies to their local counterparts if they face strong competition in the local market.

The OECD study (1999) also suggested that the ASEAN integration plan will stimulate strong competition within the region as trade barriers will be removed. However, this strong competition should not exclude FDI from OECD countries, because most of the world's advanced technologies stem from these nations. In addition, the study recommended that a neutral policy environment, offering equal access to both domestic and foreign markets for foreign investors, would be ideal for technology transfers.

## **2.7 Summary of the chapter**

In this chapter, FDI was identified as a highly important economic tool in a country's economic development. There are numerous elements involved in FDI, such as MNCs, the role of government, knowledge spill-overs, and absorptive capacity. In addition to these, a skilled workforce is the most important factor that links all of the other elements together, as shown in Figure 2.1.

There are also many factors that attract FDI to host countries, such as the size of the market, cheap labour, natural resources, tax and tariff incentives, and geography. Once again, an effective skilled workforce is highly influential on attracting FDI, particularly in relation to knowledge spill-overs involving technological-oriented FDI. Without a skilled workforce, any knowledge spill-overs would not be adequately absorbed. Hence, the absorptive capacity of the host country also plays a role in the influence of skilled workers on attracting FDI. However, it should be noted here that a skilled workforce is not the most important factor for attracting FDI across all countries. As previously discussed, there are many types of FDI; and a skilled workforce is mostly relevant to knowledge and technological-oriented FDI.

## **Chapter 3: Government Policies on Skill labour shortage**

### **3.1 Introduction**

In this chapter, government policy responses to skill labour shortage are examined. Based on the extant literature, both developed and developing countries have employed a variety of policy responses to skill labour shortage. Many studies have focused on singular policy responses such as: migration (Mahroum 2000; Tremblay 2005; Wocke & Klein 2002); education and training (Hawley & Paek 2005; Lashley 2009); female workforce (Browne & Braun 2008; Bryant & Jaworski 2011); ageing workforce (Costa & Milia 2008); disabled workforce (Gröschl 2004); and refugee workforce (Colic-Peisker & Tilbury 2006; Peters 2008). Other studies have examined multiple policy responses such as: migration and education (Birrell, Healy & Smith 2008; Cameron & O'Hanlon-Rose 2011; Ho & Ge 2011; Lowell & Gerova 2004; Wickham & Bruff 2008); education and organisation improving (Buchan 2002; Holland, Sheehan & Cieri 2007; Mackenzie, Kilpatrick & Akintoye 2000); education and ageing workforce (Fenwick 2012; Kalirajan & Shantakumar 1998); migration and local government participation (Smith 2008; Spoonley & Bedford 2008). In contrast, only several studies have examined the breadth of policy responses in addressing skill labour shortage (Ducanes & Abella 2008; Fang 2009; Lowell 2001b).

In addition, while there are numerous studies on government policy responses to skill labour shortage in other ASEAN countries such as in Malaysia and Singapore (Ducanes & Abella 2008; Fleming & Soborg 2010; Ho & Ge 2011; Ziguras & Law 2006), studies in the Thai context are limited. This thesis therefore seeks to address this gap by studying relevant Thai Government policy responses. In line with this, Chapter 3 further explores studies relating to these policy responses to provide a framework with regard to skill labour shortage and how consequent governmental policy impacts on economic development.

The foundation of this chapter is based on an analysis of literature relating to government policies on skill labour shortage. These relevant policies have been categorised into three main themes: education and training; migration; and substitute workforces. Firstly, studies on education and training policies are categorised into improving basic education, improving vocational education, improving higher education, and lifelong training programs. Secondly, there are three policy discourses which have been studied in relation to migration policies: attracting foreign citizens; repatriates; and 'brain networking'. Thirdly, studies in relation to a

substitute workforce to address skill labour shortage relate to use of female, ageing, disabled and refugee workforces.

### **3.2 Education and training policies**

Education is an important means to improve the quality of the labour workforce. A highly educated labour force is a prerequisite for economic growth and development (Tremblay 2005; Truong, van der Heijden & Rowley 2010), cultivating economic development via research, innovation and new technologies (Nieuwenhuis 2012; Tremblay 2005). Investing in education and training infrastructure is known to improve the quality of a workforce, which subsequently enhances economic development (International Labour Organization 2008; Nieuwenhuis 2012; Tremblay 2005; Truong, van der Heijden & Rowley 2010). This is especially relevant based on the emergence of increasingly sophisticated knowledge and technology, which has become a critical factor in global economic integration and competitiveness. Education and training policies are an explicit method for a government to implement to ensure its human resources are adequately skilled to compete in a global marketplace (Fleming & Soborg 2010; Truong, van der Heijden & Rowley 2010).

The extant literature has highlighted four key education and training policies that enable a government to respond to skill labour shortage: improving basic education (International Labour Organization 2008; Nieuwenhuis 2012; Osman-Gani & Chan 2009); improving vocational education (Hawley & Paek 2005; International Labour Organization 2008; Mustapha & Abdullah 2004); improving higher education (Ho & Ge 2011; International Labour Organization 2008); and lifelong training (Hawley & Paek 2005; Kalafsky 2008; McGrath-Champ, Rosewarne & Rittau 2011).

#### **3.2.1 Improving basic education**

A quality basic education (primary and secondary levels) often sets a fundamental foundation for further education and specific skill development needed in a highly skilled workforce (International Labour Organization 2008; Kim 2012; Mattei 2012; Nieuwenhuis 2012; Osman-Gani & Chan 2009). In particular, the establishment of basic literacy and numeracy skills serves as a platform for all future educational development (International Labour Organization 2008; Nieuwenhuis 2012; Osman-Gani & Chan 2009). People need to have acquired basic skills such as literacy and numeracy before they can learn other more advanced skills (International Labour Organization 2008; Mattei 2012; Nieuwenhuis 2012; Osman-Gani & Chan 2009).

A country's economic performance is often related to the quality of basic education (International Labour Organization 2008; Nieuwenhuis 2012; Osman-Gani & Chan 2009). It has

been identified in numerous international studies that the quality of basic education such as primary and secondary education is a prerequisite for a country to step up to higher levels of productivity and competitiveness, and deepen its pool of skilled labour (International Labour Organization 2008; Mustapha & Abdullah 2004; Nieuwenhuis 2012). When the quality of basic education is high, the economic performance of a country is also strong; in low-income countries, the quality of basic education is often relatively low. For example, in recent indices from ASEAN, it was demonstrated that lower-income countries such as Cambodia and Laos have dramatically lower adult literacy rates of 73.9% and 72.7% respectively, according to *The impact of ASEAN community to the industrial business in Thailand* (2012). In contrast, higher-income countries such as Singapore and Brunei Darussalam have achieved far higher adult literacy rates of 95.9% and 95.0% respectively.

The importance of basic education in providing a platform for further studies and responding to skill labour shortage is evident across the extant literature (Cameron & O'Hanlon-Rose 2011; International Labour Organization 2008; Kim 2012; Mattei 2012; Osman-Gani & Chan 2009). One noteworthy example is from Singapore, where basic education has been highlighted as the most important driver of the country's successful and sustained economic growth, particularly as it has limited natural resources (Coe & Kelly 2000). The Singaporean Government has enacted high-quality basic education for all citizens, ensuring skilled manpower for the economy (Osman-Gani & Chan 2009). According to the Programme for International Student Assessment (PISA), an international education survey operated by OECD (<http://www.oecd.org/pisa/aboutpisa/>), in 2012 the reading score of Singapore's 15-year-olds was 542 points, compared with the globally mean score of 496 points. In mathematics, the score was 573 points, compared with a mean score of 494; in science, it was 551 points for Singapore versus a mean score of 501 points.

Since its independence, Singapore's education policy has been explicitly targeted at supporting the nation's economic strategy (Sidhu, Ho & Yeoh 2011). This education policy has translated into providing appropriate human capital aligned with Singapore's economic strategy – it directs its educational institutions to cultivate a skilled labour workforce that meets Singapore's economic projections (Sidhu, Ho & Yeoh 2011). Korea has also successfully applied an education policy as a tool to align with its industrial policy and enhance its economic growth (Kim 2012) – the Korean Government is fully committed to developing the country's economic via education policy.



Another relevant example is Malaysia, where the government has increased the quality of its human capital via its education policy, to accommodate the significant inflows of FDI since the 1960s. From 1970 to 2005, Malaysia increased its amount of secondary students from 34.2% to 69.1% (UNESCO 2011); predominantly based on its *Education Act 1996* which states that education should be provided to all citizens (UNESCO 2011). Malaysia also has plans to become a fully industrialised nation, with a framework established to achieve relevant economic performance and technological capability by the year 2020 – known as ‘Vision 2020’. The government has consequently encouraged further expansion of basic education (MOE Malaysia 1997; Mustapha & Abdullah 2004), with a Smart school program introduced in 1999 as part of its industrialised nation plans. Under the Smart school program, students at primary and secondary levels are encouraged to be self-directed, creative and critical thinkers that are able to use advanced technologies (MOE Malaysia 1997; Mustapha & Abdullah 2004). They will thus be able to extend their studies into the next education level such as vocational and training education, and higher education where they can gain more specialised skills to accommodate the increasing demands of the Malaysian economy for skilled labour (International Labour Organization 2008; Mustapha & Abdullah 2004).

There are many other more general education policies that have also cultivated an adequately skilled labour force including: achieving increased class attendance and retention (International Labour Organization 2008; Nieuwenhuis 2012); improving quality of teachers (Aluede & Idogho 2014; Davidson 2007; Simola 2005; Stone, Kaminski & Gloeckner 2009); and community participation in education policy (Denessen, Bakker & Gierveld 2007; Dorner 2011; Mozumder & Halim 2006; Pandey, Goyal & Sundararaman 2009). Some governments have also reduced the cost of education and/or provided financial support for education-related activities or services to encourage increased class attendance and retention (International Labour Organization 2008; Nieuwenhuis 2012).

Based on the extant literature, the following assumptions have been developed as guidelines for the discussion of the policy discourse analysis on improving basic education in covered Chapter 9.

**Skill labour shortage can be reduced by improving the quality of basic education, such as basic literacy and numeracy skills, and the ability to be self-directed, creative and a critical thinker, producing students with a solid foundation for further skills development.**

**Skill labour shortage can be reduced by the government via appropriate legislation and dedicated policy.**

### **3.2.2 Improving vocational education**

Beyond the basic level, a country's educational infrastructure should also support the development of a skilled labour force via higher-level vocational education (International Labour Organization 2008; Mustapha & Abdullah 2004). More advanced skills are attained through vocational education, and this level of education is a fundamental role in national economic development (Hawley & Paek 2005; International Labour Organization 2008). That is, vocational education provides more appropriate skills to suit specific industrial needs.

The role of government is integral to aligning the needs of a country's industry with a vocationally educated workforce, to achieve economic development. Governments should collaborate with their country's business and education sectors to ascertain the types of skills needed and to plan an appropriate human development plan (Hawley & Paek 2005). In particular, those countries that are at the industrialisation stage of economic development need to establish strong vocational education (International Labour Organization 2008).

This was evidenced during the rapid growth and industrialisation stage of development in Singapore (Ho & Ge 2011). Since the mid-1960s through to the 1990s, the Singaporean Government focused on developing its manufacturing industry, correspondingly working to develop targeted vocational education (Ho & Ge 2011). Vocational education was expanded into the secondary school curriculum, with vocational schools established with the intent of providing necessary skills for this sector. Consequently, the number of vocational students increased from 12,000 in 1971 to 18,000 by the end of 1970s (Ho & Ge 2011).

The relevance of governments in developing an education infrastructure to address industrial needs, particularly with regards to vocational education, can also be highlighted in an Australian context. In Australia, Cameron and O'Hanlon-Rose (2011) argued that the main reason for shortages in tradespersons (skilled labour) was the under-investment in apprenticeships. Australia's Rudd Government (2007-2010) implemented education and training policies to counteract this skills shortage in the trades area (Birrell, Healy & Smith 2008), with an emphasis placed on basic and vocational education. As an example, this government issued a plan called 'Skilling Australia for the Future' in 2008 (Birrell, Healy & Smith 2008), inviting registered training organisations to offer subsidised training places for professionals, associate professionals, trade and sub-trade occupations, and semi-skilled occupations.

Vocational education is often fundamental to economic development, providing the necessary skills to support structural transformation, especially in those countries in the early stage of

industrialisation. The following two assumptions are derived from the above discussions and will provide the framework for the policy discourse analysis on improving vocational education in Chapter 9.

**Improving vocational education through dedicated government responses to meet labour market requirement will reduce skill labour shortage problems.**

**Coordinated policy responses engaging government, industries and the education sector will reduce skill labour shortage problems.**

### **3.2.3 Improving higher education**

At the higher education level, the role of universities is critical in developing higher or specialised skills in the labour workforce (Ho & Ge 2011; Sidhu, Ho & Yeoh 2011), especially in those countries moving up the value chain in the global economy (International Labour Organization 2008). Some industries, particularly those that are technologically-related (e.g. telecommunications, engineering and information technology), need a highly skilled workforce; thus higher education plays an important role in supplying the necessary skilled workforce (International Labour Organization 2008; Osman-Gani & Chan 2009; Skeldon 2008). Various government policies on higher education in response to highly skill labour shortage have included increasing the amount of higher educational institutes and improving the quality of curriculum (International Labour Organization 2008).

The importance of higher education in supporting structural transformation is evident when examining the economic progress of Singapore, where the government refocused its economic strategy from manufacturing to service industry, and placed an emphasis on developing its higher education infrastructure (Ho & Ge 2011; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011). One of the methods used to improve its higher education infrastructure was the establishment of a third university, Singapore Management University in 2000. In addition, the Singaporean Government invited world-class universities such as MIT, John Hopkins University, Duke University, and The Chicago Graduate School of Business to open campuses there (Ho & Ge 2011; Sidhu, Ho & Yeoh 2011). The policy directing the establishment of new and foreign universities' is focused on increasing the skilled labour supply to the Singaporean labour market, especially in the service industry.

The internationalisation of higher education is one of the key areas identified in extant literature on governments responding to skill labour shortage problems (Cameron & O'Hanlon-Rose 2011; Chalapati 2007; Ho & Ge 2011; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011;

Tremblay 2005; Ziguras & Law 2006). Based on increased globalisation which has created freer movement of capital, goods and people between countries, the internationalisation of higher education is one way for governments to fill the gap in their labour market requirements. The purpose of the internationalisation of higher education is to provide globally-related knowledge and skills for graduates (Chalapati 2007).

Skeldon (2008) believed that the establishment of international schools helps the expansion of Western universities in developing countries, leading to the movement of international students and teachers, academics and researchers. Most international schools provide Western style curriculum and high-quality teachers, and use an international language such as English (Skeldon 2008). In addition, the presence of foreign students evokes their global perspectives and a broader understanding between nations (Cameron & O'Hanlon-Rose 2011). International schools have also been known to attract the children of local elite families, particularly in Asia, in addition to children from expatriate or repatriate families (Cameron & O'Hanlon-Rose 2011). Thus, to be a truly internationalised institution, the recruitment of students should be focused on both local and foreign students.

Foreign students are an important element in economic development (Cameron & O'Hanlon-Rose 2011; Ziguras & Law 2006). Advantages of recruiting foreign students include increasing both the quantity and quality of the country's pool of skilled workers. It is easier for locally educated migrants or foreign students to be absorbed into the host country's labour market, as they already have language fluency. Language effectiveness of the foreign nation is a key factor in the successful integration in the host country labour market (Tremblay 2005).

Since the 1990s, with high competition for highly skilled labour, many countries in the OECD have attracted and eased visa application procedures for foreign students. Easing visa application procedures is an efficient way to encourage the movement of foreign students who are also classified as skilled labour (Tremblay 2005). In Germany, foreign students can work while they are studying – they can apply to stay for one more year to find jobs in Germany after they have finished their studies (Tremblay 2005). In the UK, a Science and Engineering Graduate Scheme was introduced in 2003 in order to attract talented scientists and engineers (Tremblay 2005). The purpose was for foreign students from non-European Union (EU) countries to stay and work in the UK for one year, and then switch to the highly skilled migrant program.

There are many examples of internationalisation of higher education worldwide. In Israel, the country has a joint program with Poland for developing medical students (Altbach & Knight 2007). The students complete their first three years in Israel and then move to study in a medical school in Poland for another three years, before moving back to Israel to finish their internship. In Vietnam, RMIT University from Australia has set up campuses in both Hanoi and Ho Chi Minh (Altbach & Knight 2007). In addition, Russia has joint programs with foreign institutions such as the London School of Economics, the Stockholm School of Economics, and the University of Oslo (Altbach & Knight 2007).

In Malaysia, the government encouraged the internationalisation of its higher education by passing the *Private Higher Educational Institutions Act 1996*, encouraging the local private education sector to increase which provides the opportunity for international university to Malaysian market (Ziguras & Law 2006). This internationalisation of the Malaysian education sector attracted Australian universities that have opened campuses there. Royal Melbourne Institute of Technology (RMIT) was first in 1996, followed by Monash University in 1998, then Curtin University in 1999, and Swinburne University of Technology in 2004 (Ziguras & Law 2006). Moreover, in 2000 the University of Nottingham and de Montfort University from UK also opened campuses. The policy directing the internationalisation of higher education in Malaysia has increased local supply for the Malaysian labour market, and also provides a migration channel to attract a highly skilled workforce to the country to fill the labour shortage gap (Ziguras & Law 2006).

Despite such government efforts, a lack of stakeholder participation in the policymaking process can cause ineffective education policies, such as poorly designed educational courses that do not address the skills required by industry (Fleming & Soborg 2010; Haukka 2011; Huggins 2001; Truong, van der Heijden & Rowley 2010). The skills required by the labour market should be identified and addressed as part of a country's economic development ambitions (Haukka 2011; Hawley & Paek 2005; Huggins 2001). According to Hawley and Paek (2005), Lashley (2009), and Nieuwenhuis (2012), all stakeholders such as government agencies, education providers, employer associations and employees should participate in the education policy making process.

Collaboration among the various stakeholders will drive an appropriate and well-planned labour workforce policy for the nation that meets the demands of labour market, both present and future. Effective workforce planning involves a response that adequately balances the supply and demand of the labour workforce (Buchan 2002). Labour market supply and demand

needs to be holistically identified so that a more accurate education policy can be formulated to provide industry with the necessary skills for both the present and into the future. Issues such as the amount of skilled workers needed and the types of skill required could be discussed among these stakeholders, with all stakeholder needs expressed.

Based on the above discussions, improving both the quantity and quality of higher education has a significant impact on economic development in terms of reducing the skill labour shortage. Proposed higher education improvements need to be aligned with each country's economic development, including identification of required skills to encourage industrial development. Internationalisation of higher education is also a key solution to reducing skill labour shortage; as well as multidisciplinary stakeholder participation in the education policymaking process.

The following assumptions have been developed from the extant literature and will guide the discussion of the policy discourse analysis on higher education in Chapter 9.

**Expanding higher education institutes will help reduce the skill labour shortage problems.**

**Internationalising higher education through policies such as increasing foreign university campuses, recruiting foreign students, and encouraging cooperation between local and foreign universities will reduce skill labour shortage.**

**Society-representative stakeholder participation in higher education policymaking processes such as employers, employees, government bodies (at all levels) and education providers can help reduce skill labour shortage.**

### **3.2.4 Lifelong training programs**

Another key area that has been highlighted in the extant literature on education policies and skill labour shortage is the development of lifelong training programs (Hawley & Paek 2005; Kalafsky 2008; McGrath-Champ, Rosewarne & Rittau 2011; Nieuwenhuis 2012). Hawley and Paek (2005) believed that lifelong learning programs are integral to sustainable knowledge provision to support economic development. They also suggested that lifelong training is most suitable for those countries with an ageing population that are facing slow labour force growth (Hawley & Paek 2005). Although lifelong training programs have also been identified as suitable to many others types of workforces, mostly based on those that want to develop or learn new skills to remain in or re-enter the labour market (Andersson & Fejes 2010; Hussein, Manthorpe & Stevens 2011; International Labour Organization 2008; Walker 2006; Wallace & Marchant 2009). Lifelong training programs providing by government is necessity as Kalafsky

(2008) pointed out that lifelong educational opportunities, such as programs offered in vocational education and training programs, are a significant component in developing an economy.

Nieuwenhuis (2012) pointed out that in South Africa, for example, a more vibrant and effective post-school education system is needed, as university entry post-school is only one option. There are many adults who leave school early and seek employment for a multitude of reasons, who may seek educational enhancement at a later stage in their career (Nieuwenhuis 2012). Lifelong training programs are an ideal solution for those in the labour workforce who would like to change their careers later in life (Nieuwenhuis 2012). Such programs can provide new knowledge and skills; thus assisting in reducing countries' skill labour shortage (Nieuwenhuis 2012).

Such lifelong training is not only limited to the public sector; the role of the private sector is also highly prevalent. As an example, in Singapore local firms and MNCs organise their own training programs which are financially supported by the public sector (Osman-Gani & Chan 2009). In Malaysia, the public sector has focused on integrating lifelong training programs through skills upgrading or training schemes since the announcement of the Industrial Master Plan in 1986 (Fleming & Soborg 2010). As part of this plan, small and medium sized companies have been encouraged to invest in their employees' training via initiatives such as the former Double Deduction Incentive for Training (DDIT) and the more recent Human Resource Development Fund (HRDF). The DDIT program encouraged small and medium sized companies to deduct double the expenditure of staff training, but it was not successful based on the small number of companies that applied. As part of the latter HRDF, employers who donate to the fund for a minimum of six months are eligible to apply for coverage in training expenses for any given year; the maximum training expenses coverage is 1% of the payroll. In association with this more successful scheme, larger firms have also cooperated with local governments in setting up Skills Development Centres aimed at targeted skill development post formal education.

As a result of the discussions surrounding the extant literature, the following assumption has been developed as a guideline for the policy discourse analysis on lifelong training programs in Chapter 9.

**Encouraging lifelong training programs through government incentives and support including the greater role of private sector in lifelong training can reduce skill labour shortage.**

### **3.3 Migration policies**

Migration policies have also emerged from the extant literature as a key area that governments use in response to skill labour shortage (Iredale 2000; Lowell 2001b; Orłowska 2011). While many nations have developed policies to increase their internal human resources capacity, migration policy has also been used to attract foreign skilled labour when this capacity is insufficient (Iredale 2000; Lowell 2001b; Orłowska 2011). Many developed countries such as the United States (US), United Kingdom (UK), Australia, Canada and New Zealand have been using migration policies in response to skill labour shortage issues, in order to sustain economic growth (International Labour Organization 2008; Iredale 2000; Lowell 2001b; Tremblay 2005).

Based on previous literature, this study has developed three main categories relating to migrant policies in response to skill labour shortage: attracting skilled foreign citizens; repatriates; and brain networking (Ackers & Gill 2005; Ciumasu 2010; Orłowska 2011; Ross, Polsky & Sochalski 2005; Skeldon 2008; Tremblay 2005; Wocke & Klein 2002).

#### **3.3.1 Attracting foreign skilled labour**

Attracting skilled labour from overseas is the most studied area across the literature on migration policies (Abella 2006; Ducanes & Abella 2008; Iredale 2000; Lowell 2001b; Orłowska 2011; Wocke & Klein 2002). Many countries use migration policy to attract foreign citizens, which is increasing its influence on their economic development. As Abella (2006) argued, a country that cannot attract foreign, highly skilled workers is at risk of falling behind when it comes to competitive global economics. Lowell (2001b) also pointed out that the global competition on skilled labour is highly competitive, occurring across a range of occupations including IT consultants, doctors, nurses and teachers.

Most governments' migrant policy responses seek to attract skilled labour via financial-related incentives (Lowell 2001b; Skeldon 2008). However, there are also non-fiscal benefits that have been used to attract skilled worker migration. For example, international schools have been used to promote the benefit of living and working in some countries, particularly focusing on expatriate and repatriate parents who require good-quality schools for their children which local schools cannot always provide (Skeldon 2008). Furthermore, lifestyle preferences is also a non-fiscal benefit that can be used, particularly among expatriates and repatriates that prefer to live and work in global cities such as London, New York, Tokyo, Hong Kong and Singapore (Birrell et al. 2001; Lowell 2001b; Tung 2008).



Many developed countries in the OECD including Australia, Canada, US, UK, France and Germany have opened their doors to skilled migrants (Iredale 2000; Lowell 2001b; Orłowska 2011; Skeldon 2008). This is because demographic changes have affected skilled labour resources in most OECD countries. For instance, since the latter half of the 20<sup>th</sup> century, there has been a decline in birth rates among OECD countries (Holland, Sheehan & Cieri 2007). The average population growth rate for all OECD countries was 0.6% per annum during 1990-2000. Therefore, internal labour workforces in OECD countries are diminishing, which leads to increased competition among these nations for a foreign skilled workforce. A similar scenario of a declining internal population has also occurred in Singapore, with Ducanes and Abella (2008) reporting that the birth rate in Singapore has been below replacement level since the late 1970s. Declining fertility levels in Singapore are mostly due to the rise in incomes, education and employment opportunities for women, with many delaying childbirth and/or showing a preference for small or childless families, along with an increase in the number of single women (Ducanes & Abella 2008).

Some countries are striving to attract foreign skilled workers based on the assumption that 'importing' such labour via migration policies is more cost and time efficient than engaging in education and training policies (McGrath-Champ, Rosewarne & Rittau 2011; Smith 2008). An enormous budget and an extensive amount of time are often required to develop a local skilled workforce via education and training policies. Hence, if a government instead focuses on its migration policy to attract foreign skilled labour, it will have implemented a time and money shortcut to gain a 'ready to work' skilled workforce. As an example, Wickham and Bruff (2008) observed that in Ireland, the government mainly focuses on the 'importing' of skilled migrants rather than 'training' the local. Since the late 1990s, there has been a large amount of skilled labour migrants in Ireland, with many that are highly qualified and consequently employed in higher skilled occupations (Wickham & Bruff 2008). In particular, some of Ireland's high-tech industries have chosen to import skilled migrants rather than continually train local staff to achieve cost savings – technologies change fast meaning that skills have to constantly be updated.

From reviewing the extant literature, easing the visa application procedure is the most effective method for attracting foreign skilled labour to developed countries. In the UK, a highly skilled migrant program based on a point system was introduced in 2002 (Tremblay 2005), attracting talented labour to stay and work in the UK. Under this program, migrants were initially granted one year and could then extend for another three years; and could apply

for permanent residency after four years. In response to its nursing shortage, in addition, the UK has recruited a large amount of foreign nurses from Asia, Africa, Australia and New Zealand (Ross, Polsky & Sochalski 2005). The UK health industry has saved a significant amount on training costs by recruiting these foreign medical workers, particularly from developing countries (Smith 2008). Along with nurses, the UK Government has also recruited teachers from other countries such as South Africa, Australia and New Zealand (Lowell 2001b).

McGrath-Champ, Rosewarne and Rittau (2011) pointed out that in Australia, the construction industry has depended on migrant workers since post-World War II. Their recruitment helps Australian construction employers reduce their training costs as well as wages and other indirect labour costs. In addition, partly to compensate for the highly skilled medical workers it has lost to the UK, Australia has recruited foreign trained doctors from India, Pakistan, Sri Lanka, Malaysia, the Philippines and Bangladesh (Smith 2008). Many of these overseas trained doctors have been sent to work in 'areas of need', which are often not preferred by local medical doctors. In 2001, there was another notable increase in skilled worker migration to Australia when foreign information, communication and technology (ICT) students were allowed to apply for permanent residency within the country without sponsorship or previous work experience (Tremblay 2005).

In New Zealand, due to an increasing demand for skilled labour mostly in the areas of IT, biotechnology, medicine, health care and education, the country revised its skilled migration policy in 2003, based on a point system similar to both Australia and Canada (Tremblay 2005). The skilled migrant point system allows foreign students in New Zealand to apply for permanent immigration; they must achieve 100 points to be eligible (Tremblay 2005). The New Zealand Government also introduced a talent visa system in 2002 which allows approved New Zealand employers to recruit foreign workers with the required skills in restricted occupations (Spoonley & Bedford 2008). The approved skilled migrant under the talent visa process can apply for New Zealand permanent residency after two years in the job.

Similar to both Australia and New Zealand, Canada also runs a point system for skilled worker migration (Tremblay 2005). In Canada, foreign students who graduate from Canadian institutions can apply for a temporary work permit for up to one year. The eligible applicants need to be enrolled and successfully complete a minimum of two years full-time study at a Canadian institute.

Somewhat removed from the point system, the US has a H1B visa for skilled workers (Tremblay 2005). The US's H1B visa has been designed for applicants who complete specific courses of higher education and wish to stay and work in the US. There are also other types of visas in the US, such as H1C for nurses who want to work in identified skill shortage areas, and the NAFTA TN visa for Mexican and Canadian residents to work in specific occupations.

Germany enacted a green card program in 2000 to recruit IT specialists from non-EU countries (Tremblay 2005). This program aimed to grant temporary work visas to eligible candidates for up to five years. The German Government also implemented a law in 2004 to grant permanent residency to highly skilled workers.

Based on common global circumstances surrounding skill labour shortage, many countries are competing to attract foreign skilled labour through the easing of their visa application procedures. Most governments have implemented migration policies to attract foreign skilled labour, with the expectation that they can fill their country's skill labour shortage gap and help with its economic growth. Thus, the following assumption is developed from extant literature that will guide the discussion on the policy discourse analysis on attracting foreign skilled workforce in Chapter 9.

**Attracting foreign skilled workforces can reduce skill labour shortage and help a nation to accelerate its economic growth.**

### **3.3.2 Repatriation**

According to a considerable amount of the literature, repatriation or return of diaspora to their home countries is another key area of government policy in response to skill labour shortage (Ciumasu 2010; Groenhout 2012; Hewitt 2006; Leclerc & Meyer 2007; Lowell 2001b; Skeldon 2008; Tremblay 2005). Such policy is based on the concept of repatriation or attracting of skilled diaspora who are living and working overseas to return, to reduce the labour shortage problems in their home countries.

The country 'brain drain' generally starts when students go abroad for further study and choose to stay on and work in their destination country after graduating. This is referred to as a 'brain drain' for the origin country, and a 'brain gain' for the destination country (Birrell et al. 2001; Lowell & Findlay 2001). This phenomenon is usually reliant on push and pulls factors: push factors are the less appealing conditions of the origin country such as low wages, political instability, and lack of access to resources; while pull factors are the more appealing conditions

of the destination country such as high wages, better working conditions and better quality of life (Ciumasu 2010; Groenhout 2012).

Interestingly, Ciumasu (2010) argued that the brain drain is not necessarily a negative scenario. Brain drain is actually the first step for developing countries to develop their human capital workforce, especially via a reverse brain drain (Ciumasu 2010; Groenhout 2012; Lowell 2001b; Skeldon 2008; Tremblay 2005). Based on this perspective, after graduates have worked in their destination country for a while, gaining beneficial work experience and skills, they may choose to return to their origin country and bring that knowledge with them, as well as capital and networks that could improve labour productivity and economic growth (Leclerc & Meyer 2007; Quaked 2002). This process is called 'reverse brain drain' or 'brain circulation'. Tung (2008) stated that there are various factors and policies that can be used to encourage repatriates to return or reconnect with their home countries, such as proof of growing economies and government incentives.

There are many examples of government policy aimed at attracting highly skilled diaspora to return to their home countries and bridge the skilled labour gap. Malaysia, for example, offers tax exemptions, permanent resident status for spouses and children, and relaxed immigration policies (Lowell 2001b). In Mexico, the government offers loans to students to study abroad; much of the loan is then exempted if they return to the country, and all is exemption if they work with a Mexican university after graduation (Lowell 2001b). In addition, the Taiwanese Government collaborated with its private sector to set up a National Youth Council in the 1970s to keep in touch with its highly skilled diaspora and link them with businesses at home; it also provides financial support for travelling and temporary jobs for returnees (Park 2008a). The Chinese Government also uses policies to encourage its diaspora to return home and enhance its skilled labour workforce – benefits include tax-free construction materials and international money transfers, fiscal incentives for investments, economic opportunities, and the possibility to have a second child with no penalty (Tremblay 2005).

However, there are also disadvantages in using repatriation policies to attract diaspora, as noted in some of the literature. For instance, Skeldon (2008) contended that there must be an attractive incentive for migrants to return to their home country of origin, especially in terms of making a living. Lowell (2001b) also argued that repatriation policies can be costly for the country of origin, with incentives often including job matching compensation, and travel and resettlement expenses.

In addition, repatriation is not always successful; it can be a complex process with minimal reward, as the Malaysian Government discovered. The repatriation policy introduced by the Malaysian Government has only attracted a trickle of diaspora back to the country (Ducanes & Abella 2008; Gross 2001; Ziguras & Law 2006). One of the main reasons for this lack of success is possibly because most Malaysian diaspora are of Chinese or Indian descent – minorities that are often marginalised via government policy favouring the Malay ethnic majority. For instance, the Malay ethnic population are also known as the ‘Bumiputra’ (sons of the soil) – a term coined and legislated by the Malaysian Government that is discriminatory. In addition, the Chinese and Indian minorities do not receive equal opportunities to the majority Malays in terms of employment and education (Athukorala & Waglé 2011).

In summary, skilled diaspora who live in a foreign country for a period of time and have gained overseas work experience may want to return to their home countries. These repatriates can fill the skill labour shortage gaps and help their home countries achieve economic development faster with the knowledge and skills they have learnt from overseas. However, governments have to employ both financial and non-fiscal initiatives to attract these repatriates to return home. The following assumption has therefore been developed from extant literature to guide the discussion on the policy discourse analysis on repatriation addressed in Chapter 9.

**Repatriation efforts engaging governments’ financial and non-fiscal benefit initiatives can reduce skill labour shortage.**

### **3.3.3 Brain networking**

From the extant literature, it has been pointed out that brain networking is another common policy response to skill labour shortage problems (Biao 2007; Ciumasu 2010; Tremblay 2005; Tung 2008). Brain networking is a connection between diaspora and their peers in their home country. A country’s diaspora can provide benefits to their home country by staying overseas rather than returning permanently (Biao 2007; Ciumasu 2010; Tremblay 2005; Tung 2008). They can be a beneficial resource to a nation in terms of remittances, knowledge transfers, technologies and investments (Chanda & Sreenivasan 2006; Ciumasu 2010; Lowell 2001b). It can be beneficial for governments not to intervene in the emigration of citizens; instead stimulating these diaspora to provide knowledge and technology contributions to their home countries from the foreign country (Lowell & Findlay 2001).

The Chinese Government, for example, uses a networking strategy with overseas Chinese for the transfer of knowledge and technology (Tremblay 2005). In India, the government has persuaded some of its diaspora based in the US to invest in Indian remittance-backed bonds (Lowell 2001b), which much needed foreign currency for international trade. Another example is the returnee Indian doctors that network with Indian diaspora associations to establish world-class corporate hospitals in India, which is advantageous in terms of investment, and knowledge and technology transfers (Chanda & Sreenivasan 2006).

In addition to the networking of professionals, Ciumasu (2010) identified universities as a key player in maintaining good bonds with diaspora. Some universities attract and encourage diaspora to connect with their home countries again. Most academics and scientists choose to work in places with large R&D expenditure; thus, governments should encourage the establishment of world-class universities to attract such diaspora. Singapore is a good example of the establishment of world-class universities that have encouraged brain networking (Ho & Ge 2011; Sidhu, Ho & Yeoh 2011). The Singaporean Government has persuaded many well-known foreign universities to open campuses in Singapore, which both attracts foreign academics and scientists to work in Singapore and creates brain networking with Singaporean academics and scientists working overseas.

Dual citizenship is another example of governmental policy response to skill labour shortage which stimulates brain networking opportunities. Many countries that have dual citizenship attract loyalty and support from both their diaspora and foreign citizens, cultivating fluid brain networking between the nations they have allegiance to (Birrell et al. 2001; Chanda & Sreenivasan 2006; Lowell 2001b; Tung 2008; Whitaker 2011). The concept of dual citizenship is increasing as a valuable policy to encourage the networking or regular visiting of highly skilled workers to their home country. As Lowell (2001b) pointed out, if diaspora feel at risk of losing their residency status in the country they are currently residing in, they may be reluctant to return permanently to their home country. Some migrate to foreign countries in search of a better life, and do want to abandon the earnings and lifestyle they have established there. Therefore, if they can retain residency status in their new country as well as their home country, they will likely feel more liberated and secure about temporarily returning to or regularly visiting their home country with its lower wages. In this scenario, it is essential for governments to provide the option for diaspora to return to their higher-wage country whenever they want to, which will encourage them to visit and brain network with their lower-wage home country (Lowell 2001b).

Some of the countries that allow dual citizenship are Australia, Canada, New Zealand and the UK; and India also passed a dual citizenship law in 2003 (Tung 2008). Some African nations have also adopted dual citizenship laws to take advantage of the professional ties their diaspora have established abroad, such as Angola, Chad, the Congo Republic, Ghana, Mali, Morocco, South Africa, Sudan and Uganda (Whitaker 2011).

In summary, brain networking relates to policies responding to skill labour shortage that use networks between diaspora who live overseas and their peers in their home country to transfer knowledge, new technologies, remittance and investment. These diaspora are an important element in the transferring of technologies and knowledge from their new country to their home countries, which may help their home countries achieve economic development faster and reduce skill labour shortage problems. Governments can use dual citizenship to encourage brain networking; an attractive benefit that can encourage diaspora to keep in contact with their home countries which may cause the transfers of capital, knowledge and technologies. The following two assumptions will guide the discussion on the policy discourse analysis on brain networking covered in Chapter 9.

**Brain networking through policy such as academic connection can reduce skill labour shortage problems.**

**Dual citizenship is an attractive incentive to create brain networking which can reduce skill labour shortage problems.**

### **3.4 Substitute workforces**

A considerable amount of literature has identified that females, the aged, disabled and refugees can be used as substitute workforces in response to skill labour shortage problems (Andersson & Fejes 2010; Browne & Braun 2008; Ducanes & Abella 2008; Fenwick 2012). In most countries' human capital pools, there are labour workforces that are voluntarily or involuntarily outside the labour market. However, it is often a challenge for policymakers to bring these substitute workforces back to the labour market as solutions for skill labour shortage.

#### **3.4.1 Female workforce**

Attracting women into labour workforces has often been one of the policy responses governments use to address skill labour shortage (Browne & Braun 2008; Bryant & Jaworski 2011; Ducanes & Abella 2008; Fang 2009; Souness & Morrison 2006; Thomas 2004; Wallace &

Marchant 2009; Wickham & Bruff 2008). There are three main study areas when attempting to engage women within the workforce: equal employment opportunity; misconceptions on jobs for men and women, or gender stereotypes; and flexible employment.

Firstly, with regard to equal employment opportunity, Japan's passing of the Equal Employment Opportunity Law in 1985 is an example of a government encouraging female contributions to the labour market (Ducanes & Abella 2008). This law was aimed at providing more employment opportunities to women, and was also against sex discrimination and age limits on the provision of education and training. It also expanded maternity leave, to attract women to continue staying in the workforce, rather than leaving permanently due to childbirth (Ducanes & Abella 2008). It is beneficial for most governments to provide equal employment opportunities to women, encouraging them to re-enter the labour market to address skill labour shortage.

Secondly, gender stereotype is a key obstacle for women to participate or re-enter the workforce, particularly in some specific jobs and industries. There are examples of gender stereotyping across particular industries. Both Bryant and Jaworski (2011) and Thomas (2004) pointed out that there is a common misconception about 'proper' jobs for men and women in the maritime and mining industries. Gender can also be an obstacle for women in taking up managerial positions in higher education institutions (Wallace & Marchant 2009). The gender stereotyping relates to abilities, skills, body shape and characteristics of men and women which lead to the perception of gender-relevant jobs despite women's skills being equal to men's (Bryant & Jaworski 2011; Thomas 2004; Wallace & Marchant 2009). For instance, women's bodies and other characteristics should not be obstacles for working outdoors in industries such as maritime and mining, or taking up managerial positions or leadership roles over men.

Thirdly, with regard to flexible employment, families and partners also play an important role in women's labour workforce contributions (Fosslund 2012; Souness & Morrison 2006). Most women spend their adult lives supporting families and engaging in domestic duties, which can often be an obstacle to gainful employment, particularly when they have children. Some of these women receive little support from other family members to help them re-enter the labour market. In addition, after long-term engagement in family duties, some lack the enthusiasm and confidence to return to the workforce (Fosslund 2012). Souness and Morrison (2006) also identified that women are rarely able to work full-time if their partners are employed in full-time jobs, and that work location is an important factor for women's



participation in the labour workforce. Mobility difficulties have often minimised the opportunities for women to contribute to the labour market.

As family, partners and work location are often main obstacles for women to participate or re-enter the labour market, flexible employment options are needed. For example, there needs to be flexibility in working hours for women to enter or re-enter the labour market, so that they can also balance their family responsibilities.

From the discussion above and the extant literature, the following assumption has been developed as a guideline for the discussion on the policy discourse analysis on female workforce in Chapter 9.

**Policies that support gender equality such as maternity leave and flexible employment will provide great incentives for women to enter or re-enter the labour market.**

### **3.4.2 Ageing workforce**

Ageing workforce has also been a common area of study in regard to government policy responses to skill labour shortage (Costa & Milia 2008; Davey 2008; Fang 2009; Fenwick 2012; Kalirajan & Shantakumar 1998; Osman-Gani & Chan 2009; Walker 2006). Such policy responses in relation to retaining an ageing workforce in the labour market include expanding the retirement age, providing working flexibilities, and retraining. However, in order to effectively implement such policies, it is also important to keep the ageing population healthy both mentally and physically, ensuring a better quality of life and higher production capabilities (Costa & Milia 2008; Kalirajan & Shantakumar 1998; Walker 2006).

In some countries such as New Zealand, France, Ireland, Greece and the UK, the retirement age has been extended in order to fill the gap in skill labour shortage (Bloom et al. 2011; Costa & Milia 2008; Davey 2008). In Singapore, the government first extended the retirement age from 55 years to 60 in 1993, and extended it further to 62 years in 2000 (Ducanes & Abella 2008). The advantages of extending the retirement age not only relate to an increased labour workforce, but also means that older workers can transfer their experience and knowledge to younger co-workers (Walker 2006).

However, to effectively maintain an ageing workforce, governments should encourage flexible working conditions that accommodate their older ages and general wellbeing, which will assist in removing full-time employment obstacles. As an example, the Singapore Government has

encouraged firms to establish part-time programs for retirees to re-enter the labour market (Ducanes & Abella 2008). In addition, it is beneficial for older workers to participate in learning and training programs to further develop their skills, which can keep them in the labour market longer and increase their employment opportunities (Fenwick 2012; Kalirajan & Shantakumar 1998). Thus, the following assumption has been developed from the extant literature, which will guide the discussion on the policy discourse analysis on ageing workforce in Chapter 9.

**Policy in support of an ageing workforce such as expanding the retirement age, flexible employment, retraining and updating skills can reduce skill labour shortage problems.**

### **3.4.3 Disabled workforce**

Based on the extant literature, a disabled workforce is also highlighted in relation to government policy responses to skill labour shortage (Berkowitz & O'Leary 2000; Campbell 2010; Gröschl 2004; Tufan, Yaman & Arun 2007). Successfully engaging disabled people within the labour market is dependent on a number of regulatory factors, such as appropriate human resource protocol, education and training, employer support, flexible working arrangements, and other relevant government policies and laws (Berkowitz & O'Leary 2000; Campbell 2010; Gröschl 2004; Tufan, Yaman & Arun 2007). Such factors need to be aligned to support and encourage a disabled workforce into the labour market; hence, the government and employers have major parts to play. As an example, the Japanese Government has implemented the Employment Promotion of Persons with Disabilities Law to enforce the hiring of disabled; requiring most Japanese employers to employ a portion of disabled workers as part of their staff (Ducanes & Abella 2008). This example shows the coordination of governments and employers in encouraging disabled workers to join the labour market.

From the extant literature on disabled workforces, the following assumption has been developed as a guideline for the discussion on the policy discourse analysis on disabled workforce in Chapter 9.

**Governments and employers can jointly use regulatory factors such as training programs, flexible working arrangements, effective legislation and apprehensible government policies can support the disabled workforce to perform in the labour market, which can reduce skill labour shortage.**

#### **3.4.4 Refugees workforce**

In the extant literature, a refugees workforce has also been commonly cited as a policy response to skill labour shortage (Andersson & Fejes 2010; Colic-Peisker & Tilbury 2006; Cortes 2004; De Vroome & Van Tubergen 2010; Hussein, Manthorpe & Stevens 2011; Peters 2008). However, there are often limitations on refugees entering into the labour market, which would need to be eased if they are to be used as part of a government's response to skill labour shortage.

Common factors that prevent or discourage refugees from entering into the local labour market include underemployment, and language and cultural barriers. In terms of underemployment, the knowledge and skills of refugees from prior learning and education are often not recognised in the new country particularly more developed countries like Australia, the UK, Sweden and the Netherlands (Andersson & Fejes 2010; De Vroome & Van Tubergen 2010; Hussein, Manthorpe & Stevens 2011; Selvarajah 1998). Most refugees that are underemployed in their new country either work in irrelevant areas to their qualifications or work in relevant areas but with lower skills. Many of them enter into the new labour market via jobs that are not desired by the locals, such as cleaning services, taking care of the aged, transport, security and the construction industry.

Language proficiency and cultural differences are further obstacles to effectively utilising a refugees workforce to reduce skill labour shortage (Colic-Peisker & Tilbury 2006; Cortes 2004; De Vroome & Van Tubergen 2010; Hussein, Manthorpe & Stevens 2011; Peters 2008). Even though some refugees may have recognised qualifications, they still have to use language to communicate with their employers and clients/customers effectively. Hussein, Manthorpe and Stevens (2011) suggested the implementation of supporting policies to help refugees find jobs such as language training, CV writing assistance, and encouraging them to do voluntary work which may lead to employment. Such policy responses would support the refugee workforce and help address skill labour shortage in the labour market.

The following assumption has been developed as a guideline for discussion on the policy discourse analysis on refugee workforce in Chapter 9.

**Policies that support refugee workforces such as skill training courses, language courses, and job application assistance can help reduce skill labour shortage.**

### **3.5 Summary of the chapter**

Skilled labour is the most important factor in supporting economic development. It is widely accepted that FDI cultivates knowledge and technology transfers to host countries; however, such transfers would not be successful without an effective and skilful labour workforce.

Based on the above discussion and the extant literature, there are three main policy themes used by governments in response to skill labour shortage: education and training policies; migration policies; and substitute workforces. These themes have formed the conceptual framework for this research, which will be discussed in the subsequent chapters.

## **Chapter 4: Research Methodologies, Research Methods and Conceptual Framework**

### **4.1 Introduction**

In this chapter, the reasons for the chosen research methodologies in this study will be explained. A combination of case study and narrative inquiry was adopted as the research methodologies to examine the phenomenon and answer this study's research questions. The case study approach provides an in-depth understanding of the case (Creswell 2007; Stake 1995; Swanborn 2010; Yin 2003). In this research, Thailand was chosen as the case to examine its government policy on skill labour shortage. This study is then narrated in a descriptive story based on narrative inquiry. It is important to understand the concepts of these research methodologies; they provide an appropriate direction for the research and help to find the right selection of research methods for the research project (Schwandt 2007; Strauss & Corbin 1998).

The research methods or the means to investigate the research questions in this study are documentation analysis, data triangulation and thematic analysis. This research involved examining a significant number of government policies that respond to skill labour shortage such as education and training policies, migration policies, and labour policies. The data was derived from various sources and analysed and triangulated into themes in order to answer the research questions. Hence, the document analysis and triangulation approaches are deemed as suitable research methods. A thematic analysis approach was also applied, as this research aims to identify and categorise themes from the Thai Government policy responses on skill labour shortage.

### **4.2 Conceptual framework**

Based on the literature review, skilled labour has been highlighted as the main driver of economic development (Abella 2006; Borensztein, Gregorio & Lee 1998; Xu 2000). Local investors cannot operate their business effectively if there is no skilled workforce in the labour market. FDI is also less likely to flow into a country that lacks a skilled labour workforce. Skill labour shortages are therefore an obstacle for any country that is striving for economic development.

Hence, from the extensive literature review covered in Chapter 3: Government Policies on Skill labour shortage, three main themes have been identified as areas where governments should respond to skill labour shortage: education and training policies; migration policies; and

substitute workforces. From these themes, policy response outcomes have also been identified. It is proposed in this study's conceptual framework that these identified policy discourses could produce holistic policy outcomes. These outcomes could be instrumental for developing effective policies to reduce skill labour shortage problems and may help countries reach their economic development targets rapidly. This relationship between these three main themes as inputs, policy responses as processes and the likely policy discourse outcomes are presented in Figure 4.1.

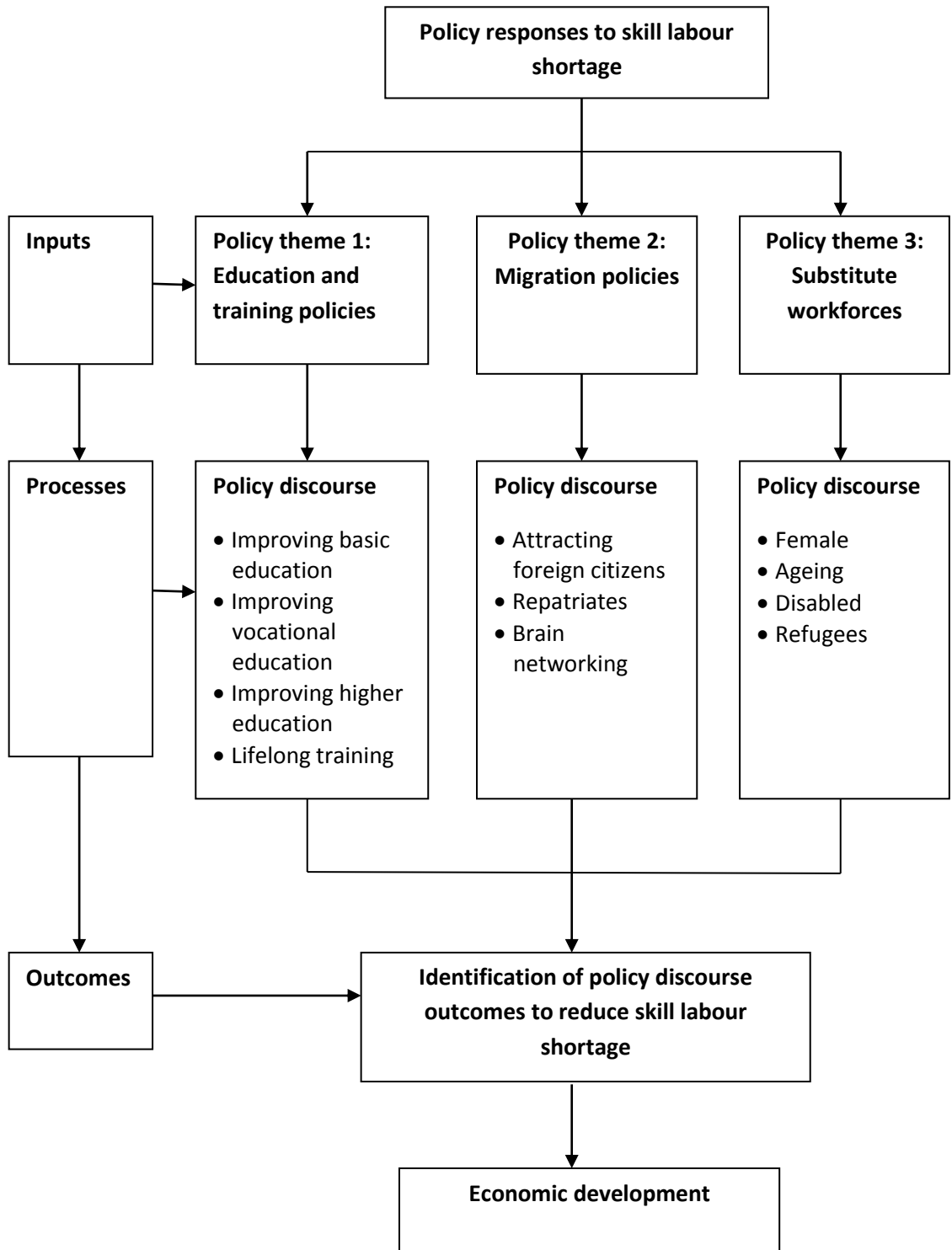


Figure 4.1: Conceptual framework of reducing skill labour shortage problems

The conceptual framework in Figure 4.1 was developed based on the literature. This research aims to categorise policy response themes that may be applicable for reducing the problem of skill labour shortage in Thailand. For the purpose of understanding the phenomenon of skill labour shortage impacting national economic development, this research has examined the Thai Government's policy responses to skill labour shortage. The literature support for the conceptual framework is as follows:

Policy theme 1: Education and training policies

Appropriate and targeted education and training legislation is a pivotal policy tool to improve the quality of human capital, which often leads to economic development (Nieuwenhuis 2012; Tremblay 2005; Truong, van der Heijden & Rowley 2010).

Policy discourse 1.1: Improving basic education: Providing a firm foundation, such as basic literacy and numeracy skills, for further education and skill development is viewed as necessary for skilled workforce development (International Labour Organization 2008; Nieuwenhuis 2012; Osman-Gani & Chan 2009).

Policy discourse 1.2: Improving vocational education: Cultivating vocational skills has a strong impact on national economic development (Hawley & Paek 2005; International Labour Organization 2008; Mustapha & Abdullah 2004).

Policy discourse 1.3: Improving higher education: Developing higher or specialised skills within the labour workforce is a key element for economic development (International Labour Organization 2008; Osman-Gani & Chan 2009; Skeldon 2008).

Policy 1.4: Lifelong training: Providing opportunities for the labour workforce to develop or learn new skills through lifelong training is essential to sustainable economic development (Kalafsky 2008; McGrath-Champ, Rosewarne & Rittau 2011; Nieuwenhuis 2012).

Policy theme 2: Migration policies

Migration policies are a common government response to skill labour shortage (Iredale 2000; Lowell 2001b; Orłowska 2011). When there is insufficient human resources capacity locally, migration policy is an important tool for governments to attract foreign skilled labour.

Policy discourse 2.1: Attracting skilled foreign citizens: This policy response aims to attract skilled workforces from foreign countries to fill the skill labour shortage gap in the local labour market. A decrease in the natural growth of the local population is one of the main reasons for



skill labour shortage in many countries (Ducanes & Abella 2008; Holland, Sheehan & Cieri 2007).

Policy discourse 2.2: Repatriates: This policy response focuses on attracting skilled repatriates who live in foreign countries to return to their home countries (Ciumasu 2010; Groenhout 2012; Lowell 2001b).

Policy discourse 2.3: Brain networking: This policy response aims to establish connections between skilled diaspora who live in foreign countries with peers in their home countries (Biao 2007; Ciumasu 2010; Tung 2008). Such networks and connections are a useful channel for transferring knowledge and technologies.

### Policy theme 3: Substitute workforces

There are several labour workforces that are outside the standard labour market, such as women, the aged, disabled people, and refugees (Andersson & Fejes 2010; Browne & Braun 2008; Ducanes & Abella 2008; Fenwick 2012). Many governments have used policies to attract these substitute workforces to return to or enter the labour market.

Policy discourse 3.1: Female workforce: There are three main policy responses used to attract women into the labour market: equal employment opportunity; gender stereotypes; and flexible employment (Browne & Braun 2008; Bryant & Jaworski 2011; Ducanes & Abella 2008).

Policy discourse 3.2: Ageing workforce: Policy responses used to retain ageing workforces in the labour market include expanding the retirement age, work flexibilities, and retraining (Costa & Milia 2008; Fang 2009; Fenwick 2012).

Policy discourse 3.3: Disabled workforce: This substitute workforce can be effective in addressing skill labour shortage, encouraged through a combination of policies such as education and training, employer support, flexible working arrangements, and apprehensible government policies and laws (Campbell 2010; Gröschl 2004; Tufan, Yaman & Arun 2007).

Policy discourse 3.4: Refugee workforce: Common barriers such as underemployment, and language and cultural barriers that prevent or discourage refugees entering into the local labour market need to be addressed (Andersson & Fejes 2010; De Vroome & Van Tubergen 2010; Hussein, Manthorpe & Stevens 2011).

### **4.3 Research philosophy**

Research philosophy is “the development of knowledge and the nature of that knowledge” (Saunders, Lewis & Thornhill 2007, p.101). When a researcher is conducting a research project, the aim is to develop new knowledge in a particular field. Research philosophy plays an important role in helping the researcher by steering them in the right direction to attain new knowledge (Saunders, Lewis & Thornhill 2007; Wilson 2010). Research philosophy also helps the researcher to clarify the research design which includes: research methodology; research methods; how to implement data collection in order to answer research questions; and what type of data is to be collected (Saunders, Lewis & Thornhill 2007; Wilson 2010).

There are three main concepts in relation to research philosophy: epistemology, ontology and Axiology (Saunders, Lewis & Thornhill 2007). Firstly, epistemology means the nature of ‘knowledge’ (Crotty 1998; Saunders, Lewis & Thornhill 2007; Schwandt 2007; Wilson 2010). Epistemology focuses on identifying the acceptable knowledge from the facts in the area of study (Saunders, Lewis & Thornhill 2007; Wilson 2010). Researchers focus on the data which are to be collected and analysed, based on the ‘facts’. Secondly, ontology focuses on the nature of reality, or in other words, how we think the world is (Crotty 1998; Saunders, Lewis & Thornhill 2007; Wilson 2010). There are two main aspects within ontology: the social entities are external to ‘social actors’ – objectivism; or social phenomena are formed by the perceptions and actions of social actors – subjectivism (Saunders, Lewis & Thornhill 2007; Wilson 2010). Thirdly, axiology focuses on value and how the researcher’s own values are affected in each stage of the research process (Saunders, Lewis & Thornhill 2007; Wilson 2010).

### **4.4 Research paradigm**

This section aims to explain the meaning of two key research paradigms: positivism and interpretivism (Crotty 1998; Saunders, Lewis & Thornhill 2007; Wilson 2010). The interpretivism paradigm aims to apprehend the phenomenon genuinely. That is, interpretivist researchers have to study and try to understand phenomenon deeply (Crotty 1998; Saunders, Lewis & Thornhill 2007; Wilson 2010). Interpretivist researchers believe that the phenomenon is more difficult to quantify than the natural sciences (Wilson 2010). Crotty (1998, p.67) stated that the interpretivism paradigm “looks for culturally derived and historically situated interpretations of the social life world”. Wilson (2010) also pointed out that an understanding of research informants in the social world is the key component of the interpretivism approach. Interpretivism is the subjective approach where the researchers interact with their research closely (Wilson 2010).

In addition, in the interpretivism paradigm, the interpretive researcher's own values can have an influence on the research (Saunders, Lewis & Thornhill 2007; Wilson 2010). The interpretivism approach usually involves an inductive approach, which is generating a new theory from the collected data to the research. Moreover, researchers who utilise the interpretivism principle in their research apply case study as one of their main research methodologies in order to understand the facts of phenomenon (Somekh & Lewin 2011).

The other main paradigm of positivism is known as the objective approach (Wilson 2010), which is a research paradigm that focuses on an observable social reality, and the research findings can be law-like generalisations (Crotty 1998; Saunders, Lewis & Thornhill 2007). The research has to be implemented in a scientific nature (Crotty 1998; Schwandt 2007). Wilson (2010, p.10) believed that this research paradigm should "follow a strict set of guidelines and should be carried out by appropriately trained scientists". The researchers who use this positivism principle usually base it on a deductive approach by using existing theory to test hypotheses and to develop the theory further (Saunders, Lewis & Thornhill 2007; Wilson 2010). Positivist researchers must have minimal interaction with the research participants while proceeding with the research. For positivists, the research is value-free; that is, researcher's perceptions are not generally influential on the research process (Saunders, Lewis & Thornhill 2007; Wilson 2010). Hence, this research is based on both the interpretivism and positivism paradigms.

#### **4.5 Qualitative research**

This research is based on a qualitative research approach. Qualitative research provides an in-depth understanding of human experiences or social problems (Robson 2011; Stake 1995; Swanborn 2010). In qualitative research, data is collected and analysed to answer the research questions by producing a written document which includes all sources of data collection, researchers' analysis, a description and interpretation of the problem, and a solution or extended research (Creswell 2007).

There are several main justifications for using qualitative research. Hesse-Biber and Leavy (2011) explained that qualitative researchers adequately answer the research questions by exploring, describing and explaining the data. Bryman (2008) also noted that qualitative research focuses on words rather than numbers. According to Strauss and Corbin (1990), qualitative research is any kind of research where the research finding is not based on scientific ways such as "statistical procedures or other means of quantification" (p. 17). Qualitative research can involve stories about people's life experiences, people behaviour,

social movements, and organisational functioning. Quantified data can also be used in qualitative research, but the analysis itself must be a qualitative way (Strauss & Corbin 1990).

Qualitative research is a data interpretation process where raw data is analysed to discover new concepts, and is then categorised into an explanatory theory (Strauss & Corbin 1998). Dooley (2002) argued that qualitative data is important in terms of understanding the relationship of the data in forming a theory. It is also known as a knowledge-building process which involves diverse perspectives and practices (Hesse-Biber & Leavy 2011). Data collection in qualitative research often involves interviews, observations, records, films and documents (Strauss & Corbin 1998).

Qualitative research is often used because it provides an in-depth understanding of a phenomenon, such as human experiences or social problems (Robson 2011; Stake 1995; Swanborn 2010); in this case, skill labour shortage in Thailand. As part of this process, this study has used NVivo which is qualitative data analysis software for data collecting and analysing. The software has been designed to analyse a large amount of data in a qualitative manner.

#### **4.6 Deductive and inductive approaches**

In developing themes, two approaches were used as part of the qualitative research: deductive and inductive (Saunders, Lewis & Thornhill 2007; Wilson 2010). Most researchers do not build a theory from the beginning (Eisenhardt 1989; Whetten 1989; Wilson 2010); they usually use an existing theory which is known as the 'deductive approach'. Researchers develop an existing theory and design a research strategy in order to test a hypothesis. Using this approach, researchers find theories/concepts from literature and test them by using data collected. Then the theories/concepts can be confirmed or rejected, which may lead to further development of the theories/concepts (Saunders, Lewis & Thornhill 2007).

The researchers should be able to explain how a new factor or variable is relevant to the existing theory. Whetten (1989) believed that that relationship between factors is the most important explanation in understanding theory; not just the lists of factors or variables. Theorists have to understand the limitations of existing theory in order to revise the variables of theory (Whetten 1989). When the theory is revised, theorists should realise feedback in order to improve the theory (Van De Ven & Poole 1989). Theorists or researchers may keep developing, testing and revising their theories until they are perfect (Van De Ven & Poole 1989).

The other inductive approach is often used to develop a theory from extensive data collection. The data is analysed and the researchers use the result to develop a theory (Saunders, Lewis & Thornhill 2007). Unlike the deductive approach, inductive does not start with an existing theory; it begins with a study of phenomenon. A theory on phenomenon will be discovered, developed and verified through systematic data collection (Saunders, Lewis & Thornhill 2007; Wilson 2010). Data are collected via a variety of methods such as interviews, observations, and written and non-written materials; and then explored and analysed to develop a theory. Saunders, Lewis and Thornhill (2007) pointed out that research which examines a new topic with minimal previous literature is usually based on the inductive approach. For example, the topic of this research – the impact of skill labour shortage on economic development in Thailand – is a new area of study with limited former literature.

Both deductive and inductive approaches have been applied in this research to identify and categorise themes on policy responses on skill labour shortage in Thailand. As the phenomenon of skill labour shortage has also been recognised in many other countries with extant literature about government policy responses (Ducanes & Abella 2008; Fang 2009; Hawley & Paek 2005; Lowell 2001b; Tremblay 2005), the deductive approach has been engaged to uncover the policy themes.

The conceptual framework Figure 4.1 above has been designed based on the extensive literature relating to skill labour shortage around the globe, particularly in developed countries in North America and Europe. However, it was identified that most of this literature on skilled labour issues focus on one area – very few are multifaceted (Birrell, Healy & Smith 2008; Browne & Braun 2008; Cameron & O’Hanlon-Rose 2011; Costa & Milia 2008; Gröschl 2004; Hawley & Paek 2005; Ho & Ge 2011; Lashley 2009; Mahroum 2000; Tremblay 2005; Wocke & Klein 2002) and based on a holistic investigative approach. This study is the first of its kind to explore the phenomenon of skill labour shortage via a systematic and purposive exploration in Thailand and the ASEAN. This research has therefore applied the deductive approach to develop themes from extant literature, and in the exploration of the phenomenon the inductive approach was applied to identify policy response outcomes on skill labour shortage in Thailand.

#### **4.7 Case study**

The case study approach is a qualitative method which allows researchers to examine a case or multiple cases over a period of time, by employing an in-depth data collection in order to explore the complexity of a specific topic and collect multiple sources of information on it

(Creswell 2007; Hesse-Biber & Leavy 2011; Liamputtong 2013; Stake 1995; Swanborn 2010; Yin 2003).

Creswell (2007, p.73), defines case study research as:

... a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g. observations, interviews, audio-visual material, and documents and reports), and reports a case description and case-based themes.

Researchers will study a case to understand its uniqueness and complexity; as Yin (2003) suggested, case study research can be used to explore, explain and describe the phenomenon.

The characteristics of a case study are as follows:

1. A case study is suitable to answer the research questions which begin with 'why', 'what', and 'how', and help us to understand how the process develops (Saunders, Lewis & Thornhill 2007; Swanborn 2010).
2. A case study is usually a descriptive research document and should not be biased; it should cover all information, and readers can use their own perceptions to judge the case (Dooley 2002).

Case study research can use both quantitative and qualitative methodologies (Dooley 2002). Multiple methods of data collection are often employed in case study research, such as observing, interviewing, focus groups, and documentation analysis (Dooley 2002; Swanborn 2010; Yin 2003). However, in this study policy responses to skill labour shortage were researched as a single case study country. Hence, this research only applied the documentation analysis method in the data collection, including Thai Government policies on skill labour shortage, academic journals, newspaper articles about the issue, statistics from government agencies and international organisations, and reports from academic institutes.

#### **4.8 Selecting the case study**

In this research, Thailand was chosen as the case study. The Thai economy was strongly focused on the agricultural sector (Daquila 2005), with main exports in rice, rubber, maize, tapioca and fish. Significant changes in this economic focus began when FDI, particularly from Japan and East Asian countries, flowed into the country via the manufacturing sector in the 1980s (Numnak 2005; OECD 1999). This inflow of FDI transformed Thailand from an agricultural to industrial-based economy. Currently classified by the World Bank as an upper-middle-income country (World Bank 2015b), Thailand is trying to move up the economic value

chain (see discussion in Chapter 5) from a labour-intensive, manufacturing-driven economy to a technology-driven economy (Wongboonsin & Wongboonsin 2009). As a result, Thailand needs to improve both the quantity and quality of its human capital pool to enhance its economic competitiveness, according to 'Thailand is facing serious skills shortages in the next ten years' (2011).

In terms of quality, the country needs a labour workforce with skills that match the requirements of industries. Relevant skills, for example, relate to IT and engineering professionals, as well as an ability to speak a common foreign language (JETRO 2006; Russell 2007). In regard to quantity, according to 'NESDB: Labour shortage in the next five years' (2010), the growth rate of working age population in Thailand is decreasing due to shifting demographics and an ageing society. Thailand is currently experiencing decreases in population growth which conflicts with its pressing need to increase its labour workforce.

In addition to Thailand's economic ambitions, the ASEAN aims to become one market by 2015, which will create freer movement of capital, labour workforce and goods among the 10 member nations of Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. The upcoming free movement of labour workforces has caused anxiety among Thai policymakers, worried that a significant amount of Thailand's skilled labour, especially doctors and engineers, may move to other countries, particularly higher-income countries such as Singapore and Malaysia, which may cause even more shortages in the skilled labour pool, according to 'The impact of ASEAN community to the industrial business in Thailand' (2012).

In summary, Thailand's economic development may progress slowly due to its shortages of a skilled labour workforce. This research therefore aims to explore what Thailand's policy responses on skill labour shortage are in order to help the country achieve economic development. The three key categories on policy responses to skill labour shortage; education and training policies; migration policies; and substitute workforces; as identified from the literature review, will be examined in the Thai context. This research also aims to categorise other potential policies in relation to skill labour shortage which may emerge from the raw data collected. In doing so, a thematic analysis method has been applied to this research, which will help to theme policies on skill labour shortage for the Thai Government.

#### **4.9 Thematic analysis**

Thematic analysis is a research method where researchers identify and analyse themes from data collected (Boyatzis 1998; Braun & Clarke 2006; Vaismoradi 2011). Braun and Clarke (2006) contended that thematic analysis should be the first qualitative analysis method for researchers to learn because it provides core skills for the qualitative approach, which is a foundation for other forms of qualitative analysis. Thematic analysis is flexible and provides an easy-to-access form of analysis. Braun and Clarke (2006) pointed out that thematic analysis could be an essentialist or realist method which relates to the experience of participants. Thematic analysis can also be a constructionist method which studies events, realities, meanings and experiences of a phenomenon (Braun and Clarke 2006). Thematic analysis is a method that reflects and discloses the reality of the study (Braun and Clarke 2006). A theme represents an important concept in the data, which is related to the research questions (Braun and Clarke 2006).

Themes in thematic analysis can be divided into two types: inductive and deductive approaches (Braun & Clarke 2006). The inductive approach is a data-driven analysis process where the themes are categorised from data, which is similar to grounded theory. The data coding in the inductive approach is not related to any pre-existing coding frame or the researcher's analytic pre-conceptions. In other words, the researcher who uses the inductive approach may choose to not be involved in the literature in the early stages of the research, which may leverage a narrow analysis of the data; themes are instead identified from raw data (Braun & Clarke 2006).

In theoretical thematic analysis, or the deductive approach, the research analysis is driven by the theoretical or analytic interests of the researcher (Braun & Clarke 2006). Braun and Clarke (2006, p.84) stated that "this form of thematic analysis tends to provide less a rich description of the data overall, and more a detailed analysis of some aspect of the data". A researcher who uses the deductive approach may need to be involved in the literature before the analysis process in order to enhance the data analysis; themes are identified from theory or previous research (Braun & Clarke 2006).

As previously noted, this study has applies both the deductive and inductive approaches in analysing and identifying themes on policy responses of the Thai Government in relation to skill labour shortage.



#### **4.10 Developing themes and codes**

Thematic analysis is a process that involves the encoding of the qualitative data (Boyatzis 1998; Braun & Clarke 2006; Vaismoradi 2011). Braun and Clarke (2006) explained that the process of thematic analysis starts when the researcher first notices patterns of meaning or themes in the data; this may happen during the data collection stage. The process generally finishes when the researcher reports themes or patterns of meaning in the data. In the analysis process, the researcher will often move back and forward between data analysis, coding data, writing, and data collection stages.

Boyatzis (1998) identified four stages in developing the ability of researcher to use thematic analysis. Firstly, the researcher must be able to recognise or senses the themes. When commencing the process of developing codes, the researcher must be open to all data; this will lead the researchers to the stage of sensing or recognising the themes. Secondly, the researcher must be able to consistently see the themes. Thirdly, codes must be developed and analysed, which again requires openness from the researcher. A good code should comprise of five components (Boyatzis 1998): a label or a name; a definition of what the theme is related to; a description of how to know when the theme happens; a description of any qualifications to the identification of the theme; and examples to eliminate possible confusion, if any, when looking for the theme. Fourthly, the themes must be interpreted in order to contribute to the development of the knowledge. This process requires a theory or conceptual framework which may be developed from previous studies deductively or developed from raw data inductively. Thus, there are three recommended approaches in developing themes and codes: a theory-driven approach; a prior-research-driven approach; and a data-driven approach (Boyatzis 1998). In this study, only the theory- and data-driven approaches are discussed, based on the belief that the prior-research-driven approach is similar to the theory-driven approach.

#### **4.11 Theory-driven and data-driven approaches**

The theory-driven approach is based on a theory which has been previously founded (Boyatzis 1998), and is most often used in social science research. As this approach is based on previous theory, codes are derived which the researcher then categorises evidence to support the theory.

The data-driven approach is based on raw information (Boyatzis 1998). It involves the researcher developing the codes, interpreting their meaning, and building a theory based on the results. If researchers choose this approach, they need to feel confident that “they will arrive at a desirable destination, especially because they do not know where it will be, what it

will look like once they are there, and how long it will take” (Boyatzis 1998, p. 29). Figure 4.2 shows a summary of the stages and steps in using either thematic analysis.

Stage	Theory-driven approach	Data-driven approach
1	Deciding on sampling and design issues	(i) Deciding on sampling and design issues (ii) Selecting sub-samples
2	(i) Generating a code from theory (ii) Reviewing and rewriting the code for applicability to the raw information  (iii) Determining the reliability	(i) Reducing the raw information  (ii) Identifying themes within samples  (iii) Comparing themes across sub-samples  (iv) Creating a code  (v) Determining the reliability
3	(i) Applying the code to the raw information  (ii) Determining validity  (iii) Interpreting results	(i) Applying the code to the remaining raw information  (ii) Determining validity  (iii) Interpreting results

**Figure 4.2: Summary of stages and steps in using thematic analysis**  
**Source: Boyatzis 1998, p. 44**

#### 4.12 Narrative inquiry

As previously stated, this study is based on a qualitative research which provides a deep understanding of human experiences or social problems (Robson 2011; Swanborn 2010). Narrative inquiry is suitable for answering research questions in the form of storytelling (Marshall & Rossman 1999; Schwandt 2007). It provides the understanding and meaning of phenomenon by describing the event or action relating to the research questions. The questions that narrative inquiry covers relate to: what the story is about, what happened, to whom, why it happened, what the consequences are from the story, and what the final outcome is (Saunders, Lewis & Thornhill 2007). Such narrative story telling is interpreted in order to answer the research questions (Riessman 1993).

Hence, this research has used narrative inquiry to tell the story of the human resources capacity building of the Thai Government, particularly its policy responses to skill labour

shortage problems from 1992 to 2014. It is also expected that narrative inquiry will provide a deeper understanding of this phenomenon.

#### **4.13 Document analysis and data sources**

This is a process of studying a particular phenomenon by examining, analysing and interpreting various documents (Marshall & Rossman 1999; Schwandt 2007). The data sources are known as secondary data; that is, data that have already been collected. The data can be both raw and published materials including reports, government documents, academic articles, newspaper articles, journal articles, letters, diaries, minutes of meetings, and memoirs (Marshall & Rossman 1999; Saunders, Lewis & Thornhill 2007). The main advantage of using documentation analysis is that it is non-reactive and modest; that is, the research can examine the truth without interfering (Marshall & Rossman 1999).

This research aims to explore the impact of skill labour shortage on economic development in Thailand. Hence, documents from various sources in relation to the research questions were collected; this ensures variety and limits potential bias in the research. The data were then analysed, triangulated and categorised into themes based on the Thai Government's policy responses to skill labour shortage. The data were triangulated to ensure accurateness of the research findings.

#### **4.14 Triangulation**

Triangulation is a research technique that uses data from different sources and/or by multiple methods to intensify the validity of research findings and deliver an in-depth understanding of the study (Denzin & Lincoln 2003; Robson 2011; Swanborn 2010; Woodside 2010). There are four types of triangulation: 1) data triangulation – using multiple data sources in a study; 2) investigator triangulation – using other researchers to investigate the same study; 3) theory triangulation – using multiple perspectives/concepts to interpret the data; and 4) methodological triangulation – using combined methods such as both quantitative and qualitative methods to study a single problem (Denzin 1978; Wilson 2010). According to Maxwell (1996), triangulation can reduce the possibility of bias in the study. Triangulation also helps to reduce the limitations of a specific data collection (Maxwell 1996).

Data triangulation can reduce “the risk of chance associations and of systematic biases” (Wilson 2010, p.164). Triangulation can also analyse similarities, differences and disagreements between the data from different sources (Robson 2011). In addition, Stake (1995) pointed out that data triangulation is a method to prove the phenomenon that researchers are investigating, advises the same meaning when found under different

situations. However, only important data is selected for triangulation (Stake 1995). It is up to the researchers to select the most important or relevant data in answer to the research questions, leading to a better understanding of the cases. For example, this study's main research question was focused on the policy responses of the Thai Government to skill labour shortage; hence, relevant data was collected from various sources to be analysed and triangulated.

#### **4.15 Summary of the chapter**

Based on the study's research objectives stated in Chapter 1, this research was aimed at exploring and identifying how the Thai Government responds to skill labour shortage to meet its economic development goals. Case study was employed as a research methodology to investigate the complexity of the Thailand case, and narrative inquiry to explain how the Thai government has responded to its skill labour shortage problems.

A large amount of documentation including government policy, policy statements, reports, academic journals and newspaper articles was expected to be examined to answer the study's research questions; hence, the chosen research methods were documentation analysis, data triangulation and thematic analysis. In addition, based on the extant literature, a conceptual framework (see Figure 4.1) was used as the main concept for conducting this research; from this, deductive and inductive approaches were applied to analyse the data.

It was anticipated that these chosen research methodologies and methods would help answer the study's research questions in relation to skill labour shortage in Thailand. In addition, this phenomenon has been explored by identifying and categorising policy outcomes from the Thai Government's responses to its skill labour shortage problems.

## **Chapter 5: Skill labour shortage in Thailand – Causes and Effects**

### **5.1 Introduction**

As previously noted, this research has studied the impact of skill labour shortage on economic development in Thailand. It is widely known that a skilled labour workforce is essential to economic development (Brown, Lauder & Ashton 2008; Ho & Ge 2011; Osman-Gani & Chan 2009); in terms of improving a country's capability to produce new technology and innovation for further development (Banks 2010; Galagan 2010; Nieuwenhuis 2012). When a country lacks an appropriately skilled workforce, its economic development goals may not be achieved (Abella 2006).

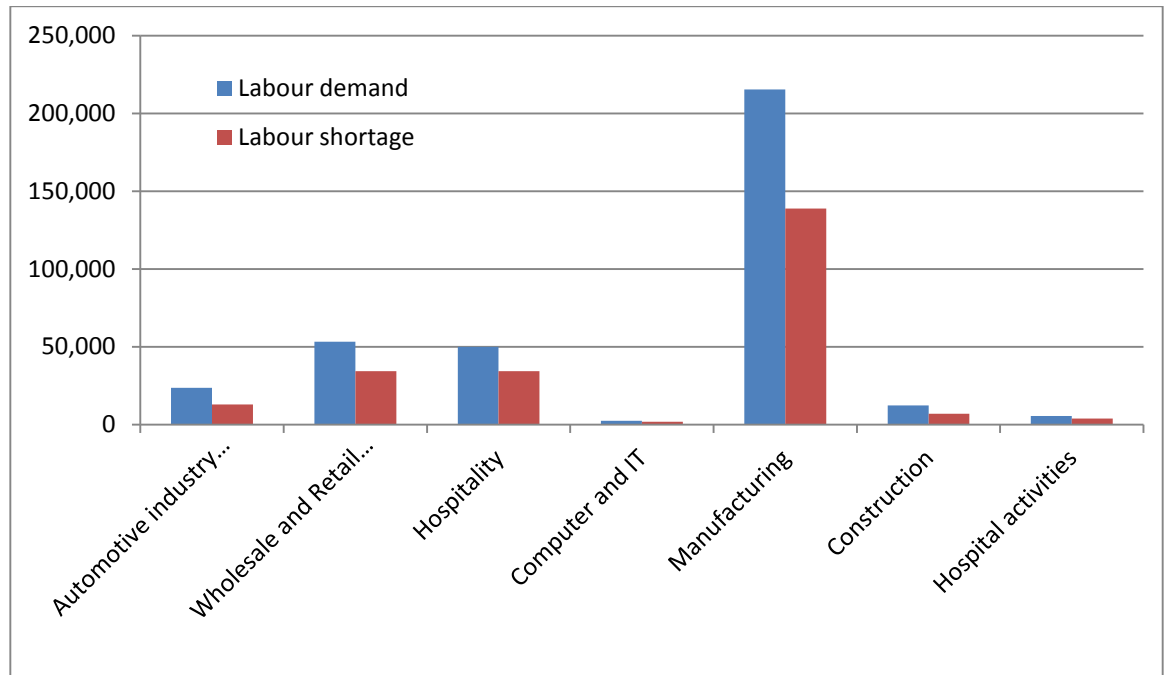
In Thailand, there are several factors that have previously been identified as causing its skill labour shortage, including economic structural change (Nafziger 2005; Robbins 2012; Todaro & Smith 2009), a decline in population growth (JETRO 2006; Wangkiat 2013), and a mismatch between education policy and the requirements of the labour market (Ducanes & Abella 2008; Park 2008a; World Bank 2012). This skill labour shortage has snared Thailand in the MIT (Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012), which delays its ability to achieve its economic development goals.

This chapter therefore examines how these factors have caused the skill labour shortage problems which have led to Thailand's position in the MIT. The crucial element that links all these factors with Thailand's skill labour shortage issue, the National Economic and Social Development (NESD) plans, is also discussed.

### **5.2 Causes behind skill labour shortage in Thailand**

Thailand is currently being outperformed by regional competing to countries such as China, Vietnam, Indonesia and the Philippines, especially in labour-intensive industries (World Bank 2012). Labour costs in Thailand are generally higher, driving most labour-intensive industries out of Thailand and into neighbouring countries to operate their production lines. Hence, Thailand needs to develop its labour workforce, to achieve economic growth via its ascent up the economic value-chain, from labour-intensive to skilled-intensive industries. However, it is widely known that Thailand is facing skill labour shortage, according to: *The need of skilled labour* (2012); *Thailand lacks of skilled labour* (2011); *Auto industry needs skilled labour* (2012); and *Health Personnel Development Plan* (2012).

Graph 5.1 shows the number of labour demands and shortages categorised by economic activity as surveyed in 2008 (National Statistical Office of Thailand 2015). The results indicate that skill labour shortage is affecting every industry in Thailand, especially manufacturing.



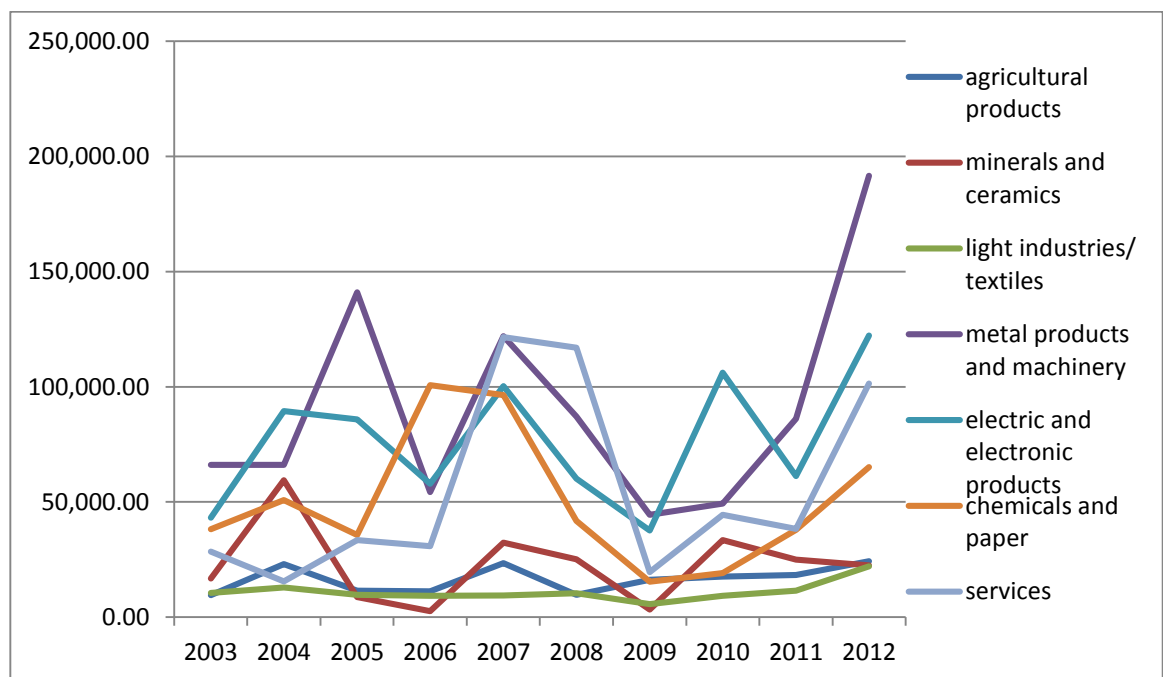
**Graph 5.1: Number of labour demands and shortages in 2008 by economic activity**

Source: National Statistical Office of Thailand (2015) -

[http://web.nso.go.th/en/survey/ld/ldoe\\_main.htm](http://web.nso.go.th/en/survey/ld/ldoe_main.htm)

Baker and Phongpaichit (2005) suggested that the inadequate supply of skilled workers in Thailand's labour market was due to the lack of vision of the government; hence, the Thai Government should collaborate with industries on the development of a skilled labour workforce. In addition, the data from Thailand's Board of Investment (BOI) (2015a) confirms that skilled-intensive industries and service sectors are becoming more influential on the country's economic structure.

Graph 5.2 below shows the amount of foreign investment in Thailand by industrial sector from 2003 to 2012. The results clearly show an increase in foreign investment in the advanced-technology and skilled-intensive service sectors such as metal products and machinery, electric and electronic products, chemicals and paper, and the services sectors. Hence, these results indicate that the Thai Government should focus on skilled worker development in these areas.



**Graph 5.2: Foreign investment in Thailand approved by BOI, by sector 2003-2012 (million Baht)**

Source: Board of Investment (2015a) -

[http://www.boi.go.th/index.php?page=statistics\\_foreign\\_direct\\_investment](http://www.boi.go.th/index.php?page=statistics_foreign_direct_investment)

In addition to the industrial/vocational skills that are required in the Thai labour market, a knowledge of foreign languages is also in demand, according to *Research shows Thai students do not want to work overseas due to language limitation* (2012). In line with this, JETRO (2006)

revealed that the lack of Thai engineers who can speak a foreign language has been a major obstacle for Japanese companies investing in Thailand. According to *Foreign language is the weak point for Thai engineers* (2012), there is concern that when the AEC becomes effective in 2015, the Thai workforce will not be competitive in the regional labour market due to its inability to speak a foreign language.

In the next sections, others factors that have influenced Thailand's skill labour shortage are discussed, such as economic structural changes, the decreasing of population growth, and the mismatch of education policy and labour market requirements.

### **5.2.1 Economic structural changes**

In general, effective economic development involves a range of processes such as maintaining sustainable development growth, increasing income levels, decreasing poverty, increasing employment, improving income distribution, providing basic social services (e.g. education, housing and sanitation), and enhancing labour and capital productivity (Musai 2011; Todaro & Smith 2009). The achievement of these factors cultivates a high economic standard of living which is a key indicator that a government's economic development program has been successful (Jitsuchon 2012). Governments play a major role in increasing the economic living standards of their people; making decisions that can transform, develop and improve the quality of the country's economic structure, including political and social wellbeing (Nafziger 2005; Robbins 2012; Todaro & Smith 2009).

Adequate economic structural change is essential to a nation's economic development, as indicated by Kambhampati (2004); it usually has a positive impact on the country's industries. In such circumstances, new and improved industries will replace old industries and take the lead in the country's economic sector (Hogendorn 1996; Tribe, Nixon & Sumner 2010). Therefore, the country needs to produce a labour workforce that aligns with the new skill requirements in the changed labour market, with the government providing the relevant knowledge and training to ensure successful economic structural change.

In an economic development process, most countries encounter three phases of economic structural change – primary, secondary and tertiary – which constitute the traditional model of economic transformation (Hogendorn 1996; Tribe, Nixon & Sumner 2010). In this change process, countries generally follow a linear approach to transform the economic structure and develop the nation's economy (Hogendorn 1996; Tribe, Nixon & Sumner 2010).



In the first primary phase, most countries begin their economic development process by focusing on primary products, such as agricultural commodities, minerals and other natural resources. In low-income and less-developed countries, the primary stage plays the largest role in economic development (Hogendorn 1996; Tribe, Nixon & Sumner 2010). This stage often comes first because it requires low-level capital and technologies, and a low-skilled labour workforce (Kambhampati 2004).

A country in this primary stage may use its revenue from the exporting of agricultural products, minerals and natural resource to upgrade its infrastructures such as roads, ports, airports, and electricity and irrigation systems (Szirmai 2012). Consequently, the upgrading of these infrastructures may attract FDI to the country to establish manufacturing. At the beginning, foreign investors usually invest in labour-intensive manufactured products. These labour-intensive manufacturers use low-level technologies; therefore, only a low-skilled workforce is needed. FDI in manufacturing will also create more jobs in the local labour market and attract more workers that were previously engaged in the low-waged agricultural sector to move into the manufacturing sector. When such growth and development occur, there is likely to be a transformation from the primary stage to the secondary (Hogendorn 1996; Kambhampati 2004; Tribe, Nixon & Sumner 2010).

In the second phase of economic transformation or the secondary stage, labour-intensive products are manufactured, which becomes the main 'engine' in encouraging economic growth (Memedovic & Lapadre 2010; Szirmai 2012). As Szirmai (2012) observed, such labour-intensive manufacturing effects radical changes in global economic structures based on increased labour productivity and economic welfare. Szirmai (2012) also revealed that manufacturing has been the driving force behind the successful economic development of many developing countries, especially those in Asia. For example, Thailand, Singapore and Malaysia have all benefited from FDI in the labour-intensive manufacturing sector since the 1970s (Daquila 2005; Szirmai 2012). Manufacturing firms that are often established in this secondary phase include textile and garment, and agricultural produce factories.

In this secondary phase, governments should actively participate in the provision of a low-skilled workforce to meets the requirements of the labour-intensive manufacturing sector. Therefore, at this stage labour market requirements are based on the quantity of local workers rather than the quality. As economic growth accelerates, continued declines in the primary stage occurs, leading to further increases in the secondary and then tertiary stages. The rise of secondary and tertiary stages generally increases the need for a highly skilled workforce

(Decharuk, Leelapornchai & Udomkerdmongkol 2009; Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012), with the education sector playing a more significant role in providing skilled workers that can meet these more advanced demands.

In the third tertiary phase, skilled-intensive products that often require increased capital, more advanced technologies and a higher-skilled labour workforce become the main focus of industry (Hogendorn 1996; Kambhampati 2004). When a country transforms from the labour-intensive manufacturing stage to a tertiary or skilled- and technology-intensive stage of economic functioning, there will be a greater demand for a skilled labour workforce (Hogendorn 1996; International Labour Organization 2008; Keller 2004; Xu 2000). As economic growth continues to increase in this stage, increased revenue and incomes for the population to spend are generated. This economic growth stage will create a middle-class population, which will also enhance the domestic demand for sophisticated, higher-technology products and skilled-intensive services (Jimenez, Nguyen & Patrinos 2012). Such demand will encourage FDI in the relevant industries (Jimenez, Nguyen & Patrinos 2012). The human resources pool will therefore need to be educated and trained for the new knowledge and technology skills required by these more advanced industries (International Labour Organization 2008).

The higher-level or sophisticated technology relates to products such as computer software, telecommunication devices and electronic products. Skilled-intensive services include personal services, restaurants and hotels, healthcare and medical services, government, financial sector, and retail sales and distribution (Szirmai 2012). The GDP share of such sectors is generally higher than 70% (Szirmai 2012), and they are generally the main drivers of significant economic growth during the third phase.

To better understand the relationship between GDP and sophisticated and higher-technology industries and skilled-intensive services, a comparison of Thailand's GDP per capita against Singapore and Malaysia has been provided in Graph 2.7 in Chapter 2. These three countries are all ASEAN members and have developed their economies over a similar period of time which is since the 1960s. Singapore is now a developed country in the third phase of economic structural change, producing skilled-intensive services and advanced-technology products. In contrast, Malaysia and Thailand remain in the second phase and are mainly producing labour-intensive manufacturing products. This graph clearly shows an extensive gap in GDP per capita between these three countries, displaying how Singapore has economically outperformed both Malaysia and Thailand.

Interestingly, in the early 1980s the GDP per capita of Singapore was not much higher than Thailand and Malaysia. Only since 1987 has Singapore's GDP sharply risen compared with the other two countries where it continues to slowly but steadily increase. As the graph also shows, the GDP dropped across all three countries in 1997 due to the AFC, but all have continued to increase since then, particularly Singapore which has widened the gap. The stunning growth in Singapore's GDP has led some to question how its government has been able to provide the leadership and guidance needed for the economy to perform well.

Despite it being a small country, the Singaporean Government has always focused on education to improve the skills of its population (International Labour Organization 2008; Mani 2002). Since the 1960s the country has consistently upgraded the skills of its human capital via educational institutions such as universities and polytechnics. During 1989 to 1999, educational expenditure in Singapore grew to about 20% per annum; concentrating on science and technology subjects, such as engineering sciences, information technology, architecture and building, health sciences, and other sciences and related technologies. The Singapore Government has strived for the country to become the talent capital of the world and the home of a highly skilled workforce (Yeoh 2007).

In addition to its focus on educating its people, migration policy that attracts foreign skilled workers is a priority of the Singapore Government. The statements of all Singaporean prime ministers have been evidenced (Pang 2006). Consistency and clarity is used in the government's migration policies to attract a foreign skilled workforce to add depth to its pool of skilled workers.

Another indicator that relates to economic growth is research and innovation (Tremblay 2005). In this regard, skilled labour again plays a pivotal role in research and innovation, in order to progress a country's economic development. A link between R&D investment, innovation, economic growth and development needs to be established to achieve long-term growth and development through skilled labour (Nieuwenhuis 2012; Tremblay 2005). That is, economic development goals will probably be achieved faster when a country significantly invests in skilled labour and the R&D sector. A deep pool of skilled labour means that the government can attract investors to invest in technology-intensive industries which could stimulate more economic growth than other basic industries.

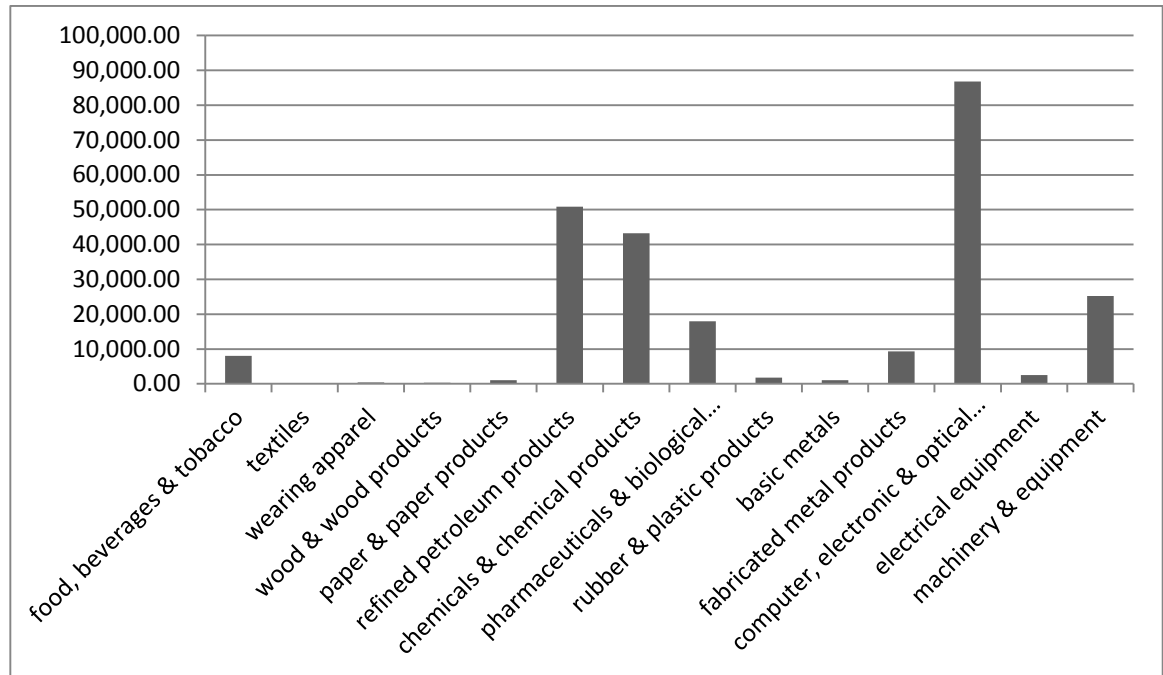
There are several graphs in Chapter 2 that clarify the importance of R&D investment. Graph 2.4 compares R&D expenditure (percentage per GDP) in Thailand, Singapore and Malaysia, and

shows that high-income and developed Singapore is a lot higher than the other two middle-income and developing countries.

Graph 2.5 shows the numbers of researchers in the R&D sector across Thailand, Singapore and Malaysia. These are professionals engaged in the conception or creation of new knowledge, products, processes, methods or systems, and in the management of the relevant projects; postgraduate and PhD students engaged in R&D are also included. The graph highlights that the amount of these researchers per million people in Singapore is considerably higher than in Malaysia and Thailand.

Graph 2.6 next shows the number of technicians in R&D per million people in Thailand, Singapore and Malaysia. These are professionals whose main tasks require technical knowledge and experience in engineering, physical and life sciences, or social sciences and humanities. They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, normally under the supervision of researchers (World Bank 2015). This graph also indicates that the number of R&D technicians in Singapore is significantly higher than in both Malaysia and Thailand.

Moving on from these previous graphs, Graph 5.3 below displays Singapore's manufacturing output by industry in 2013. The results clearly show that the most valuable manufacturing outputs are in technology-intensive industries such as petroleum products; chemical products; pharmaceuticals and biological products; computer, electronic and optical products; and machinery and equipment. This growing manufacturing output may be a result of the abundant number of skilled workers in Singapore's labour market.



**Graph 5.3: Singapore's manufacturing output by industry 2013 (US\$)**

**Source: Yearbook of Statistics Singapore 2014, Department of Statistics, Singapore (2015)**

The above discussions have identified the significant relationship between GDP per capita growth, R&D expenditure, amount of researchers and technicians in R&D, and manufacturing output. This significant relationship displayed that the development of skilled labour, especially in the science and technology field, is highly impactful on economic development. That is a country proactively invests in skilled labour, which often attracts FDI in technology-intensive industries, then the country will achieve faster economic growth (Brown, Lauder & Ashton 2008; Ho & Ge 2011; Kalirajan & Shantakumar 1998; Lowell 2001b; Osman-Gani & Chan 2009).

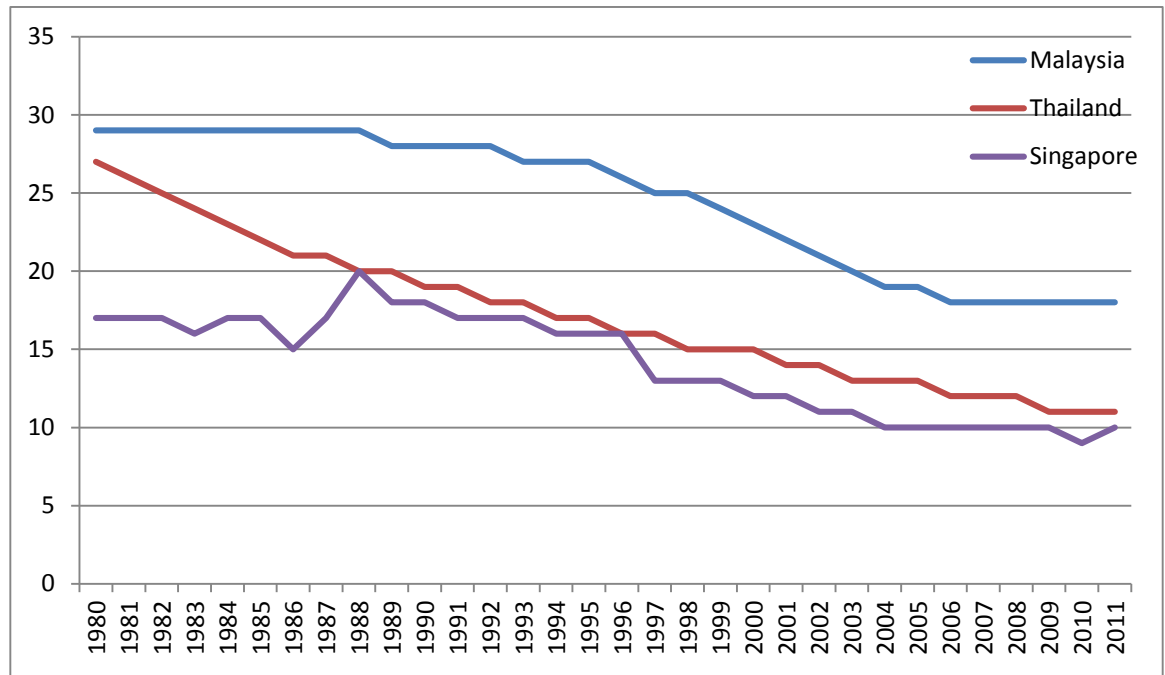
Thus, it is proposed in this thesis that if Thailand wants to reach the status of a developed and high-income country; it needs to step up to the third phase of economic structural change – the tertiary stage – where it concentrates on advanced-technology products and skilled-intensive services. This also means the country will need to upgrade its labour workforce in order to be skilful and compatible with advanced-technology industries. Based on the previous graphical results that indicate the more a country spends on R&D including researchers and technicians the greater the economic growth is, it would be beneficial for Thailand to start focusing on this area, especially in the field of science and technology, to enable it to move up the economic value chain.

### **5.2.2 Decreasing population growth**

Another factor that has caused the skill labour shortage in Thailand is the decreasing of its population growth; an issue that has been widely acknowledged in Thai society. For example, Kampkol Adireksombat, Senior Economist of Siam Commercial Bank, stated in *Thailand lacks of skilled labour* (2011) that there has been a decrease in the Thai population's fertility rate which has affected the growing rate of the working age population. The fertility rate is the number of children which could be born to a woman (World Bank 2015a). Kosit Panpiemras, Chairman of Executive Board of Bangkok Bank, pointed out in *Thai businessmen to go overseas* (2012) that the decreasing population growth has not only caused a drop in the working age population, but could also have a significant impact on Thailand's future economic development. This is based on a decrease of consumers in the Thai market which could discourage FDI. Foreign investors may instead turn their attention to other ASEAN countries such as Indonesia and the Philippines, which are more attractive in terms of the size of the market and its labour workforce.

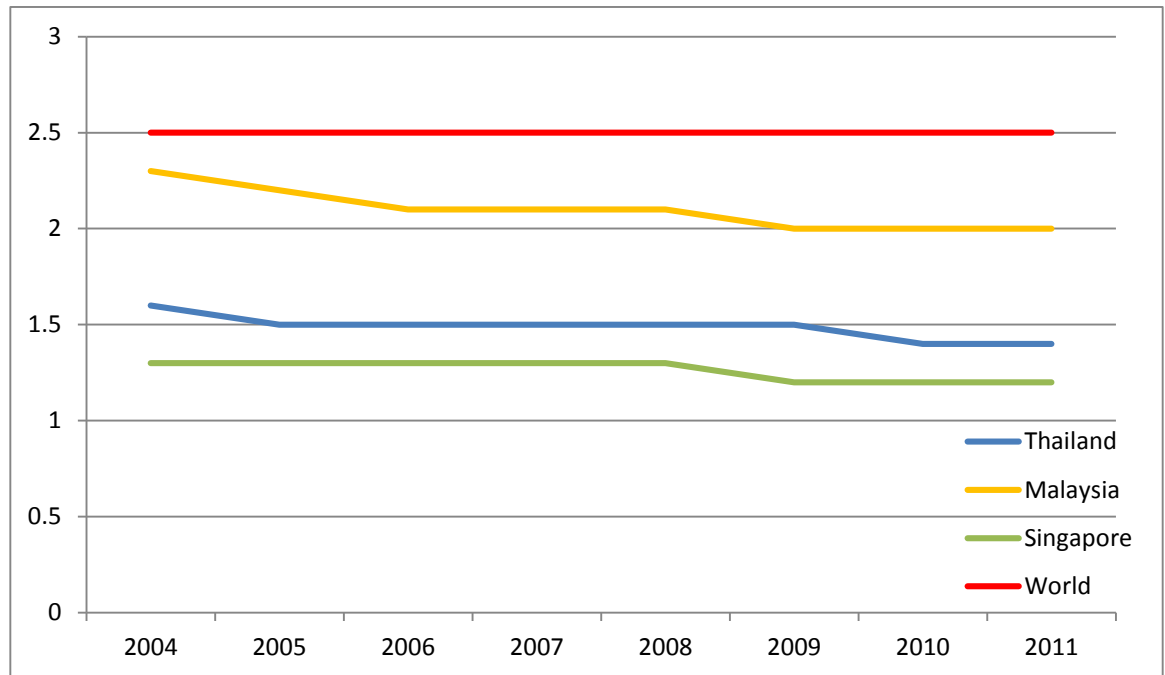
The decreases in Thailand's fertility rate were due to birth control campaigns, based on an attempt to reduce poverty in Thailand (Baker & Phongpaichit 2005). However, the attitude towards having children has changed in Thailand in more recent times; many young couples now delay starting a family, and the amount of single women is also growing. In Bangkok, 30% of women were recorded as single (Wangkiat 2013). The birth rate has decreased from 1% per annum between the years 2000-2010 to a 0.2% per annum project over the next ten years, according to *Thailand lacks of skilled labour* (2011). Such changes in demographics are also having an impact on the working age population, with Thailand now more of an ageing society than ever before (Numnak 2005; Sumulong & Zhai 2008).

Graph 5.4 compares birth rates in Singapore, Malaysia and Thailand from 1980 to 2011 – the indicators display the number of live births occurring each year per 1,000 people (World Bank 2015a). These results clearly show the birth rates across all three countries are continually decreasing, with Thailand and Singapore lower than Malaysia – a good indication that the size of these countries’ labour workforces will be lower in the future.



**Graph 5.4: Birth rate in Thailand, Malaysia and Singapore 1980-2011 (per 1,000 people)**  
**Source: World Bank (2015a) - <http://data.worldbank.org/indicator>**

Graph 5.5 shows the fertility rate of the major ASEAN countries Singapore, Malaysia and Thailand compared with the average world fertility rate from 2004 until 2011. As the results show, Thailand's fertility rate was 1.6 in 2004, dropping slightly to a steady 1.5 between 2005 and 2009, and then decreasing to 1.4 for 2010 to 2011. In contrast, the world's average fertility rate has been steady at 2.5 from 2004 to 2011.

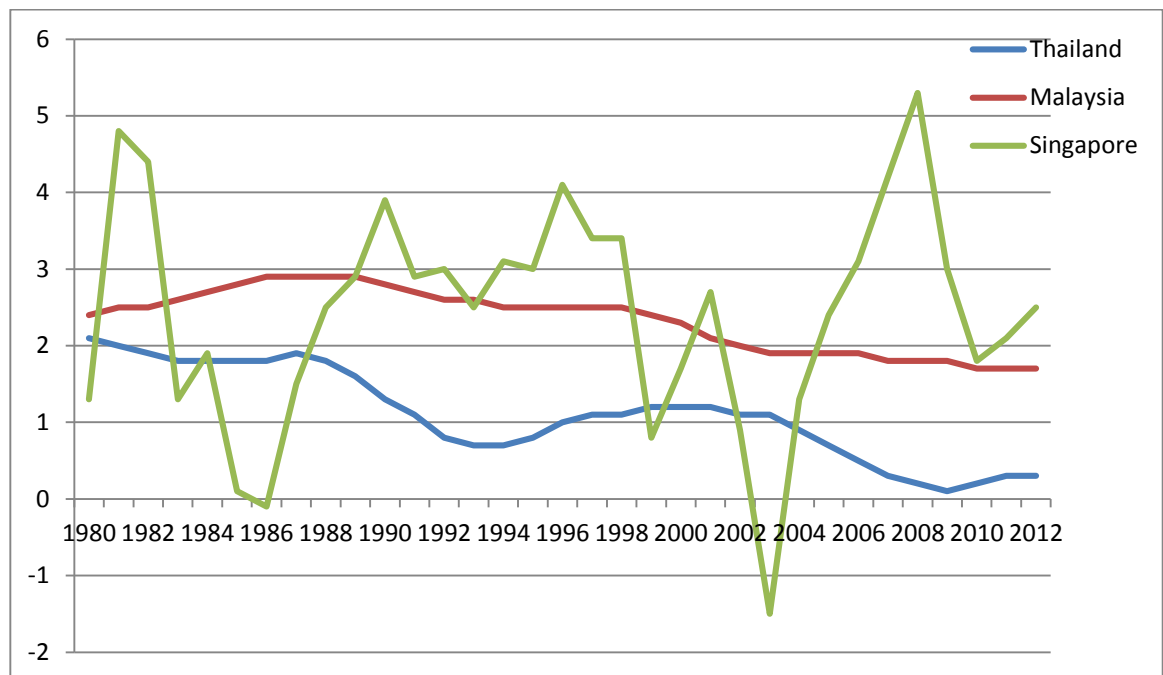


**Graph 5.5: Fertility rate comparison between Thailand, Malaysia and Singapore and the world 2004-2011**

Source: World Bank (2015a) - <http://data.worldbank.org/indicator>



Graph 5.6 shows a comparison in population growth rates between Thailand, Singapore and Malaysia from 1980 to 2012. The results clearly indicate that Thailand’s population growth rate is significantly lower than the other two countries. Of interest are the results for Singapore – despite its low birth and fertility rates, its population growth have fluctuated. This may be due to the Singaporean Government’s emphasis on increasing the population via migration policies, particularly to attract foreign skilled migrants. Such policy has been strongly supported by the Singapore leaders.



**Graph 5.6: Population growth rate in Thailand, Singapore, and Malaysia 1980-2012**  
**Source: World Bank (2015a) - <http://data.worldbank.org/indicator>**

The focus of Singaporean leaders on increasing the nation’s population via migration policy has regularly been evidenced. For example, in 1997 Goh Chok Tong, the former Prime Minister of Singapore, expressed the positive impact of skilled foreigners or foreign talent on Singapore’s economic development:

... a matter of life and death for us in the long term ... if we do not top up our talent pool from the outside, in 10 years’ time, many of the high valued jobs we do now will migrate to China and elsewhere, for lack of sufficient talent here (Pang 2006, p. 155).

Another former prime minister, the late Minister Mentor Lee Kuan Yew, also noted the importance of attracting foreign skilled workers in 2003:

If we do not attract, welcome and make foreign talent feel comfortable in Singapore, we will not be a global city and if we are not a global city, it doesn't count for much ... There are four million people in Singapore; one million of which are foreigners. You get rid of this one million and many will not find jobs (Pang 2006, p. 155).

In addition, the current Prime Minister, Lee Hsien Loong also emphasised the significance of foreign skilled workers that:

Has the competition really disappeared, or has the talent just gone to another country, where they will compete more strongly against us? If we do not top up our own talent with people from abroad, will multinational corporations still come here, to recruit from a smaller talent pool? Or will we become a backwater, just one of many cities in Asia (Pang 2006, p. 155).

Such Singaporean leaders have clearly voiced that the country needs foreign skilled workers to help it become a global city and boost its economic volume. There has been clarity and continuation on migration policy in Singapore. Singapore's results in graphs 5.4 to 5.6 above have revealed that there are other ways to increase the population aside from increasing birth and fertility rates.

It is no doubt a challenge for the Thai Government to increase its working age population in the labour workforce to achieve future economic development. Should the Thai Government encourage an increase in birth and fertility rates among its citizen to grow its working age population? Or should the Thai Government use migration policy like in Singapore to attract foreign skilled workforces?

### **5.2.3 Mismatch between education policy and skill requirements of business sector**

Another issue that has influenced Thailand's skill labour shortage is the mismatch between education policy and the skills requirements of the business sector (Ducanes & Abella 2008; Park 2008a). Anek Permwongsenee, the former Secretary of the Education Council, confirmed in *The need of skilled labour* (2012) that a lack of cooperation between education institutes and industries on the skills required in the labour market has produced a mismatched workforce. This mismatch has affected the range of skills available within the Thai labour workforce.

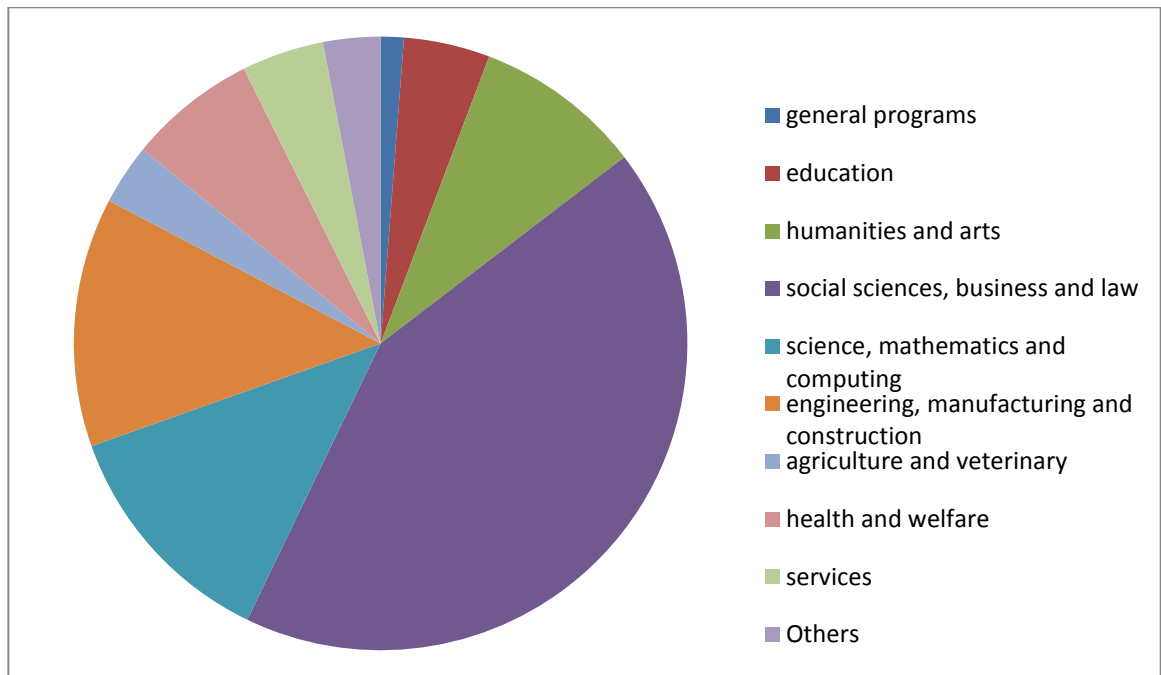
The Federation of Thai Industries has predicted that in five years time, the automotive industry will require about 300,000-500,000 skilled workers, yet educational institutes can only produce

150,000 skilled workers; the electronic industry will require 300,000-400,000 skilled workers, but educational institutes can only produce 100,000 skilled workers; and the building industry will need 200,000-300,000 skilled workers, but educational institutes will only be able to produce 100,000 skilled workers, according to *The need of skilled labour* (2012) and *Auto industry needs skilled labour* (2012).

A survey from JETRO (2006) noted that the demand of Japanese firms in Thailand for engineers has increased, especially in the automotive industry. Most Japanese firms have not been satisfied with the labour supply. Numnak (2005) pointed out that Thailand produces more social science graduates than science and technology graduates which are in greater demand in the labour market. In line with this, Pirom Kamolratanakul, the Vice Chancellor of Chulalongkorn University also opined in *Aim to reduce social science graduates* (2012) that there is an oversupply of social science graduates from all higher education institutes in the country. He proposed that the number of admissions into social science faculties in all higher education institutes should be reconsidered.

Interestingly, the shortages in skilled labour such as engineers and technicians are not a recent event – these shortages have been occurring for an extended period of time. Paron Issarasena, the former President of FTI, stated in *Shortage of engineers stifling industrial growth* (1989) that Thailand was facing an insufficient amount of engineers and technicians that could not meet industry demand. He contended that this problem could affect the country's industrial growth. This former observation from over 20 years ago raises questions about how the Thai Government has dealt with the problem so far, and why skill labour shortage problem still remains an issue.

Graph 5.7 below shows Thailand's number of university graduates by fields of study in 2011. These results confirm that the number of Thai graduates in social sciences is higher than for science and technology. In 2011, there were 105,872 graduates in social sciences, business and law; 22,027 in humanities and arts; 11,306 in education; 3,031 in general programs; 10,781 in services; and 7,504 in others This is compared with 30,899 graduates in science, mathematics and computing; 32,691 in engineering, manufacturing and construction; 7,927 in agriculture and veterinary; and 16,833 in health and welfare. Following on from the observations of Numnak (2005), these results support the argument that Thailand needs to produce more university graduates in sciences and technology and less in social sciences, to meet labour market demands.



**Graph 5.7: University graduates in Thailand by fields of study 2011**

Source: Office of the Higher Education Commission (2015) -

<http://www.info.mua.go.th/information>

This mismatch of education policy and the requirements of the labour market is another challenge the Thai Government faces in its efforts to produce an adequate labour workforce. The government needs to match the requirements of the labour market with both education and economic policy in order to ease Thailand's skill labour shortage problem.

The above three factors – economic structural changes, decreasing population growth, and mismatch between education policy and labour market requirements – are the main causes of Thailand's skill labour shortage problem. As a result of this skill labour shortage issue, Thailand now also faces the issue of being stuck in the MIT, which is further discussed below.

### **5.3 Effects of skill labour shortage in Thailand – the Middle Income Trap (MIT)**

The MIT occurs when a country shifts from low-income to middle-income status and remains there, lacking the capability to advance to the next higher-income status (Jitsuchon 2012). One of the central challenges for a middle-income economy is to maintain its current growth rates while also achieving higher per capita incomes (Jimenez, Nguyen & Patrinos 2012). The MIT may eventuate due to high labour and capital costs that make the 'trapped' country

uncompetitive with lower-income countries with low-cost manufactured products in the global market. This predicament can also mean that trapped countries are uncompetitive with higher-income countries that produce higher-technological and knowledge-based products and services, because they lack the necessary skilled labour workforce.

In relation to the MIT scenario, this study had to address the highly relevant question of whether Thailand is already in the MIT. To answer this question, the World Bank criteria on income classification were considered, which classifies countries' incomes based on GNI per capita (World Bank 2015b). The GNI is converted to US dollars and divided by the midyear population. The World Bank's income classifications for countries in 2014 was as follows: low-income countries – US\$1,045 or less; lower-middle-income countries – US\$1,046 – US\$4,125; upper-middle-income countries – US\$4,126 – US\$12,735; and high-income countries – US\$12,736 or more.

Based on World Bank income classifications, when Thailand's GNI reached US\$1,160 in 1988, it was categorised as a lower-middle-income country. This was due to the country's economic success in reducing poverty, attracting FDI and expanding its export markets. Then as the country's economy continuously grew and GNI reached US\$4,320 in 2010, the World Bank classified Thailand as an upper-middle-income country from 2011 (World Bank 2015a). This means that since 1988 until now, Thailand has been ranked as a middle-income-country, which is a very long period of time.

In the discussions in previous chapters, it was revealed that Thailand is currently facing skill labour shortage; it does not have a sufficiently skilled labour workforce to meet the demands of the labour market, especially in the advanced-technology industry. Most of the labour workforce in Thailand consists of unskilled or low-skilled workers who are in the agricultural and labour-intensive manufacturing sectors. Thus, Thailand does not have a large enough skilled labour workforce to compete with higher-income countries in the advanced-technology industry.

In addition, while Thailand is struggling to develop its skilled labour, other countries in the region such as China, Vietnam, the Philippines and Indonesia are in the second phase of economic structural change, producing labour-intensive manufacturing products like Thailand, but at lower labour costs. Therefore, many labour-intensive manufacturing firms in Thailand are now relocating their factories to these other neighbouring countries.

Based on these factors, it has been surmised in this thesis that Thailand is in fact stuck in the MIT. Concern about Thailand's MIT predicament has also been voiced in other literature (Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012; Likitkijsomboon 2015), including Dr Surin Pitsuwan, the former ASEAN Secretary, who noted this in *Thailand may be trapped* (2012), and pointed to the necessity of improving its labour workforce quality if it is to continue long-term economic development and transformation. It is a challenge for the Thai Government to accelerate growth and meet labour market demands to consolidate growth in the second phase of the economic structure change and allow for transition into the third phase – the tertiary stage.

It has been widely acknowledged that Thailand needs to produce a skilled labour workforce in order to step out of the MIT (Jitsuchon 2012; Phasuk & Wann 2013). Numerous studies have emphasised the importance of Thailand concentrating on skilled-intensive manufacturing and high-productivity services to escape the MIT (Jimenez, Nguyen & Patrinos 2012; Likitkijsomboon 2015), including educating and training its labour workforce in these areas. Dr Surin Pitsuwan further suggested in *Thailand may be trapped* (2012) that a focus on R&D in science and technology will help the country with the restructuring of its economy. Kirida Bhaopichitr, a World Bank Senior Economist, elaborated that if Thailand wants to continue its economic growth and break out of the MIT, it has to increase the productivity of all sectors (World Bank 2015a). In order to do this, Thailand needs higher levels of education and skills, including the ability to be creative, innovative and competitive, which will likely encourage even higher growth (World Bank 2015a).

In summary, it is argued in this thesis that fostering quality and quantity of skilled labour workforce will lead Thailand to breaking out of the MIT. The availability of a skilled labour workforce will increase the country's economic competitiveness by attracting FDI in advanced, technology-intensive industries and skilled-intensive services. This realised economic competitiveness will then progress Thailand's economic growth rate.

#### **5.4 Background of Thai economics – relationship between national economic and social development plans and economic structural changes**

This section explains the relationship between economic structural changes and Thailand's National Economic and Social Development (NESD) plans. The aim is to provide an understanding of how the NESD plans have influenced the country's economic structural changes, and how these changes have impacted on the country's skill labour shortage by

presenting the background of Thai economics. In order to better understand these relationships, the timeframes of Thailand's NESD plans have been divided into four phases: before 1960s; 1961-1971; 1972-1996; and 1997 to the present. This is in accordance with the country's key policies and contemporary issues of each time period (see Figure 5.1).

PHASE 1	PHASE 2	PHASE 3	PHASE 4
Before 1960s	1st plan 1961-1966 2nd plan 1967-1971	3rd plan 1972-1976 4th plan 1977-1981 5th plan 1982-1986 6th plan 1987-1991 7th plan 1992-1996	8th plan 1997-2001 9th plan 2002-2006 10th plan 2007-2011 11th plan 2012-2016
Key policies	Key policies	Key policies	Key policies
State capitalism Agricultural-based economy	Import substitution Building infrastructure Agricultural-based economy	Export orientation Industrial-based economy Influx of FDI Labour-intensive manufacturing	People-centred development Sufficiency economy
Factors impacting on Thai economics	Factors impacting on Thai economics	Factors impacting on Thai economics	Factors impacting on Thai economics
US aid; Cold War: US using Thailand as a military base in Southeast Asia	Vietnam war – US military spending in Thailand	Oil price crisis 1973-74; Eastern Seaboard project; political unrest in 1992	AFC in 1997; Global Financial Crisis (GFC) 2008-2009; MIT; political instability since 2006 military coup
Labour workforce	Labour workforce	Labour workforce	Labour workforce
Mostly uneducated and in agricultural sector	Mostly in agricultural sector Preparing labour workforce for the next phase by providing basic and vocational education	Demand for workers at vocational level	Demand for skilled workers at vocational level and higher education, including foreign languages and IT specialisation

**Figure 5.1: Relationship between economic structural changes and national economic and social development plans**



#### **5.4.1 Phase 1: Before 1960s**

Prior to the 1960s, the Thai economy had low economic growth based on productivity from the agricultural sector with limited output from industrialisation (Ouyyanont 2012). The country's main revenues were aligned with agricultural commodities and natural resources such as rice, teak, tin, rubber and sugar (Ouyyanont 2012; Stubbs 2005; Warr 1993).

The industrial sector before the 1960s was based on state capitalism (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Ouyyanont 2012). That is, the Thai Government was a major investor in the industrial sector through state monopolisation. The key manufacturing was in basic industries such as textiles, glass and paper (Decharuk, Leelapornchai & Udomkerdmongkol 2009), which was mainly for domestic use. There was a limitation on local private investment due to inadequate education and entrepreneurship among the Thai citizens.

During this phase, the Thai Government was nationalistic and had a strong anti-Chinese migrant policy (Ouyyanont 2012). The Chinese in Thailand were perceived as an economics-dominated group in terms of both capital and labour since the period of absolute monarchy (Baker & Phongpaichit 2005). King Rama 6, Vajiravudh, even called the Chinese 'the Jews of the East' (Baker & Phongpaichit 2005).

The Thai Government had therefore minimised the Chinese influence over the nation's economy by assimilating the Chinese migrants into Thai society. For example, a law was passed by the Siamese Court in 1913 (Siam is the former name of Thailand) that granted Thai nationality to those who were born to Thai fathers within the Siamese territory, which included Chinese children born in Thailand (Baker & Phongpaichit 2005). In 1939, another law was passed that granted Thai nationality to Chinese migrants who had shown their loyalty to Siam over China by speaking the Thai language, changing their name to Thai, and sending their children to Thai schools (Baker & Phongpaichit 2005).

Following on from this legislation, the communist victory in China in 1949 caused further anxiety for the Thai Government about the Chinese influence. The Thai Government therefore put pressure on the Chinese community to show their loyalty by limiting enrolment in Chinese schools, deporting Chinese activists, and limiting remittances to China (Baker & Phongpaichit 2005). The Thai Government also allowed for Chinese children born in Thailand or of second generation to be qualified for nationality; and the third generation to be automatically granted full civic rights including voting and military service. At the time of communist takeover in

China, most of Thailand's Chinese migrants in became even more assimilated into their new society.

In particular, some of the Chinese families that have been in Thailand since the 19<sup>th</sup> century or earlier have fully assimilated into Thai society. Some of the wealthier Chinese families increased these ties by organising for their children to marry Thai royal members or high-ranked bureaucrat families (Baker & Phongpaichit 2005). Such assimilation enabled many Chinese migrants to play an important part in Thailand's industrialisation shift from agricultural-based to labour-intensive industries (Ouyyanont 2012), and wealthy Thai-Chinese families to be influential in the country's economic structural change in the following decades.

In addition to the Chinese influence, Baker and Phongpaichit (2005) revealed that the US was the main supporter of Thailand's economic development prior to the 1960s. This was during the Cold War period, when Indochina was heavily at war with the communists. The US poured a large amount of money into Thailand via multiple government aid organisations such as education, health and military. This US aid was part of its global mission to stop the expansion of Communism, using Thailand as a base in Southeast Asia under the umbrella of 'development' (Baker & Phongpaichit 2005).

In terms of supporting Thailand's development, the US did help the country to establish and restructure relevant bureaucratic offices such as a Planning Board, Budget Bureau, Investment Promotion Board, and Central Bank. In 1959, the NESD Board was established; a government 'think tank' that is responsible for devising the master plans for national development in Thailand. These master plans have a five-year duration which is used as a guide for other policies in order to achieve economic goals. The BOI was also established in 1959 to promote FDI in Thailand (Decharuk, Leelapornchai & Udomkerdmongkol 2009), with the *Investment Promotion Act* passed in 1960 which aimed to promote investment in local manufacturing.

In summary, the Thai labour workforce before the 1960s was mainly employed in the agricultural sector and uneducated. The main capital in the economic system was revenue from the export of agricultural products, major investments were from the government and US aid. There were few industrial factories in Thailand, and the NESD plans were only initiated at the end of this period; therefore, the direction of the country's development was unclear. Near the end of this period, Thailand had just started to establish government agencies to manage economic development via US assistance. Hence, a skilled labour workforce was not yet in demand.

#### **5.4.2 Phase 2: 1961-1971 (first and second NESD plans)**

The first two NESD plans (1961-1966 and 1967-1971) were about preparing the country for private industrial investment in the future by building basic infrastructure such as transport, communications and public services. Agriculture was still the most important sector in this phase, as it was the main export of the country (Mukhopadhyay & Thomassin 2010; Stubbs 2005; Warr 1993).

In terms of human resources, about 80% of Thailand's labour workforce was employed in the agricultural sector (The NESD Plan 1 1961-1966), with a shortage of trained manpower noted in NESD Plan 1. The main areas of human development in NESD Plan 1 were focused on secondary education and vocational education, as Thailand was preparing its workforce for the growth of labour-intensive manufacturing (The NESD Plan 1 1961-1966). Human resources development was one of the most important objectives in both the first and second NESD plans in relation to future economic growth.

It is worth highlighting that in NESD Plan 1, a definitive population policy was recommended, based on the country's high and increasing population growth rate, which could suppress future economic, education and employment opportunities (The NESD Plan 1 1961-1966). The population growth rate was over 3% at the time of the first NESD plan, which led the Thai Government to implement birth control campaigns which were highly successful. Yet these successful birth control campaigns have leveraged a more contemporary problem, which is the shortage of a skilled workforce.

During 1961-1971, similar to the previous phase, most of Thailand's industries were small or medium sized, only playing a minor part in the country's economic development. Private sector investments were therefore being encouraged to expand. The growth of the manufacturing sector during this phase involved a combination of agricultural-based manufacturing that did not need a skilled workforce, such as rice, sugar and saw milling, tobacco manufacturing, and vegetable oil and other industries including construction materials, plastic and rubber products, cotton textiles, metal, and oil refining. As a result, there was not much requirement for skilled labour from the industrial sector.

The key economic development policy of the Thai Government was the import-substitution policy, which aimed to establish new local manufacturers to replace foreign import products (Baker & Phongpaichit 2005; Decharuk, Leelapornchai & Udomkerdmongkol 2009). There were financial incentives to support both local and foreign manufacturing investments, such as business tax holidays and tariff exemptions on machinery and equipment. Tariff barriers were

also used to protect the import-substitution industries, which were increased along the value chain. The final subjects were expected to pay the highest import duty. These government policy incentives were aimed at enabling Thailand's import-substitution industries to be competitive in international trade.

However, the import-substitution policy was not particularly success, mostly due to the underdevelopment of supporting industries (Decharuk, Leelapornchai & Udomkerdmongkol 2009). That is were not enough raw materials in Thailand for the assembly line; therefore, the manufacturers had to import these materials from overseas, which incurred a significant amount of tax from the government. Outcomes like these prevented the industrial sector from being competitive in international trade, via the import-substitution policy. The theory surrounding import-substitution is that the replacement of imports will usually save on foreign exchange rates and encourage domestic investment. Hence, import-substitution is suitable for developing countries with a large domestic market, but this does not apply to Thailand (Li 2002). This failure led to another government strategy in the next phase – export-orientation (Decharuk, Leelapornchai & Udomkerdmongkol 2009).

#### **5.4.3 Phase 3: 1972-1996 (third, fourth, fifth, sixth and seventh NESD plans)**

This phase covers five NESD plans from 1972 until 1996. The first significant economic initiative was NESD Plan 3 (1972-1976), where the main objective was restructuring Thailand from an agricultural to an industrialised economy (Mukhopadhyay & Thomassin 2010). The Thai Government also refocused its economic strategy from an import-substitution to an export-orientation policy. Export was promoted as a main driving force for economic growth, and foreign investment was also encouraged (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999; Warr 1993). In order to achieve this goal, the role of the private sector in economic development was encouraged, including attracting foreign investors.

The government also encouraged the growth of labour-intensive export manufacturing, leading to increased employment opportunities. It was stated in the third NESD plan that as part of the support of labour-intensive manufacturing, the purchasing of machinery would not be encouraged if there was a labour force available (The NESD Plan 3 1972-1976). At this time, the Thai Government strongly promoted the increasing of employment opportunities in labour-intensive industries for its labour workforce – it was more focused on the quantity of rather than the quality of its workforce. One major reason for this was that high employment rates needed to be maintained to avoid political unrest (Baker & Phongpaichit 2005; Warr 1993). Thus, there was a significant movement of labour from agricultural to the industrial

sector, which created the growth of a labour-intensive industrial sector. This labour workforce was only Grade 4 or lower graduated (The NESD Plan 4 1977-1981).

Next, the fourth NESD plan (1977-1981) was aimed at increasing economic growth to remove Thailand from the world economic recession, which the country had experienced in the latter half of the third NESD plan (The NESD Plan 4 1977-1981). This NESD plan also remained focused on the decreasing of population growth and the expansion of labour-intensive, export-oriented industries such as agricultural manufacturing where a lower-skilled labour workforce was in demand. In addition, development of Thailand's tourism industry was also focused on in the fourth NESD plan.

NESD Plan 5 (1982-1986) still focused on economic structural adjustment, aiming for Thailand to be a semi-industrialised country. The importance of the manufacturing sector was emphasised in NESD Plan 5, forecasting that the country's revenue from this sector would increase to the same level as agricultural sector revenue. In relation to economic structural adjustment, the NESD Plan 5 focused on promoting export-oriented industries and encouraging the dispersion of manufacturers to rural areas (Dixon 1999; Warr 1993).

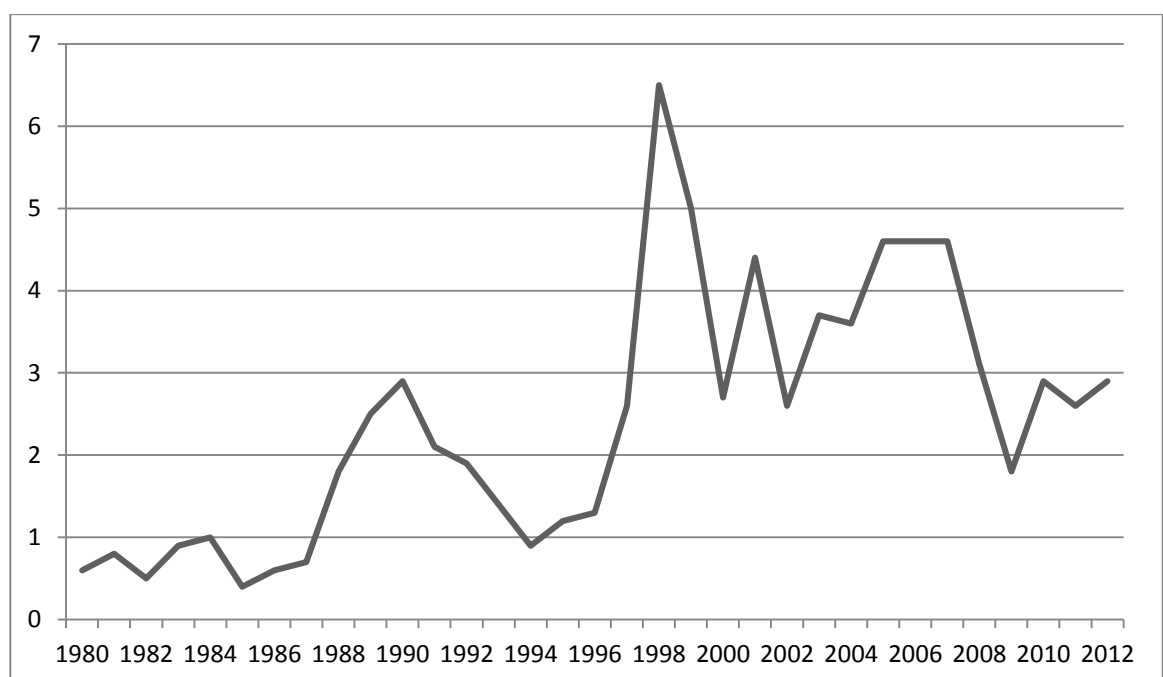
The export-oriented theory is usually most suitable for a country with a small domestic market (Li 2002), and the process often begins when advanced economies are facing rising labour costs in their home countries, causing them to relocate their labour-intensive manufacturing to less-advanced countries with low-cost labour. These foreign investors then generally export their finished products back to their homeland. Li (2002) pointed out that the benefits of export-oriented strategy include the expanding of domestic income, consumption, employment and foreign exchange.

One of the main projects in relation to cultivating the industrial sector was the development of the Eastern Seaboard (The NESD Plan 5 1982-1986), which was situated in the east of Bangkok. This location was chosen due to the discovery of natural gas in the Gulf of Thailand, which the gas pipe was laid from the sea and landed in the east region. The aim of this project was to establish new and more advanced industries such as petrochemical, fertiliser, metal, car and electronics industries. Therefore, vocational and technical colleges in the area had to restructure their curriculums in order to meet the predicted demand from industrial firms concentrated on in the Eastern Seaboard project.

Foreign investors, especially Japanese, Korean and Taiwanese, started investing in Thailand, (Baker & Phongpaichit 2005; Decharuk, Leelapornchai & Udomkerdmongkol 2009;

Mukhopadhyay & Thomassin 2010). Their investments were mainly in labour-intensive, export-oriented industries such as agricultural manufacturing, textiles, electronic goods, chemicals and shoes (Dixon 1999; Mukhopadhyay & Thomassin 2010; Stubbs 2005). In the late 1980s and early 1990s, the growth in Thailand's manufacturing sector rose 12.6% annually (Mukhopadhyay & Thomassin 2010). Another factor behind the successful export-oriented, labour-intensive manufacturing in Thailand was the devaluation of Thai Baht in 1984, which brought a large influx of FDI into Thailand (Baker & Phongpaichit 2005).

Graph 5.8 below shows the inflow of FDI to Thailand from 1980 to 2012 as a percentage of GDP. From 1980 until 1987, FDI inflows were under 1% of GDP; then it started to rise and reached 2.9% in 1990. This rise in FDI may be due to the focus on export-oriented manufacturing in the fifth NESD plan, which attracted a significant amount of foreign investors. However, FDI started to drop again in 1991 and returned to under 1% of GDP in 1994. This is probably because many foreign investors had started to move their investments to China around this time, which was more attractive than Thailand in terms of cheap labour and abundant resources (Stubbs 2005).



**Graph 5.8: Foreign direct investment in Thailand 1980-2012 – net inflows (% of GDP)**  
**Source: World Bank (2015a) - <http://data.worldbank.org/indicator>**

After another Baht devaluation during the 1997 AFC, the FDI reached its peak in 1998. A large amount of FDI flowed into the country across various industries such as property and stock markets, particularly in the banking sector (Decharuk, Leelapornchai & Udomkerdmongkol

2009). Since 1998, FDI has fluctuated between 4.6% and 1.8% of GDP, which has been influenced by the GFC in 2008-2009, continual political unrest in Thailand, and the severe floods of 2011.

Graph 5.9 next shows Thailand's GDP growth rates from 1980 to 2013. During 1980 to 1986, the GDP was steady at about 5%; it then jumped sharply to 9.5% in 1987, and rose again to 13.3% in 1988. This acute growth could have been the result of the country's economic restructure from agricultural-based to export-oriented manufacturing. Following this period, the GDP remained steady at just under 10% from 1989 to 1995, before dropping steeply to -1.4 in 1997 and -10.5 in 1998 as a result of the 1997 AFC. After this tumultuous period, the GDP fluctuated between 2-5% between 1999 and 2008, before dipping again to -2.3% in 2009 due to the GFC of 2008-2009. In 2010, the GDP rose sharply to 7.8% before dropping again to 0.1% because of Thailand's 2011 floods; then creeping back to 7.7% in 2012. In 2013, the GDP notably dropped again to 1.8%, which may be due to the instability of Thailand's economy in recent times.



**Graph 5.9: GDP growth in Thailand 1980-2013 (annual %)**  
**Source: World Bank (2015a) - <http://data.worldbank.org/indicator>**

As a result of the economic restructure focused on in the third, fourth and fifth NESD plans, the booming of a labour-intensive manufacturing industry created a large demand for workers. For example, it has been estimated that the garment industry employed about 800,000 workers during the 1980s (Baker & Phongpaichit 2005). This demand predominantly related to an unskilled workforce, with the main criterion being basic skills to read and write (Baker & Phongpaichit 2005). The government responded to this requirement by increasing the budget for education from a sixth to a quarter of the yearly budget, including providing free lunches and uniform to rural schools.

In the next NESD Plan 6 (1987-1991), the main aim was to encourage the private sector to be more involved in economic development, with a corresponding drop in public sector involvement. The plan also focused on key development issues such as development of human resources and development in science and technology, to increase the country's competitiveness in foreign markets (The NESD Plan 6 1987-1991). The vocational education system was also targeted as part of this plan, aiming to expand basic education from six to nine years, and to encourage continued education both within and outside the system.

Following this, in NESD Plan 7 (1992-1996), the main objectives were redistributing income, decentralising development to the regions, and developing human resources (The NESD Plan 7 1992-1996). In terms of human resources, the shortage of both quality and quantity in the labour force (especially in science and technology fields) was also focused on. At this time, there was an increasing demand for skilled labour, particularly in the fields of mechanical and metallurgical engineering, chemical and electrical engineering, measuring and testing instrument, civil engineering, and computer engineering.

During the period of the NESD Plan 7, economic growth grew sharply due to increased productivity from the labour-intensive, export-oriented industries, based on both local and foreign investment. Industries had expanded into various fields such as automotive, textiles, petrochemical, engineering, and electronics. The expansion of these industries required a large labour workforce across all education levels, including basic, vocational and higher education. However, the government's economic success in this phase leveraged much of Thailand's involvement in the AFC in 1997 which will be discussed further in the next section.

#### **5.4.4 Phase 4: 1997-2016 (eighth, ninth, tenth and eleventh NESD plans)**

The NESD Plan 8 (1997-2001) was another important shift in the country's development. It is often recognised as the second economic structural change in modern Thai economics, as the Thai Government concentrated on human resource development more than it had in previous



NESD plans. Stemming from previous economic success via former NESD plans and various policies, including consequent social change, as well as the nation's goal of being a developed country by 2020, the eighth NESD plan was designed to focus on people-centred development (The NESD Plan 8 1997-2001). The main objectives were to develop all Thais in the areas of health, wellbeing, intellect and vocational skills; improve their quality of life through strengthening family and community ties; and encouraging their deeper involvement in the country's development process (The NESD Plan 8 1997-2001). As part of this, there were significant targets to improve the labour workforce, such as increasing the availability of good-quality early childhood education, improving the quality of education at all levels, and upgrading skills for industrial workers.

At the onset of this fourth phase, there was a major interruption to modern Thai economic development in 1997 when the AFC occurred; this incident had a severely impact on the country's economic development. Since the late 1980s, Thailand had reformed its financial sector in order to make the economy more efficient under the World Bank's recommendation (Baker & Phongpaichit 2005). These financial reforms involved, for example, easing restrictions on the Baht currency, removing interest controls, improving stock market access, and installing an offshore banking system (Baker & Phongpaichit 2005). As a result, a large amount of FDI had started to flow into Thailand.

In 1993, when the Thai Government established the Bangkok International Banking Facility (BIBF), a financial tool for accessing foreign capital, there was a large inflow of foreign short-term capital into the Thai financial market (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999). In addition, the local Thai private sector happily accessed cheap foreign loans via the BIBF. It has since been revealed that this foreign capital was often used inappropriately; for example, the loans were used based on speculation in the property market rather than on industrial investment (Baker & Phongpaichit 2005). By 1995, there were indicators of an economic slowdown, with Baker and Phongpaichit (2005, p.254) pointing out "the stock market had begun to slide, the property market had come detached from reality, and export growth was faltering". Then in late 1996, due to these factors together with the country's poor infrastructure and rising wages, the foreign capital had started to withdraw from Thailand.

When the foreign financial speculators attacked the Thai Baht; the Bank of Thailand had attempted to defend the currency, but it was not successful. The Bank of Thailand had nearly spent the country's whole foreign reserve to protect the currency. Later in 1997, the

government had to depreciate the Thai Baht by allowing the currency to float on 2 July after its failure to intervene in the foreign exchange market to stabilise it (Daquila 2005; Dixon 1999; Stubbs 2005). The Thai currency was 25 Baht to 1 US Dollar immediately prior to the announcement of its depreciation, which dropped 16% in value within half a day of this announcement. By January 1998, the currency was 55 Baht to 1 US Dollar; its depreciation led to the enormous debt of many Thai firms. Thai companies that had used foreign loans were particularly in trouble, as the amount of foreign debt became larger than what they had initially borrowed (Daquila 2005; Dixon 1999; Stubbs 2005).

Many Thai companies went bankrupt during this time, and a large amount of the labour workforce became unemployed. The whole Thai financial sector was affected and the AFC did not stop there; it also spread to other countries in Asia such as Indonesia, Malaysia, Singapore and Korea (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999; Stubbs 2005). It has been suggested that the root cause of this crisis was “the lack of proper controls and economic safeguards on high economic growth; inappropriate investment projects; inadequate financial practices; inadequate financial laws and regulations; excessive foreign direct investment; and high levels of foreign currency transfers” (Branine 2011, p.280).

Branine (2011) also pointed out that after the AFC and under International Monetary Fund (IMF) direction, Thailand’s economic structure shifted to the stage of ‘liberalisation’. The country needed to be liberal in areas such as trade and investment, finance, and human capital in order to increase its competitiveness in the international business environment and to re-attract FDI (Branine 2011).

In retrospect, the 1997 AFC actually leverage a stronger influence of FDI on the Thai economy. When the crisis happened, many Thai firms especially banks owned by wealthy Thai-Chinese families had to be sold to foreign investors. When they took over the firms and banks, many of these foreign investors brought with them new technologies and skills that the Thai labour workforce had never before encountered. Thus, the AFC leveraged a stronger awareness among Thai policymakers of the importance of a skilled labour workforce to cultivate economic development.

Stemming from its economic hardships after the 1997 AFC, the next NESD Plan 9 (2002-2006) focused on Thailand’s King Bhumipol’s philosophy of a sufficiency economy (Kelly et al. 2012). This plan was designed to balance the development of human, social, economic and environmental resources, with Thailand’s former economic growth in the past 40 years

perceived as 'imbalanced development' (The NESD Plan 9 2002-2006). Since the end of World War II, Thailand had abided with the market-oriented approach in order to achieve economic development. On one hand this approach had underpinned significant economic growth; however, it had also leveraged the AFC's heavy impact on the country.

King Bhumipol therefore suggested a sufficiency economy for the country, to prevent further financial crises. This philosophy was based on the idea of a middle path, described as a path between capital excess and rural poverty, leading to a balanced and sustainable development strategy (Kelly et al. 2012). King Bhumipol elaborated on the meaning of a sufficiency economy that one must be moderate in one's desires, then one will have less cravings which will take less advantage from the others. In other words, a sufficiency economy encourages people to be self-disciplined in their personal consumption.

Thai economics at this time was hence aimed at being self-reliant at the local and national level, and being competitive at the international level (Kelly et al. 2012). Moreover, the ninth NESD plan continued the principle of people-centred development that had commenced in the eighth NESD plan. The ninth NESD plan's most urgent motivation was to solve the problems created by the 1997 AFC; it also applied the middle path concept to Thai society by balancing development in all areas in order to achieve sustainable growth.

It needs to be pointed out that there was a questionable in the Thai Government's NESD Plan 9. While the plan was based on the concept of a sufficiency economy as suggested by King Bhumipol, its implementation stemmed from the brainstorming of Thais across all social sectors at provincial, sub-regional, regional and national levels. It is, therefore, ambivalent as to whether this philosophy of 'sufficiency economy' was based on the actual needs of all Thai people; it seems to be on a different wavelength in society. Walker (2008) commented that:

What're the key problems with sufficiency economy? It's that it doesn't accept those people's aspirations. It's saying to people you should not aspire to have a television. You shouldn't aspire to send your children off to universities. You should be relatively content with a simple rural life, and I think that's what's fundamentally undemocratic about the sufficiency economy, that it doesn't accept people's aspirations. The thing that made me a little bit angry is that this philosophy is promoted by people who are incredibly wealthy. People who have extraordinary wealth are saying to the people who aspire to have television, 'it isn't appropriate'. That's what makes me a little bit angry about the sufficiency economy. I think it's hypocrisy of the people who promote it.

(Source: [G:/Andrew%20Walker%20%20Sufficiency%20Economy,%20Sufficiency%20Democracy,%20and%20rural%20constitution%20\\_%20Prachatai%20English.htm](http://G:/Andrew%20Walker%20%20Sufficiency%20Economy,%20Sufficiency%20Democracy,%20and%20rural%20constitution%20_%20Prachatai%20English.htm))

In the country's tenth NESD plan, the importance of highly skilled workers for Thailand's competitive capacity was once again specified (The NESD Plan 10 2007-2011). There were targets in the plan relating to relevant human development, such as increasing the average year of schooling to 10 years, increasing the proportion of the qualified workforce with medium-level skills to 60%, and increasing the proportion of R&D workers to 10-in-10,000. In this plan, the principal idea of sufficiency economy was again emphasised.

In the final and still relevant plan of this phase, the eleventh NESD plan's main concept was a combination of sufficiency economy philosophy, people-centred development, and balancing all dimensions of development (The NESD Plan 11 2012-2016). Other issues focused on in this plan include the significance of Asia as the world economic centre, the increase in the ageing population, and the change of production structure from labour-intensive to knowledge- and technology-intensive.

In this eleventh plan, economic restructuring is also referred to; restructuring of the domestic economy in relation to production capacity and services within small and medium businesses. The concept of a lifelong learning society is also focused on in order to develop human capital; and R&D principles in science and technology for future development. It can be concluded from this eleventh NESD plan that Thailand's future skilled workforce is likely to be entrepreneurial, enthusiastic about learning and technological-oriented.

## **5.5 Summary of the chapter**

From the above discussions, three key factors have been identified as causing Thailand's skill labour shortage: economic structural changes; declines in population growth; and mismatches between education policy and the requirements of the labour market. The skill labour shortage has led Thailand to be stuck in the MIT, which is a main barrier for the country's economic development. This research has therefore focused on the main research question in relation to the policy responses of the Thai Government to the skill labour shortage problem. In order to find the answers, the background of the Thai economy has also been highlighted in this chapter, to provide a better understanding of the country's economic activities. Based on this study's conceptual framework (Figure 4.1), there are three main policy responses to Thailand's skill labour shortage: education and training policies; migration policies; and substitute workforces. The data analysis of the Thai Government's corresponding policies is provided in the next three chapters of 6, 7 and 8.

## **Chapter 6: Data Analysis - Education and Training Policies**

### **6.1 Introduction**

It is the intent of this research to discover how the Thai Government had responded to its skill labour shortage problems in the 1992 to 2014 period. Education and training policies have been recognised as a significant way to develop Thailand's skilled labour workforce (Nieuwenhuis 2012; Tremblay 2005; Truong, van der Heijden & Rowley 2010). The corresponding sub-research questions in this study are: What kind of education and training policies has the Thai Government implemented that respond to the skill labour shortage? What are the education and training policy suggestions from society for addressing skill labour shortage?

This chapter relates to this study's data analysis of education and training policies of the Thai Government. The research timeframe is from 1992 to 2014 and covers Thailand's five most recent NESD plans: 7, 8, 9, 10 and 11.<sup>7</sup> The data were sourced from newspaper articles during this period, which were examined and triangulated with data from the five relevant NESD plans, government policy statements, other government documents, reports and working papers from international organisations, and academic journal articles.

### **6.2 Improving basic education**

The quality of basic education is very important to a country's economic development. Basic education is the foundation that provides basic skill in literacy and numeracy to the workforce (International Labour Organization 2008; Mustapha & Abdullah 2004; Nieuwenhuis 2012). It can help labour workforces step up to the next level of higher skills and knowledge. When the labour workforce is literate, new skills and technologies can be learnt which lead to higher productivity and competitiveness of the nation (International Labour Organization 2008; Mustapha & Abdullah 2004; Nieuwenhuis 2012).

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<sup>7</sup> The NESD plans are time-based (five years) national growth plans legislated by the Thai Government for intended economic structural change to enable desired economic development. The years of the NESD plans are formed on the financial year timeline which last for 12 months. The financial year starts on 1 October the year before and runs until 30 September the following year. For example, the 1992 financial year ran from 1 October 1991 until 30 September 1992; therefore, the duration of The NESD Plan 7 (1992-1996) ran from 1 October 1991 until 30 September 1996.

### **6.2.1 Policy on improving basic education during the period of NESD Plan 7 (1992-1996)**

During the period of NESD Plan 7 (1992-1996), the importance of basic education was perceived as a high priority (Anand Panyarachun's Policy Statement 1991; Suchinda Kraprayoon's Policy Statement 1992; The NESD Plan 7 1992-1996). There were numerous discussions and debates on improving basic education throughout this period. Various issues emerged from the data collected in this study, such as increasing educational attainment, decentralisation and stakeholder participation, culture in teaching and learning, a shortage of teachers, and knowledge of foreign languages.

#### ***6.2.1.1 Increasing educational attainment***

Educational attainment plays an essential role in economic growth by developing a more skilled and productive workforce (International Labour Organization 2011). As part of its seventh NESD plan, the Thai Government aimed to extend basic education from six to nine years (The NESD Plan 7 1992-1996). Mingsarn Kaosa-ard, an economist at Thailand Development Research Institute (TDRI), argued that Thailand has to improve the skills of its workforce by increasing educational attainment at the basic education level, in order to move up the technology ladder (Amorn 1992). Mingsarn provided the comparison that when Japan built up its high-tech industries in the 1950s, the country had a workforce with nine years of schooling; in contrast 75% of the Thai workforce would only have a six-year primary education in the year 2000.

Low educational attainment, especially in the rural areas, created a development disparity between urban and rural areas in Thailand (Fairclough 1993). Most of the manufacturers were located in Bangkok and its surrounding areas; hence, industries were discouraged to invest outside of Bangkok and its surrounds because of the low educational attainment of the population in the rural area (Oxford Analytica 1994). This investment limitation resulted in income inequality between people in the urban and rural areas.

A significant reason for the low educational attainment in Thailand was poverty (Fairclough 1993; Williams, Archavanitkul & Havanon 1997). Fairclough (1993) explained that most children did not continue their education when they graduated Year 6, which was compulsory by law at the time. Only about 10-15% of children in the provinces continued to secondary education (Fairclough 1993).

Furthermore, reports from UNESCO (Atagi 2011; Bhumirat et al. 1995) indicated that apart from poverty, there were two other factors that discouraged parents from sending their

children to schools: the inconvenience of transportation; and the lack of understanding of the importance of an education past primary level. In line with this, Williams, Archavanitkul and Havanon (1997) observed that in Thailand's rural areas, some families that were not as poor as others still did not send their kids to school because the parents needed labour to help them with their farms or businesses.

These factors led to an inadequate amount of labour workforce in the rural areas with more than six years education. Hence, the only way to ease the development disparity between urban and rural areas was to increase the educational attainment. If there was an expansion of this skilled workforce, this would likely attract manufacturers to operate in the rural as well as urban areas, which would lead to greater economic growth

Thailand's Ministry of Education (MOE) attempted to encourage more primary education students to continue through to secondary education (Fairclough 1993). Incentives were provided to students who continued to secondary education, such as free tuition fees, free school textbooks, free uniforms, free lunches, and the borrowing of bicycles (Atagi 2011; Fairclough 1993). The Thai Government also made significant progression in this area by approving a Cabinet Resolution to provide education to non-citizens' children, such as Hill-Tribe children and children of foreign illegal workers (Cabinet Resolution 28 January 1992).

Prime Minister Chuan Leekpai announced that he intended to expand the length of basic education from six to nine years (Chuan Leekpai's Policy Statement 1992); however, the Chuan Government was slow-moving in this policy execution; his government did not really do anything to expand basic education. Prime Minister Chuan re-announced this policy again in April 1995, and vowed that the policy would be effective in 1996 which was towards the end of NESD Plan 7 (Fairclough 1995). Unfortunately, his government ended a month later after the second announcement of the policy; Chuan's lack of action on this policy reflected the inefficiency of his administration.

When Banharn Silpa-archa preceded Chuan in July 1995, he re-instated the government policy to expand basic education from six to year years (Bunharn Silpa-archa's Policy Statement 1995). However, when Prime Minister Banharn left the office in November 1996, the policy was still in effective. It only became an operational policy in 1999 when the Thai Parliament passed *The National Education Act* (B.E.2542), stating that basic education would be compulsory for nine years (Bai-ngern 1999).

### **6.2.1.2 Decentralisation and stakeholder participation**

During this period of 1992-1996, there was criticism of the lack of decentralisation or stakeholder participation in Thailand's education policy planning process. For example, Paitoon Sinlarat, Dean of the Faculty of Education at Chulalongkorn University, pointed out in *Education system makes students passive* (1994) that there were no stakeholders in the brainstorming process in relation to education and training, especially local teachers and officials. Sinlarat argued that local people should participate in this process to achieve the educational goals; community needs had to be considered in the policy planning. In the same article, Piphob Dhongchai, a NGO worker of the Foundation for Children, also contended that the role of the MOE should be minimised, and that each community's requirements should be served individually. Stakeholders such as teachers, students and local residents should have a greater role in designing their own curriculum, as the purpose of education should be based on the concept of serving the community. Dr Sippanont Kettudat, a former Education Minister, pointed out in *Decentralisation of education policy given serious thought* (1996) that 'network' is key to decentralisation – the tool that holds each sector of society together, such as families, schools, religious institutes, communities and the media. He believed that once a community network had been created, learning and sharing knowledge would naturally occur.

### **6.2.1.3 Teaching and learning culture**

In Thailand, the teaching and learning style has often been described by Western academics as 'passive learning' (Chalapati 2007). In *Education system makes students passive* (1994), Piphob Dhongchai, a NGO worker from the Foundation for Children, commented that "the Thai education system makes students passive ... the students were supposed to listen to what their teachers had to say with no questions asked". In this same article, Samphan Thongsamak, a former Education Minister, pointed out that Thai people lack innovation and are mostly too compromised to change. In addition, a director of a construction firm, argued that the influence of passive respect for your seniors in Thai culture could be an issue, because most Thai people would not question their seniors in any capacity (Barnes 1995).

As an example, a Thai student's experience when attending a Western style education class was recorded by Ballard and Clanchy (1991, p.16) as follows:

When I am in class and the professor asks questions, and we have a discussion, I never say anything. Often I think of the answer, but I cannot express my ideas well, so I wait for someone else to speak for me. I have never asked a question. The other students ask many questions and even argue with the professor. I could never do that, because I do not think that is right behaviour.

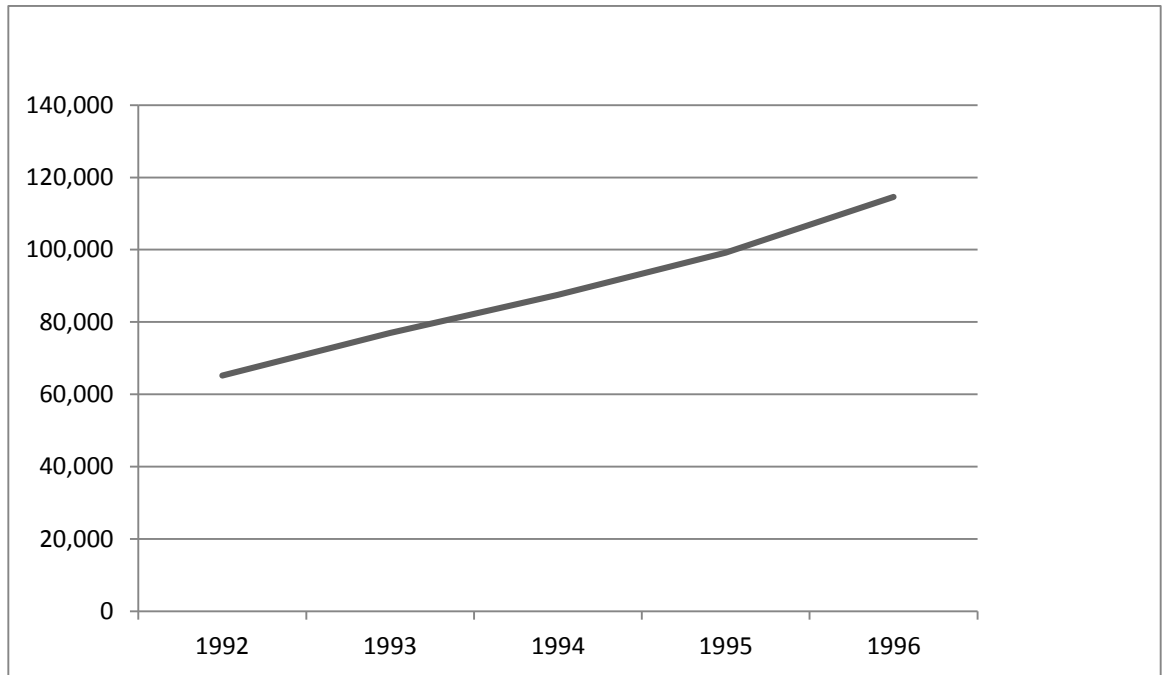


This passive style of teaching and learning in Thailand is influenced by the concept of '*Krengjai*' which is a core cultural norm in Thai society (Chalapati 2007; Komin 1990). The meaning of *Kreangjai* is being considerate; not consciously taking any action that makes trouble or causes others to be upset. This cultural norm means that most Thai students would not challenge their teachers, as they do not want to upset them. Yet such behaviour in the classroom is not compatible with modern globalisation (Chalapati 2007) and its relevant skill requirements such as creative thinking and intellectual challenge and response; *Krengjai* does not align with these modern-world teaching and learning necessities.

#### **6.2.1.4 Improving teachers**

According to Fairclough (1993), Bangkok '*needs to show*' it wants to reverse brain drain (1994), and Wong-Anan (1996), the lack of teaching personnel was another problem in Thailand during 1992-1996. An intention to increase the number of teachers was highlighted in NESD Plan 7 along with the government's policy statements. The rural areas were always the most difficult to provide with teachers, as most educational instructors preferred to work in urban areas (Wong-Anan 1996). As some rural schools did not have enough teaching resources at the secondary level, they had to use teachers from the primary level to also educate secondary students (Fairclough 1993). Attempts by the Thai Government to increase the amount of teachers included approving 3,110 new positions for teachers to be recruited (Cabinet Resolution 8 September 1992) and approving a development project for teacher assistants to become fully qualified teachers (Cabinet Resolution 8 December 1992).

Graph 6.1 shows the number of students in Thai teacher colleges between 1992 and 1996, attending four-year training courses. The results show that the number of students increased each year, indicating that the government had successfully implemented strategies to grow its country's teaching pool. However, based on the continued demand for teachers at this time as stated above, the graph also suggests that there was a mismatch of teacher courses and the needs of the labour market.



**Graph 6.1: Number of students in teacher colleges in Thailand 1992-1996**  
**Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)**

### **6.2.2 Policy on improving basic education during the period of NESD Plan 8 (1997-2001)**

The NESD Plan 8 was focused on people-centred development instead of the growing rate of economic growth (The NESD Plan 8 1997-2001). In NESD Plan 8, economic growth was used as an instrument to improve the wellbeing of Thai people; the final measurement for success was the physical and mental state of the Thai people, not the economic growth. During this period of NESD Plan 8 (1997-2001), discussions on improving basic education related to increasing educational attainment, the shortage of teachers, foreign language abilities, stakeholder participation or decentralisation, and culture in teaching and learning.

#### **6.2.2.1 Increasing educational attainment**

One of the objectives in NESD Plan 8 was to expand basic education from six to nine years, with a further extension to 12 years where relevant (The NESD Plan 8 1997-2001). This objective was an ongoing policy from NESD Plan 7 which had not yet been executed. Progression in Thai education was evidenced in 1999 when the cabinet approved the policy on free basic education for 12 years, and approved the expanding of compulsory basic education from six to nine years (Cabinet Resolution 16 March 1999). The *National Education Act B.E. 2542* was also passed in August 1999 (Bai-ngern 1999), where the main subjects were

providing free basic education of 12 years, including nine compulsory years (7-16 years of age); promoting financial independence of educational providers; promoting decentralisation to a local level; and promoting the participation in education policy of stakeholders such as individuals, families, private sector, local authorities, professional associations and religious institutes (The National Education Act B.E.2542 1999).

It can be concluded that the passing of the *National Education Act B.E. 2542* was a significant success for the Thai Government, laying a good foundation in education and skill development for the Thai workforce. Continued attempts by the Thai Government to increase educational attainment has been evidenced, such as in 2000 when it decided to waive tuition fees to students in all public secondary schools (Editorial 2000c). This decision was aimed at students from poor families to have more opportunities to pursue secondary education.

Significantly, it should be noted that the Constitution has played a significant role in increasing educational attainment in Thailand.<sup>8</sup> In 1997, there was the enactment of Constitution B.E.2540<sup>9</sup>. In Article 43 of this Constitution, it was stated that people have equal rights to gain free basic education for at least 12 years that provided by the government (Constitution (B.E.2540) 1997). In line with this article, the Thai Government enacted laws and policies that helped increase educational attainment in Thailand.

#### **6.2.2.2 Improving teachers**

One of the main objectives in NESD Plan 8 was supporting the development and increase in the number of teachers (The NESD Plan 8 1997-2001). In addition, the *National Education Act B.E.2542* (1999) noted that the MOE needed to support development of educational personnel.

The main reasons for the shortage of teachers at the time were low salaries and work overloads (Cabrera 2000; Saengsanoh 2000). For example, the starting salary for teachers was

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<sup>8</sup> According to Thai legislation system, the Constitution is the supremacy law in the country. It is aimed at demonstrating both the limitation and the legitimate power of the Thai Government (Aphornsuvan 2000). There is a variety of legislative law under the Constitution, such as the Royal Act (Phraratchabanyat), the Royal Ordinance (Phraratchakamnot), the Royal Decree (Pharratchakrisdika), and Ministerial Regulations (Kotkrasuang). However, even though the Constitution is the supremacy law, it has been terminated many times by military coups. Where a coup was successful, the military junta would introduce a new Constitution. Since becoming a democracy state, there have been 19 successful and failed military coups in Thailand; equating to 19 constitutions, with most enacted by military governments, and several of them amended.

<sup>9</sup> Constitution B.E.2540 (1997) was the result of political uprising in May 1992. The process of making this Constitution was implemented through the elected Constitution Drafting Assembly. It was the 16<sup>th</sup> Constitution in the history of Thai politics. Aphornsuvan (2000) pointed out that it was the closet Constitution to the wishes of Thai people.

about 6,300 Baht, compared with about 20,000+ Baht for a secretary in a private firm in Bangkok (Saengsanoh 2000). Work overload was also having a significant impact on teaching resources. Apart from teaching duty, teachers also had to assess students' tasks, prepare teaching materials and exams, meet with parents, supervise students, and do administration work; all without any extra pay (Saengsanoh 2000).

The common difficulty of travelling to distant schools to attend work was also another factor causing the teacher shortage. For example, there were teacher shortages in village schools along the Thai-Myanmar border because of commuting difficulties (Chinvarakorn 1998). As a result, these children generally received their education via the Thai Border Patrol Police or officers from the Hill-Tribe Welfare Division, rather than MOE qualified teachers, which meant they were ineligible to receive education certificates (Chinvarakorn 1998). The only way for them to receive their education certificates was to enrol in the non-formal education program under MOE, which was for those who could not attend normal schools. Under this program, students had to meet their teachers once a week for three hours; however, because of the difficulty in distance and travelling, the Hill-Tribe students could instead meet with their teachers once a month (Chinvarakorn 1998).

In response to the shortage of teachers in more remote areas in some villages in Thailand, villagers decided to build a day-care centre, via limited governmental and non-governmental support. The concept of these day-care centres was to provide education to local children via local instructors who had at least received M-3 certificates (junior-secondary level, equal to Year 9), which were provided via the non-formal education program. Many MOE officers and local people agreed that this concept of hiring locals would help to reduce teacher turnover rates (Chinvarakorn 1998). In 2001, the cabinet noted that hiring locals to work as teachers may be the ideal way to solve the problem of teacher shortage in remote areas in the long term (Cabinet Resolution 21 August 2001).

In addition to government policies, a non-governmental institution supported by the monarchy, King Bhumipol, introduced the use of satellites to remedy the shortage of teachers in rural areas (Barnes 1997; Defterios 1998). The role of monarchy has often been instrumental in Thai governance and legislation; many policies and projects have been introduced by King Bhumipol, with the Thai Government establishing a special agency, Office of the Royal Development Projects Board, in 1992 for this purpose (Office of the Royal Development Projects Board 2015).

Policy planning and implementation is often a complex process in Thailand. As such, a range of stakeholders have been involved in designing most of Thailand's education policies, such as King Bhumipol, the Office of the National Education Commission (Office of the NEC), the NESD Board, and the MOE (Witte 2000). The Office of the NEC was the main agency responsible for designing national education policy. However, this policy also had to align with the NESD plans, and then be approved by the cabinet and announced by the King. Witte (2000, p.233) contended that "new ideas emerge in a complex consensus building process between these institutions".

Another education issue that emerged during this period was the quality of teacher students. Janchitfah (1997) pointed out that the quality of teachers students decreased because many of the high-scoring secondary school graduates did not want to continue their study in the field of education. For example, in 1996, the highest university entrance exam score was 74.5% and belonged to a student who chose to study in the Faculty of Engineering at Chulalongkorn University in Bangkok. In contrast, the lowest score was 26% which belonged to a student who chose to study at the Faculty of Education at Taksin University in the south of Thailand (Janchitfah 1997).

### ***6.2.2.3 Knowledge of foreign languages***

The ability to speak foreign languages is an essential element for the current skilled workforce. It is particularly useful for technology transfers, especially as part of on-the-job training (Kampan 2004). A Thai workforce with the ability to use foreign languages is in high demand for the current labour market (JETRO 2006; Numnak 2005; Skeldon 2002). Yet difficulties in finding staff with foreign language capabilities, especially English, have regularly been evidenced. For example, it was described by a foreign journalist that out of 20 shortlisted interviewees for the role of his assistant, only two passed the written test, while most of the applicants did not even understand the elementary level of English (Tang 1998).

A major obstacle in teaching foreign languages, especially English, is due to the inability of the teacher (Baker 2008; Janchitfah 1997; Nonkukhetkhong, Baldauf Jr & Moni 2006). A student observed that the teacher always asks students to recite the vocabularies, but never teaches the students how to use them (Janchitfah 1997). Nonkukhetkhong, Baldauf Jr and Moni (2006) believed that most Thai teachers who taught English were familiar with the teaching style of memorising grammar structure and vocabulary, and reading textbooks to prepare the students for university entrance exams. Baker (2008) also pointed out that the university entrance exam was a major obstacle for English proficiency of Thai students, as the exam only focused on

reading skills and grammar knowledge, and neglected other essential skills such as writing and speaking. The reluctance of teaching practical skills such as writing and speaking had led to a mismatch with the requirements of the labour market, as the majority of Thai students cannot use English language effectively (Nonkukhetkhong, Baldauf Jr & Moni 2006).

#### **6.2.2.4 Decentralisation and stakeholder participation**

Decentralisation and stakeholder participation was supported by the NESD Plan 8 as well as prime ministers' policy statements during the period of 1997-2001 (Chavalit Yongchaiyudh's Policy Statement 1996; Chuan Leekpai's Policy Statement 1997; The NESD Plan 8 1997-2001). For example, it was stated in NESD Plan 8 that "teachers and community members at the local level were encouraged to participate in syllabus-designing" (The NESD Plan 8 1997-2001, p.19).

In *Education reform 'at risk' says expert* (2001), Sompong Jitradab, an academic from Chulalongkorn University, argued that educational reform would not be successful without decentralisation or stakeholder participation. That is, more people needed to be encouraged to participate in the nation's educational reform. A state cannot ignore the needs of its communities, which can be recognised via decentralisation (Editorial 2000a).

In the *National Education Act B.E. 2542* (1999), it was recommended that communities have a participatory role in education management via committees (The National Education Act B.E.2542 1999). The role of these committee includes financial management, participation in the schools' policies and curriculums, and monitoring school performances (Editorial 2000c).

#### **6.2.2.5 Teaching and learning culture**

In NESD Plan 8, it was declared that Thailand's teaching and learning process needed to be reformed (The NESD Plan 8 1997-2001). Chareonwongsak (1997) pointed out that Thailand's rote learning style had to be changed in order to produce a skilled workforce with creative thinking and analytical skills. Rung Kaewdaeng, a former Secretary of the NEC, agreed that rote learning had harmed the education system in Thailand by decreasing the learning capacity of Thai students (Santimetaneedol 1998); that is, Thai students needed to change their attitude towards their learning behaviour, including challenging their teachers to practise analytical thinking and generate creative ideas.

However, Janchitfah (1997) contended that the society attitude was the major obstacle in changing Thailand's teaching and learning culture. For example, when a school teacher had wanted to send his students to do a report on their community via knowledge from their

elders, the school director stopped this project because he did not think this project would help with the learning of students (Janchitfah 1997).

This cultural change needs to be assisted by teachers, with an editorial article noting that interactions between teachers and students are key to improving the quality of Thailand's education (Editorial 2000b). According to *Real Life is the Best Teacher* (2001), Amornwic Nakornthap, a lecturer from Chulalongkorn University performed his teaching by encouraging his students to do research outside of the classroom, rather than sitting at a lecture and memorising from class textbooks. Amornwic believed that there are two main important skills for university students: analytical thinking and problem-solving skills.

### **6.2.3 Policy on improving basic education during the period of NESD Plan 9 (2002-2006)**

After experiencing extensive economic difficulties from the AFC, NESD Plan 9 was based on the sufficiency economy as suggested by King Bhumipol (The NESD Plan 9 2002-2006), the middle path of moderation. Its main aim was to reduce the nation's vulnerable circumstances that could be influenced by the globalised development strategies. The main focus of NESD Plan 9 was the balancing of human, social, economic and environmental development (The NESD Plan 9 2002-2006). Key debates on education during this period included increasing educational attainment, stakeholder participation or decentralisation, and improving teacher.

#### ***6.2.3.1 Increasing educational attainment***

During this period, the Thai Government was highly successful in encouraging the transition of primary education graduates to enrol in secondary education. In July 2005, the government approved a policy on providing the rights to access public education to the Hill-Tribe children and children of foreign illegal migrants (Cabinet Resolution 5 July 2005). Under this Cabinet Resolution, the children were also eligible to obtain subsidies for tuition fees, uniforms, textbooks, learning materials and school lunches (Arphattananon 2012).

Yet even though the government granted these stateless children public education access, they were still often ignored by the local schools (Arphattananon 2012; Park, Tanagho & Gaudette 2009). In the case of foreign illegal migrants, the government did not want to promote this policy aloud in case it increased their numbers (Arphattananon 2012). For the Hill-Tribe children, it has been reported that some local schools were unaware of the policy while others knew about it but chose to ignore it (Park, Tanagho & Gaudette 2009).

### ***6.2.3.2 Improving teachers***

As Prime Minister Thaksin (17 February 2001 – 8 March 2005) suggested a new learning mindset of creativity in thinking for the new generations (Limsamarnphun 2002), the Permanent Secretary of the MOE argued that in order to meet this prime ministerial suggestion, teachers would have to retrain themselves to be able to guide these students. That is, the teachers would also need to have a creative mindset if they were going to educate children this way. The former teaching and learning process in Thailand was a rote learning style where students would copy down everything that the teachers wrote or told them about (Barnes 2002; Limsamarnphun 2002). Unfortunately, some teachers were ineffective in the subjects they were responsible for, especially English (Bunnag 2006). Teachers that taught English often focused on training students to memorise grammar structure and vocabulary rather than speaking it (Bunnag 2006).

### **6.2.4 Policy on improving basic education during the period of NESD Plan 10 (2007-2011)**

The direction of NESD Plan 10 was based on both people-centred development and a sufficiency economy, aiming to achieve a 'happy society' (The NESD Plan 10 2007-2011). In line with this, country development across all dimensions needed to follow the middle path where all aspects of society could be balanced.

#### ***6.2.4.1 Increasing educational attainment***

The key focus in NESD Plan 10 was to increase the average years of schooling (The NESD Plan 10 2007-2011). During this time, the role of the Constitution to help increase educational attainment was shown. In 2007, after the military coup overthrowing Thaksin Shinawatra's Government in 2006, the military junta promulgated a new Constitution B.E.2550. According to article 49 of the Constitution, similar to the previous Constitution, it was stated that people have equal rights to gain free public basic education for at least 12 years; only it was now extended to also cover the disabled and poor (Constitution (B.E.2550) 2007).

All four prime ministers during the period 2007-2011 were similarly focused on expanding the basic education for all Thai citizens (Abhisit Vejjajiva's Policy Statement 2008; Samak Sundaravej's Policy Statement 2008; Somchai Wongsawat's Policy Statement 2008; Surayud Chulanont's Policy Statement 2006). Samak Sundaravej and Somchai Wongsawat enacted a 12-year free education policy, while Abhisit Vejjajiva provided 15-year free education (Cabinet Resolution 17 March 2009).



It was reported in *Thailand: Government to subsidise purchases of school uniforms* (2009) that the Abhisit Government had prepared a budget of 18 billion Baht for this 15-year free education project. The budget would cover textbooks, tuition fees, uniforms and educational materials, according to *Thailand: Students' parents and guardians satisfied with free education policy* (2009), and *Thailand: Situations on the government's 15-year free education program* (2009).

#### **6.2.4.2 Shift of policy focus to improving education quality**

During this period, there was another significant policy – the closing down of small rural primary schools with less than 120 students (Editorial 2011). The MOE specified that there were about 14,397 small primary schools around the country; about 5,627 schools needed to be closed due to budget constraints, a shortage of teachers, scarce teaching materials, and poor education quality (Editorial 2011).

There were both supporting and opposing sides for this policy. In the opposing argument, it was contended that the government was forcing students to stay away from their communities by sending them to larger schools in other villages (Editorial 2011). It was believed that this could result in a decreasing number of primary students, as some parents may not have enough money for travelling costs for their children, or may not want their children to leave their villages (Editorial 2011). One journalist urged the MOE to maintain small schools within the rural communities, which would provide a better learning environment for students and keep parents happier (Ekachai 2011a).

From the supporting side, Tongthong Chandransu, the Secretary General of the Education Council, declared in an interview in 2010 that about 7,000 small schools – mostly primary schools – had been found to be ineffective in terms of education quality and resource management (Saengpassa & Khaopa 2010). He believed that there was no alternative but to close these schools if they were not improved, the only exception being those in remote areas where transportation was inconvenient.

#### **6.2.4.3 Improving teachers**

An academic from Rangsit University in Thailand believed that one of the main factors causing a downturn in education quality was the low quality of teaching staff (na Mahachai 2007). He contended that the government needed to pay more attention to improving the quality of teachers than economic development. A newspaper reader also emphasised that the quality of teachers needed to be improved (Tan-Atichat 2010), mostly based on the selection process used for teacher students. She highlighted that high school students often chose teacher

colleges as their second preference when they failed the university entrance exam. This was confirmed in the article *Communities can play a bigger role in education* (2011), where it was argued that students attending teacher colleges were often those who had not passed the entrance exams to their preferred university. These perceptions and revelations suggest there was a negative attitude in Thai society towards being a teacher.

To help address teacher shortages, the Surayud Government approved the cooperative teacher project, where students from teacher colleges completed work experience in schools where teachers were lacking (Cabinet Resolution 18 April 2007). The Surayud Government also approved the repatriate graduate project which aimed to encourage graduates, especially those in science fields, to repatriate and teach in their hometown schools (Cabinet Resolution 12 June 2007). The Abhisit Government then approved a new generation teacher project which aimed to provide scholarships and employment upon graduation opportunities to students (Cabinet Resolution 8 December 2009).

#### ***6.2.4.4 Knowledge of foreign languages***

An academic from Mahidol University in Thailand opined in *Asia: Many workers heading to big metropolis amid economic surge* (2011), that due to the ASEAN integration in particular, Thailand was in need of a labour workforce with foreign language skills such as English, Chinese, Japanese and other ASEAN countries should be taught (Saengpassa & Khaopa 2010).

English was and still is a main foreign language in Thailand which is commonly taught to students from an early age. Yet it was argued at that time that Thai students' ability to use English remained poor, according to *Thailand: National test for students show low scores* (2008). Hence, the country needed to improve English teaching and learning, and stimulate foreign languages education, especially with the ASEAN integration approaching (Fry 2011).

The inefficiency of English teaching standards in Thailand, especially in public schools, was a serious problem. Most of the English-language teachers in Thailand were without proper training or qualifications, according to *Thailand: Teachers do poorly in English language test* (2007). In 2007, 14,189 English-language teachers sat in for a test and about 75% of them scored less than 41% (Editorial 2007c). Only 10% of the teachers scored above 60%. These poor results for the teachers were also reflected in the poor performance of students in regard to English language knowledge. It was reported in *Thailand: National test for students show low scores* (2008) that the average national test score of Year 9 students in English was very low.

At this time, it was suggested that hiring native speakers to teach English classes could be a solution, as highlighted in *Popularity of English classes raise fears* (2010). In the same newspaper article, it was stated that the trend of recruiting native speakers to teach English classes thus became popular; yet there were flow-on problems such as the uncompetitive salaries in Thailand for Western jobseekers compared with other countries in Asia such as Taiwan, South Korea and Japan. In addition, some Western jobseekers were not actually qualified for the jobs.

In relation to hiring native speakers to resolve the foreign language issues, there were both supportive and opposing arguments. For example, Chuensuksawadi (2011) believed that hiring qualified native speakers to teach English was a worthwhile investment for Thailand. While Gerald Fry, a foreign expert on Thai education policy, recommended in *Think quality not quantity – urges education expert* (2011) that the government instead invest in local English-language teachers by sending them to train abroad such as in Singapore.

#### ***6.2.4.5 Decentralisation and stakeholder participation***

Based on the government's policy of closing down small rural schools with less than 120 students, some Thai journalists began to urge greater community involvement in local education (Editorial 2011; Ekachai 2011a). The belief was that rather than shutting these small schools down, policy could be introduced that enabled locals to manage their community schools, which would also enrich the links between the education system and local communities.

Interestingly, those who were encouraging the government to also enable community elders to be more involved in local education via lessons on local history, arts and crafts, and cultural values, caused others to question whether this was a singular view. For example, there were no suggestions on how these locals would teach the core subjects such as mathematics, science and English, which are all necessary for higher education. In addition, these journalists were all Bangkok-based, and there was no citing of teachers or locals' opinions on the closing down of small rural schools.

#### ***6.2.4.6 Teaching and learning culture***

Throughout this period, it was commonly recommended that Thailand change its style of teaching and learning from rote to student-centred, as voiced in various newspaper articles (Ekachai 2011b; Graham 2009; na Mahachai 2007). It was argued that the overload of administrative work for teachers was a factor that caused rote learning in Thailand's education system (na Mahachai 2007). Due to this work overload, teachers did not have the time to

develop a teaching style that stimulated students to analyse and think creatively. A foreign teacher who was living in Thailand spoke of an urgent need to change the teaching and learning style from teacher-centred to student-centred, which would help students to be creative and analytical (Graham 2009).

### **6.2.5 Policy on improving basic education during the period of NESD Plan 11 (2012-2014)**

As the NESD Plan 11 is still active, the analysis in this section will only cover the period of the Yingluck Government which was from 8 August 2011 until 7 May 2014. NESD Plan 11 continued the sufficiency economy philosophy and the focus on people-centred development (The NESD Plan 11 2012-2016). The key goals to improve basic education specified in NESD Plan 11 included increasing educational attainment by expanding average schooling to 12 years; promoting equal opportunity for boys and girls in education; promoting talented children especially those in sciences, mathematics, arts, crafts, sports and music; promoting the learning of foreign languages; and improving the quality of teachers.

In Prime Minister Yingluck Shinawatra's Policy Statement, it was stated that her government would promote the learning of foreign languages, address teacher shortages, and promote equal educational opportunities to all Thais (Yingluck Shinawatra's Policy Statement 2011). However, it should be noted that Prime Minister Yingluck was only in office from 8 August 2011 until 7 May 2014, which was about two years and nine months, and there were four education ministers during this period. This has led to the question on the continuity of educational policy. How can education policies be effectively implemented if education ministers are changed frequently and are only in the position for a short period of time?

#### ***6.2.5.1 Shift of policy focus to improving education quality***

A particularly controversial education strategy of the Yingluck Government was the One Tablet per Child policy (Yingluck Shinawatra's Policy Statement 2011). Under this policy, tablets would be provided to every Year 1 student, aiming to keep them up-to-date with new technologies. There was some support for this policy, with it being suggested in *Thailand: Education Minister says preparations needed for tablet policy* (2011) that the tablets could also be used to learn foreign languages. Positive feedback from parents was also recorded in the article *Thailand's 'One Tablet Per Child' policy draws mixed views* (2012).

However, there were also many who opposed this policy, such as those parents who believed that such technology may disconnect the children from society and the environment, instead devoting themselves to their tablet. A foreign academic working in Thailand also raised the

question of whether Year 1 students are ready at this age for tablets usage, as this is when they are supposed be developing their first language literacy and mathematics skills (de Groot 2011). Relevant research results from Srinakharinwirot University were also cited in *Thailand: Researchers give advice on government distribution of tablet computers to students* (2012), indicating that Year 4 students were more age-relevant for tablet usage than those in Year 1. In addition, some contended that it was not only Thailand's students that needed to be trained in tablet usage – it also needed to include teachers and parents (Pornwasin 2012; Saengpassa 2012b). The government first needed to train teachers on how to use the tablets properly before providing them to students (Saengpassa 2012b). Parents also needed training in this area, so that they could help their children use tablets effectively at home (Pornwasin 2012). Prime Minister Yingluck stated that all teachers, parents and students had to be trained to use the tablets, according to *Thailand: OTPC Project, Enhancing Thai Children toward Knowledge Technology* (2012). In fact, this One Tablet per Child policy was not for just students; this policy was also about keeping the whole Thai society up-to-date with new technologies.

After the tablets had been implemented into the education system, there was positive feedback from teachers and students, according to *Tablets pep up classroom life* (2012) and Khaopa (2012a). One teacher that used the tablets one hour per day to teach science, mathematics, English and Thai subjects, described them as 'remarkable' for stimulating students' learning (Khaopa 2012a). In the article, *Tablets pep up classroom life* (2012), another teacher had observed improved concentration from students after using the tablets, although she believed it was too early to define this as a successful policy. In the same article, a NGO worker opined that the MOE was on the right track to stimulate students to learn by using the tablets.

Another education policy of that time was in relation to providing scholarships to poor students in rural areas. Phongthep Thepkanchana, the third Education Minister of the Yingluck Government, stated that he would resume the former policy of Prime Minister Thaksin Shinawatra – 'One District, One Scholarship' – which had been discontinued by the Surayud Government, according to *Thailand: Scholarships for poor revived* (2012). However, this time he would adjust the policy to 'One District, Two Scholarships'. The main aim of the policy was to provide opportunities to Year 12 graduates from poor families to continue their studies at university level either in Thailand or overseas.

### **6.2.5.2 Increasing educational attainment**

The intention to increase educational attainment had been shown as Worawat Auapinyakul, the first Education Minister of the Yingluck Government, stated that he would continue the 15-year free education policy of the previous government, according to *No change to 15-year free compulsory education policy* (2011). The second Education Minister of the Yingluck Government, Suchart Thada-Thamrongvech, stated in *Thailand: Education Ministry poised to push for high school-equivalent education among Thais* (2012) that the ministry planned to encourage more people to pursue high school certificates via the non-formal education program.

The most controversial education policy at that time was the closing down of small rural schools, which was an ongoing debate in Thai society since the previous government. The Yingluck Government affirmed that it would accomplish this policy, with the MOE initiating the process by meeting with local communities to discuss school closures, according to *Thailand: Obec orders small schools to merge with larger ones* (2013). It was also stated in the same article that the ministry implemented a budget to buy 1,000 vans for the transportation of rural students to schools.

However, there was still much contention about this policy, particularly in relation to the perceived broken links that would occur between local students and their communities. The MOE agreed to establish a joint committee between its own officials and local communities to implement the government's policy on the closing down of small rural schools, according to *Thailand: Govt backs down on schools* (2013).

A researcher from the TDRI raised the question of whether small schools are able to provide access to education or provide quality of education to students in rural areas (Sasiwuttiwat 2013). The question on education accessibility and quality of small schools is based on the school budget. Thai Government based its school funding on the number of students at a school; hence, smaller schools normally receive smaller budgets compared with the larger schools (Sasiwuttiwat 2013).

As a result of the ongoing debate and public pressure, the MOE announced in 2013 that there would not be any schools closed in that academic year, according to *Thailand: Education Ministry says no small schools will be closed this year* (2013). Moreover, the MOE declared that it would provide more resources for small rural schools in order to improve their quality.

### **6.2.5.3 Improving teachers**

Sirichai Kanjanawasee, the Dean of the Faculty of Education at Chulalongkorn University, stated in *Thailand: Prominent educator accuses government of not being interested in educational reform* (2012) that the quality of teachers is key to education reform. It has been acknowledged elsewhere that teachers play a leading role in Thailand's education reforms (Pusawiro 2013). Pornpun Waitayangkoon, Director of the Institute for the Promotion of Teaching Science and Technology (IPST), contended that as the primary level is the 'heart' of education, the Thai Government should offer these students the best quality teachers in order to provide them with a firm foundation (Saengpassa & Khaopa 2012).

While there are many courses for teacher qualifications in Thailand's universities, these courses do not generally provide graduates with the skills required by the labour market (Khaopa 2011b). Sombat Noparak, President of the Thailand Education Deans Council, argued that problems in producing quality teachers included the lack of a master plan for teacher development, lack of lecturers and out-of-date courses (Khaopa 2011b). For example, there was an oversupply of teacher graduates for the kindergarten level, while there was a significant demand for teachers at primary and secondary levels (Khaopa 2011b). It was also inferred that Thailand had an oversupply of teacher graduates who wanted to be teachers (Intatthep & Nghoh 2013). For example, when there was a recruiting drive for 6,802 teaching positions in 2004, the number of applicants was 120,000 (Atagi 2011), which indicates that the shortage of teachers was more about the Thai Government's miscalculations in human development planning than about a scarcity of applicants.

Atagi (2011) believed that the two key factors that determine the recruiting of teachers each year were government budget and policy – not the needs of schools. Hence, due to budget constraints, there was always strong competition between schools to be allocated new teachers each year. Atagi (2011) also stated that there were no clear criteria on how new teachers were assigned to each school, particularly as once they had been assigned a school, they were unlikely to relocate to another school. Even if the number of students decreased at a school, they were unlikely to transfer. In 2007, it was reported that there were about 5,165 schools with a surplus of 10,280 teachers (Atagi 2011).

During this period of 2012-2016, the Thai Government attempted to apply several policies and plans to provide more teachers to the education system. For example, there was the new-breed teacher project which aimed to produce teachers in the shortage areas (Khaopa 2011b). The project recruited high-performing students from towns that lacked teachers, and trained

them in this area. Woravat Auapinyakul, the first Education Minister, was also planning an amendment of teacher qualification regulations to allow professionals from other sectors with no teaching qualifications to teach in the shortage areas (Khaopa 2011b). An academic who agreed with this proposed amendment, contended that due to the severe shortage of science teachers, the government should allow professionals in science and related fields to teach this subject in schools (Intathep 2012).

#### **6.2.5.4 Knowledge of foreign languages**

The Thai Government during this period also attempted to implement policies and plans that would stimulate the use of English in Thai society. For example, the government established 2012 as English Speaking Year, implementing a project that aimed to encourage teachers and students to use English, according to *Teaching of English to be ramped up* (2011). In line with this, the Office of the Basic Education Commission (OBEC) planned to increase the number of enrolments in both the English Program (EP) and Mini-English Program (MEP) in public schools (Khaopa 2011a). The EP program encourages the use of English in class for at least 15 hours a week, while MEP encourages between 8 and 14 hours a week, according to *Popularity of English classes raise fears* (2010).

However, one of the main obstacles in increasing Thailand's foreign language knowledge was the difficulty in recruiting qualified foreign teachers who could use English as instruction in the class. In response to this problem, the MOE allocated a budget for local teachers to be trained in English courses in Canada, Australia, New Zealand, the UK, USA and Singapore, according to *Thailand: Bt100m for teachers to brush up English skills abroad* (2012). However, a valid point was made by Chaturon Chaisaeng, the fourth Education Minister of the Yingluck Government, when he contended that the way of teaching and learning English in Thailand had to be changed from focusing on grammatical correctness to communication abilities (Intathep 2013). Unfortunately, Chaturon's opinion in this area did not get the chance to become policy, as the Yingluck Government was overthrown by a military coup in May 2014.

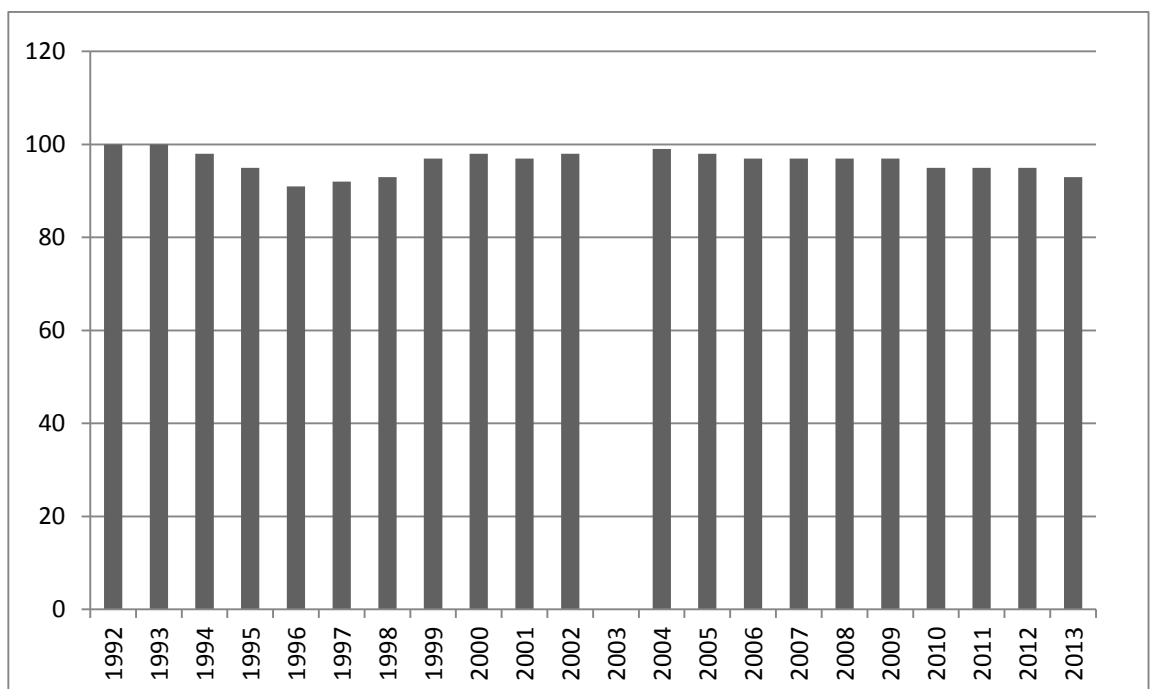
#### **6.2.6 Summary of policy on improving basic education 1992-2014**

Based on the data analysed in this study, such as policies, plans, recommendations and concepts for improving Thailand's basic education during 1992-2014, several policy discourses have been identified: increasing educational attainment; stakeholder participation or decentralisation; the shortage of teachers in both quantity and quality; culture in teaching and learning; the knowledge of foreign languages; and the shift of policy focus to improving



education quality. The graphs below show further statistical evidence relating to these policy discourses.

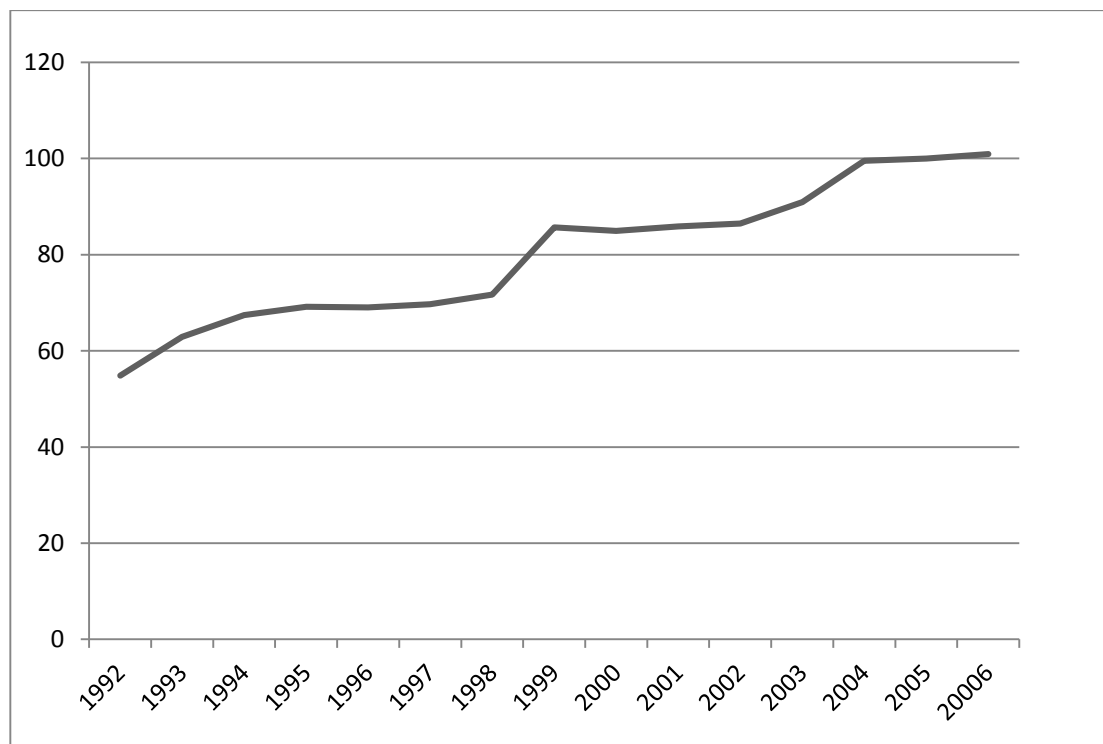
Graph 6.2 shows the percentage of overall student enrolments, regardless of age, at primary level as percentage of total population at primary school age. These results indicate a high percentage of student enrolments at primary level in Thailand during 1992-2013. In 1992 and 1993, 100% enrolment was achieved, before it started to drop until it reached 91% in 1996. In 1999, enrolments started to increase again and remained steady for several years before commencing another slight downward trend since 2004. This recent slight decrease may be due to the decline of birth rates in Thailand; however, overall the enrolment rates still remain high.



**Graph 6.2: Student enrolment at primary level as percentage of total population at primary school age in Thailand 1992-2013**

Source: World Bank (2015) - <http://data.worldbank.org/indicator>

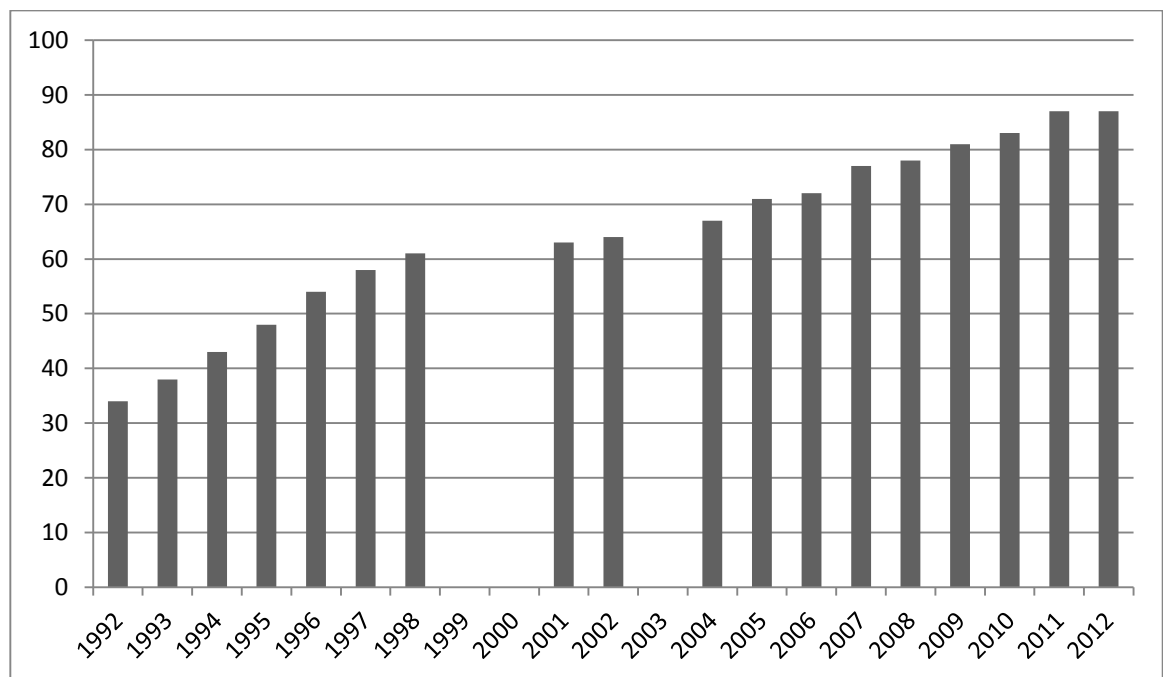
Graph 6.3 shows the percentage of Year 7 students – first year of secondary school – as per the total population of 12-year-old children in Thailand from 1992 to 2006. These results clearly show that the percentage of students who continued their education post-primary level to Year 7 at secondary level has dramatically increased over this period. Interestingly, in the last two years shown in the graph – 2005 and 2006 – the results exceeded 100%, which may be due to the inclusion of over-aged students who did not enrol in previous years.



**Graph 6.3: Year 7 students as percentage of total population of children aged 12 in Thailand 1992-2006**

Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

Graph 6.4 shows Thailand’s overall student enrolment in secondary level, regardless of age, as a percentage of the total population at secondary school age between 1992 and 2012. The results clearly indicate considerable growth in the number of Thai students enrolling at secondary level. This indicates that the Thai Government has been successful in implementing policies that encourage students to continue their education post-primary level.

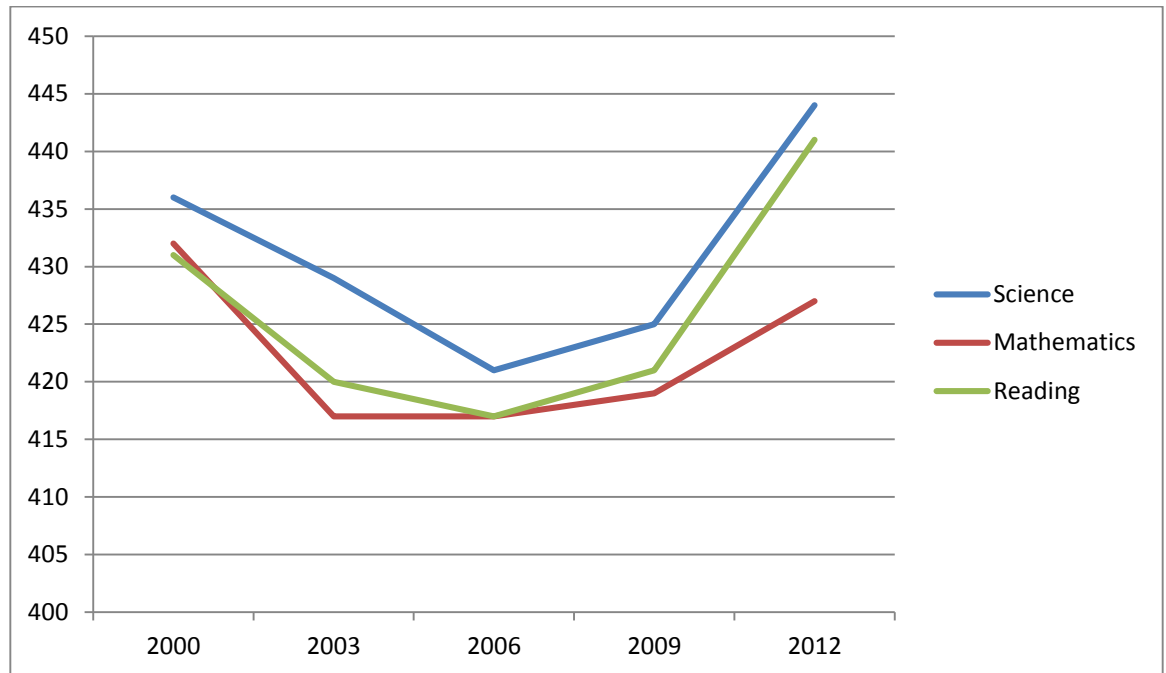


**Graph 6.4: Student enrolment at secondary level as percentage of total population at secondary school age in Thailand 1992-2012 (% gross)**

**Source: World Bank (2015) - <http://data.worldbank.org/indicator>**

In terms of the quality of education for secondary level students, a survey of 15-year-old Thai students’ performances in science, mathematics and reading is conducted by the PISA ([www.oecd.org/pisa/aboutpisa](http://www.oecd.org/pisa/aboutpisa)), under the supervision of the OECD, every three years – commenced in 2000 (OECD 2014). The most recent results from the 2012 PISA survey indicated that Thailand remains in the lower range of the OECD average. In comparison with other ASEAN members, Thailand’s mean score was lower than Singapore and Vietnam, but higher than Malaysia and Indonesia (OECD 2014).

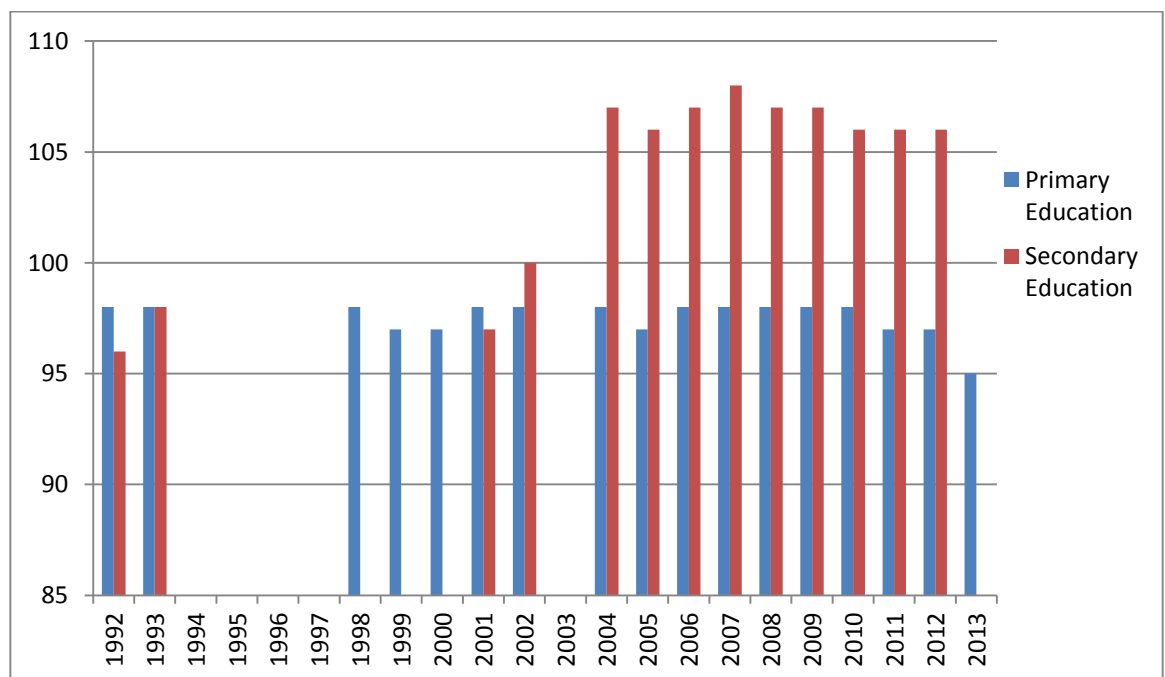
Graph 6.5 shows 15-year-old students Thai secondary students' performances in science, mathematics and reading from 2000 to 2012, based on the PISA three-year surveys. The results show that their performance in these subjects decreased from 2000 until 2006, but then started to steadily increase, indicating that the quality of secondary education in Thailand is continuing to improve.



**Graph 6.5: PISA survey results of 15-year-old students Thai secondary students' performances in science, mathematics and reading**

Source: OECD (2014) - <http://www.oecd.org/pisa/aboutpisa/>

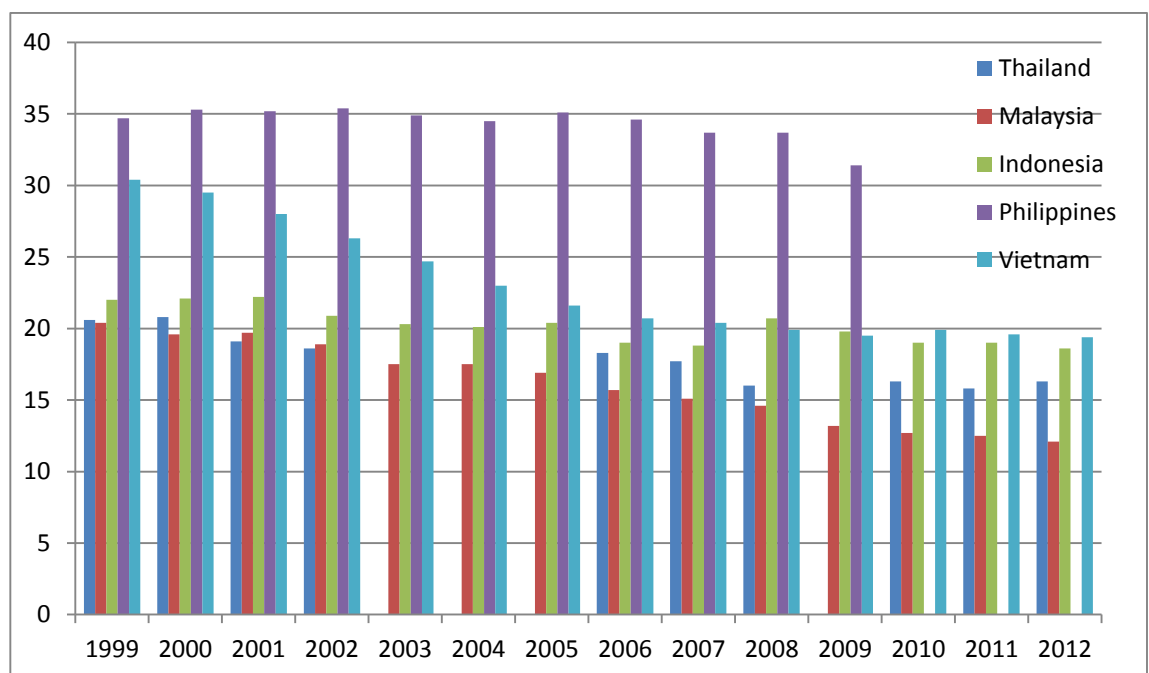
Graph 6.6 shows the ratio of females to males enrolled in both primary and secondary level education in Thailand from 1992 to 2006. At the primary level, the ratio of female enrolments is slightly lower than for males. In contrast, at the secondary level, there is a growing trend of higher female enrolments than males. The ratio from 2004 to 2006 in secondary level education notably exceeded 100%, which may be due to the enrolment of over-aged females who did not enrol in previous years. These results indicate that the Thai Government has been successful in encouraging female students to continue their study to the next level. They also suggest that an increased number of female students at basic education level will translate to an increased amount of skilled women in the future workforce.



**Graph 6.6: Ratio of females to males at primary and secondary levels in Thailand 1992-2006**

Source: World Bank (2015) - <http://data.worldbank.org/indicator>

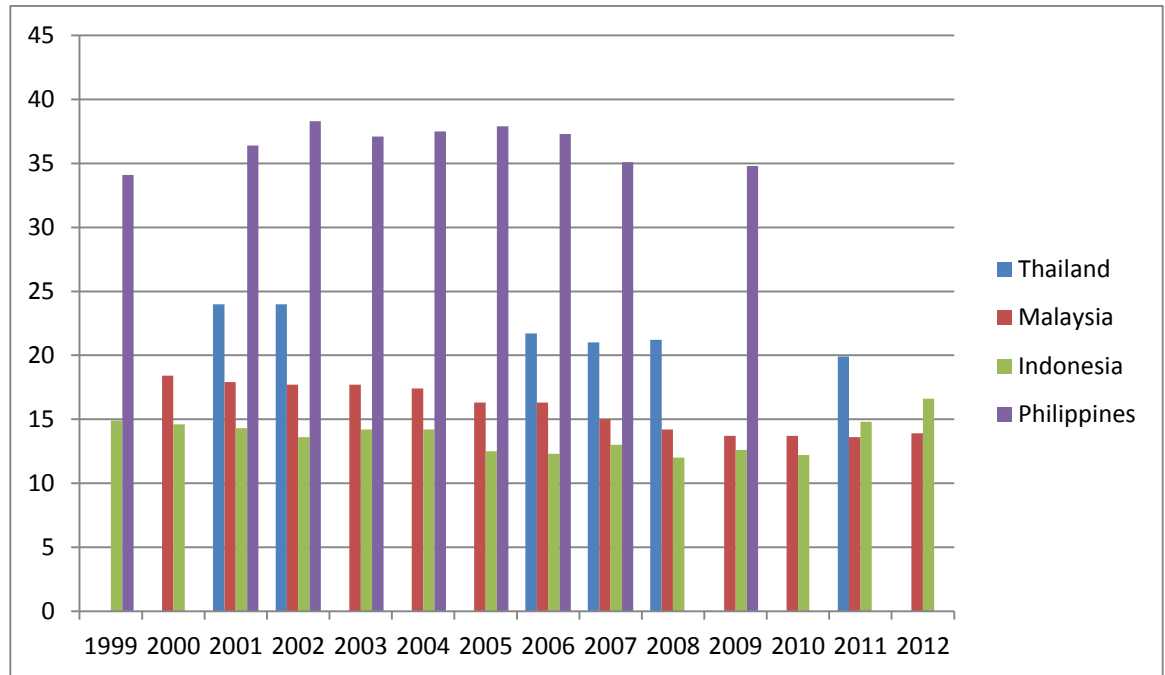
Graph 6.7 displays the teacher-student ratio at primary level between 1999 and 2012, comparing Thailand with other ASEAN countries. The results reveal that across this period, Thailand and Malaysia have shared similar teach-student ratios. Since 2006, Malaysia has achieved the lowest ratios across these countries, with Thailand second-lowest. In Thailand, a ratio of 20.6 was achieved in 1999, which had declined to 16.3 by 2012; potentially indicating the decreasing number of primary level students in Thailand which due to decreasing birth rates.



**Graph 6.7: Student-Teacher ratio in primary school in Thailand, Malaysia, Indonesia, Philippines and Vietnam 1999-2012**

Source: UNESCO (2015) - <http://data.uis.unesco.org/Index.aspx?queryid=180>

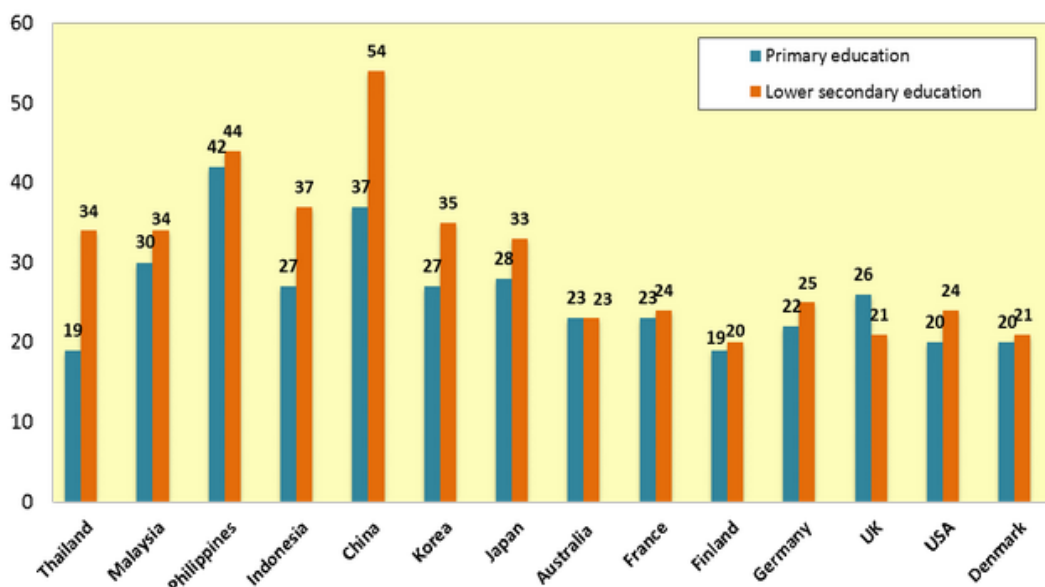
Graph 6.8 shows the teacher-student ratio of secondary level compared Thailand with other countries in ASEAN. The Graph displays that Thailand has the higher ratio of teacher-student at secondary level than Malaysia and Indonesia, while the Philippines has the highest ratio. In 2001, the ration for Thailand was 24 then decreased to 20 in 2011.



**Graph 6.8: Student-Teacher ratio in secondary school 1992-2012**

Source: UNESCO (2015) - <http://data.uis.unesco.org/Index.aspx?queryid=180>

Graph 6.9 shows the average class sizes in Thailand compared with a range of other countries in 2010, by both primary and lower secondary levels.<sup>10</sup> In this year, the average number of students in a class at primary level was 19 for Thailand, which was very low compared with most other countries. In contrast, the average number of students in lower secondary classes in Thailand was 34, which was a mid-range result compared with the other countries.



**Graph 6.9: Average class size of Thailand compared with other countries in 2010**  
 Source: Office of the Educational Council (2015) - <http://stat-ed2.onecapps.org/?Lang=1&ID=17&UnderSub=39&Sub=23>

The above graphical results show that both the student-teacher ratio at primary and secondary levels between 1999 and 2012 and the average class size primary level in 2010 were not particularly high in Thailand. This suggests that Thailand’s teacher shortage has not been as severe as previously believed; that the real issue may instead relate to a lack of quantity and quality teachers in Thailand’s rural areas, as Graph 6.10 next indicates.

Graph 6.10 compares Thailand’s schools in urban and rural areas in relation to the percentage of teachers trained in the main subjects. These results indicate that schools in rural areas are

<sup>10</sup> Lower secondary level is categorised for students from Year 7 to 9. After Year 9, the students can choose either to study at upper secondary level for Year 10 to 12 or to follow the vocational education (Also see Figure 6.1).



more likely to lack teachers trained in science, mathematics, English and computing than those in urban areas.



**Graph 6.10: Percentage of schools lacking teachers trained in main subjects in Thailand**  
**Source: Atagi (2011)<sup>11</sup>**

A significant obstacle in improving Thailand’s basic education has been the discontinuation of the education policy which appeared during 1992-2014. It has been suggested that Thai politicians have a short-term vision when it comes to education policy (Oxford Analytica 1994). That is, rather than focusing on the education quality for Thai students, they generally focus on the physical infrastructure such as buildings construction. A foreign journalist once define the Thai education policy as a ‘stop-go’ policy, as there have been many cabinet reshuffles which have hampered the government’s ability to fully implement such policy (Coben 1997). For example, during the five-year period of NESD Plan 8 (1997-2001), there were seven education ministers under three prime ministers. In line with this, Sippanondha Ketudat, the former Thailand’s National Education Council Director, commented in 2000 that:

We change education ministers once a year on average. This interrupts reform and its policies and subjects them to changes (Bai-germ 2000).

<sup>11</sup> Atagi derives this graph from Ket-sing, V. 2006. *Phaen Tee Sadaeng Sapawa Kan Khad Klaen Kru Sakha Vicha Tang TangJamnaek Tam Khet Puen Tee Kan Suksa* [Map of Teacher Shortage Situation in Different Subjects by Education Service Area] (In Thai). However, the graph does not indicate the year of the statistics.

Another main factor that has caused the discontinuity of many education policies has been Thailand's continual political instability. For example, it was reported in *Education Ministry cancels 3 Thaksin-era projects* (2006) that when the Thaksin Government was overthrown by a military coup in August 2006, the military junta government cancelled three educational projects: the One Tablet per Child policy; the distribution of 250,000 computer units and installation of a high-speed internet service at every primary and secondary school; and the essay competition scholarship.

Another common issue in relation to implementing education policies was in relation to how well the ministers understood the context of the policy. Thailand's ministers were unlikely to steer an education policy in the right direction if they did not fully understand it (Kantabutra 1999). Witthayakorn Chiangkoon, a senior academic from a private university in Thailand, also contended in *Educators say changes illegal* (2002 ) that another major obstacle to Thailand's education reform was due to most policymakers lacking a clear understanding of the country's education system and its ideologies.

### **6.3 Improving vocational education**

After basic education, higher advanced skills are learnt at the vocational level (International Labour Organization 2008; Mustapha & Abdullah 2004) – skills that are necessary for a country's development (Hawley & Paek 2005; International Labour Organization 2008). In particular, countries in the industrialisation stage of economic development with a middle-income status should prioritise educational development in both vocational and technical areas (International Labour Organization 2008). A well-established vocational education can help the future workforce to improve their skills and knowledge to meet the demands of the labour market.

#### **6.3.1 Policy on improving vocational education during the period of NESD Plan 7 (1992-1996)**

In NESD Plan 7, it was noted that the increasing role of the industrial and service sectors had highlighted a shortage of skilled manpower such as technicians and professionals, especially in science and technology. The country needed to improve the skills of its labour workforce beyond basic education, however, based on the collected data which is discussed next, yet the Thai Government did not pay as much attention to improving vocational education as expected.

### 6.3.1.1 Producing a vocational skilled workforce

Interestingly, even though an awareness of skilled manpower shortage was shown in NESD Plan 7, the government only responded with policy relating to improved basic and higher education. There was no mention of vocational education in NESD Plan 7; that is, the plan did once use the term ‘vocational education’.

Figure 6.1 shows the structure of the Thai education system from lower secondary to advanced levels. Based on this structure, when students graduate from Year 9, they have two choices: upper secondary or lower vocational. Students who choose upper secondary will continue along the path to university level, with a standard university course taking four years to complete. For students who choose the vocational path, when they graduate from lower vocational they can choose either to continue their studies or join the labour market. Among those students who choose to continue their studies to upper vocational, once they graduate from this level, they can either choose to continue with their studies to acquire a bachelor degree within two years, or find employment.

Thai education system from lower secondary to university			
Age (years)	Year	Level of education	
12	7	Lower secondary	
13	8		
14	9		
15	10	Upper secondary	Lower vocational – certificate
16	11	(Por Wor Chor)	
17	12		
18	First year	Bachelor degree	Upper vocational – diploma
19	Second year	(Por Wor Sor)	
20	Third year	Bachelor degree	
21	Fourth year		

**Figure 6.1: Thai education system from lower secondary to university**  
**Source: Ministry of Education (2015)**

During 1992-1996 there were three out of four prime ministers in Thailand who according to their policy statements similarly neglected the importance of vocational education in line with NESD Plan 7. For example, the interim prime minister after the February 1991 coup, Anand Panyarachun, did not mention the term 'vocational education' in his policy statement (Anand Panyarachun's Policy Statement 1991). In addition, the next Prime Minister, Suchinda Kraprayoon only mentioned it to encourage the greater role of the private sector in vocational education (Suchinda Kraprayoon's Policy Statement 1992), and was only in power for two months. The next Prime Minister Chuan Leekpai also did not refer to vocational education in his policy statement; instead stating that career training in both formal and non-formal education would be provided (Chuan Leekpai's Policy Statement 1992). Prime Minister Bunharn Silpa-archa was the only leader during this period who paid attention to vocational education. In his policy statement, he recommended the enhancement of vocational institutes in areas such as increasing teachers, developing curriculums and encouraging cooperation with foreign institutes to increase the nation's competitiveness (Bunharn Silpa-archa's Policy Statement 1995).

Even though vocational education was not a main interest of NESD Plan 7 or the first three prime ministers of this period, the number of vocational students increased from about 600,000 in 1992 to around 970,000 in 1996, and continued to rise to more than one million by 1997 (see Graph 6.11). This may be due to Thailand's steady economic growth during this period. The GDP of the country was also very high in the early 1990s – from 1991 to 1995, the GDP was 8.6, 8.1, 8.3, 9.0, and 9.2% respectively. Such economic growth no doubt created a demand for vocational skilled workforce in Thailand's labour market.

### ***6.3.1.2 Role of private vocational providers***

The private sector also played a crucial role in vocational education and human development throughout the period of 1992-1996. As examples: a report was produced that recommended expanding private training schools to include more economy relevant topics such as foreign languages and computing (Chaiyariti 1994); the Federation of Thai Industries urged the government to provide more subsidies for in-house training programs (Boyd 1994); and FDI was increasing, including in Japanese and US training institutions such as a technical college (Minehan 1996). There was also a Cabinet Resolution (23 March 1995) during this period to approve the policy of encouraging the role of private investment in human development.

### **6.3.2 Policy on improving vocational education during the period of NESD Plan 8 (1997-2001)**

The importance of vocational education started to be realised by more of Thailand's policymakers in the late 1990s, as shown in NESD Plan 8 where an objective was set to develop the vocational skills of all Thais to adapt to the changing social and economic environment (The NESD Plan 8 1997-2001). The development of technicians and a middle-level skilled workforce was also recommended in NESD Plan 8, including encouraging private vocational providers to take a greater role in skilled workforce development.

In his 1996 policy statement, Prime Minister Chavalit Yongchaiyudh declared that he would reform vocational education by encouraging cooperation between educational institutions and the major industries, to meet the requirements of the labour market (Chavalit Yongchaiyudh's Policy Statement 1996). However, Prime Minister Chuan Leekpai (9 November 1997 – 17 February 2001), who returned to office for the second time, again did not mention anything about vocational education in his subsequent policy statement (Chuan Leekpai's Policy Statement 1997). In addition, the *National Education Act of B.A. 2542* (1999) covered all areas of the education, yet there was little mention of vocational education (Abelman et al. 2001). The act only specified that vocational education would be provided by the state-owned institutes, private institutes and other enterprises (Abelman et al. 2001).

#### ***6.3.2.1 Producing a vocational skilled workforce***

There is evidence during this period of Thai governments attempting to increase the number of female vocational students, such as via the cancellation of gender quotas in the vocational education entrance exam (Cabinet Resolution 26 November 1996). This cancellation showed that the Thai Government was attempting to provide equal opportunity for women in the workforce.

In addition, a report from the World Bank (Abelman et al. 2001) recommended that the Thai Government focus on the quality of vocational education by setting clear standards for vocational graduates and establishing an assessment system for students, teachers and schools. The report also suggested that Thailand implement content standards to be used as guidelines on what and how subjects should be taught in each year level; that is, a framework which is a guide for the curriculum (Abelman et al. 2001). It was deemed important to ensure that the curriculums across all of Thailand's vocational colleges comply with the same education standards – students would then better understand what they could achieve from the course (Abelman et al. 2001).

### ***6.3.2.2 Role of private vocational providers***

As places were limited in public vocational institutes, admissions were processed via an entrance examination, where those students who did not pass then had the option to enrol in a private vocational school (Johanson & Wanasiri 2001). Hence, it was argued that the government should better support the private vocational schools (Johanson & Wanasiri 2001).

However, this entrance exam generally meant that the educational performance of private vocational students was often not as high-quality as public vocational students. In addition, some students in private vocational schools were of lower socioeconomic status than those in public vocational schools (Abelman et al. 2001; Johanson & Wanasiri 2001). According to *Thailand's private schools feel the pinch* (1997), some of the students from lower socioeconomic status families had to pay off the school fees by instalments. In 1997 when the AFC occurred, the household financial situation became more severe; some parents had to ask their children to drop out of school. At this time, many private vocational schools had to ask the government for financial assistance, including providing more funding to help the students stay in school. To address this need, evidence shows that the cabinet approved a loan fund from the Asian Development Bank to assist private vocational students who needed financial support (Cabinet Resolution 28 March 2000).

### ***6.3.2.3 Collaboration between educational providers and the industry***

It has been suggested that policies and decisions relating to vocational education should be market-driven (Abelman et al. 2001). Anantachai Kunanantakul, President of the Confederation of Thai Employers (CTE), urged the Thai Government to review the vocational education syllabuses in order to develop a labour workforce that matched the requirements of the industries (Pongvutitham 1998). Such coordination would help to produce a skilled workforce that supports the economic policy and the actual need of the employers.

There are examples of this cooperation occurring between public and private sectors, such as CP All, a leading retail business, and the Informal Education Department, where training programs were provided to students who were particularly interested in the services sector (Pongvutitham 1999). In addition, in 2001 ASEAN's first automotive training college was opened in Thailand (Wiryapong 2001), which was a cooperative project between the Ministry of Education's Department of Vocational Education and the Honda Group.

### **6.3.3 Policy on improving vocational education during the period of NESD Plan 9 (2002-2006)**

The increasing quantity of vocational skilled workforce was a key issue during 2002-2006, as evidenced in NESD Plan 9 (The NESD Plan 9 2002-2006). At this time, Prime Minister Thaksin Shinawatra established the Income Contingency Loan (ICL) program, aiming to provide funding to both higher education students and vocational students for study purposes, according to *Thai Government provides income contingency loan for greater educational opportunities* (2005). In this program, students could start to pay the loan back when they were employed.

Even though this ICL program seemed to be an attractive concept, it was reported in *Thailand: Vocational school enrolment falls sharply* (2006 ) that within a year of its implementation, the number of students enrolled in vocational education had dropped by almost 30%. This drop may have been due to the perceived financial limitations of this program for vocational students. That is, based on the regulations of the loan program, vocational students could not borrow the same amount of money as university students. For example, vocational students could only borrow 25,000-30,000 Baht a year compared with 60,000 Baht for social science and 70,000 Baht for science and engineering university students. Hence, many students applied to universities rather than vocational colleges for their continued education.

In addition to the ICL program, the cabinet took other steps to improve the quality of vocational education, including the establishment of the Professional Qualification Institute to better coordinate the tasks of government agencies from different ministries on the national strategy for skilled labour policy (Cabinet Resolution 26 October 2004b), and the approval of the National Education Standard (Cabinet Resolution 26 October 2004a). Research from the MOE also identified other major problems relating to vocational education in Thailand which needed to be address, such as unclear frameworks and policy, budget constraints, shortage of both quality and quantity of teachers, and lack of cooperation between education institutes and communities (Sornnil et al. 2005).

### **6.3.4 Policy on improving vocational education during the period of NESD Plan 10 (2007-2011)**

It was stated in NESD Plan 10 that Thailand's labour workforce with vocational education was deficient in both quantity and quality (The NESD Plan 10 2007-2011). The plan emphasised that it was very important to produce a workforce with vocational skills to feed the market needs, in order to increase the country's competitiveness.

#### **6.3.4.1 Producing a vocational skilled workforce**

One of the main problems in producing a vocational skilled workforce was the mismatch of the education policy and the requirements of the labour market. In addition, rather than entering the labour market, most vocational students continued to study at the higher education level in fields unrelated to the vocational education they just graduated from.

Other obstacles to producing vocational skilled workforce included the deficiency in both quality and quantity of teachers, and students' lack of knowledge in foreign languages (Office of the Education Council 2011). The bad reputation of vocational students was also a key factor (na Mahachai 2007). In addition, the decreasing of birth rates in Thailand had contributed to the decrease in vocational education enrolments, according to *Better graduates needed* (2007).

It was further pointed out in *Thailand must put more emphasis on technical studies* (2011) and *Wage moves spark fears of big jump in jobless* (2011), and by Ekachai (2011b) that vocational education is often seen as a second-grade choice. Both students and parents showed a preference for a university rather than vocational education. It was therefore recommended that the Thai Government concentrate on changing society's attitude towards vocational education, such as by providing clear career path guidelines for vocational education graduates, as suggested in *Educators comment on policies proposed by various political parties* (2011).

#### **6.3.4.2 Collaboration between educational providers and the industry**

Examples of collaboration between Thai vocational colleges and the industry can be observed throughout the period of 2007-2011. The need for a skilled workforce at the vocational level was a strong concern for the industrial sector in Thailand, according to *More graduates needed in vocational subjects* (2008), especially in the auto industry (Ongdee 2007). It was reported in *Scheme adds to techs' skills* (2008) that major car manufacturers General Motors and Chevrolet Sales had jointly established an Automotive Service Educational Programme (ASEP) that was focused on producing highly skilled technicians in the auto industry. Under the ASEP program, students from 11 vocational colleges across Thailand were trained for six days a week for three months in the necessary skills for the auto industry.

In addition to the auto industry needs, due to the growth of the spa industry in Phuket – a popular tourist destination – the local vocational college and the Phuket spa association jointly established a spa training course for vocational students (Nottingham 2008). In addition, the Siam Cement Group (SCG), one of the leading conglomerates in Thailand, signed an agreement



with the Office of the Vocational Education Commission (OVEC) to provide on-the-job training to about 200 vocational students, according to *Siam Cement Group hires vocational college graduates* (2009). This project aimed to provide training in the skills most required by this industry. Based on this education agreement, students from Rayong Technical College who are trained in SCG's petrochemical plants are generally hired by SCG when they graduate (Prachyakorn 2009). The Vocational Education Commission also later signed an agreement with TOA Paint (Thailand) to train vocational students in painting and spray coating skills which were in short supply in that industry (Ongphet 2011).

The data above displayed that most of the skills that the government had coordinate with the industries were the new skills or new technology to Thailand at the time. The OVEC was responsible for keeping up-to-date on the requirements of the labour market by maintaining cooperation with the industries.

### **6.3.5 Policy on improving vocational education during the period of NESD Plan 11 (2012-2014)**

The importance of vocational education to the country's economic development is even more noticeable in government policies relating to NESD Plan 11. In terms of quantity, increasing the number of vocational students was emphasised in NESD Plan 11, as well as the objective of adjusting the ratio of vocational and secondary students to 60:40 (The NESD Plan 11 2012-2016). While Prime Minister Yingluck Shinawatra continued her brother Thaksin Shinawatra's policy by supporting the ICL program (Yingluck Shinawatra's Policy Statement 2011). In terms of quality, it was stated in NESD Plan 11 that cooperation between public and private education providers in improving the skilled workforce at the vocational level needed to be encouraged (The NESD Plan 11 2012-2016). In addition, the Yingluck Government encouraged the matching of vocational education with the requirements of the labour market (Yingluck Shinawatra's Policy Statement 2011).

#### ***6.3.5.1 Producing a vocational skilled workforce***

A report from the Office of the Vocational Education Commission identified that one of the main obstacles to producing a Thai vocational skilled workforce was a mismatch between education policy and industrial policy (Vocational Education Commission 2012). This misguided perspective had led to the consecutive skill labour shortage and unemployment problems in Thailand during this period.

A senior government officer argued that the aim of increasing the proportion of vocational students to 60% would not be successful if the Thai Government did not actually devote to the

policy (Wongsamuth 2012). He further stated that a key obstacle was the negative attitude of Thai society towards vocational education. Chaturon Chaisang, the fourth Education Minister in the Yingluck Government, showed his determination to increase the number of vocational students, according to *Education Ministry wants to increase number of vocational students by 75,600 next year* (2013).

#### **6.3.5.2 Collaboration between educational providers and the industry**

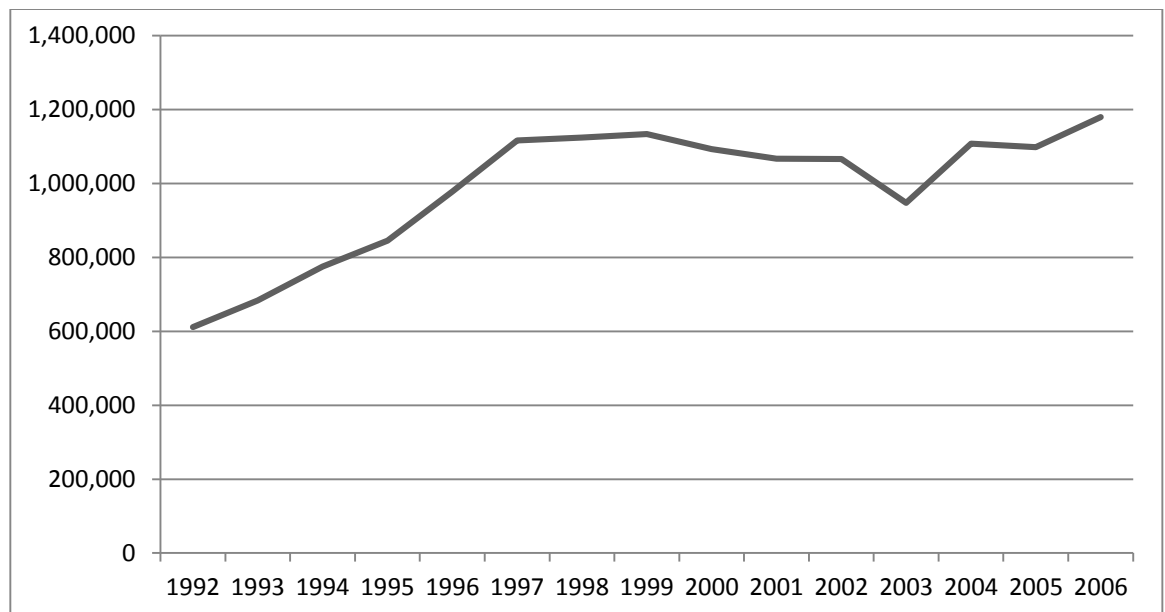
Siripan Choomnoon, a senior officer in the MOE, argued that the best way to offer skills that match with the requirements of the labour market is via industrial involvement (Chalamwong & Suebnusorn 2012). Singapore is a noteworthy example of applying industrial involvement to vocational education to achieve economic development (Khaopa 2012b). The country used to be in a similar position to Thailand, with a negative attitude towards vocational education; but since the Singapore Government rebranded vocational education via improved student quality, industrial involvement had increased. The key factor was 'learning by doing', with teaching staff updating and improving their skills based on feedback from industry experienced workers; acquiring specific employment knowledge and skills that could be passed onto the students. Singapore's vocational students then had skills that accurately matched the needs of the labour market, which influenced economic growth and transformed vocational education to a positive image.

Chaturon Chaisang, the fourth Education Minister, recommended that the OVEC should cooperate closely with the industry in providing training to students, according to *Education Reform to Improve Thailand's Education Standards* (2013). In line with this, a more significant role of the private sector in developing vocationally skilled students would also be encouraged. For example, CP All, a retail firm that operates 7-Eleven throughout Thailand, established its own vocational college to produce students with the specific skills it required (Amornvivat 2012; Saengpassa 2012a).

#### **6.3.6 Summary of policy on improving vocational education 1992-2014**

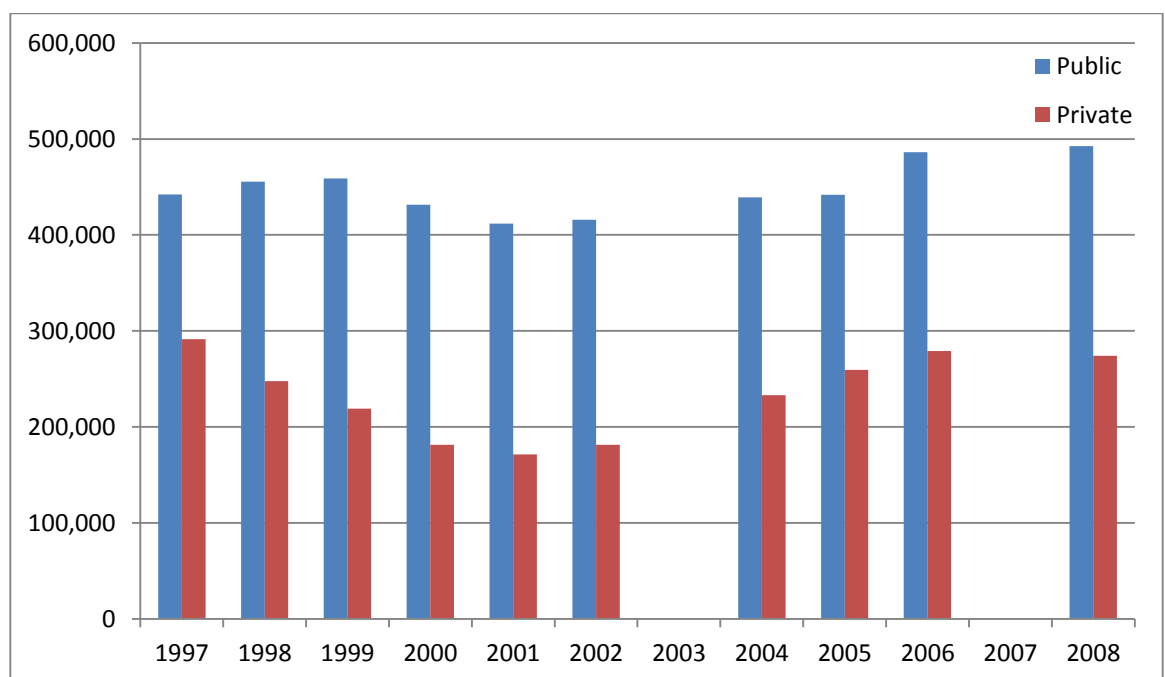
The three key policy discourses on improving vocational education during 1992-2014 as identified in this thesis are: (1) producing a vocational skilled workforce; (2) the role of private vocational providers; and (3) collaboration between educational providers and the industry. Below are a series of graphs relating to vocational student development in Thailand during this period.

Graph 6.11 shows the number of vocational students in Thailand during 1992-2006. Unfortunately, due to unclear data from the MOE, the number of vocational students from 2007 to 2014 could not be included. These results show that the number of vocational students consistently increased from 1992 until 1997, and then remained steady for a few years. In 1990, the number of vocational students started a downward trend until 2003, which may have been caused by the AFC. In 2004, vocational student numbers started to rise again.



**Graph 6.11: Number of vocational students in Thailand 1992-2006**  
Source: Ministry of Education (2015) [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

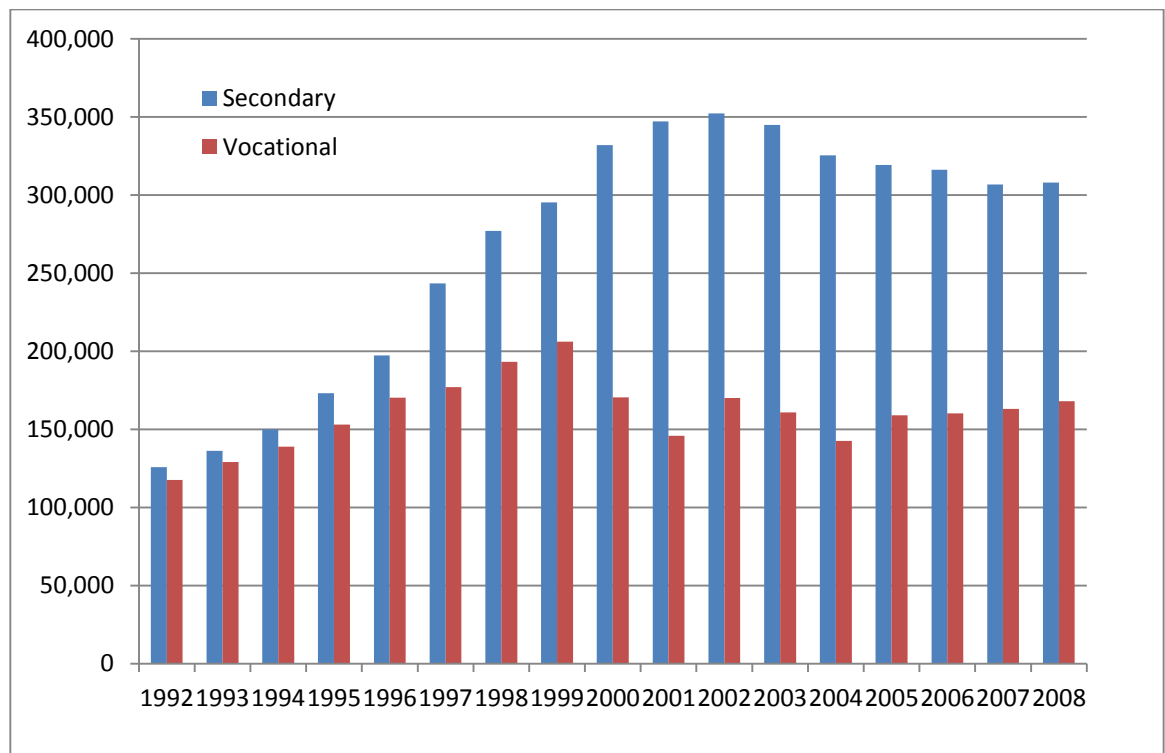
Graph 6.12 below compares the number of vocational students in Thailand’s public and private vocational colleges during 1997-2008. The results show that from 1997 to 2001, the number of students in private vocational colleges steadily decreased, before starting an upward climb in 2002. Despite this recent increase, the number of private vocational college students was consistently far below the number of students in public vocational colleges throughout the charted period. Based on the data from the period of 1992 to 2014, where the role of private education providers had emerged in the narrative analysis, the finding suggests that the Thai government should support the greater role of private sector in vocational education.



**Graph 6.12: Number of vocational students in public and private vocational colleges in Thailand 1997-2008**

Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

Graph 6.13 compares the number of graduates in upper secondary (Year 12) and lower vocational (Certificate or *Por Wor Chor*) between 1992 and 2008. During 1992-1996, which was the period of NESD Plan 7, there was minimal difference between the numbers of graduates who chose either career path. A difference in graduate numbers became from noticeable at the beginning of the NESD Plan 8 period (1997-2001), which continued through the period of NESD Plan 9 (2002-2006). The results show that the number of graduates who pursued the secondary education path towards university was higher than those who chose the vocational education path. While these results indicate overwhelming success by the Thai Government in increasing secondary level enrolments, they also show its failings in encouraging students to enrol in vocational education.

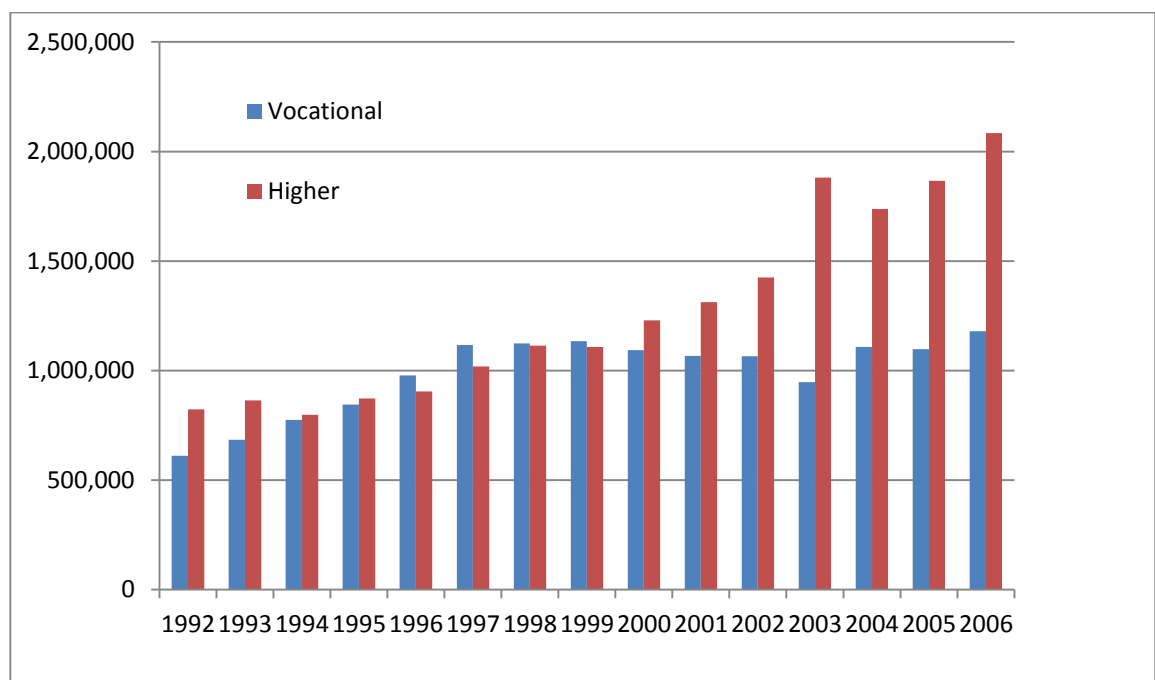


**Graph 6.13: Number of graduates in secondary education (Year 12) and lower vocational education (Certificate or *Por Wor Chor*) in Thailand 1992-2008**

Source: The National Economic and Social Development Board (2015) -

[http://social.nesdb.go.th/SocialStat/StatReport\\_Final.aspx?reportid=43&template=1R2C&eartype=M&subcatid=23](http://social.nesdb.go.th/SocialStat/StatReport_Final.aspx?reportid=43&template=1R2C&eartype=M&subcatid=23)

Graph 6.14 compares the numbers of vocational education students and higher education students during the period of 1992-2006. These results show that at the beginning of NESD Plan 7 (1992-1996), the number of vocational students was lower than the university students. Then in 1994 the number of vocational students started to increase to a similar level as the number of higher education students, before exceeding it between 1996 and 1999. This higher number of vocational students may have been due to the high economic growth in Thailand during the early 1990s, which likely created the demand for a vocational skilled workforce. In addition, the cancellation of the gender quota in the vocational education entrance exam (Cabinet Resolution 26 November 1996) would have been a major contributor this vocational increase. After 1999, the number of vocational students started to drop, which can possibly be attributed to the aftermath of the 1997 AFC. From then onwards, the number of students in higher education remained higher than the number of vocational students.



**Graph 6.14: Number of vocational and higher education students in Thailand 1992-2006**  
 Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

## **6.4 Improving higher education**

Among middle-income countries that want to achieve the higher-income status, the role of higher education is very important (Ho & Ge 2011; International Labour Organization 2008; Sidhu, Ho & Yeoh 2011). Higher education will provide a skilled labour workforce that better matches the needs of advanced-technology industries and highly skilled services, which will leverage further economic growth towards higher-income status (Hogendorn 1996; Keller 2004; Xu 2000).

### **6.4.1 Policy on improving higher education during the period of NESD Plan 7 (1992-1996)**

During 1992-1996, there were major Thai Government plans and policies in relation to improving higher education, such as via NESD Plan 7, the five-year Higher Education Development Plan 7 (1992-1996), the Long Term Higher Education Plan (1990-2002), and the policy statements of four prime ministers. The key issues and needs that influenced the development of these plans and policies were the increasing number of higher education students especially in science and technology, internationalisation of universities, expanding higher education to regions, encouraging the greater role of the private sector in higher education, and restructuring public universities to make them more autonomous (Anand Panyarachun's Policy Statement 1991; Bunharn Silpa-archa's Policy Statement 1995; Chuan Leekpai's Policy Statement 1992; Higher Education Development Plan 7 1992-1996; Long Term Higher Education Plan 1990-2004; Suchinda Kraprayoon's Policy Statement 1992; The NESD Plan 7 1992-1996).

#### ***6.4.1.1 Increasing universities and students***

The importance of science and technology in higher education was an integral part of the Thai Government's NESD Plan 7. Scholarships were noted as a key device in attracting students at all levels of higher education, from bachelor and master, to doctorate levels, to pursue science and technology fields. In response to this, the National Science and Technology Development Agency established a joint program with foreign universities to offer scholarships and produce 10 science PhDs a year (Wheeler 1995).

In addition, it was perceived that the number of university students could be increased by expanding the number of universities in Thailand. Most Thai universities were located in the capital or Bangkok, which mainly provided higher education to the middle class (Oxford Analytica 1994). The government therefore approved the expanding of higher education to the regions in 1995 (Cabinet Resolution 20 June 1995). In 1995, there were about 54 higher education institutes, both public and private, in Thailand (Kulachol 1995); it was suggested that

this needed to be expanded to at least 150 universities or two universities for each province (Itti 1994). However, Chiangkoon (1995) pointed out that there were numerous problems in establishing rural universities across Thailand, such as red tape, salary structures, recruitment of lecturers, and living conditions in these areas.

#### **6.4.1.2 Role of private sector in higher education**

The private sector was encouraged at this time to take on a greater role in assisting public universities in producing skilled workers to address the supply shortage, according to *An Interview on Regional Economic Issues* (1994). In addition, it was reported in *Thailand/Skilled-Labour Shortage-2:Govt Agencies Step In* (1994) that Prime Minister Chuan Leekpai had loosened the regulations for private educational providers, which had led to an increase in private schools and colleges. There was also a recommendation that the government let the private sector concentrate on higher education in Bangkok, while the government focuses on expanding higher education in regional areas (Oxford Analytica 1994). In 1995, the Chuan Government approved a policy that encouraged private sector investment in human development (Cabinet Resolution 28 March 1995). By 1995, there were 32 private higher education institutes which included 16 universities and 16 colleges (Kulachol 1995).

Despite such policy, a private university's dean argued at that time that private higher education was not receiving the full support of the Thai Government (Kulachol 1995). There were key problems that minimised the potential expansion of the private higher education, such as unclear government policy on private education, the apparent limitations of financial support from the government, and the differing regulations relating to private higher education in comparison with public higher education. Factors like these contributed to lower enrolments and less efficient operations in most private higher education institutes (Kulachol 1995).

#### **6.4.1.3 Autonomous universities**

The Suranaree University of Technology, Thailand's first autonomous university, was established in 1990 (Cabinet Resolution 14 August 1990), followed by Walailak University in 1992 (Cabinet Resolution 12 September 1992). Minimal Thai government policy data relating to autonomous universities could be found in the cabinet resolution archives for the period of 1992-1996; most of it was about infrastructure construction for the two established universities, Suranaree and Walailak.

It was reported in *Former PM says red tape mars educational initiative efficiency* (1994) that former Prime Minister Anand Panyarachun strongly supported the independence of public



universities from the government. He believed that if they remained attached to the government's more bureaucratic system, it would limit their performance efficiencies. This bureaucratic system was identified by others as the root cause of most Thai universities' poor administration operations (Pouaree 1995).

#### ***6.4.1.4 Internationalisation of higher education***

During 1992-1996, the concept of internationalisation was quite new to most of Thailand's society. There was therefore limited data in the cabinet resolution archives in relation to this concept. Only one relevant document has been cited, where it was noted that the cabinet agreed with the principle of internationalisation of higher education, as Ministry of University Affairs suggested (Cabinet Resolution 21 May 1996). There were attempts during this time by foreign universities to establish campuses in Thailand, such as a co-project proposed by several Australian universities to establish a new university in Thailand in 1992 (Slattery 1992), and the attempt of British universities in 1995 (Authers 1995). However, no information on the progression of these projects was found in the archives data.

#### **6.4.2 Policy on improving higher education during the period of NESD Plan 8 (1997-2001)**

Similar to the previous period, the main issues and needs in relation to the Thai Government improving higher education were encouraging autonomous universities, expanding higher education to the regional areas, producing graduates in shortage fields such as science and technology, encouraging the internationalisation of higher education, and supporting the role of the private sector (Chavalit Yongchaiyudh's Policy Statement 1996; Chuan Leekpai's Policy Statement 1997; Higher Education Development Plan 8 1997-2001; Long Term Higher Education Plan 2008-2022; The NESD Plan 8 1997-2001).

##### ***6.4.2.1 Autonomous universities***

One of Thailand's key economic reform conditions under the agreement with the IMF after the AFC in 1997 was establishing autonomous universities (Vargo 1998; Wannasiri 1998). The AFC had forced the Thai Government to cut its budget for public universities, and the IMF consequently lent US\$17.2 billion to Thai public universities to help them restructure and become independent as 'non-government-owned' universities (Wannasiri 1998).

Under the autonomy concept, Thai public universities would be independent from government control and make their own decisions (Wannasiri 1998). They would still receive subsidies from the government, but they would be less than before; these non-government-owned universities would have to find their own revenues. One main income expansion initiative was

increasing tuition fees, while others included 'hiring' out the use of their properties for commercial purposes (Wannasiri 1998).

A dean from a private university in Thailand raised concerns about autonomous universities being more profit-oriented, as he believed this would mostly impact the poor, particularly increased tuition fees (Vargo 1998). Most opponents of the autonomous university concept were concerned about lack of financial resources and job security (Bunnag 2000b). In 2000, Prime Minister Chuan Leekpai declared that the autonomous university concept would definitely be going ahead and that the government would be subsidising these education institutions (Bunnag 2000b). In line with this, the government's role would be reduced to only providing financial support to poor students (Bunnag 2000b). Many university executives liked the idea of less government involvement, enabling them to better manage and develop their institutes without political interference (Editorial 1999). In March 2000, the cabinet agreed in principle to changing public universities to autonomous universities, as suggested by the Ministry of University Affairs (Cabinet Resolution 14 March 2000).

#### ***6.4.2.2 Internationalisation of higher education***

The 1997 AFC was a major influencer of the internationalisation of Thai universities (Chalapati 2007; Pimpa 2011). The AFC created a vigorous opportunity for internationalised education, as many Thai students chose to study international programs at home rather than studying abroad because of the devaluation of the Baht currency.

This encouraged ambitions for Thailand to become a regional education hub (Bunnag 2000a, 2001). Kitti Limsakul, an academic from Chulalongkorn University, believed that Thailand could become the educational hub for Southeast Asia, attracting foreign students from Myanmar, Malaysia and Vietnam (Bunnag 2001). The Ministry of University Affairs declared that it would encourage more foreign universities to establish campuses in Thailand or operate joint programs with the local universities (Bunnag 2000a).

#### ***6.4.2.3 Role of private sector in higher education***

During this period of 1997-2001, the number of students in both public and private higher education had increased rapidly, indicating that the Thai Government had been successful at increasing higher education enrolments. However, the number of students in private higher education institutes remained lower than for public higher education, despite government policy and plans.

There were many cabinet resolutions during that time that confirmed the Thai Government's drive to improve the private higher education, such as the establishing of a lecturer

development fund for private higher education (Cabinet Resolution 4 February 1997), expanding the budget for the private higher education development fund (Cabinet Resolution 25 August 1998), and approving the draft *Private Higher Education Act* (Cabinet Resolution 12 October 1999).

#### **6.4.3 Policy on improving higher education during the period of NESD Plan 9 (2002-2006)**

The key government policies on improving of higher education in the period of 2002-2006 were in relation to Thailand becoming an the education hub in the region as part of internationalisation, the development of a skilled workforce in science and technology, and the establishment of autonomous universities (Higher Education Development Plan 9 2002-2006; Thaksin Shinawatra's Policy Statement 2001; The NESD Plan 9 2002-2006).

##### ***6.4.3.1 Internationalisation of higher education***

Thailand aimed to be the main education hub in the Southeast Asian region by attracting students from neighbouring countries (Marukatat & Bunnag 2003). However, there was competition from Malaysia and Singapore which also strived to be regional education hubs. Questions were therefore raised on how Thailand could make itself competitive in terms of internationalisation, compared with Malaysia and Singapore.

In relation to becoming a regional economic hub, Marukatat and Bunnag (2003) believed that Thailand was disadvantaged by its poorer-quality of research and the scarcity of qualified lecturers. An academic from Chiang Mai University agreed with this perspective (Kantabutra 2003), pointing out that it was extremely difficult to improve the quality of academic practices with only a small number of PhD-qualified lecturers.

In 2004, the Thai Government again pushed forward with its aims of becoming a regional education hub, according to *Government pushes Thailand as a regional learning hub* (2004), with the Department of Export Promotion (DEP) revealing a plan to attract students from the region. In this plan, the DEP emphasised that Thai higher education institutes would need to improve their English programs in order to share revenue from other countries in this international education business.

##### ***6.4.3.2 Autonomous universities***

Similar to previous periods, the major concerns in Thailand still related to financial resources and job security (Chandranoi 2004; Editorial 2003a; Todd 2002). It was argued in one Thai newspaper that most of its opponents misunderstood the autonomous university concept

(Editorial 2003a). This was because there was no clear guidelines on how autonomous universities would manage their financial and human resources.

In terms of tuition fees, a common concern was voiced in *STATE UNIVERSITIES: Call to keep subsidies* (2004) and by Chandranoi (2004) that universities would become more profit-oriented if they were autonomous, and would most likely increase their study fees which would impact many students. In response to this concern, the Thai Government established an education fund that higher education students could borrow from, which was the ICL introduced by Prime Minister Thaksin (Cabinet Resolution 12 July 2005; Marukatat 2006). Prime Minister Thaksin Shinawatra also confirmed that these universities would maintain their status as a government agency (Cabinet Resolution 2 October 2001). Based on this, autonomous universities would still be supported by the government, while gaining self-administration responsibilities.

#### **6.4.3.3 Increasing universities and students**

In 2001, the government established community colleges in 10 Thai provinces (Cabinet Resolution 19 February 2002; World Bank 2009), which was conceived to serve the educational needs of the broader community. There was also an upgrading of 41 teacher training colleges throughout the country to Rajabhat universities (Cabinet Resolution 5 March 2002; World Bank 2009), which was implemented to cultivate regional development. As reported in *Thailand: Rajabhat institutes to accept more students* (2005), a senior officer had predicted that about 200,000 students would attend Rajabhat universities in the incoming semester, compared with 77,000 students in the previous year. The cabinet also upgraded technical colleges to Rajamangala universities of technology across the country (Cabinet Resolution 2 April 2002).

#### **6.4.4 Policy on improving higher education during the period of NESD Plan 10 (2007-2011)**

During the period of 2007-2011, the main policy discourses that emerged from the Thai Government's policies and plans related to the quality of higher education that was impeding the expansion of new universities, the producing of graduates in science and technology, and internationalisation via the regional education hub ambitions (Abhisit Vejjajiva's Policy Statement 2008; Higher Education Development Plan 10 2007-2011; Long Term Higher Education Plan 2008-2022; Samak Sundaravej's Policy Statement 2008; Somchai Wongsawat's Policy Statement 2008; The NESD Plan 10 2007-2011).

#### **6.4.4.1 Internationalisation of higher education**

The Secretary General of the Higher Education Commission (HEC) stated in *Thai education roadshow to be held in China* (2009) that the HEC aimed to increase the number of foreign students, especially Chinese scholars, from 30,000 to 100,000. It was later cited in *UTCC sets its sights on overseas students* (2011) that private universities were striving to attract foreign students during this period, due to a decreased registration of local students. It was stated in the same article that, for example, the University of Thai Chamber of Commerce (UTCC) attempted to attract foreign students by improving the quality of its teaching staff, providing them with master and PhD scholarships. Pimpa (2011) pointed out that the main obstacle for internationalisation in Thailand was the lack of knowledge of foreign languages, especially English.

#### **6.4.4.2 Increasing universities and students**

It was argued at this time that the Thai Government was more focused on increasing higher education than basic or vocational education (na Mahachai 2007). The budget for higher education in 2007 was 16%, compared with 13% in 2002 (na Mahachai 2007). The importance of science and technology professionals still appeared to a major focus of the Thai Government, with it being reported in *Institute aims to produce scientists and researchers* (2008) that the Institute for the Promotion of Teaching Science and Technology (IPST) under the MOE had proposed a plan to the cabinet to produce 3,500–5,000 PhD graduates per year. However, it was pointed out in *Universities going off campus for courses* (2009) that many universities were gaining access to students via off-campus programs. For example, some universities from Bangkok ran evening or weekend classes in the provinces, while some regional universities rented office spaces in Bangkok to operate their programs. These programs, especially MBA courses, were very popular as there was a large demand for university qualifications. However, many academics voiced concern about the quality of these off-campus courses, with a scandal relating to the of buying and selling university qualifications in the provinces reported in *Degrees for sale* (2011).

This was because the Thai community still valued and recognised first priority to the university qualifications. This attitude led to a vast number of students who wanted to pursue their study to higher education. Unfortunately, this often led to the mismatch of university graduates with the needs of the labour market, as reported in *Think tank says labour shortage a critical issue for Thailand* (2011) and *Economists urge new government to work on labour market problems* (2011). Such mismatches created both a skill labour shortage and unemployment problems at

the same time. The Thai community appeared to be more focused on the quantity rather than quality of higher education.

In the later period of the Abhisit Government, a One Province-One University policy was approved, as reported in *PM witnesses signing of One Province-One University MOU* (2011). Under this policy, the public institutes in a province would be merged to become a university, as explained in *Cabinet approves plan to merge provincial universities* (2011).

#### **6.4.5 Policy on improving higher education during the period of NESD Plan 11 (2012-2014)**

During the period of Prime Minister Yingluck Shinawatra from 8 August 2011 until 7 May 2014, the main issues on higher education were improving the quality and the internationalisation of higher education (Higher Education Development Plan 11 2012-2016; Long Term Higher Education Plan 2008-2022; The NESD Plan 11 2012-2016; Yingluck Shinawatra's Policy Statement 2011).

##### ***6.4.5.1 Internationalisation of higher education***

The knowledge of English was emphasised in Higher Education Development Plan 11 (Higher Education Development Plan 11 2012-2016). In the latest report from International Institute for Management Development (IMD) – a business school in Switzerland – on the economic competitiveness of countries, the Thai labour workforce ranked 51<sup>st</sup> out of 60 countries on foreign language skills, compared with Malaysia's 15<sup>th</sup> ranking and Singapore's 9<sup>th</sup> (IMD 2014). These results re-emphasised that the Thai workforce needed to improve its foreign language skills.

Other progress during this time in relation to the internationalisation of higher education included the opening of a British university campus in Thailand (McVicar 2012), the establishment of an international college within a public university to attract foreign students (Limsamarnphun 2012), and a growing enthusiasm among Thailand's public universities towards being internationalised and improving the English proficiency of students, with a focus on the ASEAN integration (Saengpassa 2014).

##### ***6.4.5.2 Increasing universities and students***

The Yingluck Government also continued the One Province-One University policy of her preceding government (Cabinet Resolution 6 December 2011). Based on this policy, the establishment of new universities ceased, and higher education public institutes from different government agencies in a province were merged into a single university. The key aim of this

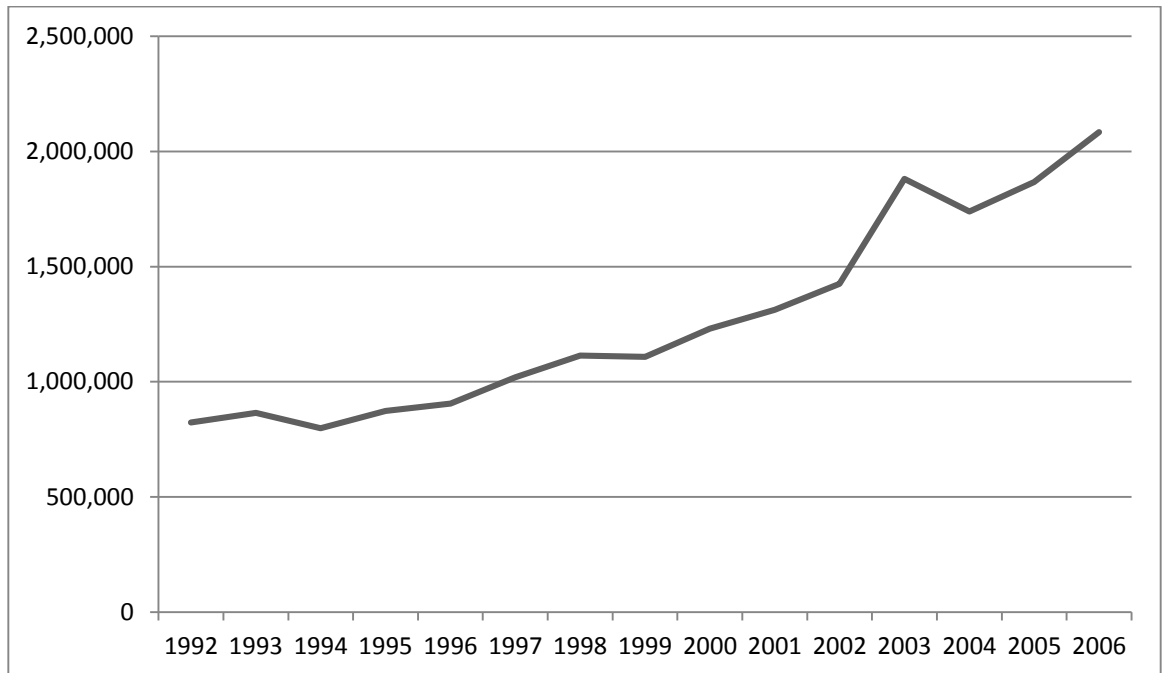
policy was to serve the local community, aiming to produce university graduates that matched their labour needs.

In terms of quality, it was argued during this period that the quality of university graduates had decreased, as many were performing clerical and service tasks rather than working as professionals (Amornvivat 2012). This reflected ongoing mismatch problems between the labour market needs and education policy.

#### **6.4.6 Summary of policy on improving higher education 1992-2014**

Based on the above discussions, policy discourses on improving higher education included: (1) internationalisation; (2) autonomous universities; (3) increasing the number of students and higher education institutes; and (4) the role of the private sector. The graphs below relate to the number of students and universities in higher education during this period, comparing Thailand's higher education students across public and private universities, the number of public and private universities in Thailand, the number of public and private universities in Bangkok and the regions, and the number of international students in Thailand, Malaysia and Singapore. Please note that all the graphs from Thai government web pages such as Ministry of Education and the National Economic and Social Development Board only provide the data until the year 2006. Graphs 6.17 and 6.18 also do not have data in 2003.

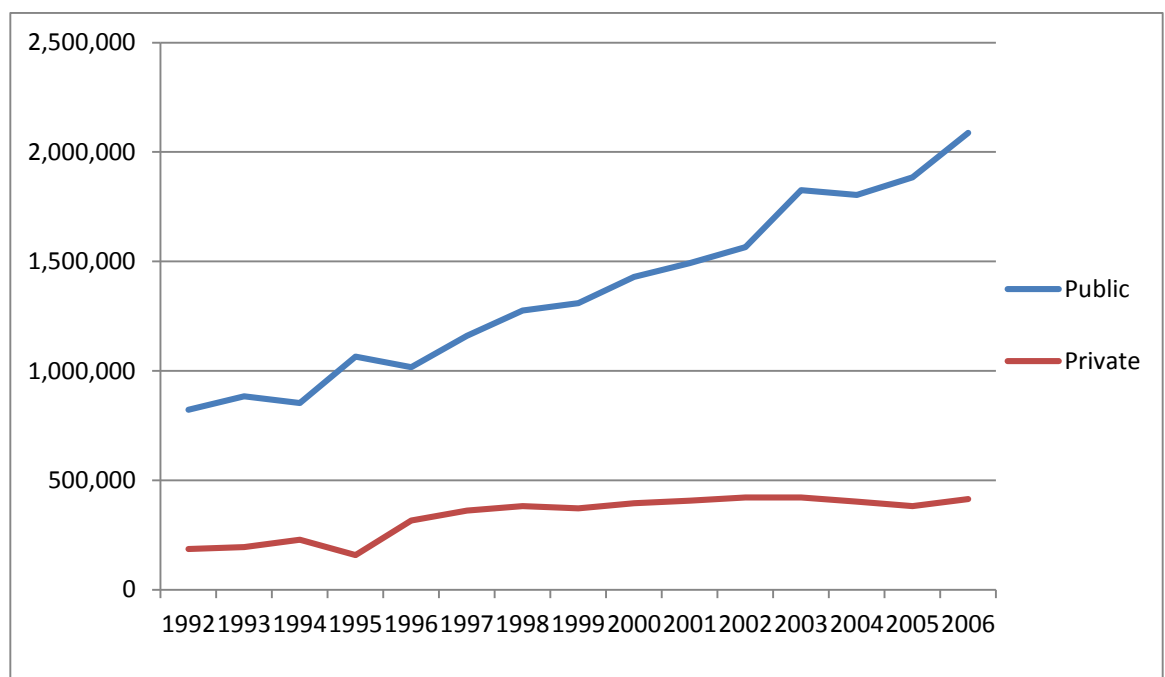
Graph 6.15 relates to the number of students in higher education in Thailand from 1992 to 2006. The results show a consistent dramatic climb in the number of higher education students, from fewer than 1,000,000 students in 1992 to more than 2,000,000 by 2006. This indicates that the Thai Government performed well during this period, in increasing the quantity of higher education students.



**Graph 6.15: Number of higher education students in Thailand 1992-2006**  
Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)



When comparing the number of higher education students in Thailand’s public versus private universities during this same period, as shown in Graph 6.16 below, it is evident that students in private universities remained far behind those in public universities. This is despite a slight upward trend in private university students from under 200,000 in 1992 to about 300,000 in 1996, which remained steady at between 360,000 and 400,000 since that time. These results indicate that the Thai Government needed and still needs to increase its efforts in encouraging greater involvement of the private sector in higher education initiatives.

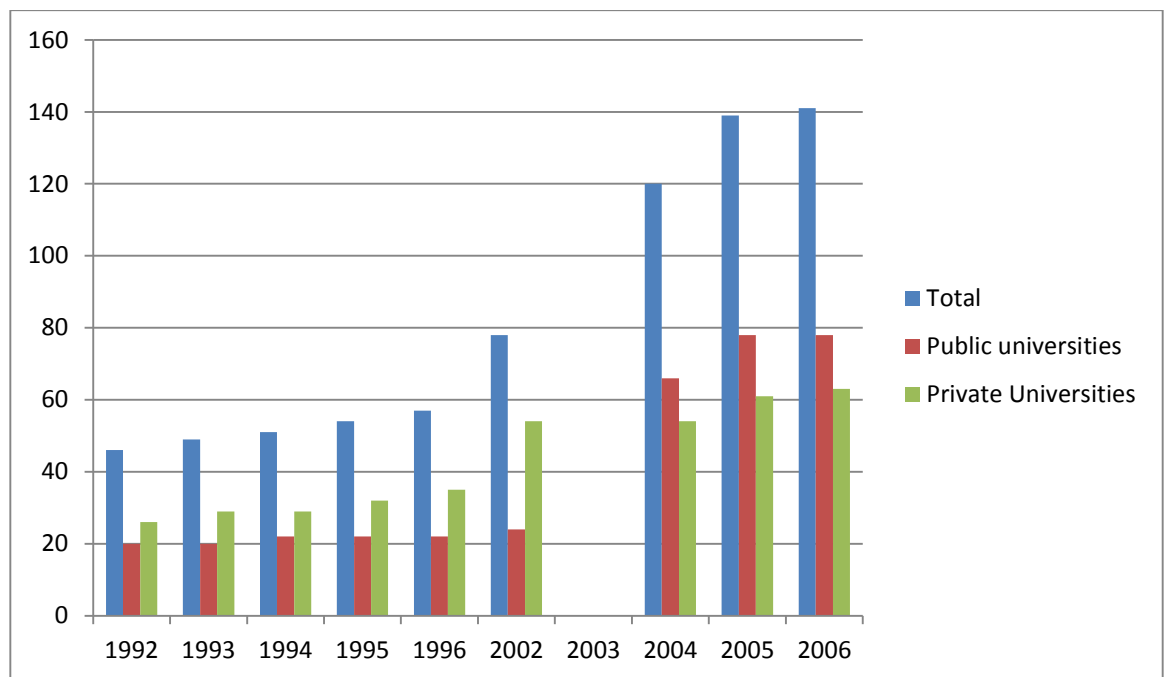


**Graph 6.16: Number of higher education students in both public and private universities in Thailand 1992-2006**

Source: The National Economic and Social Development Board (2015) -

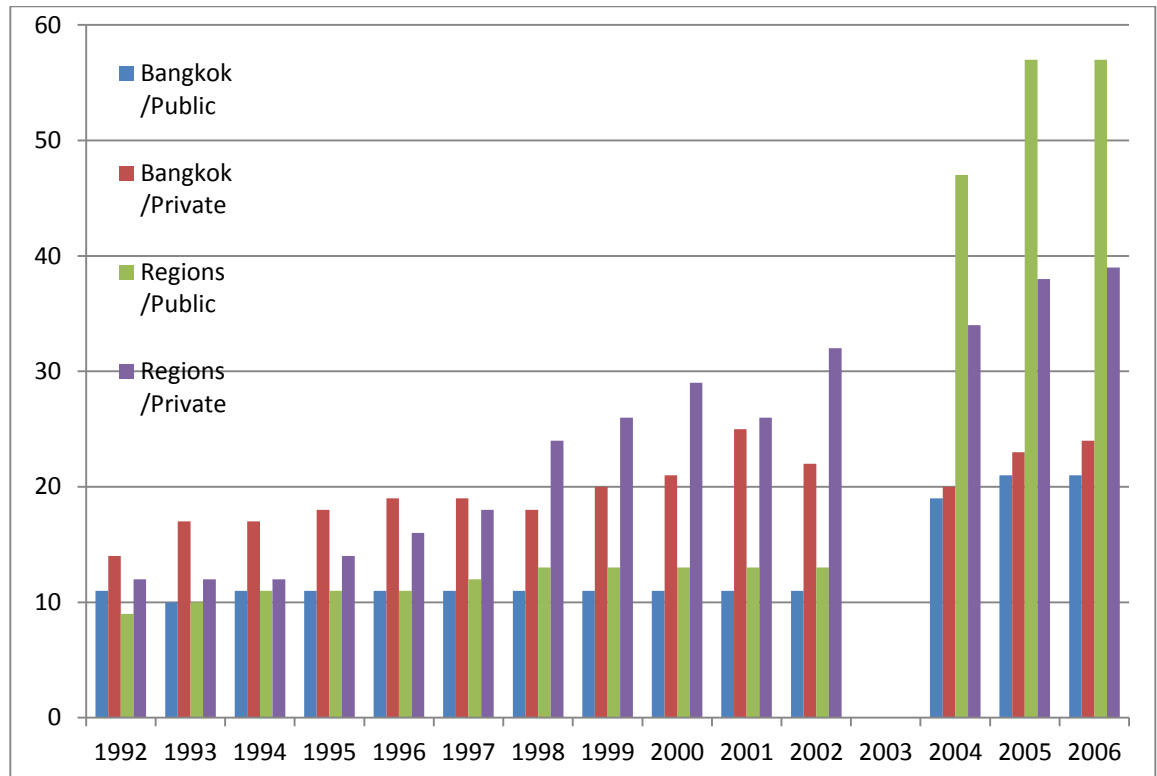
[http://social.nesdb.go.th/SocialStat/StatReport\\_Final.aspx?reportid=597&template=2R2C&yeartype=M&subcatid=19](http://social.nesdb.go.th/SocialStat/StatReport_Final.aspx?reportid=597&template=2R2C&yeartype=M&subcatid=19)

Graph 6.17 shows the number of public and private universities that existed, including combined results, in Thailand between 1992 and 2006. These results show a steady growth in the number of Thai universities across this period, with more private than public universities existing between 1992 and 2002. In 2004, the amount of Thai public universities overtook and remained ahead of private universities, which was probably due to the upgrading of teacher and technical colleges to Rajabhat and Rajamangala universities based on NESD Plan 9.



**Graph 6.17: Number of public and private universities in Thailand 1992-2006**  
 Source: Ministry of Education (2015) - [www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

When analysing the amount of both public and private universities in Bangkok and the regional areas, the results in Graph 6.18 below mostly show increases in both public and private universities in both Bangkok and the regions from 1992 to 2006.

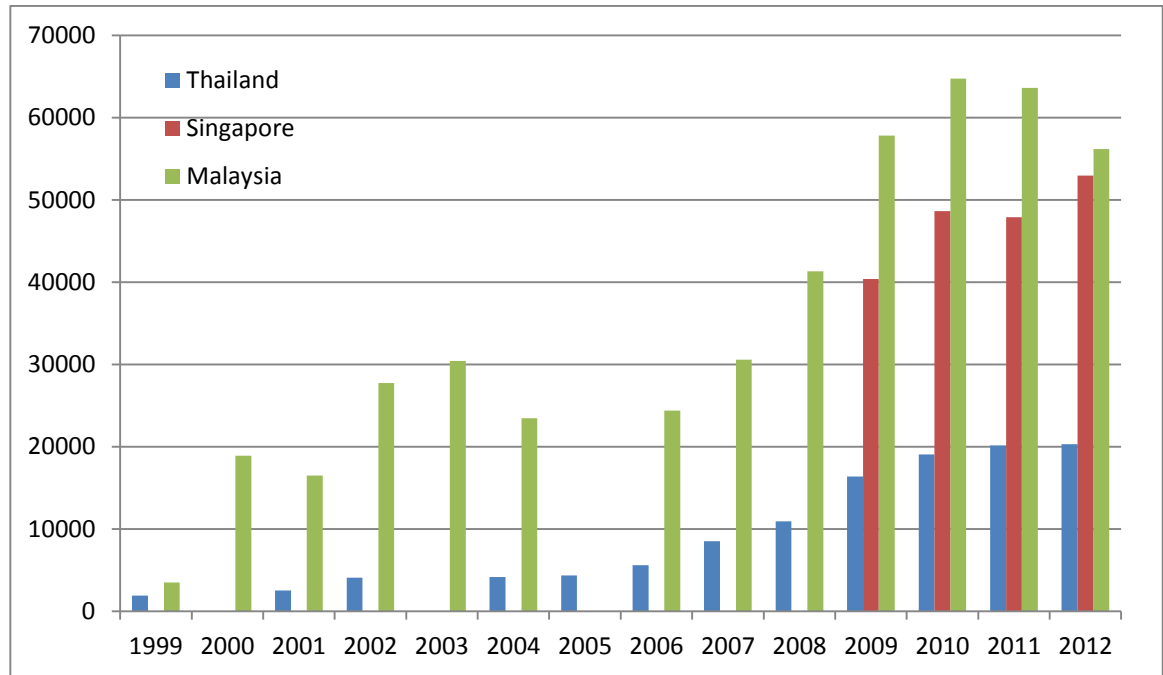


**Graph 6.18: Number of public and private universities in Bangkok and the regional areas 1992-2006**

Source: Ministry of Education (2015) - [www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

Both Graph 6.17 and Graph 6.18 indicate the success of the Thai government in expanding the quantity of universities in Thailand between 1992 and 2006, which also underpinned increases in the number of university students during this period.

Graph 6.19 compares the number of international students in Thailand, Malaysia and Singapore between 1999 and 2012. These results clearly show that the number of international students in Thailand is far behind the other two ASEAN countries. The data from Singapore is only provided from 2009 onwards.



**Graph 6.19: Number of international students in Thailand, Singapore and Malaysia 1999-2012**

Source: UNESCO (2015) - <http://data.uis.unesco.org/Index.aspx?queryid=171>

## 6.5 Lifelong training programs

It has been identified in previous literature that lifelong learning programs are an important part of a country's economic development; training programs suitable to labour workforces that want to develop or learn new skills to remain in or re-enter the labour market (Andersson & Fejes 2010; Hussein, Manthorpe & Stevens 2011; International Labour Organization 2008; Walker 2006).

### 6.5.1 Policy on lifelong training programs during the period of NESD Plan 7 (1992-1996)

It was reported in *Labour expert says workers need to develop new skills* (1994) that each year at least 100,000 Thai workers need skills training, while only 30,000 generally received it.

Recognising that this significant training undertaking was not something the Thai Government could implement on its own, NESD Plan 7 explicitly focused on cooperation between the government and private sector to provide training and upgrading skills for the labour workforce (The NESD Plan 7 1992-1996). As part of this plan, the private sector was encouraged to take on a stronger role in providing lifelong training via training development funds (The NESD Plan 7 1992-1996). Sources for this training development fund were defined in NESD Plan 7 as follows: the government “may contribute a grant, while the rest may be collected from factories or business enterprises to form the fund” (The NESD Plan 7 1992-1996, p.45).

Additional financial incentives were applied in order to encourage the private sector to establish training programs (Pura 1994). For example, there were tax incentives such as income tax exemptions and tax deductions to encourage private firms to organise their own training programs (Fairclough 1995). In addition, if any of these firms sent their staff to colleges or universities for further training, they received tax deductions (Fairclough 1995).

#### **6.5.2 Policy on lifelong training programs during the period of NESD Plan 8 (1997-2001)**

Due to the AFC in 1997, many workers across all industries had to be laid off in Thailand (Decharuk, Leelapornchai & Udomkerdmongkol 2009; Dixon 1999; Stubbs 2005). According to *More Thais working abroad for better pay* (1997), some also close to search for jobs overseas, believing that working aboard would provide a better income than working in Thailand.

At this time of labour instability, the Chuan Leekpai Government announced one of its more rapid policies in an attempt to ease the country’s unemployment issues (Chuan Leekpai's Policy Statement 1997). In June 1998, the government offered a non-formal vocational education program to unskilled Thai workers, according to *Unskilled workers to receive training* (1998). This program was designed to cover subjects most relevant to the main industry such as mathematics, science and English; occupational training in mechanics, electronics and construction was also provided. In line with this government objective, NESD Plan 8 heavily promoted skills training for the Thai workforce – one of the main targets was upgrading “the skills and basic knowledge of industrial workers, particularly in the 25-45 age group” (The NESD Plan 8 1997-2001, p.3). Training in industry-relevant skills was therefore perceived as a double solution to both improve the labour workforce’s abilities and to ease unemployment after the AFC.

During this period, there were new skills that the Thai workforce needed to learn. In a World Bank report (Abelman et al. 2001) it was predicted that in the future the market requirements for a skilled labour workforce would need to include problem solving, creative ideas, strong communications, team work, and effective use of foreign languages. At the end of the NESD Plan 8 period, the cabinet took a significant step in its training policy when it approved the *Promoting Skills Development Act* (Cabinet Resolution 18 September 2001). Under this act, the private sector was further encouraged to play a bigger role in the skills development of the Thai workforce.

### **6.5.3 Policy on lifelong training programs during the period of NESD Plan 9 (2002-2006)**

In NESD Plan 9, it was stated that skills training components such as curriculum and learning processes would be adjusted to better match with the requirements of the labour market, modern technology and the concept of a knowledge-based economy (The NESD Plan 9 2002-2006). The role of the private sector in supporting training programs was also focused on. This involved various cabinet resolutions such as the approval of tax incentives to attract the private sector to organise training programs for their staff (Cabinet Resolution 19 November 2002), and approval of tax incentives to encourage the private sector to hire students as part-time employees (Cabinet Resolution 9 March 2004).

Based on these Thai Government training initiatives, some firms, especially in the retail industry, established their own training programs to develop staff skills, according to *Thailand: CP 7-Eleven to set up school for training retail professionals* (2005) and Rungfapaisarn (2004). For example, Carrefour, a French retailer, established staff training programs on basic retail knowledge, specialisation and sales management training (Rungfapaisarn 2004). In addition, it was reported in *Thailand: CP 7-Eleven to set up school for training retail professionals* (2005) that CP All, the firm that owns 7-Eleven convenient stores in Thailand, established its own vocational college to produce staff for its stores. While these examples display the greater role of the private sector in Thailand's training policies at that time, they may also indicate the inefficiency of vocational education provided by the MOE. It would appear that the MOE could not produce an adequate labour workforce with up-to-date knowledge and skills to accommodate industry requirements.

#### **6.5.4 Policy on lifelong training programs during the period of NESD Plan 10 (2007-2011)**

The skills development of Thailand's labour workforce was further supported by NESD Plan 10 and its four prime ministers during 2007 to 2011. This skills development policy addressed a range of areas such as physical and mental development, knowledge, ethics, problem-solving skills, and career skills in order to meet the needs of the labour market (Abhisit Vejjajiva's Policy Statement 2008; Samak Sundaravej's Policy Statement 2008; Somchai Wongsawat's Policy Statement 2008; Surayud Chulanont's Policy Statement 2006; The NESD Plan 10 2007-2011).

Despite these forward-planning skills development policies, during Prime Minister Surayud Chulanont's leadership (1 October 2006 – 6 February 2008) some still perceived the government as reluctant to adequately develop the skills of its labour workforce to meet industry needs (Editorial 2007b; Praprutitum 2007; Yuthamanop 2007). Such complaints during this time may be due to Surayud, who only came to power for a short period of time as being appointed by the military coup leaders in September 2006. In addition, no newspaper articles about lifelong training could be found for the ensuring periods of Prime Minister Samak Sundaravej and Prime Minister Somchai Wongsawat during the year 2008, which may have been due to the ongoing political unrest at that time.

It was only when Prime Minister Abhisit Vejjajiva came into office (20 December 2008 – 8 August 2011) the government started to function normally. Thus, newspaper articles about training courses provided by the Thai Government started to appear, such as for automotive workers (Theparat, Wiriyapong & Pitsuwan 2009) and workers in small and medium sized companies (Theparat 2009). It was also the Abhisit Government that implemented the *Tonkla Archeep* program, a vocational skills training program for unemployed or laid-off workers, according to *Laid off workers demand their voices be heard* (2009).

#### **6.5.5 Policy on lifelong training programs during the period of NESD Plan 11 (2012-2014)**

Training and skill development issues continued in Thailand throughout the period of Prime Minister Yingluck Shinawatra (8 August 2011 – 7 May 2014). Relevant skill development issues that were focused on in NESD Plan 11 included improving the capabilities of Thai citizens at all ages, and encouraging cooperation between public and private institutes to improve the quality of the labour workforce (The NESD Plan 11 2012-2016). The private sector was strongly encouraged to upgrade the skills of its staff, according to *Govt plans to be clear by October* (2011). This may also have been due to foreign business communities in Thailand including the

Japanese, German and Indians urging the government to focus on skills development programs for its labour workforce, according to *Job training vital: Japan Chamber* (2011), Wiriyapong (2012), and Pratuangkrai (2014).

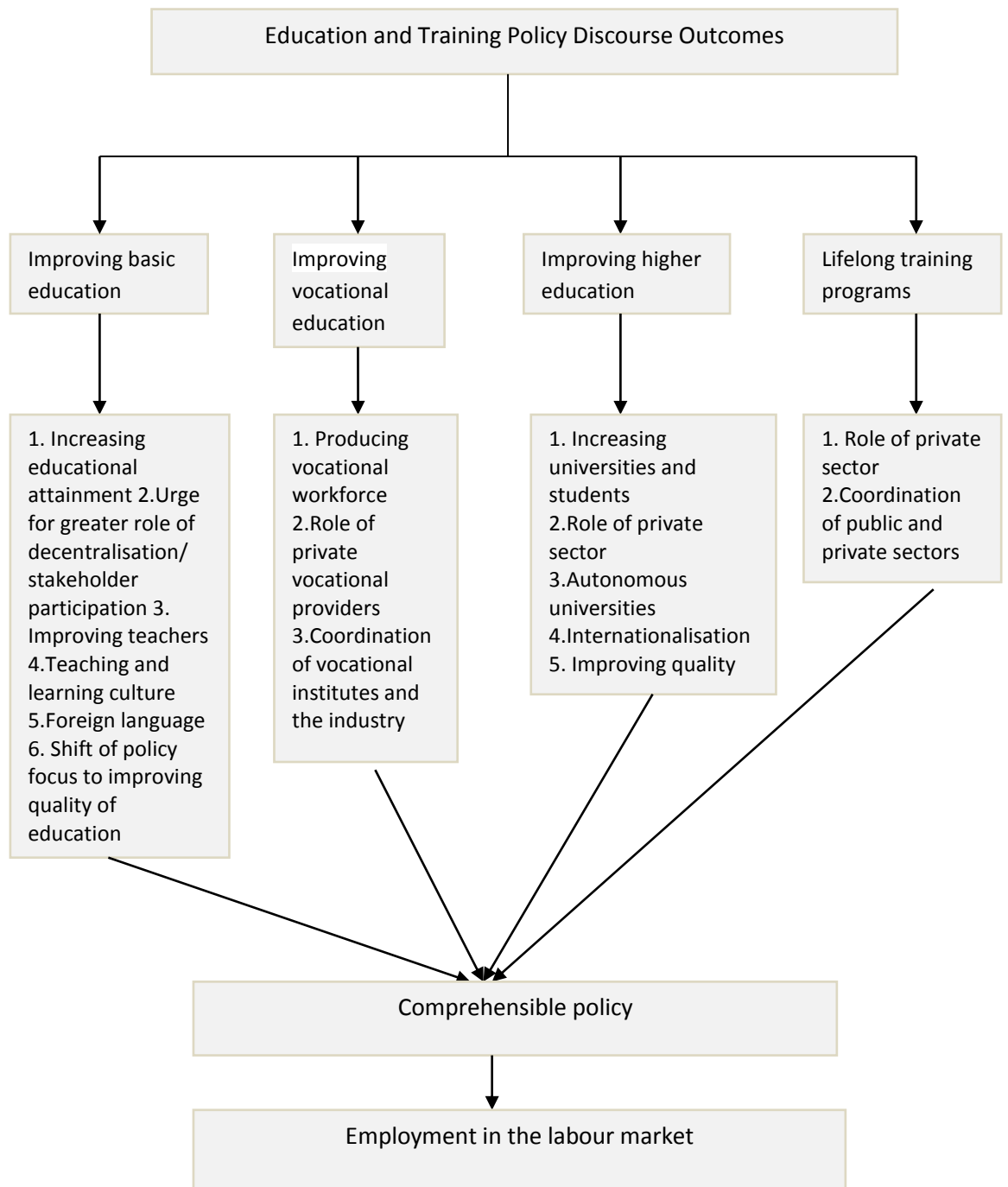
#### **6.5.6 Summary of policy on lifelong training programs 1992-2014**

Based on the data collected, there were two key policy discourses in relation to Thailand's lifelong training programs during the period of 1992-2014: (1) cooperation between public and private sectors; and (2) the greater role of the private sector.

Across these years, the Thai Government was continually striving to train or retrain its labour workforce for new technologies and required skills. In particular, workers with knowledge of information technology or foreign languages would have an advantage in future labour markets (Chareonwongsak 2000). Thus, lifelong training programs were identified as a tool that could provide these new skills and knowledge to upgrade the Thai labour workforce.

Figure 6.2 below lists the main focuses of the Thai Government's education and training policy responses between 1992 and 2014, to address the country's skill labour shortage. In this diagram, the four main policy discourse outcomes identified in this study are shown, as well as the issues that emerged from these discourses.





**Figure 6.2: Policy discourse outcomes on education and training policies in Thailand 1992-2014**

## **6.6 Summary of the chapter**

Education and training policy is essential for any nation if it is to develop an adequately skilled labour workforce. There are three levels of education – basic, vocational and higher – that produce three different levels of a skilled workforce; thus all three should be improved. During the period of 1992-2014 in Thailand, there were different key issues that emerged from this study's derived data, across each level of education, which have been discussed in this chapter.

In summary, this data indicated that the Thai Government had been more focused on increasing educational attainment at the bottom and top levels of its educational infrastructure, which were basic and higher education, while it had neglected the vocational education level. The data indicates that this is what led to the shortage of vocationally skilled workers to meet the demands of Thailand's labour market.

It has also been identified in this study's data that deeper input from the private sector was consistently encouraged across most areas of education and training policy and infrastructure. The notable exception was basic education where the public sector was the key contributor. Various policies and incentives were applied to attract the private sector's engagement in skills development; the Thai Government recognised that it could not improve its labour workforce without this sector's support. Further details in relation to these research findings will be discussed in Chapter 9: Discussion.

## **Chapter 7: Data Analysis - Migration Policy**

### **7.1 Introduction**

In this chapter, the focus is on Thailand's migration policy. Hence, the sub-research questions for this chapter are: What kind of migration policies has the Thai Government implemented that respond to the skill labour shortage? What are the migration policy suggestions from society for addressing skill labour shortage? In order to answer these questions, the five NESD plans and the Thai Government's policy statements relating to the 1992 to 2014 period (involving 14 governments and 11 prime ministers) were examined and triangulated, along with data from newspaper articles on migration policy during this time, in order to identify the issues that emerged on Thailand's migration policy. These issues were also discussed, analysed and triangulated in correlation with other Thai government documents, international organisations' reports, and academic journal articles.

From the extant literature, there are three policy discourses that have emerged in this study: (1) attracting foreign citizens; (2) attracting repatriates; and (3) brain networking. In this chapter, data is investigated to display how Thailand can develop these three policy discourses to satisfy its skilled labour needs. However, based on this study's data, discussions on attracting skilled repatriates and brain networking have been perceived as imbricate; hence, the analysis of these two policy discourses has been combined.

In addition to the above, from the data investigation, there was another significant policy discourse that emerged in Thailand during the period of 1992-2014. This policy discourse was in relation to the contribution of illegal low-skilled migrant workers to Thailand's economic development, involving those from neighbouring countries, especially Cambodia, Laos and Myanmar (CLM), who entered Thailand illegally in search of work. It has been well-recognised that this cohort of workers significantly contributed to Thailand's economic development during this period (Chalamwong & Cheycom 2005; Chantavanich 1999; Pholphirul 2011).

Another migration policy area that also overlaps is in relation to Thailand's illegal low-skilled migrant workers and its non-citizen disadvantaged groups such as refugees and Hill-Tribe villagers; thus the corresponding analysis has been combined for all such groups. It has been recognised that this cohort of illegal low-skilled migrant workers, refugees and Hill-Tribe villagers have the potential to become a vital workforce to Thailand (Nakornthap 1997). Nakornthap (1997) therefore suggested that the Thai Government should provide education

and legal rights to these people, especially their children who can be a skilled workforce for Thailand's future.

## **7.2 Attracting foreign citizens**

Abella (2006) expounded the importance of attracting a foreign skilled workforce when emphasising that a country that cannot attract such workers is unlikely to perform well in the highly competitive global marketplace. The benefits in attracting a foreign skilled workforce include access to knowledge of new technologies, access to foreign markets, and an expansion of communication abilities in foreign languages (Bauer & Kunze 2004). The Thai Government's policy on attracting foreign skilled workforce during the period of its seventh, eighth, ninth, tenth and eleventh NESD plans is therefore next examined.

### **7.2.1 Policy on attracting foreign citizens during the period of NESD Plan 7 (1992-1996)**

In terms of science and technology development, Thailand had previously had shortages in science and technology lecturers at this time, which had resulted in labour shortages in corresponding skilled occupations such as engineers, scientists, mathematicians and technologists. To meet this shortfall, it was recommended in NESD Plan 7 that the Thai Government "devise measures to enable temporary hiring of qualified personnel from the public and private sectors as well as from abroad to relieve existing shortages of teaching personnel in higher education" (The NESD Plan 7 1992-1996, p.62). It was also suggested in this plan that the Thai Government "encourage utilization of foreign experts or Thais living abroad to teach, conduct research and development activities, and to act as instructors or resource persons in training programs" (The NESD Plan 7 1992-1996, p.63). In addition, other incentives were suggested in this plan, such as the relaxation of personal income tax and the facilitation of granting work permits in order to attract a foreign skilled workforce (The NESD Plan 7 1992-1996).

During this period, Prime Minister Chuan Leekpai declared in his policy statement that the government would support technology transfers from overseas including cooperative efforts with other countries in developing science and technology. It was also promised that the government would grant tax relaxation to foreign experts who helped with technology transfers (Chuan Leekpai's Policy Statement 1992). This policy statement on granting tax relaxation for foreign experts indicates that the Thai Government intended on attracting foreign experts to move to and work in the country. Unlike the other prime ministers during the period of NESD Plan 7, who mostly recommended collaboration with foreign countries to

develop science and technology, Prime Minister Chuan specifically referred to the term 'foreign experts' in his policy statement (Chuan Leekpai's Policy Statement 1992).

According to the *Foreigners' Working Act B.E. 2521* (1978), foreigners could apply for work permits to work in Thailand under two group articles (also see Graph 7.1):

- The first group was defined as Article 7, as the aliens who are not Thai citizens but granted residency status and who legally enter Thailand and request for work permits for the works that are not listed in the *Royal Decree on Prohibited Works and Professions for Foreigners B.E. 2522* (1979).
- The second group was defined as Article 10, as the aliens who enter Thailand legally under the conditions covered by the *Investment Promotion Act (1960)* or sometimes called 'BOI Act'.

### **7.2.2 Policy on attracting foreign citizens during the period of NESD Plan 8 (1997-2001)**

In NESD Plan 8, there were no statements about attracting a foreign skilled workforce to work in Thailand (The NESD Plan 8 1997-2001), which may be because it was mainly designed to focus on the Thai people-centred concept. Hence, the major emphasis of this plan was to develop the local labour workforce rather than attracting foreign skilled workers to the country. Prime Minister Chuan Leekpai (9 November 1997 – 17 February 2001), who returned to office for a second time, also did not mention the attracting of a foreign skilled workforce in his policy statement (Chuan Leekpai's Policy Statement 1997). This was divergent from his first term as country leader during the period of NESD Plan 7, where he had specified the need to attract foreign expatriates in his policy statement (Chuan Leekpai's Policy Statement 1992).

Yet even though Prime Minister Chuan paid no attention to attracting an international skilled workforce to Thailand during this period, others remained focused on this need. Chareonwongsak (1997) stated that Thailand needed foreign skilled workers because the country did not produce enough of its own skilled workforce to meet the growing demands of the labour market. He also suggested that Thailand needed to reduce its 'red tape' to attract foreign skilled workers.

### **7.2.3 Policy on attracting foreign citizens during the period of NESD Plan 9 (2002-2006)**

Similar to the previous plan, NESD Plan 9 did not refer to the attraction of foreign skilled workers, although there were somewhat relevant terms such as 'cooperative networks', 'collaborative networks' and 'integration' in relation to local and foreign institutes throughout

the plan. For example, under the topic of upgrading skills of the labour workforce, it was stated in NESD Plan 9 that the government should create “cooperative networks between educational and training institutes and business enterprises, both local and foreign, in order to promote exchanges of resources, training cooperation, and information, necessary for curricular improvement” (The NESD Plan 9 2002-2006, p.42).

In addition, in terms of developing R&D in the science and technology field, it was stated in NESD Plan 9 that the Thai Government aimed to stimulate “multinational corporations to increase research and development activities, technology transfer, and labour skill development, in Thailand” (The NESD Plan 9 2002-2006, p.99). It was also recommended that the government encourage “integration between universities and well-known agencies or institutes, both domestic and foreign, in various fields to exchange knowledge and experiences, collaborate on research and development, pool faculties among universities in understaffed fields, and jointly arrange human resources training” (The NESD Plan 9 2002-2006, pp.101-102).

The above discussions display the explicit focus of Thai policymakers at that time on cooperation and networking between local and foreign education institutes; which suggests that attracting a foreign skilled workforce was still a relevant tool for the Thai Government in encouraging cooperation between local and international communities.

In a letter published in *The Nation* (The Scholar Errant 2004), the Thai Government was urged to pay attention to a skilled foreign workforce, especially to attract retired foreign skilled labour. It was argued in this letter that this skilled retired workforce was still useful and could be a substitute for Thailand’s brain drain. This suggestion was responded to in 2005 when the Labour Minister Sora-at Klinprathum announced that the government would try to attract a foreign skilled workforce including those who had retired, stating that regulations would be eased and incentives would be provided (Phanayanggoor 2005). This declaration confirms the determination of the Thaksin Government to attract skilled foreign citizens to work in Thailand during the 2002-2006 period. However, there is no further evidence showing the progression of this policy.

#### **7.2.4 Policy on attracting foreign citizens during the period of NESD Plan 10 (2007-2011)**

It was identified in NESD Plan 10 that, due to global changes, there has been a notable increase in the free movement of people across borders, and that some countries were using migration policies to attract foreign highly skilled workforces (The NESD Plan 10 2007-2011). It has been

commonly recognised that a highly skilled workforce is important in terms of increasing a country's competitive advantages. Hence, migration policies can help to increase the competitive capacity of countries faster than education policies and human resource development plans (The NESD Plan 10 2007-2011). NESD Plan 10 therefore recommended that Thailand focus on attracting foreigners to work in the country; although there were no clear suggestions on how the country could achieve this. In the plan, it was only stated that if the free movement of peoples increased in the near future, Thailand would need to develop both 'active and passive strategies' to manage the situation, without any clear definition of this phrase. Hence, NESD Plan 10 does not appear to have prioritised the issue of attracting foreign skilled workforce as urgent.

In addition, no other leader during this period except Prime Minister Samak Sundaravej suggested improving facilities to attract skilled workforces, to better enable transfers of technological knowledge to the local Thai workforce (Samak Sundaravej's Policy Statement 2008). There were no other government policies on attracting new foreign skilled workforce during this period, which indicates that the Thai Government still may not have believed that attracting a foreign skilled workforce would help resolve the country's skill labour shortage problems.

The only progress made during this time was the passing of the *Foreigners' Working Act B.E.2551 (2008)* to replace the old *Foreigners' Working Act B.E.2521 (1978)*. The main changes to the act were shorter timeframes for approving work permits for foreigners who apply under the *Investment Promotion Act (1960)*, and regulations were added to address the illegal migrant workers from CLM countries (Foreigners' Working Act B.E.2551).

At the end of the 2007-2011 period, a report from the International Organization for Migration (IOM) was stated in Hall (2011c) that, to respond to the integration process initiated by the AEC, the Thai Government in 2011 has needed to formulate significant policies to attract highly skilled migration. The AEC emphasised that its planned economic integration of ASEAN nations would initially include the free flow of capital and people, according to *The impact of ASEAN community to the industrial business in Thailand (2012)* and Hall (2011c). Hall (2011c) wrote that Thailand should aim to attract skilled labour workforces from other countries to increase its productivity and receive technology transfer. As further evidence of this need, in *Thailand: Labor Minister cites benefits of using skilled foreign workers (2010)* the Labour Minister was cited as saying that there are opportunities to increase Thailand's productivity by attracting foreign skilled workforces. In another article, *Asia: Many workers heading to big metropolis*

*amid economic surge* (2011), it was reported that the number of foreign skilled workers in Thailand was increasing due to the forthcoming AEC integration.

#### **7.2.5 Policy on attracting foreign citizens during the period of NESD Plan 11 (2012-2014)**

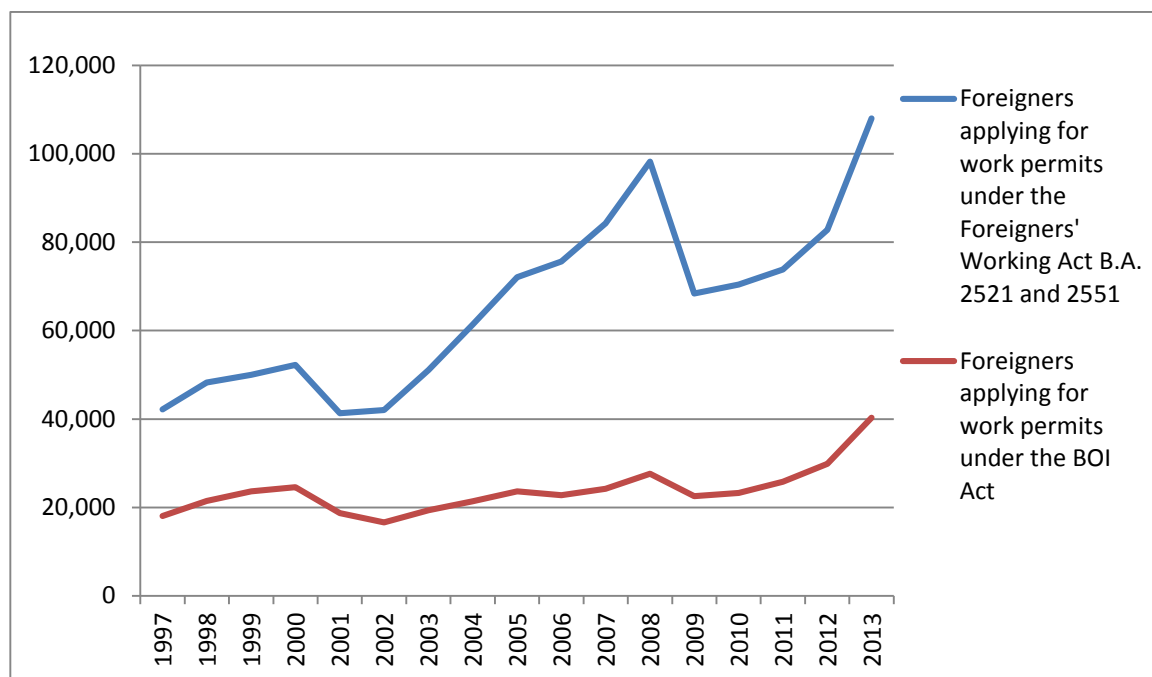
Poon and Sajarattanochoe (2010) had previously pointed out that attracting foreign citizens is a popular policy among many ASEAN countries such as Singapore and Malaysia. Yet the need to attract a foreign skilled workforce was not mentioned in Thailand's NESD Plan 11 (The NESD Plan 11 2012-2016). In addition, Prime Minister Yingluck Shinawatra did not single out the attracting of foreign citizens as a way to solve the country's skill labour shortage problems in her policy statement (Yingluck Shinawatra's Policy Statement 2011). Yet even though the public sector seemed less focused on attracting a foreign skilled workforce during this period, private companies in Thailand were formulating their own plans for hiring foreign skilled workers prior to the AEC integration, especially those in the architecture, engineering and machinery design industries (Sangwongwanich 2013).

#### **7.2.6 Summary of policy on attracting foreign citizens 1992-2014**

The above discussions and data show that there was no clear policy implemented during this period to attract foreign skilled workforces to Thailand. Despite this lack of focus, there were statements throughout the period that announced the Thai Government's support for technology transfers, and cooperation between Thai and foreign institutes; and in the later part of NESD Plan 9 (2002-2006). There were also letters from various stakeholders published in Thai newspapers where government policy on this issue was requested. However, no explicit plans were executed by the Thai Government.

Graph 7.1 shows the number of legal foreign workers who were in Thailand during the period of 1997-2013, covering two specific groups: (1) those who entered Thailand with work permits under Article 7 of the *Foreigners' Working Act B.E. 2521 (1978)*; and (2) those who were granted work permits under the specific *Investment Promotion Act* (BOI Act) and Article 10 of the *Foreigners' Working Act B.E. 2521 (1978)*. These results show decreases several years after the 1997 AFC, across both groups, with the amount of foreign workers then steadily rising from 2002 for a number of years in the general skill category, while slowly climbing for the more specific BOI group category. The number of legal foreign workers notably dropped off for both groups again in 2009, followed by another steady upward trend to the end of the researched period. These results indicate that the number of foreign citizens who legally work in Thailand is steadily increasing; hence, the Thai Government should have a clearer policy on attracting foreign skilled workforces.





**Graph 7.1: Number of legal foreign workers in Thailand 1997-2013**  
**Source: Office of Foreign Workers Administration (2015)**

### **7.3 Attracting repatriates and brain networking**

Repatriates are the citizens of a home country who have travelled to work and live in a foreign countries for a period of time, before returning to settle in their home countries (Ciumasu 2010; Lowell 2001b; Skeldon 2008; Tremblay 2005). The main purpose of the Thai Government's policies in relation to repatriation has been to attract repatriates to return home and engage productively in the Thai labour force (Ciumasu 2010; Lowell 2001b; Skeldon 2008; Tremblay 2005).

With regard to brain networking, this is based on the concept that the diaspora who are living overseas can better contribute and provide knowledge and technology to their home country by staying overseas rather than returning permanently (Biao 2007; Ciumasu 2010; Tremblay 2005; Tung 2008). Thai Government policies in relation to both attracting repatriates and cultivating brain networking to address skill labour shortage are further discussed in this section.

#### **7.3.1 Policy on attracting repatriates and brain networking during the period of NESD Plan 7 (1992-1996)**

Based on NESD Plan 7 and government policy statements from this period, it can be construed that the Thai Government had used policies to establish collaborative efforts with foreign

institutions to help Thailand develop in science and technology and knowledge/technology transfers. Incentives such as the relaxation of personal income tax and the granting of work permits were used to attract Thailand's repatriate skilled workforce (The NESD Plan 7 1992-1996). Collaboration could also mean leveraging links with Thai experts working abroad for technology transfer between Thai and foreign institutes.

According to *Govt policy needed to lure Thais back from abroad* (1994), Cholthanee Koernojna, the Vice President of Association of Thai Professionals in America and Canada (ATPAC), believed that many Thai professionals wanted to return to their homeland, but did not know how serious the Thai Government was. Koernojna was further cited in *Bangkok 'needs to show' it wants to reverse brain drain* (1994) that the determination of government on the Reverse Brain Drain project was not clear as there was no written policy and no organisation who responsible for this matter.

Such comments show the uncertainty in Thai Government policy during this period. Stakeholders needed the Thai Government to prove that it was serious about reversing the brain drain by attracting Thai professionals to return home. In 1995, a Reverse Brain Drain Committee was established by the Ministry of Science, Technology and Environment. This committee was made up of members from both the public and private sectors, and proposed a incentive package to encourage repatriates to return home (Chaiyariti 1995a). This proposed package included education subsidies, import tax exemption for their belongings, and the right to hold dual citizenship. The committee also aimed to attract 20 Thai professionals to return home by October 1995 (Chaiyariti 1995a). Even though there are no clear results that confirm the achievement of this project, this committee incentive shows the attempts the Thai Government was making at the time to lure back Thai professionals living overseas.

In addition, due to the shortage of lecturers at this time, especially in the fields of science and technology, the Ministry of University Affairs developed a Reverse Brain Drain project, according to *Move to reverse Thai brain drain* (1995). In August 1995, University Affairs Minister Boonchu Trithong announced the intention of the government to attract skilled Thai experts from overseas to teach in universities. Boonchu declared that repatriates did not have to return home permanently; they could instead return on a short-term basis. This project also shows the significant attempts of the Thai Government during this period to attract skilled Thai experts based overseas.

Even though the Reverse Brain Drain project first appeared in 1994 and was debated in society, it took some time for the Thai Government to officially approve the project. It was the cabinet under Prime Minister Bunharn Silpa-archa who eventually approved the project in March 1996 (Cabinet Resolution 19 March 1996), stating that it would come under the responsibility of the National Science and Technology Development Agency (NSTDA) in the Ministry of Science, Technology and Environment. The establishment of the Reverse Brain Drain project also showed the determination of the Thai Government to attract overseas Thai professionals to return home during this period.

When considering the Thai Government's determination to lure back overseas-based Thai experts during this period, some of the obstacles that discouraged their return should also be discussed. Low wages was a key factor discouraging their return to Thailand (Chaiyariti 1995a). For example, a doctor who returned to Thailand after being a medical researcher in the US for 27 years, had decided to work in a private hospital rather than as an academic in a public university for financial reasons (Chaiyariti 1995a). It was also pointed out during this period that Thailand's skilled workforce living abroad would be more likely to consider returning home if the government could assist in resettling matters such as organising accommodation, merit-based promotions, dual nationality, children's education, tax subsidies for research equipment, and helping with the relocation expenses (Chaiyariti 1995a).

Apart from the government, there were also attempts at this time within the private sector to create separate 'reverse brain drain' projects, such as that established by Siam Commercial Bank to develop networks with Thai professionals in developed countries to transfer new technology to Thailand (Chaiyariti 1995b). A private hospital had also attempted to attract Thai experts from abroad to return and run its new heart treatment centre (Polkwamdee & Pothasuthon 1995).

### **7.3.2 Policy on attracting repatriates and brain networking during the period of NESD Plan 8 (1997-2001)**

In NESD Plan 8, there was no statement about luring back Thais living and working abroad (The NESD Plan 8 1997-2001). However, in the Policy Statement of Prime Minister Chavalit Yongchaiyudh from this same period, under the labour policy section, it was declared that the government would aim to attract skilled Thai professionals to return home (Chavalit Yongchaiyudh's Policy Statement 1996). Unlike the NESD plan, this policy statement confirmed the Thai Government's determination to continue the Reverse Brain Drain project which was approved by the previous cabinet of Prime Minister Bunharn Silpa-archa.

During the 1997-2001 period, it was reported in *Bid to plug brain drain beginning to bear fruit* (1997) that the University Affairs Minister was attempting to attract Thais living in the US and Canada to return and teach in Thailand. This minister also further declared that a one-stop service centre would be established to assist Thais living overseas who wanted to return and teach in public universities (Bunnag 1997).

Even though the Reverse Brain Drain project was promoted by both Prime Minister Bunharn and Prime Minister Chavalit, there was no information on the project found in the period of Prime Minister Chuan Leekpai. It has been suggested that the crucial obstacle to this project's implementation was budget limitations (Bunnag 1998). In 1998, there was a seminar on attracting Thais living overseas to return home, organised by the Ministry of University Affairs, where it was revealed by the ministry's Permanent Secretary that the budget for the Reverse Brain Drain project had been slashed from 24.5 million Baht in 1997 to 20 million Baht in 1998, and would be further dropped to 18 million Baht in 1999 (Bunnag 1998).

Kantabutra (1999) also believed that the Thai Government did not adequately focus on this repatriation project because it knew it could not similar remuneration to what the Thai engineers and scientists were receiving in their foreign countries. A lack of government funding was no doubt the key reason for this repatriation project not getting off the ground – the government did not have enough money to support the project. There was another obstacle put forward that some believed also discouraged the project's implementation, which related to 'quality of life' (Trangtrakul 2000). In this argument it was pointed out that many professional Thais had been living overseas for a long time and were adapted to the comforts and living conditions of their foreign home; thus, these repatriates would probably struggle to readjust to the Thai living environment (Trangtrakul 2000).

### **7.3.3 Policy on attracting repatriates and brain networking during the period of NESD Plan 9 (2002-2006)**

Once again, methods for attracting Thai skilled workers living overseas or brain networking with them were not mentioned in NESD Plan 9; and nothing was also referred to in Prime Minister Thaksin Shinawatra's policy statements from this period (Thaksin Shinawatra's Policy Statement 2001). Interestingly, this lack of repatriation and brain networking 'coverage' was a contradiction by Prime Minister Thaksin, as at the same time as he mentioned nothing in his policy statements, his own multinational telecoms firm, Shin Corporation, was employing its own reverse brain drain recruitment program which aimed to lure back highly skilled Thais living abroad (Mongkolporn 2002). This contradiction shows that Prime Minister Thaksin was

aware of the importance of attracting repatriates; however, as discussed above, budget limitations may have again been the main reason for the Thai Government's lack of motivation in this area.

Yet even though there were budget limitations at this time, there is still evidence of the Thai Government's attempts to attract skilled Thais living both locally and internationally to contribute to the country's development. For example, the NSTDA, which was responsible for the Reverse Brain Drain project, established a similar project called 'The Best and the Brightest' (Boonnoon 2002). This project was aimed at recruiting three different groups of Thai experts based both locally and internationally to conduct R&D for Thai industries: postgraduate students, skilled workers from public and private sectors, and Thai experts living abroad (Boonnoon 2002). This project showed the determination of the Thai Government to encourage skilled Thais to facilitate R&D, particularly those living and working overseas who were offered relocation and tax incentives. In line with this, the government's Science and Technology Minister announced a series of roadshows to attract Thai academics to return home in 2004, as reported in *Government to hold roadshows in a bid to reverse the brain drain* (2004). An example of this initiative was a computer engineer who returned to Thailand from the Silicon Valley in the US under the Reverse Brain Drain project and established his own company to design computer chips (Buranaphatanin 2003).

Despite stories of success, it was emphasised by some that the main objective of the Reverse Brain Drain project to attract overseas Thais to return home permanently was not an easy task (Ho 2002). In addition to the financial obstacles discussed above, there were other factors that limited the project's success, such as red tape and the Thai traditional culture (Sambandaraksa 2006). For example, a Thai repatriate who had grown up in Western society perceived Thai working conditions as different; for example, the Thai social norm of respect for elders overriding seniority of position in the workplace made him feel uncomfortable (Hlransomboon 1995). Thai social norms such as these no doubt discouraged the repatriation of some of Thailand's skilled workers, and may have stifled the innovation and enthusiasm among some of those who did return.

Therefore, in 2002 the Reverse Brain Drain project switched emphasis to attract Thai professional living overseas to join the program without leaving overseas base (Ho 2002). This meant that Thai expatriates could continue to contribute to the development of Thailand while living overseas – they did not have to return to their home country permanently. This introduced the concept of brain networking.

Following on from this change of emphasis, it was reported that most of the 10,000 Thai professionals who worked in the US did not want to return permanently (Sutharoj 2004). Most preferred to stay in the US and help transfer knowledge and technology to Thailand (Sutharoj 2004). The highly skilled Thai workforce who had worked in the US and Canada in the fields of science, engineering, medicine, computing, environmental-industry and the agro-industry had established a professional associations and wanted to create networks with those local academics and scientists in Thailand (Sutharoj 2004). Through this network, these highly skilled overseas Thais could share their experiences and skills with their counterparts. An example of this was the cooperation between the Royal Thai Navy, the NSTDA and a Thai associate professor based at the Virginia Polytechnic Institute and State University (Virginia Tech), which was initiated in 2006 on a submersible vehicle project (Sutharoj 2006).

#### **7.3.4 Policy on attracting repatriates and brain networking during the period of NESD Plan 10 (2007-2011)**

Rather than the NESD Plan 10 specifically referring to the attraction of repatriates and brain networking, it was broadly stated in the plan that Thailand needed to deal with the situation actively and passively without any suggestions of how (The NESD Plan 10 2007-2011). During this period, only Prime Minister Samak Sundaravej spoke about attracting skilled workers from overseas to transfer technology and knowledge to the local Thai workforce (Samak Sundaravej's Policy Statement 2008); the other three prime ministers made no mention of this. Presumably, the 'overseas skilled workforce' that Prime Minister Samak referred to related to repatriates as well as foreigners, but he was only in power for seven months due to ongoing political unrest in Thailand. The Science Minister, Wutthipong Chaisang, later stated that the Ministry of Science, Technology and Environment would change the strategy by focusing on brain networking rather than attempting to lure Thai experts back from overseas, as reported in *Ministry taps Thais abroad to give local research a lift* (2008).

It has been argued that a key tool for attracting Thai experts living overseas is networking (Visetsak 2009). The President of the ATPAC stated that he was working with Thailand's Reverse Brain Drain committee in establishing a network especially focused on the computing industry between Thai professionals in the US and Canada with local researchers in Thailand (Pornwasin 2008). In line with these discussions, a senior officer from the NSTDA also stated that networking is key for reverse brain drain and brain networking strategies (Tanpipat 2012). For example, in Taiwan and South Korea, the success of their reverse brain drain projects has mostly stemmed from networking, which played an influential role in designing policy to attract their skilled repatriates to return home (Visetsak 2009). Interestingly, it was contended

during this period that Thailand did not succeed in its own Reverse Brain Drain project because the number of Thai professionals in foreign countries was not substantial enough to impact the policy (Visetsak 2009). In addition, some believed that Thai professionals' skills were not as diverse and did not adequately match with the needs of Thailand (Visetsak 2009). These factors are most likely what led the Thai policymakers to change their focus from reverse brain drain to brain networking.

### **7.3.5 Policy on attracting repatriates and brain networking during the period of NESD Plan 11 (2012-2014)**

In the most recent period, both the NESD Plan 11 and the policy statement of Prime Minister Yingluck Shinawatra lacked any mention of the policies surrounding the attraction of Thai repatriates and brain networking. In addition, across this period of the Yingluck Government, no newspaper articles could be found in relation to these areas of contention. This absence of discussions may be due to incidents like the severe flooding in Thailand's Central region during this period, which lasted for several months, as well as the ongoing political turmoil, which prevented the Thai Government from working at its full capacity.

### **7.3.6 Summary of policy on attracting repatriates and brain networking 1992-2014**

There appear to have been attempts made by both the public and private sectors in relation to reverse brain drain strategies. Prime Minister Bunharn Silpa-archa approved the Brain Reverse project in 1996, which was followed by the declaration from the Chavalit Government that policy would be implemented to lure Thai professionals back home. However, the Reverse Brain Drain project was not further action by subsequent governments, mostly due to budget constraints and the inability to match potential Thai repatriates current quality of life. Other factors included the lack of networking between the Thai government and the Thai professionals living overseas, the small quantity of Thai skilled professionals, and the mismatch of professionals' skills and the needs of Thailand. As a result, the Thai Government switched to brain networking as a solution to the country's skill labour shortage. The emphasis on brain networking was a less expensive proposition and Thai professionals did not have to return to Thailand permanently. However, to successfully use brain networking to address the skill labour shortage problems, the Thai Government still needs to work on establishing its networks with Thai professionals based overseas.

## **7.4 Illegal low-skilled migrant workers, refugees and Hill-Tribe villagers**

Another important potential contributor to addressing Thailand's skill shortages was identified in the form of illegal foreign workers in the period from 1992 to 2014. Jinnawaso (1995)

revealed that the amount of illegal foreign workers had notably risen from 40,000 in 1987 to 700,000 in 1995. This amount was then recorded at 1.9 million in 2007 (Huguet, Chamrathirong & Richter 2011). Most of these illegal foreign workers came from neighbouring countries such as Myanmar, Cambodia, Laos, China (South) and India (South) (Huguet, Chamrathirong & Richter 2011).

Within this group of countries, migrants from CLM were selected as the main target group for discussion in this research, as they are the majority and have therefore had the greatest impact on Thai economics (Chalamwong & Cheycom 2005; Chantavanich 1999). These illegal foreign workers were mostly a combination of unskilled and low-skilled; and the term 'low-skilled' has been used in this research in relation to all of them. Most illegal foreign workers across this period entered Thailand for better job opportunities and higher wages, which was a reflection of the uneven development of regional economies (Chalamwong & Cheycom 2005; Chantavanich 1999; Jinnawaso 1995).

These illegal low-skilled migrant workers have been particularly important to labour-intensive industries. They often fill job vacancies in industries where Thai workers do not wish to work, such as construction, fisheries, agricultural and domestic work (Brees 2008; Chalamwong & Cheycom 2005; Chantavanich 1999). In addition, an example from Malaysia displayed the use of foreign low-skilled workers for domestic work has often provided opportunities for skilled female workforce to return to the labour market as Tan and Gibson (2013) noted that the Malaysian Government has specifically aimed to encourage its female workforce to return to the labour market by increasing the number of foreign low-skilled workers in the domestic work industry.

In addition to illegal low-skilled foreign workers, the other two groups of non-Thai workers discussed and analysed in this section are Hill-Tribe villagers and refugees. The Hill-Tribe people have been in Thailand for many generations and most of them from this period were born there and had both or at least one parent also born in Thailand. Hence, under Thai law they are eligible for Thai citizenship; yet most of them do not have citizenship status (Park, Tanagho & Gaudette 2009). Lack of citizenship often exposes Hill-Tribe people to a range of societal problems, such as a lack of education opportunities, sex trafficking and abusive labour. Based on these negative impacts, Park, Tanagho and Gaudette (2009) argued that the Thai Government needs to recognise the eligibility of the Hill-Tribe workers to Thai citizenship.



Thailand has increasingly been a home for refugees from its neighbour countries since the 1970s (Chantavanich 1999). During the 1970s there was a large influx of refugees from Laos, Cambodia and Vietnam who fled to Thailand from the Indochina war; and then refugees from Myanmar started arriving in Thailand in the 1990s due to their country's civil war (Brees 2008; Chantavanich 1999). In addition to refugees, there were also illegal Myanmar migrants entering Thailand during this period, based on economic reasons (Huguet & Chamratrithirong 2011). Thus, the distinction between Myanmar refugees and illegal Myanmar migrants is complex; and with little indication of any of them planning to return to their country in the future (Huguet & Chamratrithirong 2011).

#### **7.4.1 Policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villages during the period of NESD Plan 7 (1992-1996)**

Resolution of the illegal foreign migrant workers problem in Thailand was described during this period as complicated (Jinnawaso 1995). This was partly based on the serious labour shortages in Thailand's low-skilled industries during this period, especially in the areas along its borders, which could not be remedied via the use of foreign migrant workers due to laws and regulations that disallowed their employment. To ease the severe problem of labour shortages, the Thai Government then allowed illegal immigrant workers to work in some parts of the country (Chantavanich 1999). Initially in 1992, the government allowed employers in the four provinces only along the Myanmar border to hire foreign migrant workers (Chantavanich 1999). However, this decision encouraged more foreign migrant workers to illegally enter Thailand, which meant that many had to advance further into the inner provinces to find work.

Another example of complicated resolutions was the *Foreigners' Working Act B.E. 2521 (1978)* which did not allow foreign citizens who entered Thailand illegally to work in the country; yet under the same law, illegal foreign citizens were allowed to do temporary work while waiting to be deported to their home country. Based on this act's regulations, Thai employers were allowed to hire illegal migrant workers during the lawsuit process, even when an illegal migrant worker had been arrested and was waiting to be deported, where an employer could post bail. When an illegal migrant worker was granted bail, the employer could then apply for a temporary work permit to allow them to work in Thailand. This complicated process has caused conflict and confusion to many stakeholders involved (Jinnawaso 1995). It was quoted in *Migrant labour - who pays?* (1995) that a senior police officer in Ranong province described the migration policy on illegal immigrant as an irony. This was based on situations where police were blamed by their community for indirectly destroying the local economy when they arrested highly employable but illegal migrant workers.

In 1996, to better systemise foreign illegal workers, the government encouraged those from CLM to become registered, meaning they could work in Thailand legally for one year. However, while these registered illegal low-skilled migrant workers had been promised equal status with Thai workers including minimum wages, in reality this did not generally occur despite their registration (Chantavanich 1999).

There were several groups that impacted on Thailand's migration policy on illegal migrant workers during this period, such as the bureaucrats, the army, politicians, and the private sector in particular locals. The key support group for the existence of illegal migrant workers in Thailand was the local investors, particularly in the border provinces (Chantavanich 1999). For Thai policymakers such as bureaucrats and the army, national security was always the first priority in relation to Thailand's migration policy (Chantavanich 1999; Jinnawaso 1995). Thus, whenever the foreign migrant workers were perceived as a threat to Thailand's national security, they were deported.

Although Chantavanich (1999) argued that Thai policymakers at this time were unrealistic, in that they often believed foreign illegal workers were responsible for unemployment in Thailand. It has been identified that most of the jobs occupied by Thailand's foreign migrant workers were not of interest to the Thais (Chalamwong & Cheycom 2005; Chantavanich 1999). Thus, it was often perceived as futile and a wasted resource to deport foreign migrant workers to their countries while there remained a huge demand for low-skilled workers in Thailand.

Moreover, various public officers admitted that they failed to prevent the illegally migration of low-skilled workers from neighbouring countries. A former Labour Minister admitted in *Academic calls for new policy on immigration* (1994) that national borders did not stop people from moving across illegally. A senior government official from the National Security Council also supported this assertion in *Plan to legalise illegal workers* (1993). He pointed out that the Thai-Myanmar Border is about 2,400 kilometres long and that it is therefore very difficult to stop illegal immigrants crossing into Thailand. An officer on the Thai-Cambodian border further backed this up by noting that when the Thai Government pushed Cambodian illegal migrants back to their country, the illegal migrants generally pushed their way back the day after (Hutasingh & Sangrungrueng 1996). A senior researcher from TDRI also admitted that the country has failed to control the influx of illegal migrant workers to Thailand, according to *New attempt to halt wave of migrants* (1995). Given the complexity of illegal migrant inflows and its inability to control them during this period, it was suggested in *Academic calls for new policy*

*on immigration* (1994) that the Thai Government needed to find a new migration policy and update the immigration law to respond to this problem.

#### **7.4.2 Policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villagers during the period of NESD Plan 8 (1997-2001)**

As with NESD Plan 7, during the period of NESD Plan 8 one of the major factors impacting the Thai Government's migration policy especially on refugees was the national security issue. A Thai official confirmed that when there was fighting in a refugee's home country, the Thai Government would allow temporary asylum; but they would have to return once it had ceased. During their temporary stay, these refugees were not allowed access to education or employment, which was deemed necessary to maintain national security; a mindset that has been rooted in Thai Government policies since the 1970s and the Indochina War in particular (Manibhandu 1998). At the time of the Indochina War, especially after 1975, a large influx of refugees from Laos, Cambodia and Vietnam fled the communist victory in their countries to Thailand (Chantavanich 1999).

During the period of NESD 8 Plan, an increasing demand for low-skilled migrant workers was pressuring the Thai Government to be more lenient with illegal immigrants. For example, in 1998, the cabinet decided to expand the areas where illegal low-skilled migrants could work by allowing them access from 4 to 11 provinces along the Thai borders, as well as the 22 provinces with fishery industries (Cabinet Resolution 21 July 1998). In an interview in 1999, Wut Sukosol, the Labour and Social Welfare Minister, admitted that Thailand had to allow low-skilled foreign workers to work in industries such as fishing, milling, mining, construction and agriculture as Thai workers did not want these jobs (Wirotanan 1999). He reported that Thai employers across a range of industries had requested that the government allow an extra 350,000 foreign workers to be given legal working status; although the minister personally thought this number was too high, instead believing the government should allow some illegal foreign workers to stay on a short-term basis while encouraging Thais to work in those industries. However, there were a number of reasons why it proved difficult to encourage Thais to work in these more unfavourable industries (Wirotanan 1999).

Firstly, many Thai employers had benefited from paying low-skilled foreign workers lower salaries than Thai citizens (Wirotanan 1999); hence, they did not want to have to pay more. Secondly, it was Thai people's general attitude towards what they perceived as less favourable industries rather than the wages that discouraged them from working in these roles. For example, when the government founded a training course for Thai workers in Tak in 2000, a

province near the Thai-Myanmar border, aimed at replacing Myanmar illegal workers, it was later admitted by Minister Wut that this endeavour had failed. About 80% of trainees had pulled out before the course finished; and out of those who passed the training course, most resigned from their jobs within two or three weeks (Kasem 2000).

In addition to Wut's acknowledgement, Panithi Tangpati, President of the Tak Chamber of Commerce, affirmed that the local industry had lost about four billion Baht of revenue when the government had tried to push illegal Myanmar workers back to their home country from Tak – there were no workers to run the factories and farms (Kasem 2000). Based on these factors, Thailand could no longer deny the impact and importance of the low-skilled migrant workforce to its economic growth.

Surichai Wun'gao (2001), an academic from Chulalongkorn University, also believed that the Thai Government had to face such realities and better understand the likely problems from denying illegal immigrants access to employment in Thailand. He recommended that the government implement a new migration policy for illegal low-skilled foreign workers which require all stakeholder participation, citing the example of Japan which had faced a similar problem in the 1980s. In 1990, the Japanese Government established a committee on migrant worker policy comprising of members from the public sector, private sector and academia, where one of the recommendations was to set up a system of skills-based training for illegal migrant workers (Wun'gao 2001).

In addition, Amornwit Nakornthap, another academic from Chulalongkorn University, contested that the Thai Government should pay more attention in migration policy to the children of disadvantaged groups such as refugees, Hill-Tribe villagers and the stateless (Nakornthap 1997). He believed that these children could become a significant labour workforce for Thailand in the future if they were properly educated and trained. It was also pointed out that by providing education and skills training to these children, the government would probably lessen social problems such as child labour and child prostitution (Nakornthap 1997). It would appear that a key solution would have been granting citizenship to some of these illegal migrant workers. East (2000) argued during this period that acquiring citizenship for disadvantaged people such as Hill-Tribe villagers and the stateless was crucial to their education and employment opportunities, as well as their potential to own land.

Returning to the importance of future generations of Thai workers, Chaipipat (2001) provided an example of a student, a refugee's offspring, who had not been eligible for Thai citizenship

even though she was born in Thailand – because she was born to Vietnamese refugees. The status of non-citizenship then disqualified her from entering an elite public vocational school in Bangkok, which highlighted the outdated policy of the Thai Government that was restricting education and employment opportunities for future generations (Chaipipat 2001). In 2001, it was reported that more than 12,000 Vietnamese refugees including their children were waiting for Thai citizenship to be granted (Chaipipat 2001), which confirms the ineffective and outdated migration policy of that time, in expanding Thailand's skilled workforce. In line with this, a Thai academic contended during this period that the government should automatically grant citizenship to second and third-generation refugees– most children of refugee, Hill-Tribe and stateless Thais were born in Thailand; thus they already spoke fluent Thai and had a deep understanding of the culture (Antaseeda 2001).

#### **7.4.3 Policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villagers during the period of NESD Plan 9 (2002-2006)**

Prime Minister Thaksin Shinawatra was in office for two terms, which almost covered the whole period of NESD Plan 9. During this time, he stated in both of his policy statements that the government would find a proper solution for illegal migrant workers by balancing the needs of the labour market and that of national security (Thaksin Shinawatra's Policy Statement 2001; 2005). Thaksin showed a determination to solve the problem of illegal foreign workers. On 28 August 2001, the cabinet decided to register illegal foreign workers from CLM countries and provide them with work permits via the Ministry of Labour (Cabinet Resolution 28 August 2001). Through this process, 562,527 CLM illegal foreign workers registered with the Ministry of Labour (Cabinet Resolution 30 October 2001).

However, the registering illegal migrant worker from CLM countries was very complicated because it involved many government agencies, such as the National Security Council, Ministry of Interior, Ministry of Labour, and Ministry of Foreign Affairs. To provide a solution, in 2001, the Thaksin Government established the Committee of Foreign Workers Administration as the key agency in planning and implementing policy for this illegal foreign workers issue (OFWA 2005). This registration of illegal foreign workers and the establishment of the Committee of Foreign Workers Administration highlight the attempts of the Thai Government at this time in acknowledging the existence of illegal foreign workers.

Furthermore, in 2004, the cabinet decided to encourage more illegal migrant workers from the CLM countries to register for work permits. These additional illegal migrant workers were provided with one-year work permits which could be extended (Cabinet Resolution 27 April

2004). The government allocated all administrative work with regard to these illegal migrant workers, such as the processing of nationality verification of those from CLM, to the Ministry of Labour (OFWA 2005).

During this period, there was also another group that added more complications to addressing the issue of illegal migrant workers – those categorised as ‘refugees’ from Myanmar. Brees (2008) noted that Thai policymakers of this time had expected Myanmar refugees to only be in Thailand on a temporary basis, returning to their homeland when the civil war was over. During their stay in Thailand, these Myanmar refugees were not allowed to work or go outside their camps; they were deported if they disobeyed these rules (Brees 2008). Brees (2008) pointed out that the Thai Government did not allow these refugees to work because they did not want to create an influx of refugees from the same country. However, the policy of prohibiting these refugees from working was not generally complied with especially at the local level (Brees 2008). For instance, there was a heavy demand for low-skilled workers in the local private sector, with many textile factories established at the border town of Mae Sot in Thailand, mainly so they could use the cheaper Myanmar illegal workers (Kaur 2010). Towards the end of the NESD Plan 9 period, the Thai Government, in cooperation with other international organisations such as UNHCR and NGOs, allowed Myanmar refugees, especially along the Thai-Myanmar border, to leave the camps for work, studies or career training (Kasem 2006; Raksakul 2006).

Another group that was still impacted by non-citizenship status during this period, even though they were born in Thailand and had never left the country, were the descendants of refugees who had lived in Thailand for an extended amount of time, such as those from the Indochina War (Rojanaphruk 2004). Even though these children had studied in Thai schools and some had also completed vocational and higher education, they were still not granted Thai citizenship.

Within the Hill-Tribes, status recognition from the Thai Government by providing Thai citizenship identification or proof was the key issue. One Hill-Tribe girl from this period complained that without identification, she had not been able to find a job anywhere (Hutasingh 2002). This lack of identification also discouraged them to improve themselves through education.

#### **7.4.4 Policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villagers during the period of NESD Plan 10 (2007-2011)**

During this period, national security was still the core focus of Thai policymakers when managing and planning policies for illegal migrant workers and stateless people. Similarly, it was declared in the policy statements of the three out of four prime ministers during this period – Samak Sundaravej, Somchai Wongsawat and Abhisit Vejjajiva – that the Thai Government would use its legal system to strictly manage illegal migrant workers, including stateless people, in order to maintain national security and society harmony (Abhisit Vejjajiva's Policy Statement 2008; Samak Sundaravej's Policy Statement 2008; Somchai Wongsawat's Policy Statement 2008).

However, during this period, the concept of 'national security' also started to be questioned by others in Thailand. It was pointed out that in the previous 20 years, most senior Thai policymakers had persisted with the idea that that illegal migrant workers and refugees were only in Thailand on a short term basis (Hall 2010a). In order to deal with this issue especially for illegal migrant workers, policies and regulations were reviewed on an annual basis (Hall 2010a). There were cabinet resolutions about extending permits for illegal migrant workers to stay in Thailand for both one year (Cabinet Resolution 19 December 2006) and two years (Cabinet Resolution 18 December 2007). During this period, Hall (2010b) argued that the Thailand Government lacked long-term vision with regard to its migration policy. Hence, based on Hall's argument, Thailand may need to implement policies that equally distributed benefits among migrants, employers and society; that is, Thai policymakers needed to change their mindset on the issue of illegal immigrant workers. In reality, most illegal migrant workers had been in Thailand for a long period of time and most of them were unlikely to return to their countries voluntarily (Huguet & Chamrathirong 2011).

The Thai Government's short-term solution based on annual and bi-annual terms was perceived by some as exploitative, providing limited access to basic human rights for illegal migrant workers (Hall 2010a, b, 2011b). To solve these perceptions, the Thai Government's implementation to legalise illegal migrant workers from CLM countries was carried out during this period. In 2011, the Nationality Verification (NV) process was imposed by the Thai Government to manage and systemise illegal migrant workers and update their status to legal (Hall 2011a, b). However, due to a lack of information, complicated procedures, perceived high costs and fears to be sending back to their countries, the majority of illegal migrant workers failed to register (Hall 2011a). It was reported that only about 500,000 illegal migrant workers

completed Thailand's NV process by 30 June 2007, out of an unofficial estimated number of two million (Editorial 2007a).

Other potential solutions to illegal migrant worker issues also emerged during this time. For example, Prime Minister Surayud Chulanont introduced a plan to import contract workers legally from CLM countries as well as Vietnam and Bangladesh (Editorial 2007a). The concept was also proposed of establishing a special economic zone along the Thai-Myanmar border, to reduce the number of illegal migrants in Thailand and generate economic development for Myanmar, according to *Thailand reconsiders launching special economic zone along the Thai-Myanmar border* (2010). In addition, when reviewing the Thailand Board of Investment website ([http://www.boi.go.th/index.php?page=policies\\_for\\_investment\\_promotion](http://www.boi.go.th/index.php?page=policies_for_investment_promotion)), one of its core policies on investment promotion is promoting special economic development zones (SEDZ) along the borders of Thailand's neighbouring countries (Board of Investment 2015b). In addition, most of the promoted industries were of the promoted industries are labour-intensive industries such as textiles, electricity and electronics, furniture, agriculture, and auto parts.

In contrast with the above, in a report from the ILO during this period, it was stated that Thailand needed to avoid relying on low-skilled migrant workers (Wasuprasat 2010). In line with this, it was argued that the existence of illegal migrant workers in the country's labour market would encourage local industries to keep focusing on labour-intensive industries rather than improving and developing the skills of their employees for technology-intensive industries (Pholphirul 2011; Wasuprasat 2010).

#### **7.4.5 Policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villagers during the period of NESD Plan 11 (2012-2014)**

In NESD Plan 11 the increasing demand for unskilled foreign workers and its impact on Thai society such as the structural change required in the local labour market, security of life and property, health issues, public expenditures, and stateless children is referred to (The NESD Plan 11 2012-2016). This shows that by this stage, the Thai Government had developed a stronger understanding of the importance of illegal foreign migrant workers to the Thai economy. Similar to the previous period of NESD Plan 10, national security was still a high priority in respect to illegal migrant workers and stateless people. It was also stated in Prime Minister Yingluck's policy statement that the Thai legal system would be strictly enforced to manage the issue (Yingluck Shinawatra's Policy Statement 2011).



During this time, Thailand's National Security Council introduced a strategy to try and solve the illegal low-skilled migrant workers and stateless groups issue (The National Security Council 2012), where these people were categorised into four groups. Firstly, in regards to the Hill-Tribe and other minority people who had migrated to Thailand many years before and were registered with the government (about 560,000), it was recommended that the Thai Government grant citizenships or legal migration status to them based on their extensive history in Thailand and because they were not viewed as a threat to Thai security.

Secondly, with regard to the two million plus illegal migrants from CLM who had entered Thailand for economic purposes, it was recommended that in the short term the Thai Government aim to legitimise their status through registering process. In the long term, the Thai Government should aim to reduce the influx of these CLM illegal migrants via economic policy and technology. For example, the industries in the future should be focused on technology-intensive rather than labour-intensive.

Thirdly were the illegal migrants and refugees who posed security concerns for Thailand including: Myanmar refugees who had fled civil war and were living near the Myanmar-Thai border; the Rohingya refugees from Myanmar and had fled Myanmar based on their ethnicity and religion; and North Korean refugees who are entering to Thailand illegally through Laos. There were about 100,000 people in this group, and it was recommended that the Thai Government aim to send them back to their own countries or other countries that would accept them. Lastly were the other illegal migrants who were not categorised into the previous three groups where it was advised that they should be strictly handled by the legal system.

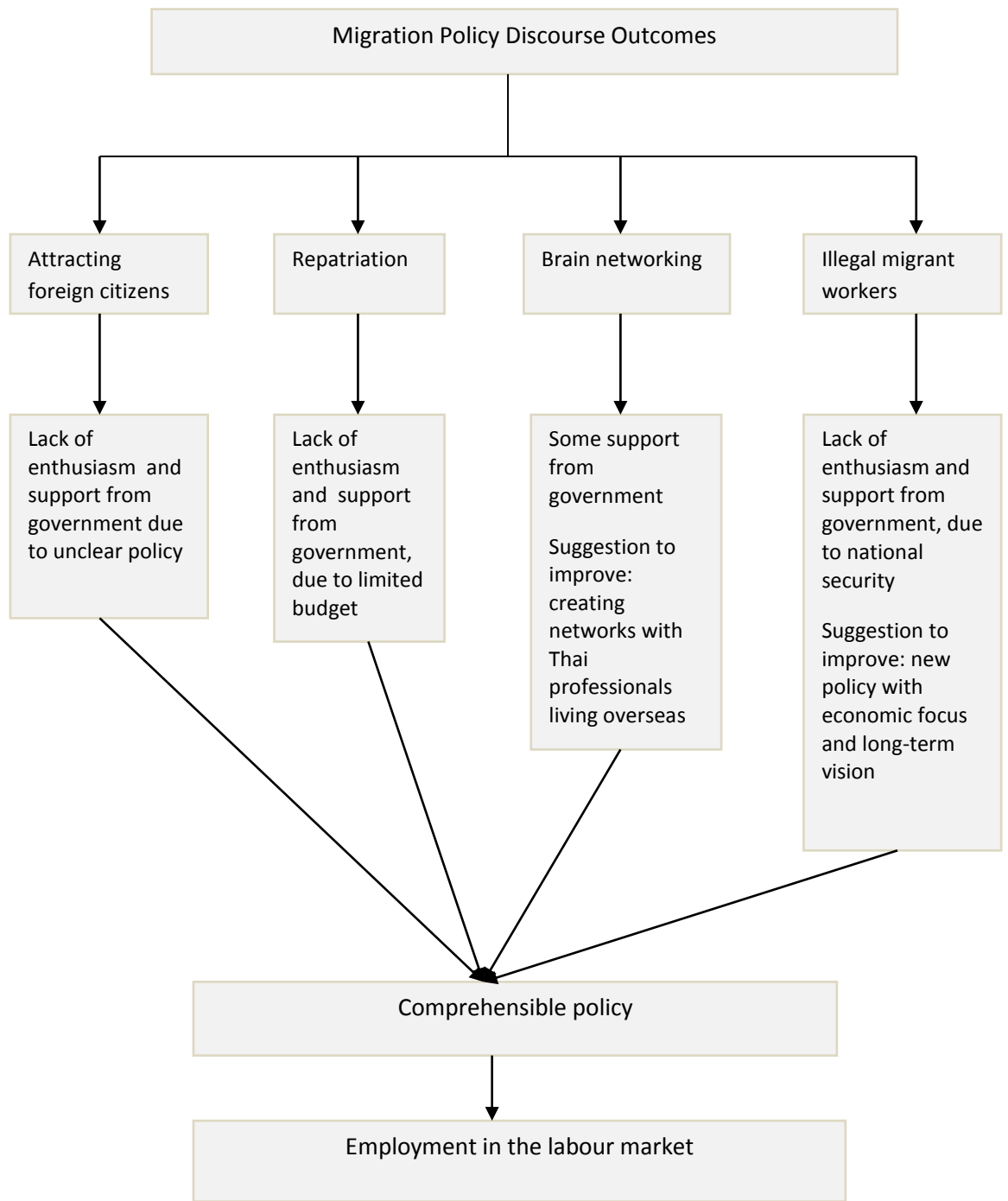
Most news items regarding illegal migrant workers during the period of the Yingluck Government were mainly focused on legalising their status in cooperation with relevant neighbouring countries such as Myanmar, as reported in *Thailand seeks to hire workers from Myanmar* (2012), *Govt to allow pregnant migrant workers to give birth here* (2012), and *Authorities to take over migrant labour* (2012). Other relevant news of this time related to urging the Thai Government to extend the deadline for the NV process and to relax the policy on deporting illegal migrant workers who meet the deadline.

#### **7.4.6 Summary of policy on illegal low-skilled migrant workers, refugees and Hill-Tribe villagers 1992-2014**

When dealing with the large influx of illegal migrant workers from neighbouring countries, it is clear that national security was the foremost concern among Thai policymakers of this time. However, due to economic expansion and the growing demand from some industries, Thailand

had to refocus its migration policy in relation to low-skilled illegal workers. This period produced a crossroad for the Thai Government between national security and economic growth. It had to consider which way Thailand was heading, and how the country could align these two concepts via relevant migration policy.

Figure 7.1 shows the main discourse outcomes of migration policy in Thailand during the period of 1992-2014 in response to the skill labour shortage. This study has identified four policy discourses on migration policy: attracting foreign citizens, repatriation, brain networking, and illegal migrant workers. The diagram shows that the unclear policies of the Thai Government during this time were often the obstacle to effective migration policy in response to the country's skill labour shortage.



**Figure 7.1: Policy discourse outcomes on Migration policy in Thailand 1992-2014**

## **7.5 Summary of the chapter**

From the above discussions, it would appear that the Thai Government did not focus on attracting a foreign skilled workforce including Thai professionals living abroad to return home, even though it wanted to improve the science and technology industry where highly skilled workers would be needed. Instead, the government concentrated on brain networking where universities and research agencies attempted to create connections between their staff and Thai professionals living abroad.

Another significant issue that emerged during this period was in relation to illegal low-skilled migrant workers in Thailand. Many of these workers flowed in from neighbouring countries such as CLM in search of work, and proved to be significant contributors to the Thai economy particularly since the 1990s. However, during this period national security was generally the main priority of Thai policymakers, rather than economics. Hence, dealings with these illegal migrant workers in the past 20 years were mostly focused on a short-term basis rather than a long-term vision of economic development of the country. There were arguments put forward during this period that the government needed to update its laws and regulations on migration accordingly. It was recommended that the Thai Government make relevant decisions based on the type of industries that would be focused on in the future – technology-intensive versus labour-intensive. It was commonly believed that this would help steer Thailand's migration policy in the right direction; based on the perspective that such policy is an efficient tool for the government to use in response to Thailand's skill labour shortage.

## **Chapter 8: Data Analysis - Substitute Workforces**

### **8.1 Introduction**

This chapter aims to examine and analyse Thai Government policies on substitute workforces in response to the country's skill labour shortage during the period of 1992 to 2014. This chapter analyses the policy response to the sub-research questions: What kinds of substitute workforces does the Thai Government need to address skill labour shortage? How does the Thai Government maximise the use of substitute workforces to address skill labour shortage?

Based on the previous literature, four key policy discourses on substitute workforces have been identified in this study: female workforce, ageing workforce, disabled workforce, and refugee workforce. However, in this chapter only female, ageing and disabled workforces will be discussed; the context of the refugee workforce is complicated and imbricate with other workforces without Thai citizenship such as illegal low-skilled migrants and Hill-Tribe minorities. Hence, policies and issues relating to the refugee workforce were previously analysed and discussed in previous Chapter 7 on migration policy.

The structure of Chapter 8 is based on the analysis of the female workforce, following by the ageing workforce and then the disabled workforce. The analysed data relates to Thailand's NESD plans, the Thai Government's policy statements, newspaper articles from Thai publications, as well as reports from international organisations and academic journal articles during the 1992-2014 period. The collected data was examined and triangulated in chronological order based on the periods of each NESD plan – seventh, eighth, ninth, tenth and eleventh. The purpose of this data triangulation is to explore and provide answers to research questions with regard to how the Thai Government responded to the skill labour shortage across each of the NESD periods and via progressive policy development from 1992 to 2014, to support Thailand's economic development.

### **8.2 Female workforce**

The extant literature highlights that attracting women into a labour workforce is a common policy response used to address skill labour shortage (Browne & Braun 2008; Bryant & Jaworski 2011; Ducanes & Abella 2008; Fang 2009; Wallace & Marchant 2009). However, there are several main obstacles in relation to the skills development of women for workforce participation, such as equal employment opportunities, gender stereotypes, and flexible employment (Browne & Braun 2008; Ducanes & Abella 2008; Fang 2009; Wallace & Marchant 2009).

The role of female workers in Thailand's labour market has been and is still significant. Falkus (2000) revealed that the participation rate of females in the Thai workforce is higher than in most other Asian countries. Falkus (2000) also noted that since the 1990s, women have played a major role in Thailand's manufacturing industry, such as in textiles. Thailand's high participation rate of female workers was also revealed in other literature in addition to Falkus. For example, in 2012 it was estimated that about 30% of companies in Thailand had female CEOs, compared with 19% in China and 16% in Vietnam; while at middle management level, the share of women was 68% in Thailand (Fawcett 2012). It was also more recently reported that Thailand ranked eighth in the world for its number of female senior management positions (Finkelston 2014). In the following sections, policies relating to female participation in the workforce in Thailand during the periods of NESD plans 7, 8, 9, 10 and 11 are investigated and discussed further.

### **8.2.1 Policy on female workforce during the period of NESD Plan 7 (1992-1996)**

It was clearly stated in NESD Plan 7 that a greater role of women in economic and social development would be encouraged – it was acknowledged that support for women was needed to increase opportunities for them “to attain their full potential and improve their quality of life” (The NESD Plan 7 1992-1996, p.16). As part of this, it was declared in this plan that training and skill development would be provided to women.

Prime Minister Chuan Leekpai advised in his policy statement of that period that the government would amend laws and regulations to enhance the opportunities of females in the labour market, such as providing them with equal rights and status to the male workforce (Chuan Leekpai's Policy Statement 1992). The ensuing Prime Minister Bunharn Silpa-acha next pledged in his policy statement that equal opportunities between female and male workers would be supported (Bunharn Silpa-acha's Policy Statement 1995).

Yet despite such strong evidence of the Thai Government's attempts through this period to support the development of a female workforce as stated above, there were also obstacles (Janchitfah 1995). For instance, it was argued that the government did not have a clear policy on the skills needed for the development of women (Janchitfah 1995). In addition, state-run skill development institutes were often perceived as inflexible to meeting the real needs of female workers (Janchitfah 1995). For example, it would have been more convenient for many of Thailand's female workers to receive skill development via workplace or in-house training, rather than at training centres often far away from their workplaces (Janchitfah 1995). One female labour team leader at a garment factory voiced such a need that there should be skill

training centres near or inside the factories (Janchitfah 1995). In addition, a senior program officer of the Australian International Development Assistance Bureau suggested that the Thai Government cooperate with the main industries to establish in-house skill training which will help to improve the industrial sector (Janchitfah 1995).

Other obstacles to developing the female workforce included gender-job stereotyping and employers' attitudes. Janchitfah (1995) argued that gender stereotyping made it difficult for women to choose the right jobs and skill training. The attitude of employers towards female workers was also noted as a common obstacle during this period (Janchitfah 1995). An example was cited of a 16-year-old factory worker in Thailand who had enrolled to study secondary school level education with the Non-formal Education Department. When she asked for leave from work to sit an examination scheduled on a Saturday, she was told her employment at the factory would be terminated. This example conveys the general attitude and reluctance of some Thai employers in supporting the skills development of the female workforce.

### **8.2.2 Policy on female workforce during the period of NESD Plan 8 (1997-2001)**

In line with its stronger focus on people-centred development, it was stated in NESD Plan 8 that women would have "greater opportunities for developing their full potential" (The NESD Plan 8 1997-2001, p.11). During this period, Prime Minister Chavalit Yongchaiyudh declared in his policy statement that his government would support the participation of women in the development of the country (Chavalit Yongchaiyudh's Policy Statement 1996). Equal opportunity for women was also addressed when Chavalit's cabinet then approved the cancellation of the gender quota for the higher education and vocational education entrance examination (Cabinet Resolution 26 November 1996).<sup>12</sup>

Lae Dilokvidhayarat, the Director of the Labour Management and Development Centre at Bangkok's Chulalongkorn University, confirmed the unequal opportunities between Thailand's male-female workforces as male usually have been promoted to higher position than female and if the factory has to lay off workers, female usually get chosen (Daorueng & Yamin 1998). In the same publication (Daorueng & Yamin 1998), a Thai female worker voiced agreement with Lae Dilokvidhayarat's, arguing from her own personal experience that women were

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<sup>12</sup> The NESD plans are time-based (five years) plans legislated by the government to enable desired economic development. The years of NESD plans are formed on the financial year timeline which lasts for 12 months. The financial year starts on 1 October of the year before and run until 30 September in the following year. For example, the 1992 financial year ran from 1 October 1991 until 30 September 1992; therefore, the duration of NESD Plan 8 (1997-2001) was from 1 October 1996 to 30 September 2001.

always placed in the same job while men had more opportunity to be trained for a new job, such as controlling machinery that pays more (Daorueng & Yamin 1998). Hence, the result of being placed in the same job for many years caused women to remain unskilled. The lower amount of opportunities for Thai female workers to enhance their capacity seemed to be mostly caused by the concept of gender-job stereotyping (Daorueng & Yamin 1998). An advisor from the United Nations Development Fund for Women (UNIFEM) also confirmed that there was a gender-job stereotyping issue (Achakulwisut 1998). Noting that education and training would not be beneficial if this gender-job stereotyping attitude was allowed to continue, the UNIFEM advisor stressed that this attitude needed to be changed.

### **8.2.3 Policy on female workforce during the period of NESD Plan 9 (2002-2006)**

In NESD Plan 9, it was stated that equal opportunity for potential development should be provided to all Thai citizens including women (The NESD Plan 9 2002-2006). Prime Minister Thaksin Shinawatra pledged that his government would support greater female participation in economic development at both community and national levels (Thaksin Shinawatra's Policy Statement 2001). His government also approved the Women's Development Plan (2002-2006) as a guideline for all government agencies (Cabinet Resolution 4 June 2002). The main objectives of this plan were to assist women in being self-reliant, having a good quality of life, and living happily (Women's Development Plan 2002-2006). To achieve these aims, other strategies such as development of women's potential, participation of women in decision-making, and promotion of gender equality and social security were also implemented (Women's Development Plan 2002-2006).

However, despite the government's progress in developing a female workforce, no newspaper articles could be found in relation to benefits of a female workforce to address skill labour shortage. It was only contended in one newspaper article (Toh 2003) from this period that if Thailand wanted to support the greater role of women in the country's development, the government had to encourage the enrolment of girls in primary and secondary education.

### **8.2.4 Policy on female workforce during the period of NESD Plan 10 (2007-2011)**

During the period of Prime Minister Surayud Chulanont (1 October 2006 – 6 February 2008), the cabinet approved the Women's Development Plan (2007-2011) (Cabinet Resolution 9 January 2007). The key aims of this plan were to change societal attitudes towards gender equality, and involve women more in the country's development (Women's Development Plan 2007-2011). Surayud's cabinet also approved the draft *Gender Equality Act* at the start of this period (Cabinet Resolution 13 November 2007). There were four prime ministers during the



period of NESD Plan 10, but only Prime Minister Somchai Wongsawat (24 September 2008 – 2 December 2008) made specific reference in his policy statement on labour policy to the skills development of the female workforce (Somchai Wongsawat's Policy Statement 2008). This reflected the Thai Government's intentions of developing the skills of the female workforce during this period; however, Somchai's Government was short-lived due to ongoing political unrest, which held up this policy.

In the media during this period, there was a newspaper article (Suttisiltum 2008) that specifically focused on gender-job stereotyping; where it was reported that the percentage of unemployed male university graduates was only 6.3% of all 154,571 unemployed men in 2005, in contrast with 25.4% unemployed female university graduates of 113,124 unemployed women. The journalist suggested that this may have been due to gender-job stereotyping, pointing out that most female university graduates had degrees in social science disciplines which was a mismatch with the requirements of the labour market (Suttisiltum 2008).

#### **8.2.5 Policy on female workforce during the period of NESD Plan 11 (2012-2014)**

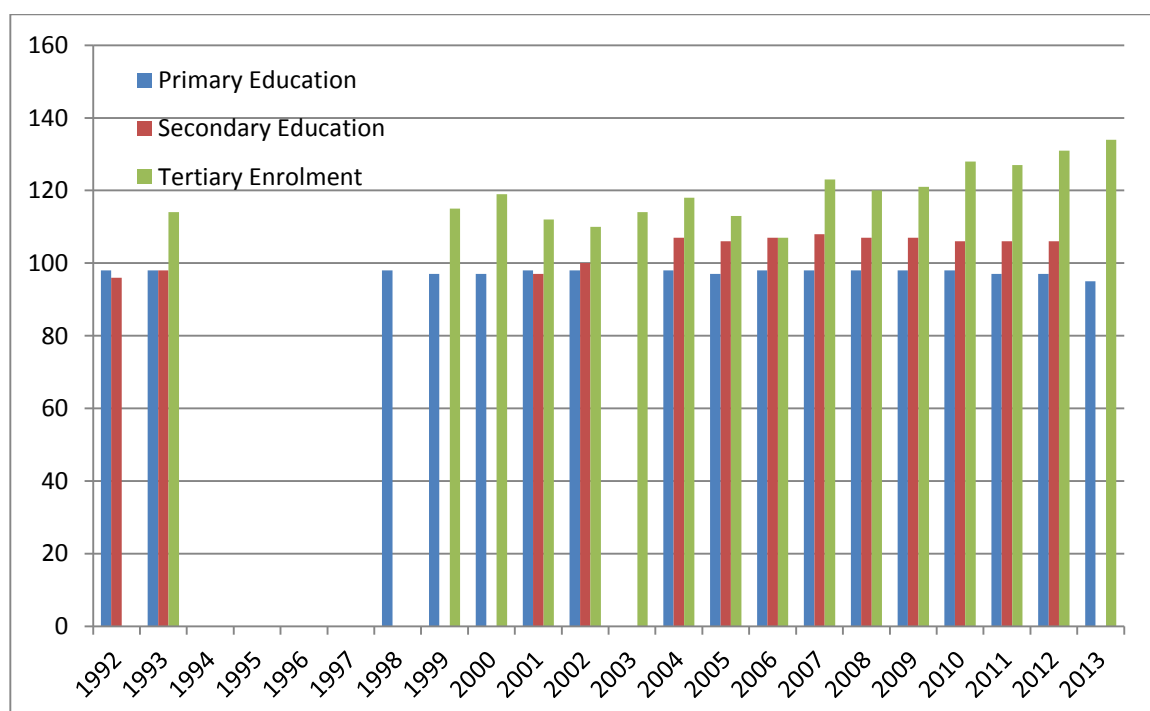
The core concept of the eleventh NESD plan was in support of King Bhumipol's sufficiency economy philosophy, focusing on people-centred development by balancing development across all aspects (The NESD Plan 11 2012-2016). In this plan, it was specified that the government would encourage equal opportunity for boys and girls in accessing education. Even more significant was the clear declaration in this plan that women would be encouraged to take up senior positions in both local and national institutions.

One of Thailand's most significant steps in developing its female workforce occurred at the beginning of the NESD Plan 11 period, when Yingluck Shinawatra was elected as the country's first female Prime Minister. Her subsequent policy statement showed the determination of this government to improve the capabilities of Thailand's female workforce. A women's development fund was established during Yingluck's leadership (Cabinet Resolution 31 January 2012), which was aimed at providing a low-interest or free loan to women for the purpose of career development or revenue creation (Women Development Fund 2012). The Yingluck Government also approved the next Women's Development Plan (2012-2016) (Cabinet Resolution 3 July 2012), which aimed to encourage Thais to be more aware of and respectful of the role of women across all of society's aspects, including economics, politics and sociality.

The graphs below show data analysis relating to the development of Thailand's female workforce between 1992 and 2014, such as: the ratio of female versus male primary, secondary and tertiary enrolments in Thailand; female workforce participation rates in ASEAN;

female employees in the agricultural, industrial and service sectors in Thailand; female versus male vocational students by vocational education types; and women employed in the non-agricultural sector in ASEAN. These data are derived from the World Bank and Office of the Vocational Education Commission.

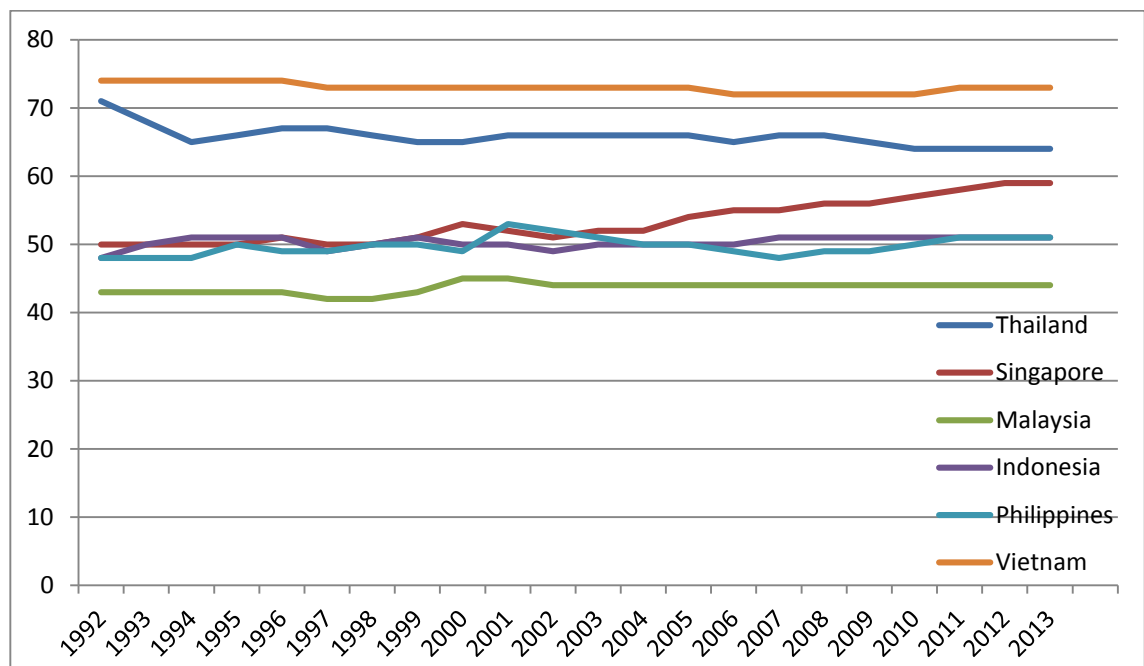
Graph 8.1 compares the ratio of female versus male primary, secondary and tertiary enrolments in Thailand from 1992 to 2013. These results show that female enrolment at primary level remained slightly under male enrolment. At the secondary level, the enrolment of females prior to 2004 was lower than for males; although this trend then reversed with female students exceeding males in secondary education. At the tertiary level, the ratio of female enrolments was consistently very high as it was with males. These results indicate that the Thai Government performed well in providing education to females throughout this period, especially at the secondary and tertiary levels where female enrolment either eventually exceeded or was on par with male enrolment.



**Graph 8.1: Female-Male ratio of primary, secondary and tertiary enrolments in Thailand 1992-2013**

Source: World Bank (2015a) - <http://data.worldbank.org/indicator>

Graph 8.2 shows workforce participation rates for females aged 15 years and over from 1992 to 2013, comparing Thailand with its neighbouring ASEAN countries of Singapore, Malaysia, Indonesia, the Philippines and Vietnam. The results provide further evidence that the participation rate of Thai female workers in the labour market remained at a regionally high level when compared with ASEAN counterparts except Vietnam. This is strong indication that Thai women have been a significant contributor to the country's labour workforce for a long period of time.



**Graph 8.2: Percentage of female workforce participation, aged 15 years and over in Thailand, Singapore, Malaysia, Indonesia, Philippines and Vietnam 1992-2013**  
 Source: World Bank (2015a) - <http://data.worldbank.org/indicator>

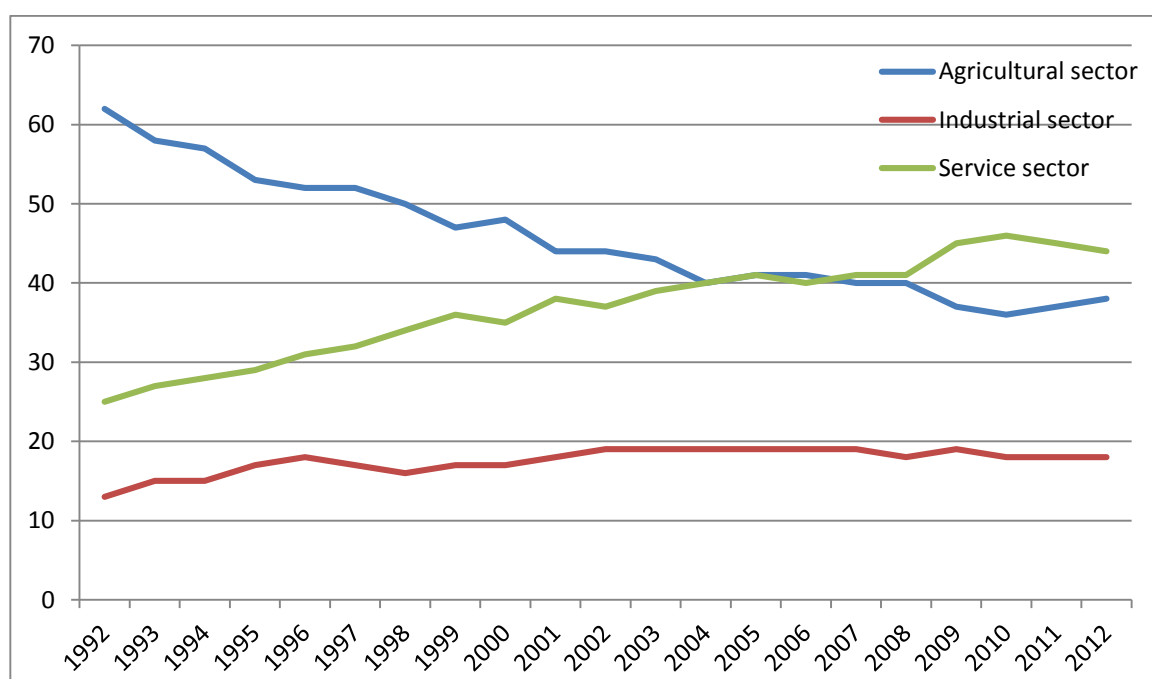
Falkus (2000) and Tonguthai (1996) both believed that the Thai woman's significant contribution to the labour market was in addition to the crucial role most have in the family. For example, Tonguthai (1996) explained that the success of rural women who came to Bangkok seeking factory jobs was often measured by the amount of remittance they sent back home. This may explain the high participation of Thai female workers in the labour market compared with other most ASEAN countries.

Graph 8.3 shows the percentage of female employees during 1992-2012 in Thailand in the agricultural, industrial and service sectors. These results show that most female workers had previously been in the agricultural sector, although their employment in this area had consistently dropped off since 1992. In contrast, the percentage of Thai female workers in the

service sector continued to rise, and was ahead of the other two sectors by 2009. The share of female employees in the industrial sector only slightly increased between 1992 and 2012.

Factors that contributed to the decreasing female labour force in agriculture included the reduction of agricultural land, which was recognised as a push factor (Kaosa-ard & Kaow-meessri 2007). In addition, the advancement of the country’s infrastructure during this period, such as roads, led to easier transport option for rural women to seek jobs in Bangkok and its surroundings (Falkus 2000). Another factor was the increasing educational attainment by Thai women, encouraging them to strive for work in other industries (Kaosa-ard & Kaow-meessri 2007).

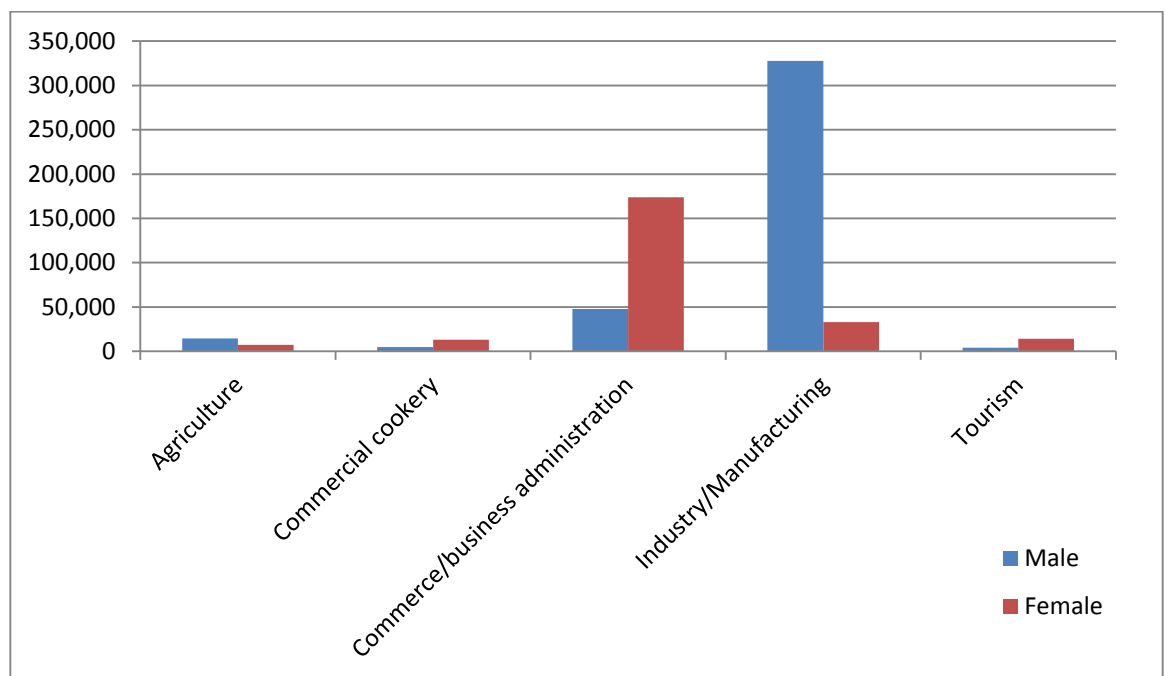
Questions that have arisen from these results include why more of Thailand’s female workforce chose to work in service rather than industrial. Was this because of gender-job stereotyping? Or did the female workforce not have the right skills required by the industrial sector?



**Graph 8.3: Percentage of female employees in agricultural, industrial and service sectors in Thailand 1992-2012**

Source: World Bank (2015a) - <http://data.worldbank.org/indicator>

Graph 8.4 compares the number of female versus male vocational students by vocational education in Thailand in 2014. These results show that the types of vocational education which have most often been required by the labour market such as industry/manufacturing have been dominated by male students. This reflects the often discussed attitude of Thai society with regard to gender-job stereotyping. Female vocational students tended to study in the less skills-intensive areas such as commercial cookery, commerce and tourism. The Thai Government should therefore encourage higher enrolment of female students in the industry/manufacturing field, which will increase a vocationally skilled workforce most relevant to the requirements of the labour market.

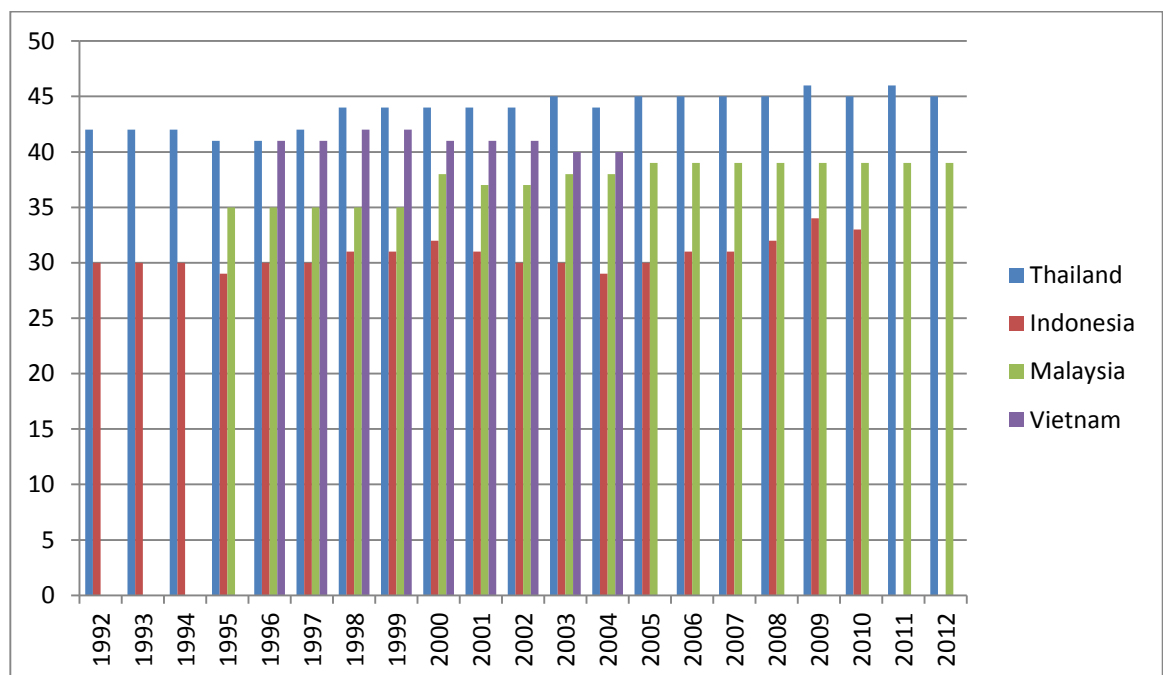


**Graph 8.4: Number of vocational students by types of vocational education, by gender in Thailand in 2014**

Source: Office of Vocational Education Commission (2015) - <http://www.vec.go.th/>

Graph 8.5 shows the percentage of women employed in the non-agricultural sector in ASEAN countries during 1992-2012 – Thailand versus Indonesia, Malaysia and Vietnam. The non-agricultural sector relates to industry and service sectors that require workers with stronger technology-intensive skills such as in mining, manufacturing, construction, electricity, wholesale and retail trade, hospitality, transport, communications, financing, insurance, real estate, and business services.

These results show that the share of employed women in the non-agricultural sector in Thailand increased during the period, to nearly be equal to the share of male employees. This growth in more technology-intensive employment indicates that the female workforce has played an important role in the non-agricultural sector of the Thai labour market. In contrast, in Indonesia and Malaysia the results clearly reveal that the majority of employees in the non-agricultural sector were male; only Vietnam had similar results to Thailand.



**Graph 8.5: Percentage of women employed in the non-agricultural sector in Thailand, Indonesia, Malaysia and Vietnam 1992-2012 (% of total non-agricultural employment)**  
 Source: World Bank (2015a) - <http://data.worldbank.org/indicator>

### 8.2.6 Summary of policy on female workforce 1992-2014

The data in this section have highlighted the significant participation of women in the Thai workforce. Falkus (2000) emphasised the need for Thai women to be co-income earners to support their families. The participation of Thai women in labour workforce is higher than in

other ASEAN countries. Evidence of the significant role of women in the labour market was confirmed in the previous research of Tonguthai (1996), Fawcett (2012) and Finkelston (2014). In addition, to encourage greater female participation in Thailand's workforce, the government was heavily involved in stimulating women to pursue educational interests, as highlighted in its various initiatives between 1992 and 2014. As a result, the number of female students enrolled in educational institutions eventually outnumbered male students, especially at the secondary and tertiary levels. This growth of women in education has contributed to the expansion of female employees in the country's labour pool, especially in the non-agricultural sector. These findings suggest that the Thai Government has been highly successful at promoting and encouraging more women to enter the workforce.

Despite this progress in the expansion of female workers, a key obstacle was evidenced across most of the research period – gender-job stereotyping – which has caused unequal employment opportunities between men and women. In this regard, the Thai Government still needs to enhance the capacity of women in the workforce by providing skills training that matches the needs of the labour market, and by promoting attitudinal change within society on gender-job stereotyping.

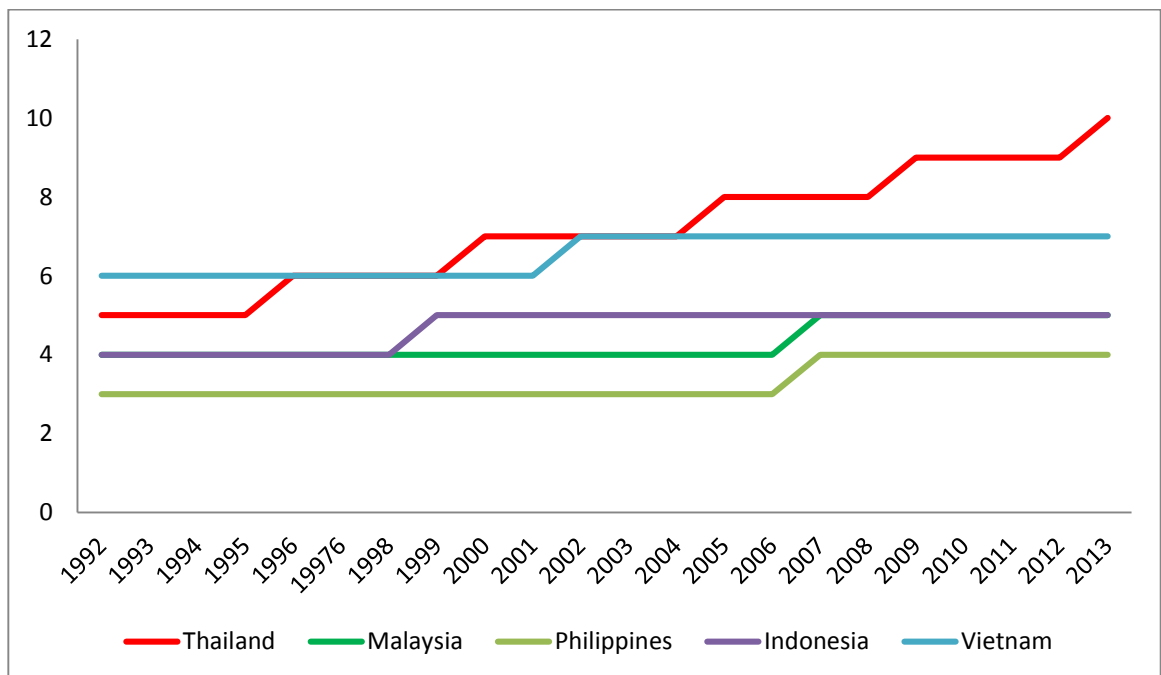
### **8.3 Ageing workforce**

Based on the literature review, the scope of study on Thailand's ageing workforce covers areas such as expanding retirement age, working flexibilities, and retraining (Costa & Milia 2008; Fang 2009; Fenwick 2012; Osman-Gani & Chan 2009; Walker 2006). In line with this focus, the policies of the Thai Government related to the ageing workforce in Thailand during 1992-2014 are discussed.

#### **8.3.1 Policy on ageing workforce during the period of NESD Plan 7 (1992-1996)**

During the period of NESD Plan 7, between 1992 and 1996, there were no government statements or policy releases with regard to Thailand's ageing workforce. However, newspaper articles of this period with headlines like *Judges should retire at 65 says Chalerm* (1995), *Parties make judge term bill urgent but refuse to hurry* (1996), and *Row over judges tenure triggers frantic lobbying* (1996) highlighted a skills shortage in the judicial system and the need to extend the retirement age of judges. Most court judges had been retiring at the age of 60, which some wanted extended to the standard retirement age of 65. A consequent bill to extend the retirement age of judges went to Thailand's parliament in April 1996 and was approved in 1999 (The Retirement Age of Public Servants B.E.2542 1999).

Graph 8.6 shows the average population aged 65 and over in Thailand from 1992 to 2013, in comparison with its nearby ASEAN neighbours – Malaysia, Indonesia, the Philippines and Vietnam. The results clearly show that the percentage of ageing population in Thailand was higher than the other countries across most of this period, followed by Vietnam. It would therefore be beneficial for the Thai Government to consider implementing proactive policies to encourage the ageing workforce to stay in the labour market, particularly as the country is aiming for its next phase of economic growth but is faced with labour shortages.



**Graph 8.6: Percentage of population aged 65 and over per total population in Thailand, Malaysia, Indonesia, the Philippines and Vietnam 1992-2013**

Source: World Bank (2015a) - <http://data.worldbank.org/indicator>

In response to the increasing number of elderly in Thailand, the government developed the First National Plan for Older Persons which covered the period between 1982 and 2001 (Jitapunkul & Wivatvanit 2009). However, this plan was more about providing guidelines on the treatment of the ageing population and was not in reference to engaging the older population in the workforce (Jitapunkul & Wivatvanit 2009). The plan focused on co-residing between the elderly and their families, encouraging children to take care of their parents and grandparents.



### **8.3.2 Policy on ageing workforce during the period of NESD Plan 8 (1997-2001)**

Similar to the previous period, in NESD Plan 8 there was no mention of skills training or preparing the ageing population for further participation in the labour market (The NESD Plan 8 1997-2001). NESD Plan 8 only focused on ensuring that aged people would be looked after and cared for physically and mentally (The NESD Plan 8 1997-2001). In contrast, Prime Minister Chuan Leekpai declared in his policy statement from this same period that the ageing workforce would be provided with education, skills training and employment opportunities in order to be self-reliant (Chuan Leekpai's Policy Statement 1997). This policy statement confirms the government's prioritisation of ensuring Thailand's ageing population would be self-reliant rather than a substitute workforce. During this period, discussions about extending the standard retirement age of the Thai workforce were also common (Corbett 1999). Some argued that as the development of science and technology had provided people with healthier and more active lives than before, people were more likely to live longer and continue working (Corbett 1999).

Also during this period covered by NESD Plan 8, the 'brain bank' concept was introduced by Queen Sirikit and widely debated and reported on in the media (Branchflower & Branchflower 2000; East 2001; Srivalo 2000). The proposed brain bank would perform as a national think tank, providing independent recommendations; members comprising of retired academics, army generals, bureaucrats and businessmen. The Thai Government approved the brain bank initiative in August 2000, and assigned its implementation to the NESD Board (Cabinet Resolution 15 August 2000). The NESD Board first had to collaborate with each Thai ministry to find retired bureaucrats who could join as members, and then acted as a coordinator to link the retirees' suggestions with the authorised government agencies.

However, as this project used retired voluntary participants, its members could only really provide suggestions with regard to expertise required. Hence, brain bank could not provide an effective resolution to the country's skill labour shortage; it instead showed the influence of Thailand's Royal Court over the Thai workforce policy planning process.

### **8.3.3 Policy on ageing workforce during the period of NESD Plan 9 (2002-2006)**

The labour potential of the ageing workforce was again not specifically referred to in NESD Plan 9; it only generally referred to the need for equal opportunities for all Thai citizens. In this same period, Prime Minister Thaksin Shinawatra declared in his first policy statement that his government would encourage the use of the ageing population's knowledge and experiences to help with the country's development (Thaksin Shinawatra's Policy Statement 2001). Then in

his next policy statement, Prime Minister Thaksin Shinawatra reiterated that a stronger contribution by the ageing population would be encouraged, using their experiences to participate in the country's development (Thaksin Shinawatra's Policy Statement 2005). In addition to these policy declarations, the Second National Plan for Older Persons (2002-2021) was implemented, where employment of the elderly was one of the key focuses (Jitapunkul & Wivatvanit 2009). In this plan it was specified that ongoing work would be promoted for the elderly, and skills training would be provided while an extension of their retirement age would be encouraged.

As the number of Thai elderly people continued to increase during this period, there was a surge in media reporting (Assavanonda 2002a; Editorial 2005b; Hutasingh 2003) calling for policy change to keep the aged in the labour workforce longer. The Thai Government was pressed to encourage its ageing workforce to continue distributing their skills, experiences and knowledge to the labour market; while an extension of the retirement age was still widely debated. Suggestions were made to extend the retirement age of Thai civil servants from 60 to between 62 and 65 years, according to Chantanusornsiri (2006); *Thailand: Labour experts urge raising retirement age to 65* (2006); and *Thailand: Survey of situation of older persons in Thailand* (2006). Academics from various government agencies such as the Bank of Thailand and the NESD Board also encouraged the government to increase the standard retirement age (Chuenchoksan & Nakornthab 2008; Naewpanich, Phongsamut & Wittayapul 2009).

Furthermore, Chuenchoksan and Nakornthab (2008) pointed out that an extension of the working life of ageing employees would help to boost Thailand's GDP growth by 0.2%. In addition, it was suggested that the extending of the country's retirement age could potentially ease the country's skill labour shortage. Extending the working life of Thai citizens also had other potential benefits such as reducing dependence on the Social Security Office (SSO) which was struggling to cope with its increasing financial problems due to the continued increases in elderly people, including additional health care costs and pension funds (Chuenchoksan & Nakornthab 2008).

#### **8.3.4 Policy on ageing workforce during the period of NESD Plan 10 (2007-2011)**

Once again, the policy of encouraging Thailand's ageing workforce to remain in or re-enter the labour market was not mentioned in NESD Plan 10 (The NESD Plan 10 2007-2011). In addition, out of the four prime ministers in office during this period, only the last two – Somchai Wongsawat and Abhisit Vejjajiva – promoted employment of the elderly in their policy statements. Also during this period, most media reporting was in relation to issues surrounding

Thailand's ageing workforce, such as welfare, rather than focusing on potential opportunities from encouraging their continued employment. Only one newspaper article from this time could be found – *Thailand: Survey finds widespread poverty among the elderly* (2010) – that urged the Thai Government to offer more job opportunities to the elderly. It was highlighted in this article that one-third of Thailand's elderly were living in poverty and that this was a valid reason for providing them with more job opportunities. It was argued that if more elderly were in the Thai workforce, they would rely less on the government and other family members.

Despite the lack of government initiatives during this period, a survey on the ageing workforce's participation in the Thai labour market was conducted (Adhikari, Soonthorndhada & Haseen 2011). This survey found that most elderly who were still involved in the labour market lived in urban areas, were married, were heads of families, did not live with their children, had never been public servants, and were in financial difficulties. The survey also revealed that Thai elderly who only had primary level education or no education at all were more likely to still be working than those who had completed secondary or higher education. This result of the survey further highlights the lack of government initiative in maintaining skilled elderly in the workforce. The survey recommended that, in order to retain more elderly in the labour market, the Thai Government should improve the health status of its elderly (Adhikari, Soonthorndhada & Haseen 2011).

### **8.3.5 Policy on ageing workforce during the period of NESD Plan 11 (2012-2014)**

In the most recent NESD Plan 11, it was pledged that the capabilities of Thai citizens of all ages would be improved (The NESD Plan 11 2012-2016), while the policy of the country's ageing workforce was not specifically mentioned. The policy statements of Prime Minister Yingluck Shinawatra also did not mention skills development or employment of the ageing workforce. Although in her policy statements, she did recommend that the elderly be encouraged to participate in the country's development due to their extensive experience (Yingluck Shinawatra's Policy Statement 2011).

During this period, the main focus of media reporting on Thailand's ageing workforce was again in relation to extending Thailand's retirement age (Chutikul 2013; Deboonme, Saengpassa & Sarnsamak 2012; Editorial 2012, 2014). The Civil Service Commission was asked to increase the standard retirement age from 60 to 62, and for professionals such as doctors, nurses, law specialists, engineers and university lecturers it was recommended that it be extended to 70.

In April 2012, the National Economic and Social Advisory Council proposed to cabinet that employment regulations be amended and implemented in relation to Thailand's ageing workforce (Cabinet Resolution 24 April 2012). The key recommendations included extending retirement age in the public sector, encouraging the private sector to employ ageing workers, changing society attitudes towards ageing workers, providing skills development to the elderly, and support the ageing workforce to keep healthy both mentally and physically.

### **8.3.6 Summary of policy on ageing workforce 1992-2014**

During the period of 1992-2014, the potential role of the ageing workforce was barely focused on. In most government policies and plans it was only specified that the elderly would be taken care of. Only the Second National Plan for Older Persons (2002-2021) referred to the promotion of employment opportunities for the elderly; yet there was still no evidence to confirm the implementation corresponding government policy. In the media, the issue most often discussed during this period in relation to Thai's ageing workforce was the expanding of the retirement age. It was proposed that the standard retirement age be expanded from 60 years to 62 or 65 years. However, no final solution emerged in relation to this.

From this analysis, this study has concluded that the Thai Government was and possibly still continues to be reluctant to promote and encourage its ageing workforce to stay in the labour market. It would appear that the concept of using the elderly as a substitute workforce has not been accepted by most Thais. One of the main reasons for this lack of enthusiasm may be cultural – children looking after the elderly has been part of Thai society for many years (Adhikari, Soonthorndhada & Haseen 2011; Knodel, Chayovan & Siriboon 1992). Sukin (2006) contended that children taking care of their elderly is so entrenched in Thai culture that not doing so may incur disrespect from neighbours and other community members. In line with this, allowing the elderly to continue working could be perceived as younger family members not looking after them properly. Thus, there has not been any clear government policy that addresses the potential of using the ageing population as a substitute workforce in the Thai labour market.

## **8.4 Disabled workforce**

From the extant literature, the disabled workforce has been highlighted as a key area of study with regard to government policy responses to Thailand's skill labour shortage (Berkowitz & O'Leary 2000; Campbell 2010; Gröschl 2004; Tufan, Yaman & Arun 2007). This section aims to assess how the Thai Government has trained the disabled to become a substitute workforce to

help fill the skill labour shortage gap. Hence, the discussion below will explore the policies of the Thai Government in relation to its disabled workforce during the period of 1992-2014.

#### **8.4.1 Policy on disabled workforce during the period of NESD Plan 7 (1992-1996)**

The policy of the disabled workforce was referred to in NESD Plan 7, where it was pledged that this disadvantaged group would be supported. The three relevant prime ministers from this period – Suchinda Kraprayoon, Chuan Leekpai and Bunharn Silpa-archa – also declared in their policy statements that the government would provide education and skills training to disabled people (Bunharn Silpa-archa's Policy Statement 1995; Chuan Leekpai's Policy Statement 1992; Suchinda Kraprayoon's Policy Statement 1992). Yet even though all of these prime ministers made similar declarations about educating and training the country's disabled, no particular plan was implemented to empower this group to become a substitute skilled workforce.

During this period a blind academic voiced a need for Thailand's disabled to feel productive in the main workforce (Punong-ong 1994). He argued that the existing special schools for disabled children did not enable these students to integrate into the general community, and therefore suggested a special curriculum be implemented to help with this (Punong-ong 1994).

It was noted during this period that recognition from the Thai community about the relevance of disabled children needed to be improved. At a Children's Rights Forum in November 1995, as reported in *Young delegates call for better education* (1995), it was stated by one delegate that disabled students were mostly ignored by the community, and as a result had less chance to pursue their studies to a higher level. The issue of the disabled being disadvantaged in relation to further education was further emphasised by Murray (1998), who also argued that disabilities in Thailand were largely neglected by the community. He believed that many disabled Thais had missed out on opportunities to participate in the social, economic, political and cultural life of the community, which often resulted in limited access to education, skills training, health care and employment (Murray 1998). This predicament of the disabled missing out on further education opportunities highlights the need for proactive government policy at both a school and community level to enable opportunities to live productively in society. Greater recognition of the disabled by the Thai community could open opportunities for the disabled workforce, which could be used as another substitute workforce to address the skill labour shortage in Thailand.

According to *The disabled want to get on the electric train too* (1995) and Assavanonda (1996), there was another obstacle preventing the development of many of Thailand's disabled – the lack of facilities for them to live independently in Thai society, such as access to public

transport and communication channels (e.g. telephone booths), as well as the poor quality of many of Thailand's walkways. There is little debate that the installing of public facilities for the disabled could provide greater opportunities for them to integrate with the community. For instance, the ability to easily commute to both study and work could cultivate more disabled people with the ability to further enhance their job prospects; thereby increasing the number of skilled workers in Thailand (Assavanonda 1996).

#### **8.4.2 Policy on disabled workforce during the period of NESD Plan 8 (1997-2001)**

In NESD Plan 8, it was declared that Thailand's disabled would be developed to their full potential (The NESD Plan 8 1997-2001). It was also specified in this plan that education at all levels must be provided to disabled people, including vocational, in order to better prepare them for the labour market.

In his policy statement, Prime Minister Chavalit Yongchaiyudh pledged that his government would encourage and support all Thai children to access 12 years of education, including disabled children (Chavalit Yongchaiyudh's Policy Statement 1996). His successor, Prime Minister Chuan Leekpai who returned to the office for a second time, also asserted that education and skills training would be provided to disabled children to increase their self-reliance (Chuan Leekpai's Policy Statement 1997).

Both NESD Plan 8 and the above policy statements above indicate that the development of Thailand's disabled was adequately supported by the government during this period. The Thai Government clearly indicated intentions to create more opportunities for disabled children in relation to accessing education. Furthermore, in 1999 the Thai Government announced that that would be the Year of Education for the Disabled (Cabinet Resolution 16 February 1999). Later, the government also approved regulations for better managing education for Thailand's disabled, which included increasing the budget for the disabled, hiring more teachers, and building more centres for disabled (Cabinet Resolution 6 July 1999). In addition, disabled children who went to private schools were granted completely free education (Boonrath 2000).

Yet even though the government was attempting to provide more education opportunities for disabled children during this period, there were still obstacles that could limit their future employment opportunities. These obstacles included the disabled person's own personal situation such as physical ability; public infrastructure issues; and people's negative attitudes towards them (Antaseeda 1999). Many of the disabled had not received basic education which prevented them from taking advantage of the further education opportunities such as

vocational education (Nakornthap 1997). In addition, there were few vocational education institutes which catered to disabled students' needs disabled students (Antaseeda 1999).

In a report from the ILO (Murray 1998) on vocational training of disabled persons by the government institutes in Thailand, barriers were identified, such as illiteracy among the disabled, curriculum that was not up to national standards, a lack of sufficient instructors, a lack of modern equipment, and courses that did not match the requirements of the labour market. Obstacles like these highlighted the insufficiency of the government's vocational training for the disabled, and the ILO report provided several recommendations such as on-the-job training, cooperation between government and NGO training centres, and integrated training between disabled and mainstream students (Murray 1998). The benefits of cooperating with NGO centres included access to sufficient instructors and modern equipment, while training with mainstream students and providing training would help the disabled to better integrate with the society when they enter the labour market (Murray 1998). The vocational training of disabled persons was under the responsibility of Department of Public Welfare, which in 1998 ran seven vocational training centres across the country.

In addition to ill-equipped government policy and education frameworks, attitudes of parents were also often an obstacle for the development of disabled children. It was reported in several newspaper articles such as *EDUCATION FOR DISABLED: Thanks to several state and volunteer initiatives* (2001) and *Differently able* (2001) that it was common for parent to keep their disabled children at home. A parent of disabled children was cited in *EDUCATION FOR DISABLED: Thanks to several state and volunteer initiatives* (2001) as saying that:

... why do you have to teach such a stupid girl. She is stupid so let her be. She won't get any better, so stop wasting your time ... and don't bring her milk because she always spills it around the house. Worse, she always pees in her bed, stupid girl. Feeding her is a waste of time ... (<https://global-factiva-com.ezproxy.lib.swin.edu.au/redirect/default.aspx?P=sa&an=bkpost0020010710dx2b006qk&cat=a&ep=ASE>)<sup>13</sup>

The President of a disabled club in Nakorn Pathom province agreed that parents were often an obstacle to the development of their disabled children (Pornpitagpan 1999), stating that these attitudes were very difficult to change, and that most were very protective and chose to keep their disabled children at home isolated from the community. He believed that a change in

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<sup>13</sup> Please note that the newspaper article was derived from Factiva, an online database, which does not provide the page number of this article. Therefore, the web-link is used for this direct quote.

attitude towards disabled including within their families was necessary in order to improve the quality of life of Thailand's disabled (Pornpitagpan 1999). The change in attitude can also provide the employment opportunities to the disabled.

According to the Thai Government's *Rehabilitation of Disabled Persons Act (1991)*, during this time, employers were obliged to hire a certain proportion of disabled workers<sup>14</sup>. Employers that did not hire disabled workers had to contribute to the Disabled Rehabilitation Fund an equivalent of the minimum wage for a year for a disabled person – or close to 40,000 Baht – for each disabled worker not employed. In the same article, a senior officer from the Ministry of Industry acknowledged that some employers preferred to contribute to the fund instead of hiring the disabled, to avoid extra worries and costs that may occur from hiring them. Despite this policy, many Thai employers failed to either hire disabled workers or contribute to the fund during this period (Antaseeda 1999), and no report was found in this study about consequent penalties, which signifies the inefficiencies of the Thai legislation system at this time.

Another major issue of this period that prevented the disabled from being employed was their lack of connectivity with the Thai society. The Director of the Office of the Committee for Rehabilitation of Disabled Persons was quoted in Antaseeda (1999) as saying:

Learning to adapt themselves to the outside society and workplaces was as important as improving their skills ... Many of them broke down because they could not handle the pitiful looks from strangers ([https://global-factiva-com.ezproxy.lib.swin.edu.au/redirect/default.aspx?P=sa&an=bkpost0020010901\\_dv7q007nw&cat=a&ep=ASE](https://global-factiva-com.ezproxy.lib.swin.edu.au/redirect/default.aspx?P=sa&an=bkpost0020010901_dv7q007nw&cat=a&ep=ASE)).

The above discussions clearly show that the obstacles for the disabled to be employed are all related. For instance, most disabilities are physical, which often causes difficulties in commuting; and parents may not be able to provide assistance in this area. Hence, as parents are often unable to meet their transportation needs, many disabled are kept at home (Paul 1999). When the disabled are isolated at home, they are generally unable to access educational facilities, which can reduce their ability to acquire the necessary skills to be productive in society. This lack of skills further compounds the negative attitude held by employers and others.

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<sup>14</sup> The process of calculating this proportion was often drawn-out. Later in 1994, the Ministry of Social Development and Human Security issued ministerial regulations on this proportion, specifying that the employer must hire 1 disabled person to every 200 regular employees.



A journalist, Paul (1999) pointed out that the disabled have the right to live, the right to be educated and the right to move, and he argued that the lack of public accessibility was often caused by an unwillingness to provide supportive services to the disabled. As an example in relation to Thailand, Bangkok Mass Transit System (BMTS), the company which built the city's electric train system, promised to implement accessibility for the disabled at five major stations, but only did so at two major stations (Bangprapa & Techawongtham 1999).

#### **8.4.3 Policy on disabled workforce during the period of The NESD Plan 9 (2002-2006)**

In NESD Plan 9, it was only generally stated that equal opportunity should be provided to all Thai citizens, with no specific mention of Thailand's disabled workforce. Prime Minister Thaksin Shinawatra had stated that his government would provide education and skill training to disabled people (Thaksin Shinawatra's Policy Statement 2001), and his determination to assist the disabled was cited by Assavanonda (2002b):

We must accept the truth that disabled people do exist in our society, and they have the potential to be developed ... We must empower them so that they can rely on themselves and will not become a burden to society ... Their rights must be respected (<https://global-factiva-com.ezproxy.lib.swin.edu.au/redir/default.aspx?P=sa&an=bkpost0020021011> dyab0005q&cat=a&ep=ASE).

While this quote shows the recognition of Thai policymakers with regard to the need to develop the disabled, obstacles still remained during this period. One of the major hurdles was the unsystematic amount of disabled persons in Thailand – the number of disabled people and the 'disabled' varied among Thai government agencies. For example, the National Statistical Office estimated the number of disabled in Thailand to be around six million, while the Sirindhorn National Medical Rehabilitation Centre estimated that there was only one million (Assavanonda 2002b; Editorial 2003b). This clear discrepancy between estimated figures obviously made policy decision-making in relation to Thailand's disabled challenging.

As another attempt to assist the disabled during this period, the Thai Government announced that 2002 was the Year of Employment Opportunity for Persons with Disabilities (Antaseeda 2002). A corresponding plan involving professional training for disabled persons was employed, which was to be established in every province, with services including skills training and searching for job vacancies (Antaseeda 2002).

Following on from this, in 2003 a new Thai law for the disabled began to be drafted. According to *New law for Thai PWDs drafted* (2003), there was no existing legislation that covered all

issues for disabled persons. The most relevant law was the *Rehabilitation Act for Disabled Persons (1991)* which only related to rehabilitation for the disabled. Hence, the parliament's Committee on Justice and Human Rights drafted a new law for the disabled in 2003, which aimed to provide equal rights and opportunities with non-disabled persons. It became law in 2007, legislated as the Promoting and Developing Quality of Life for the Disabled B.E.2550 (1997) act.

Despite these government efforts to ensure equal opportunity and skills development, the main desire of most disabled Thais during this period, as reported in the media, was in relation to public infrastructure (Ashayagachat 2005; Assavanonda 2002b; Editorial 2003b, 2004, 2005a, 2006; Wipatayotin 2005). Relevant infrastructure requirements included public toilets, ramp access for wheelchairs, public telephones, and specially designed footpaths. One leader from a disabled group alleged that the government was too focused on the strengthening capacity of the disabled via skills training, while not serving the real needs of the disabled in relation to infrastructure (Wipatayotin 2005).

#### **8.4.4 Policy on disabled workforce during the period of NESD Plan 10 (2007-2011)**

It was specified in NESD Plan 10 that all Thai persons would be provided with physical and mental development (The NESD Plan 10 2007-2011), which could be assumed to include the disabled. In terms of policy statements, Prime Minister Surayud Chulanont was mainly focused on the welfare of the disabled (Surayud Chulanont's Policy Statement 2006). Prime Ministers Samak Sundaravej and Somchai Wongsawat subsequently pledged that their governments would support the disabled by providing access to 12 years of free education (Samak Sundaravej's Policy Statement 2008; Somchai Wongsawat's Policy Statement 2008). Somchai Wongsawat further declared in his policy statement that his government would support skills development and encourage employment of the disabled. While the Somchai Government only lasted two months due to political unrest<sup>15</sup>, his intentions were continued when the next Prime Minister, Abhisit Vejjajiva, declared in his policy statement that his government would support the employment of disabled Thais (Abhisit Vejjajiva's Policy Statement 2008).

Apart from Prime Minister Surayud, the other three prime ministers across this period intended to support the education and employment of Thailand's disabled. In addition, there were significant cabinet resolutions on the disabled during this period, such as approving the

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<sup>15</sup> Thailand's current political unrest was started by a military coup in August 2006, where the elected government of Prime Minister Thaksin Shinawatra was overthrown. Since then, Thai society has been split into two sides, and political unrest has been ongoing for close to a decade, which has resulted in some short-lived governments.

budget on education for disabled children (Cabinet Resolution 14 November 2006), approving the *Promoting and Developing Quality of Life for the Disabled Act* (Cabinet Resolution 10 April 2007), approving the *Special Education Act* (Cabinet Resolution 24 April 2007a), approving the Third Quality of Life Development Plan for the Disabled (2007-2011) (Cabinet Resolution 24 April 2007b), approving the five-year Special Education Plan for the Disabled (2007-2011) (Cabinet Resolution 25 December 2007), and agreeing in principle that the public offices must offer infrastructure facilities to the disabled by the year 2011 (Cabinet Resolution 19 May 2009).

In January 2008, the *Education for Disabled Act* was passed; where the key context was free education for Thailand's disabled. This showed progress in developing Thailand's disabled workforce. Next in 2011, the Thai Government made further progress by promoting employment of the disabled via the Ministry of Labour's issuing of a ministerial regulation on the quota of disabled employees in the workplace. It was stated that both public and private organisations which employ more than 100 employees must employ 1 disabled employee per 100 able employees (The Ministerial Regulation on the quota of disabled employees in the workplace B.E.2554 2011). This ministerial regulation that was introduced in 2011 greatly benefited Thailand's disabled, providing them with more employment opportunities. It had previously been very difficult for Thailand's disabled to be employed, based on obstacles such as the attitude of business owners, lack of facilities for the disabled, and the abilities of the disabled themselves (Ketpama 2004). In addition, transportation and commuting were often limited the disabled's work opportunities (Sangiampongsa 2007).

#### **8.4.5 Policy on disabled workforce during the period of NESD Plan 11 (2012-2014)**

As NESD Plan 11 was focused on people-centred development, it was stated that the capabilities of Thai citizens of all ages would be improved to meet global challenges, and that disadvantaged groups would have access to equal opportunities (The NESD Plan 11 2012-2016). Even though the term 'disabled' was not specified in the plan, it can be assumed from the previous periods' data discussed above that the development of the disabled workforce was covered in NESD Plan 11. In her policy statement, Prime Minister Yingluck Shinawatra declared that educational opportunities would be provided to all disadvantaged groups including the disabled (Yingluck Shinawatra's Policy Statement 2011). In addition, public infrastructure would be provided for the disabled in order to improve their quality of life.

The disabled were even more acknowledged by the Thai Government in this most recent period. For instance, it was clarified in the Fourth National Disabled Development Plan B.A.

2555-2559 (2012-2016) that the government had become more aware of the disabled as a result of a specification in Constitution B.E. 2550<sup>16</sup>, that equal opportunities for education and public welfare must be provided to the disabled (The Fourth National Disabled Development Plan B.E. 2555-2559).

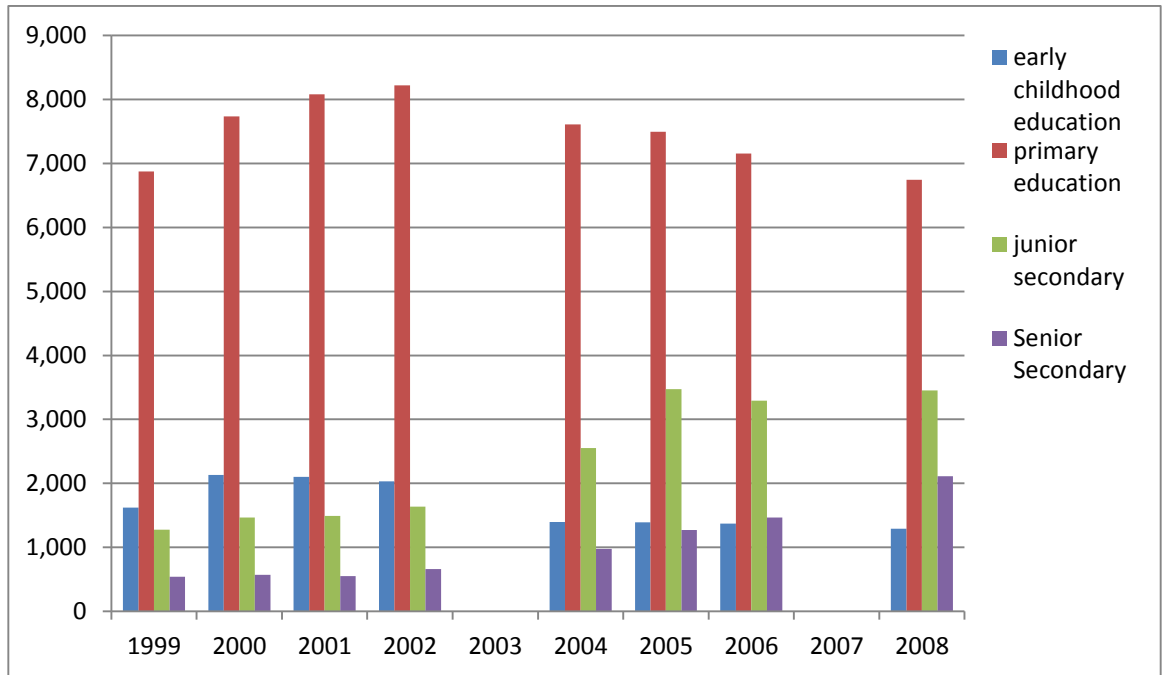
Thailand's private sector also became more aware of the importance of equal employment opportunities for the disabled during this period. As examples, Advanced Info Service, a Thai telecommunications firm, started to employ blind employees in its call centres; KFC (Thailand) started to recruit disabled employees; and a real estate company employed disabled employees to work in its prefabrication factory (Deboonme 2013). Further encouragement from the Thai Government to support employment of the disabled was evidenced in the job fair reported in 'Thailand: Job Fair for the Disabled to be held at Central World' (2013).

#### **8.4.6 Summary of policy on disabled workforce 1992-2014**

The next two graphs below show further evidence of the above discussions in relation to education opportunities that have been available to disabled children in Thailand. Graph 8.7 shows the number of disabled students in early childhood, primary and secondary levels in public schools in Thailand during 1999-2008. These results clearly highlight that even though there were large numbers of disabled students at primary level, relatively few continued their studies to the higher levels. This is despite the upward trend in the number of disabled students at both junior secondary and senior secondary levels since 1999.

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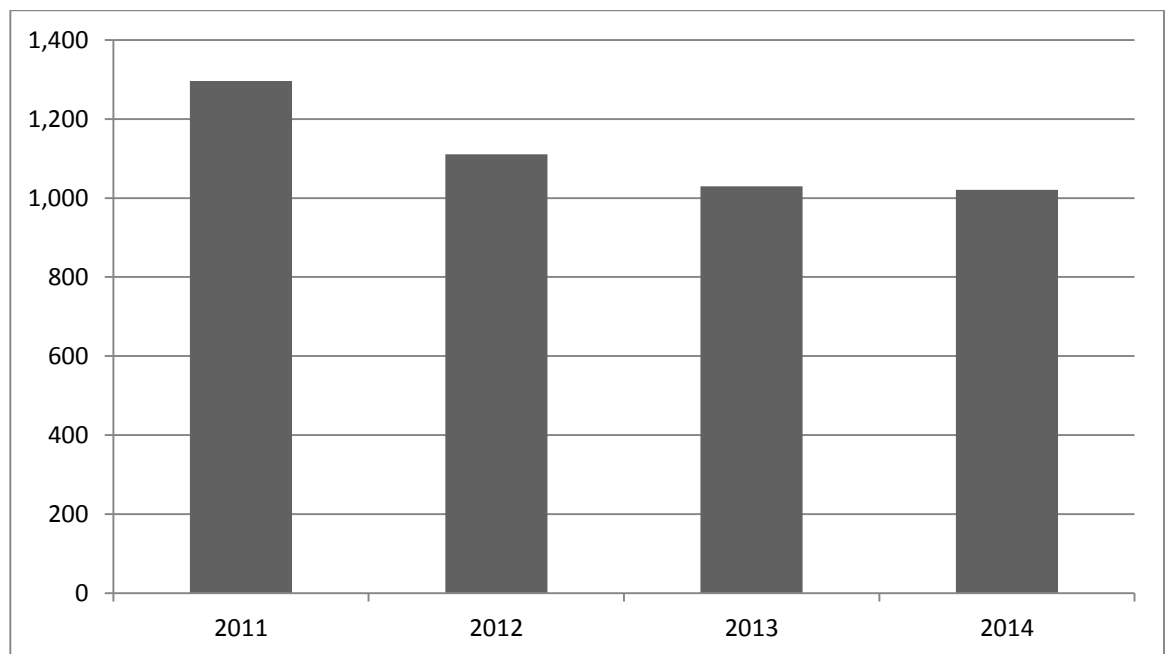
<sup>16</sup> The Constitution is the supremacy law of Thailand, which is aimed to address both the limitations and the legitimate power of the Thai Government. Constitution B.E.2550 (2007) was the result of a military coup in 2006 which overthrew both the elected government and Constitution B.E. 2540. After the coup, a committee appointed by the military junta legislated a new constitution for the country, which became Constitution B.E. 2550.



**Graph 8.7: Number of disabled students in public schools at early childhood, primary and secondary levels in Thailand 1999-2008**

Source: Ministry of Education (2015) - [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)

Graph 8.8 displays the number of disabled students in vocational education in Thailand between 2011 and 2014. In 2011, there were about 1,300 disabled students in vocational education, which steadily decreased to around 1,000 students in 2014. These results indicate that more attempts need to be made by the Thai Government to encourage disabled students to improve their skills via vocational education, to help address the country's skill labour shortage problem.

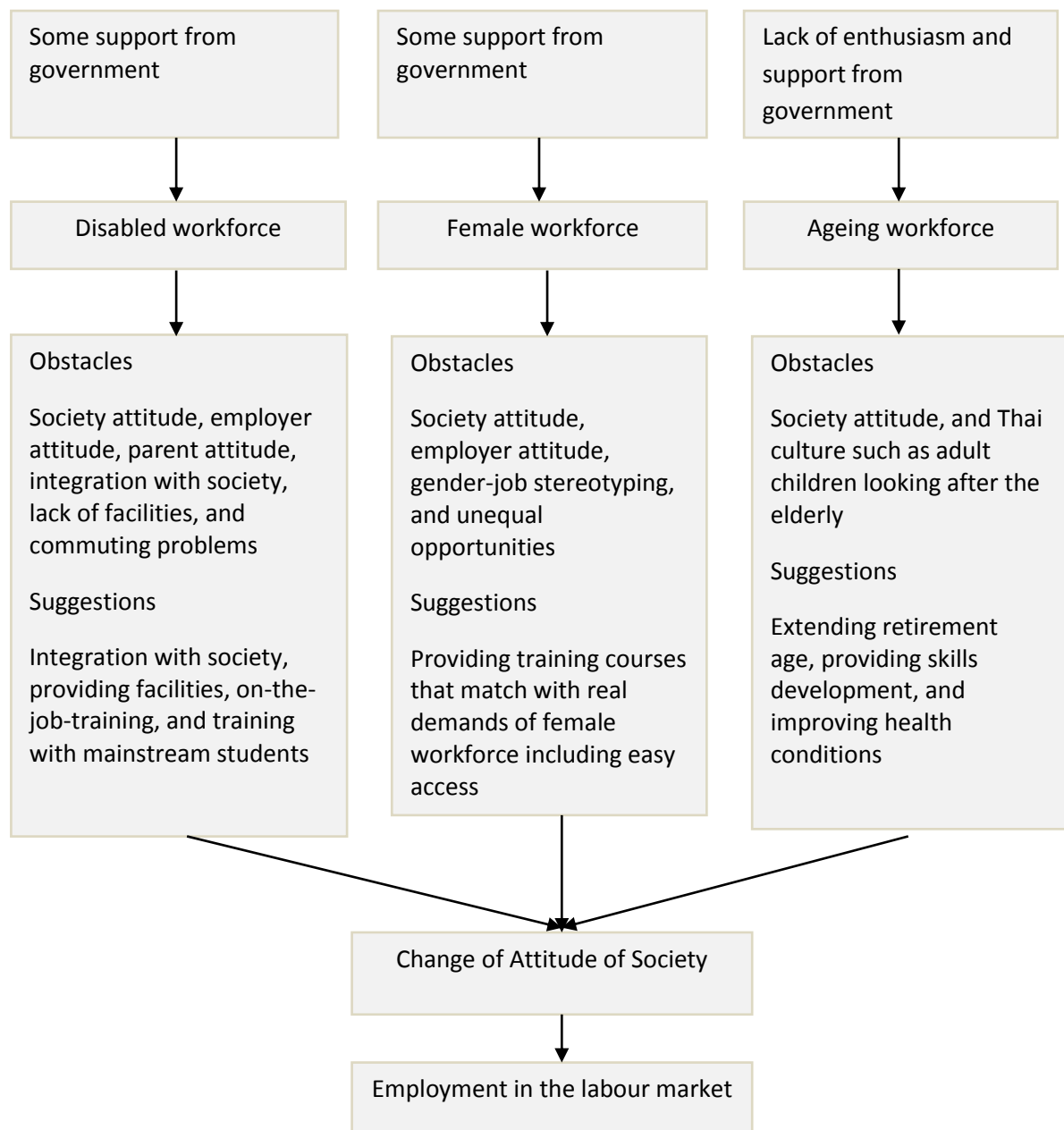


**Graph 8.8: Number of disabled students in vocational education in Thailand 2011-2014**  
Source: Office of the Vocational Education Commission (2015) - <http://www.vec.go.th/>

It is evident across this period that the NESD plans and the Thai Government have grown in their support of the development of Thailand's disabled. Laws, regulations and plans relating to education, training and employment opportunities for the disabled have been provided throughout the period of 1992 to 2014. However, obstacles still remain. The key issue in the development of Thailand's disabled workforce was the lack of integration with its society, mostly as a consequence of limited access to education; the attitude of parents, employers and society; and the lack of public facilities. As Bualar (2014) summarised, the attitude of society, parents and employers towards disabled persons are all main causes for a lack of

inclusion of disabled in the workforce. The Thai Government needs to focus on connecting positive attitudes towards disabled across all of these parties, which will help the disabled to be adequately employed and live independently. It is therefore argued in this thesis that if the disabled can fully connect with society, they are more likely to be effectively employed. In order to connect the disabled with society, a government must change the attitude of all parties including parents, employers and society. In addition, the building of adequate public infrastructure for disabled people must also be implemented.

Figure 8.1 below displays the summary of policy discourse outcomes on substitute workforces in Thailand, as identified in this study. The figure indicates how supportive the Thai Government has been for these three workforces, including obstacles and policy suggestions during the period from 1992 to 2014.



**Figure 8.1: Policy discourse outcomes on substitute workforces in Thailand 1992-2014**

### **8.5 Summary of the chapter**

The above discussions have provided data analysis of Thai Government policies on female, ageing and disabled workforces in response to the country’s skill labour shortage during 1992 to 2014. With regard to the female workforce, the Thai Government performed well in



encouraging women to enrol in education, especially at the secondary and higher education levels. However, the key obstacle was gender-job stereotyping for women in the labour market. Within the disabled workforce, the government had supported education and skills trainings. However, the key obstacle preventing disabled from entering the labour market was lacking connection with society. With regard to the ageing workforce, the government has been reluctant to encourage this workforce to re-enter the labour market due to cultural norm in Thai society, mostly based on the children taking care of their elderly. Based on the data analysis, the main similarity across the three substitute workforces relates to the attitude of Thai society, which needs to be changed in order to attract these workforces to the labour market.

## Chapter 9: Discussion

### 9.1 Introduction

This chapter provides overall interpretation and discussion of the data analysis in this study. In doing so, this chapter provides insight into Thailand's skill labour shortage problem by addressing the main research questions mentioned in Chapter 1. The main factors causing Thailand's skill labour shortage have been commonly identified as economic structural change (Decharuk, Leelapornchai & Udomkermongkol 2009; Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012), the decline of the Thai population (JETRO 2006; Sumulong & Zhai 2008), and the mismatch between education policy and the requirements of the labour market (Ducanes & Abella 2008; Park 2008a). As a consequence of this skill labour shortage, Thailand is stuck in the MIT where it is unable to move from its current position of a middle-income nation to that of a high-income country (Jimenez, Nguyen & Patrinos 2012; Jitsuchon 2012; Phasuk & Wann 2013). In other words, Thailand's economic development cannot progress as the factors identified as causing its skill labour shortage have produced a bottleneck in the nation's economic growth pathway.

Based on this general understanding, the factors causing the skill labour shortage in Thailand as identified in the extant literature were further analysed. In this thesis, documentation analysis and triangulation of data on education and training policies, migration policies, and substitute workforces have driven the research strategy. The primary data was sourced from Thai newspaper articles during the period 1992-2014, which were analysed and triangulated with Thai government policies policy statements, academic journal articles, and reports from international organisations.

Based on the observations from the documentation analysis and triangulation reported in Chapters 6 to 8 in relation to responses to Thailand's skill labour shortage, propositions were developed and presented for future testing. The propositions present potential policies that may help reduce Thailand's skill labour shortage problem in the three key policy areas: education and training; migration; and substitute workforces.

The input-outcome summary (see Figure 9.1 below) encapsulates the process undertaken in this study and forms the basis for the discussion in this Chapter. It summarises the themes developed in the conceptual framework (see Figure 4.1 in Chapter 4) on skill labour shortage in Thailand, the strategies applied to address these shortages drawn from data collected during 1992 to 2014, and the policy discourse outcomes generated from the analysis of the data.

Based on the documentation and triangulation analysis of the data, an additional factor contributing to Thailand's skill labour shortage has been identified and included in the input-outcome summary in Figure 9.1, which was not in the conceptual framework developed from extant literature (see Figure 4.1 in Chapter 4). While gathering the data, there were recurrent referrals to Thailand's illegal immigrants from neighbouring countries, nomadic Hill-Tribe villagers and refugees, who could also contribute to the Thai labour pool. This addition appears to be unique to Thailand (although it could also be relevant in other countries) and did not form part of the discussions in the mainstream skill labour shortage literature. Therefore, in the migration policies theme category, illegal migrant workers, Hill-Tribe villagers and refugees have been added as an important policy discourse in Thailand. Even though the workforce in this policy discourse is not generally skilled, they could play a supporting role to Thailand's skilled labour workforce (Brees 2008; Chalamwong & Cheycom 2005; Tan & Gibson 2013). It has been noted that they often fill jobs that the Thai labour workforce do not want; thus, this group contributes to the importance of an engagement of a substitute workforce.

<b><u>INPUT</u></b>	<b><u>PROCESS</u></b>	<b><u>OUTCOMES</u></b>
<i>Policy themes addressing skill labour shortage</i>	<i>Policy discourse addressing skill labour shortage</i>	<i>Summarising of policy discourse outcomes during 1992-2014</i>
<b>Education and training policies</b>	<b>1. Improving basic education</b>  <b>2. Improving vocational education</b>  <b>3. Improving higher education</b>  <b>4. Lifelong training programs</b>	<b>1.1 Legislation helps to increase the number of students</b>  <b>1.2 Policies focusing on improving education quality</b>  <b>1.3 Teacher as a key player in improving quality of basic education</b>  <b>1.4 Greater role of decentralisation and stakeholder participation in basic education</b>  <b>2.1 Dedication of government to vocational education</b>  <b>2.2 Collaboration between government and the industry</b>  <b>2.3 Greater role of private vocational providers in vocational education</b>  <b>2.4 Proposed policy on encouraging positive attitude of society towards vocational education</b>  <b>3.1 Dedication of government to higher education</b>  <b>3.2 Encouraging internationalisation of higher education</b>  <b>3.3 Establishing autonomous university status</b>  <b>3.4 Encouraging greater role of private sector in higher education</b>  <b>4.1 Collaboration between public and private sectors</b>  <b>4.2 Greater role of private sector in lifelong training</b>
<b>Migration policies</b>	<b>1. Attracting foreign citizens</b>  <b>2. Repatriates and brain networking</b>  <b>3. Illegal migrant workers/Hill-Tribe/Refugees</b>	<b>1.1 Dedication of government</b>  <b>1.2 Explicit policy of government</b>  <b>2.1 Dual citizenship</b>  <b>2.2 Networks</b>  <b>3.1 Need citizenship</b>  <b>3.2 Policy refocusing on economic purpose rather than national security</b>  <b>3.3 Explicit policy and effective legislation</b>
<b>Substitute workforces</b>	<b>1. Female workforce</b>	<b>1.1 Need employers' support</b>  <b>1.2 Training programs</b>

	<b>1.3 Positive attitude of society</b>
<b>2. Ageing workforce</b>	<b>2.1 Training programs</b>
	<b>2.2 Extending retirement age</b>
	<b>2.3 Positive attitude of society</b>
<b>3. Disabled workforce</b>	<b>3.1 Need employers' support</b>
	<b>3.2 Training programs</b>
	<b>3.3 Public facilities</b>
	<b>3.4 Positive attitude of society</b>
<b>4. Refugee workforce</b>	<b>Combined with illegal migrant workers in migration policies</b>

**Figure 9.1: Input-Outcome categorisation of skill labour shortage policy discourse in Thailand 1992-2014**

## **9.2 Education and training policies**

Based on the extant literature, four policy discourses were identified and examined as potential responses via education and training policies to address Thailand's skill labour shortage: (1) improving basic education; (2) improving vocational education; (3) improving higher education; and (4) lifelong training programs. Each of these policy discourses will be discussed below to develop a cohesive and integrated model of the societal views towards meeting skill labour shortage in Thailand.

### **9.2.1 Data analysis on improving basic education**

Previous research identified the improvement of basic education as a foundation for increasing skilled labour (Kim 2012; Mattei 2012; Nieuwenhuis 2012; Osman-Gani & Chan 2009). Both Nieuwenhuis (2012) and Osman-Gani and Chan (2009) believed that the development of basic literacy and numeracy skills serves as a platform for all future educational development, and help to enhance competitiveness and productivity of the country to achieve economic development.

The studied topics on improving basic education from the previous research include: the capabilities of governments to increase class attendance, student retention, and quality of basic education (International Labour Organization 2008; Nieuwenhuis 2012); the development of teachers (Aluede & Idogho 2014; Davidson 2007; Simola 2005; Stone, Kaminski & Gloeckner 2009); and community participation (Denessen, Bakker & Gierveld 2007; Doner 2009; Pandey, Goyal & Sundararaman 2009). Based on an integrated approach to

addressing these areas, previous research has identified the mentioned topics as the holistic basis for improving the underlining conditions in addressing skill labour shortage.

Based on the analysed data, the policy discourse outcomes on improving basic education in Thailand during the period from 1992 to 2014 can be allocated into four categories: (1) legislation helping to increase the number of students; (2) policies focusing on improving education quality; (3) teachers as a key player in improving the quality of basic education; and (4) the greater role of decentralisation and stakeholder participation in basic education. Hence, it is argued in this thesis that these four policy discourse outcomes, which are also aligned with extant literature, contribute to the development of an appropriate holistic model for improving basic education to address the skill labour shortage.

#### ***9.2.1.1 Legislation helps to increase the number of students***

Based on the literature review, the commitment of many governments to improve basic education via dedicated policy and effective legislation has been displayed. The role of governments such as in Finland (Simola 2005), Singapore (Gopinathan 2007; Sidhu, Ho & Yeoh 2011), Korea (Kim 2012), and Malaysia (UNESCO 2011) have been portrayed as dedicated to improving basic education to achieve economic development. This section discusses the importance of improving basic education and increasing education attainment.

The increasing of educational attainment is an important policy for developing a country's skilled labour pool, preparing the workforce with basic skills such as literacy and numeracy and aligning these skills with market labour requirements (International Labour Organization 2008; Mustapha & Abdullah 2004; Nieuwenhuis 2012). To meet industry needs, the Korean Government has been recognised as a country that has strongly aligned its skilled workforce needs with industry policy (Kim 2012), while Singapore has developed skilled workforce forecasts that target the requirements of the labour market (Sidhu, Ho & Yeoh 2011). Malaysia has also applied a legislative policy instrument to increase the number of students to support labour force requirements (Mustapha & Abdullah 2004; UNESCO 2011).

These examples of neighbouring countries' policy changes to meet labour force needs indicate that the increasing of educational attainment by the Thai Government is moving in the right direction. The most important factor that has encouraged the increasing of educational attainment in basic education has been the supportive changes to Thai legislation. As the data indicates, the promulgation of Constitution B.E.2540 in 1997 and Constitution B.E.2550 in 2007 led to the enactment of important laws and policies that increased the number of students at the basic education level (for further details on the Constitution, see footnotes 7 and 8 in

Chapter 6). This legislative shift increased the student intake and thereby provided a larger pool of skilled workers in Thailand.

This research also found that the increasing of educational attainment by the Thai Government has corresponded with the literature that this was a key initiative. The analysed data also conveys the importance the Thai Government placed on improving basic education via legislative means, similar to Malaysia, to increase the educational attainment of students at the basic education level, which has enabled wider participation in the labour force. Based on the data analysis, where it has been shown that Thailand's legislative system in support of increasing educational attainment has helped increase its pool of skilled workers, a proposition for future research is proposed.

**Proposition 1: Increase educational attainment via supportive legislation to reduce skill labour shortage.**

#### ***9.2.1.2 Policies focusing on improving education quality***

It has been reported that an increase in access to basic education does not necessarily increase the quality of skills in a labour workforce (International Labour Organization 2008; World Bank 2012). This section discusses quality as a factor for improving basic education; based on the extant literature, the quality of basic education is a prerequisite for economic development (International Labour Organization 2008; Mustapha & Abdullah 2004; Nieuwenhuis 2012). A good quality basic education can help create a skilled labour workforce with higher productivity and competitiveness. For example, the success of Finnish education policy has been evidenced in the PISA results<sup>17</sup> where it has always ranked highly, showing the Finland Government's success in improving the quality of basic education (Simola 2005). Singapore has also firmly and continuously applied education policy to effectively improve its skilled workforce (Coe & Kelly 2000; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011). In the PISA survey results of 2009 and 2012, the quality of basic education in Singapore was ranked as one of the top five countries (OECD 2015).

The data analysis in this study shows that from 1992 until 2010, the Thai Government focused more on improving the quantity of basic education rather than the quality – most policies related to increasing the number of primary and secondary students. Once an increase in the number of students had been achieved, the government then shifted its focus to improving

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<sup>17</sup> A survey of 15-year-old students' performance in science, mathematics and reading which is operated by PISA (<http://www.oecd.org/pisa/aboutpisa/>), under supervision of the OECD.

the quality of basic education. For example, there were topics to improve students' skills in areas such as literacy and numeracy, ability to be self-directed, being creative, and thinking critically. This shift of policy shows the right direction the Thai Government has more recently been heading in to improve basic education.

One of its policies in relation to quality education was the closure of small rural schools. At the end of NESD Plan 10 and during the beginning of NESD Plan 11, covering the two offices of Prime Minister Abhisit Vejjajiva and Prime Minister Yingluck Shinawatra, the Thai Government attempted to close small schools that had less than 120 students, due to budget constraints, shortage of teachers, and lack of materials. However, as objections to these proposed closures were widely expressed and public debates intensified, the government of Prime Minister Yingluck Shinawatra relented and the policy was discontinued. This downsizing policy indicates that the Thai Government had been more concerned with balancing the budget and less on tackling issues related to education as an input to economic growth outcomes.

There was also another significant policy on improving the quality of basic education during Prime Minister Yingluck Shinawatra's period – One Tablet per Child. This polarising policy aimed to increase student familiarity with technology by providing tablets for electronic learning purposes to every child attending school. However, it was discontinued by the military junta who overthrew the Yingluck Government in May 2014, where it was stated that the One Tablet per Child policy was not a cost-effective project and was not worth investing in (na Mahachai 2014).

Examples like these indicate the mostly inadequate attempts of the Thai Government in improving the quality of basic education. The data analysis shows that there was a lack of dedication in implementing these policies; that is, there was no continuity. Thailand needs to ensure policy continuity to improve the quality of its basic education, although this has proved challenging for the government to date, as it has consistently been interrupted due to political instability.

Based on the data analysis, it has been identified that a key issue to improving Thailand's basic education is the need for more solid and consistent policy implementation. However, the instability of most policy due to continuous changes at the ministerial level is a key obstacle. As the evidence shows (see Chapter 6), there have been numerous interruptions to the implementation of policies in Thailand, such as cabinet reshuffles and changes in government. Hence, it is argued in this thesis that bipartisan agreed policies in relation to a country's



development is essential to ensure full implementation of such policies. This argument leads to a proposition for future research.

**Proposition 2: Skill labour shortage can be reduced by improving the quality of basic education via continuous policy implementation.**

### ***9.2.1.3 Teacher as a key player in improving the quality of basic education***

Based on the literature review, the role of teachers is also very important in improving basic education (Aluede & Idogho 2014; Davidson 2007; Simola 2005; Stone, Kaminski & Gloeckner 2009). Simola (2005) believed that the role of the teacher is a key factor behind the success of Finland's education policy, as in Finnish society, being a teacher is one of the most respected professions. Davidson (2007) pointed out that teachers could play crucial roles in motivating children in the classroom; while Stone, Kaminski and Gloeckner (2009) argued that teachers are key to creating a skilled workforce to match the requirements of the labour market.

Based on this study's data analysis, several key factors have emerged as obstacles in Thailand's ability to improve basic education, such as rote as a traditional form for teaching and learning, the limited knowledge in the use and application of foreign languages, and the shortage of quality teachers. All of these potential obstacles can be removed by focusing more on teachers. For instance, teachers can help to change the traditional form of teaching and learning from rote to a self-directed, creative and critical thinking format. Based on the data analysis, it is argued in this thesis that the development of good quality teachers should be prioritised.

As shown in the data, when it comes to improving the learning experience and encouraging students to accept and adapt to these changes, teachers are seen as the key player (Graham 2009; na Mahachai 2007; Pusawiro 2013). However, Kasama Worawan na Ayudhaya, the former Permanent Secretary of Thailand's MOE rightfully stated that the teacher has to first adjust their mindset first before they can guide students (Limsamarnphun 2002). That is, the teachers themselves need to be self-directed, creative and critical thinkers before guiding students towards this mindset.

In terms of teaching foreign languages, the data indicated that the inability of most Thai teachers was an obstacle (Editorial 2007b; Janchitfah 1997). Hence, due to the limited budget of the Thai Government to hire foreign-speaking teachers, local Thai teachers are needed to be trained in foreign languages skills.

In terms of the quantity of teachers, it became apparent in the data that the shortage of teachers was not the actual problem. Evidence shows that the number of applicants for teaching positions greatly outnumbers the amount of vacant positions each time the government announces vacancies (Atagi 2011). Data also reveals that there are some Thai schools with a surplus of teachers, while others are lacking teachers, particularly those in rural areas (Atagi 2011). It is therefore argued in this thesis that the real problem is the mismanagement of the Thai Government in relation to manpower planning with the requirements of the labour market. In addition, the data analysis indicates that Thai teachers' wages and other benefits need to be improved to attract high-quality teachers.

This study's data analysis also suggests that teachers are key input factors in improving basic education. The quality of students, as input for the country's skilled labour workforce, can be affected by teaching style and motivation of teachers. Hence, the Thai Government should focus on improving and developing the quality of its teachers. This argument leads to a proposition for future research.

**Proposition 3: Improving the quality of teachers can reduce skill labour shortage.**

#### ***9.2.1.4 Greater role of decentralisation and stakeholder participation in basic education***

Based on the literature review, the role of decentralisation and stakeholder participation is also significant in improving Thailand's basic education (Denessen, Bakker & Gierveld 2007; Doner 2009; Pandey, Goyal & Sundararaman 2009). In particular, it is essential to the relevant policymaking processes (Doner 2009), based on policies that are shaped from community debates . Pandey, Goyal and Sundararaman (2009) believed that decentralisation and stakeholder participation would encourage public demand for quality education services, and also increase the pressure on teachers and schools to perform well.

During the period of 1992-2014, there were numerous newspapers articles pressuring the Thai Government to decentralise or let all stakeholders in society participate in the education policy process. The Thai Government responded by enacting the *National Education Act B.E. 2542* in 1999. The act clearly stated the importance of community participation in education management, including the establishment of local committees to oversee the education policy of local communities (The National Education Act B.E.2542 1999).

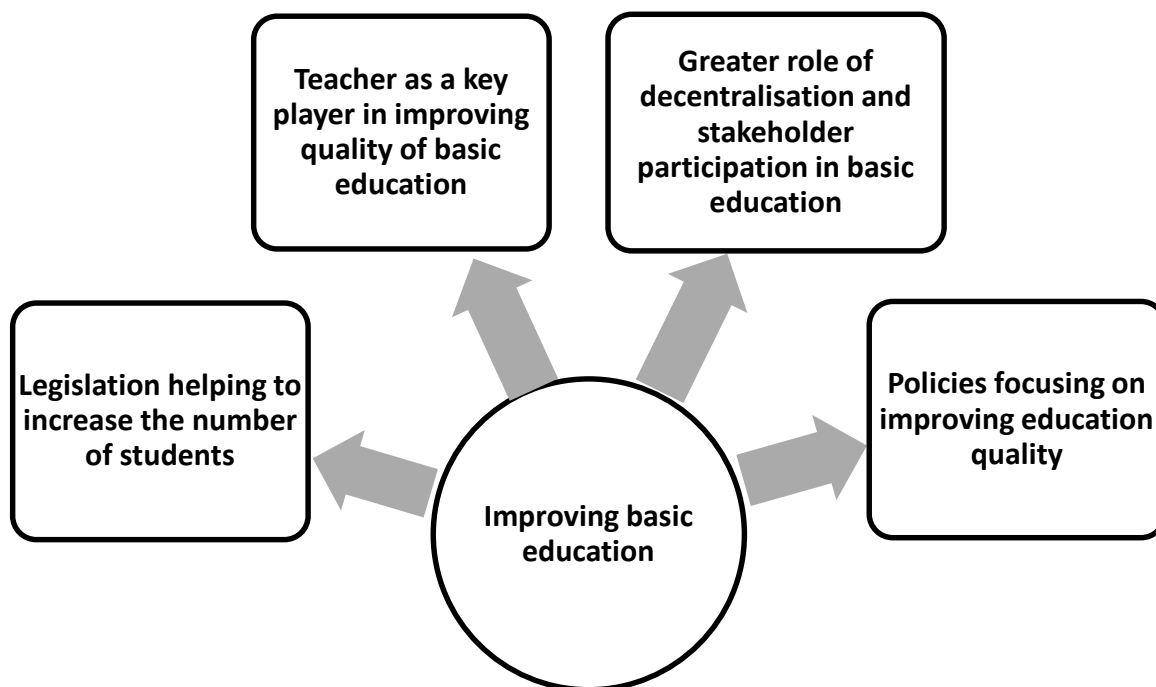
However, during this same period there were few news items relating to the national policy role of local education committees – most were about these committees supporting the teaching of local history or wisdom. There was no connection made between the roles of local committees on education policy and the actual contribution of education policies to support economic development. Based on this data, the Thai Government needs to nurture the role of local education committees in designing educational policy so it better matches with the requirements of their own local areas.

Based on the analysed data, it is therefore argued in this thesis that the Thai Government must support the greater role of decentralisation and stakeholder participation in the policymaking process, which is necessary for improving basic education. The participation of community stakeholders will help create policies that: (1) match with the requirements of the community; (2) improve basic education; and (3) contribute to economic development by reducing skill labour shortage problems. This argument forms a proposition for future research that could reduce skill labour shortage.

**Proposition 4: The greater role of decentralisation and stakeholder participation can reduce skill labour shortage via basic education policymaking processes.**

#### ***9.2.1.5 Summary of policy discourse outcomes in improving basic education***

The discussion in this thesis has proposed that the combination of the following four policy discourse outcomes are key to improving basic education in Thailand: (1) legislation to help increase the number of students; (2) teachers as a key player in improving quality of basic education; (3) greater role of decentralisation and stakeholder participation in basic education; and (4) policies focusing on improving education quality. Figure 9.2 below shows these four policy outcomes that the Thai Government should apply to improve the country's basic education and address skill labour shortage.



**Figure 9.2: Expected policy discourse outcomes in improving basic education**

### **9.2.2 Data analysis on improving vocational education**

It is well-recognised that vocational education is important to the economic development of a nation (International Labour Organization 2013; World Bank 2012). Based on this study's extant literature, improving vocational education is seen as a policy discourse for addressing skill labour shortage (Cameron & O'Hanlon-Rose 2011; Hawley & Paek 2005; Ho & Ge 2011; Mustapha & Abdullah 2004). Hawley and Paek (2005) and Cameron and O'Hanlon-Rose (2011) recommended that governments collaborate with their industries to improve the vocational education and produce a vocationally skilled workforce that matches industry needs. The commitment of the government is also necessary to continuously and effectively improve vocational education (Cameron & O'Hanlon-Rose 2011; Hawley & Paek 2005; Ho & Ge 2011).

During the 1992-2014 period, based on this study's data analysis, three main policy discourse outcomes were identified in relation to improving vocational education: (1) dedication of government to vocational education; (2) collaboration between the government and the industry; and (3) greater role of private vocational providers. In addition, there was a proposed policy on improving vocational education that emerged in Thailand during this period:

encouraging positive attitude of society towards vocational education. These four policy discourse outcomes will be discussed in the following sections.

### ***9.2.2.1 Dedication of government to vocational education***

The extant literature suggests that the dedication of a government to improve its vocationally skilled workforce is necessary for national economic development, as proven in research relating to Singapore (Ho & Ge 2011; Kalirajan & Shantakumar 1998); Australia (Birrell, Healy & Smith 2008; Cameron & O’Hanlon-Rose 2011; McGrath-Champ, Rosewarne & Rittau 2011) and USA (Kalafsky 2008).

In addition, the International Labour Organization (2008) recommended that middle-income countries should prioritise the development of vocational education, as the demand in their labour market is mainly from the manufacturing and service sectors. As an example, the Singaporean Government’s emphasis on vocational education to support economic development has been deemed a success (Ho & Ge 2011). Ho and Ge (2011) pointed out that the success of the Singaporean Government was mainly due to its clear industrial policy – the educational institutes knew what types of skills the industry needed. The Australian Government has also been perceived as dedicated to the development of a vocationally skilled workforce to meet industry demands (Birrell, Healy & Smith 2008; Cameron & O’Hanlon-Rose 2011; McGrath-Champ, Rosewarne & Rittau 2011). Initiatives for vocational students have been provided by the Australian Government, such as flexibility in trades training, a progress pathway for traineeships through trade certificates, and the greater role of private vocational providers (McGrath-Champ, Rosewarne & Rittau 2011).

As a middle-income country, this study’s data analysis indicates that Thailand’s production of a vocationally skilled workforce has not been highly successful. Graph 6.11 in Chapter 6 showed that the number of Thai vocational students during the period of 1997-2006 did not increase. The majority of lower-secondary Thai students had chosen to pursue further studies in upper-secondary and university rather than vocational, as Graph 6.13 and 6.14 demonstrated. The likely factors that prevented an increase in vocational students over this period included the lack of focus on vocational education by the government, the mismatch between education policy and industrial policy, the poor reputation of vocational students, the attitude of society towards vocational training, and the unclear standards of vocational education.

In addition, the Thai Government’s NESD plans, which are the country’s master economic development plans, mostly focused on basic and higher education rather than vocational. The term ‘vocational education’ was not even mentioned in the seventh and ninth NESD plans, and

only six out of the eleven prime ministers from this period referred to it in their policy statements. As a result, there has been an ongoing shortage of skilled workforce at the vocational level to feed the requirements of the Thai labour market (Baker & Phongpaichit 2005; International Labour Organization 2013).

Based on the data analysis, it is argued in this thesis that the Thai Government has not dedicated enough of its time and resources to vocational education. The policy of vocational education has not been aligned with the country's economic policy, and the Thai Government has failed to produce a vocationally skilled workforce to address its labour market's needs. Even though many of Thailand's industries required vocationally skilled workforces during this period, the data show that the Thai Government was more focused on basic and higher education rather than vocational. Hence, moving forward, the Thai Government needs to be more committed to policy on improving vocational education to meet its economic development goals – it needs to establish a clear industry policy that focuses on developing a vocationally skilled workforce as required by the labour market in Thailand. Based on this information, the following proposition is forwarded for testing in future studies.

**Proposition 5: Improving vocational education via alignment with economic policy will reduce skill labour shortage.**

#### ***9.2.2.2 Collaboration between the government and the industry***

Analysis of the literature suggests that the role of government is essential to matching industry needs with the capacity of vocational education, which will lead to a country's economic development (Birrell, Healy & Smith 2008; Cameron & O'Hanlon-Rose 2011; Hawley & Paek 2005; Ho & Ge 2011; International Labour Organization 2008). For example, the collaboration between government and industries could provide vocational education curriculums and courses that match industry needs and produce a vocationally skilled workforce.

The data analysis shows there has been an ongoing mismatch between Thailand's vocational education policy and the requirements of its labour market, which contrasts with data indications that collaboration between industries, the government and vocational education providers can improve the quality of vocational students.

Based on reported items in the period of NESD Plan 7 to NESD Plan 9 (1992-2006), it is surmised in this thesis that the Thai Government's collaboration with industry was not progressing well at this stage. However, since NESD Plan 10 (2007-2011) and the start of NESD

Plan 11 (2012-2016), progression has been made on cooperative projects between the Thai Government and industry, as reported throughout this period. Some industries even established their own training colleges, while the government also collaborated with its foreign counterparts to improve vocational education. This coordination and cooperation in relation to vocational education could help to improve the quality of Thailand's skilled workforce. A proposition for future research is highlighted.

**Proposition 6: Policy coordination and cooperation between the government, industry and education providers in both public and private sectors on vocational training will reduce skill labour shortage.**

### ***9.2.2.3 Greater role of private vocational providers in vocational education***

The extant literature does not highlight a role of private vocational providers in Thailand's vocational education. The literature only covers the context of vocational education and skill labour shortage. This is a unique contribution of this thesis in arguing for the greater role of private vocational providers to participate in producing Thailand's vocationally skilled workforce.

From the data analysis, the role of the private sector in vocational education has been recognised as an important factor in Thailand's ability to address its skill labour shortage problem (Abelman et al. 2001; Johanson & Wanasiri 2001; Sorannil et al. 2005). However, the role of private vocational providers did not perform well enough to address skill labour shortage in Thailand. The data shows that the number of vocational students has been far lower for students in secondary and higher education (see Graph 6.13 and Graph 6.14 in Chapter 6); while the data suggests that Thailand requires a more extensive vocationally skilled workforce to meet the demands of its industry (International Labour Organization 2008; Office of the Education Council 2011; World Bank 2012). Therefore, due to the limited availability in public vocational institutes, the private sector should be encouraged more to meet this shortfall. This would also create opportunities for students who miss out via the higher education entrance examination.

Graph 6.12 in Chapter 6 shows that between 1997 and 2008, the amount of students in public vocational schools was far higher than in private vocational schools. This may have been due to a lack of government support in this area, as argued by Johanson and Wanasiri (2001) who believed that the Office of the Private Education Commission had not fully supported the greater role of private vocational education. Unlike public vocational education, private

vocational providers did not receive subsidies from the government. As a result, the costs for education at a private vocational institute were much higher than at public vocational institute. For example, in 1997 the cost for tuition fees with a private vocational education provider was about 13,320 Baht compared with 3,033 Baht for public (Johanson & Wanasiri 2001). Factors like these highlight the Thai Government's failure in promoting the role of the private sector in vocational education.

Based on the data analysis, it is argued in this thesis that the Thai Government needs to provide more support to the private vocational education sector, particularly as a large vocationally skilled workforce is needed by the labour market to help Thailand achieve its economic development goals. The private vocational providers can enhance their production of a vocationally skilled workforce by providing courses for students that missed out on public vocational colleges. Hence, private vocational providers can help increase the number of vocationally skilled workers for Thailand. Based on this, the proposition for future research is presented as follows:

**Proposition 7: Improving vocational education by supporting the greater role of private vocational providers can reduce skill labour shortage.**

#### ***9.2.2.4 Proposed policy on encouraging positive attitude of society towards vocational education***

This policy discourse outcome on proposed policy on encouraging the positive attitude of Thai society towards vocational education was not highlighted in the extant literature. As the literature suggested, vocational education is significant for a nation's economic development, especially for a nation with middle-income status (International Labour Organization 2008). However, the attitude of Thai society has played a key part in discouraging the enrolment of students in vocational education (Ekachai 2011b; na Mahachai 2007).

It is widely known in Thai society that vocational education is perceived as second choice (Jantapong & Tansri 2012). Most students and parents place their first preference on university, as this is seen as an honour to the family if their children graduate from a university. For example, when Prime Minister Thaksin Shinawatra established the ICL program to provide funding to students in vocational and higher education, there were large numbers of students who applied for this loan to access higher rather than vocational education.



Khaopa (2012b) provided an example of how this negative society attitude towards vocational education could be reversed, based on the Singaporean Government's actions. In Singapore, the negative image of vocational education was 'rebranded' by improving its quality via significant industry involvement. As part of this, teaching staff were sent to factories regularly to update their knowledge and skills as required by the industry, which would then be passed onto students. As shown here, when the quality of vocational students is improved, the image of vocational education is also improved. Based on this example, it is argued that improved quality in Thailand's vocational education also means that the image of vocational education will improve, which will improve the society's general attitude towards vocational education. The enrolment of vocational students would probably increase and provide a much-needed solution to some of Thailand's skill labour shortage problems if the attitude towards vocational education changes.

Hence, a positive society attitude towards vocational education is an important factor to increase enrolment of vocational students. This change in attitude may attract high-performing students, which would then further raise the quality and image of vocational education. It is no doubt a necessary challenge for the Thai Government, in response to its skill labour shortage, to change the attitude of Thai society towards vocational education by improving the quality of vocational students.

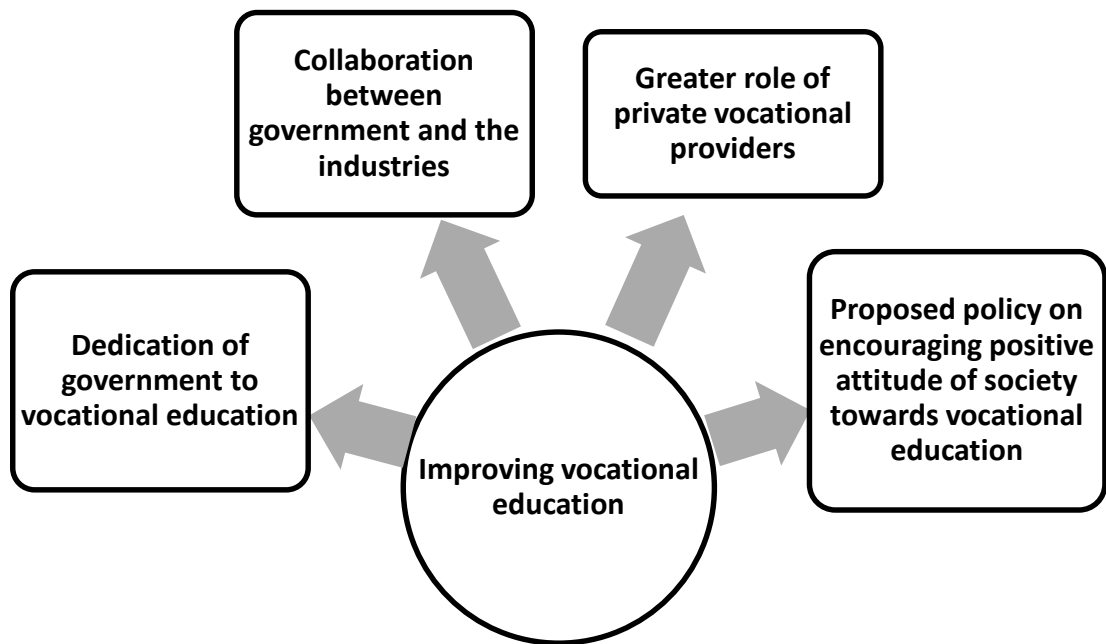
This proposed policy on encouraging the positive attitude of Thai society towards vocational education is a supportive factor to improve vocational education. Based on this study's data analysis, improving the quality of vocational students can help reverse the negative image and increase the enrolment of vocational students. The following proposition for future research is therefore included:

**Proposition 8: Improving vocational education by encouraging positive attitude of society towards vocational education by increasing the quality of vocational students can reduce skill labour shortage.**

#### ***9.2.2.5 Summary of policy discourse outcomes in improving vocational education***

Based on this study's data analysis, three policy discourse outcomes were identified as follows: (1) dedication of government to vocational education; (2) collaboration between government and the industry; and (3) greater role of private sector in vocational education. In addition, the proposed policy on encouraging a positive society attitude towards vocational education has

also emerged. Figure 9.3 displays the policy discourse outcomes in providing vocational education to reduce the skill labour shortage problem in Thailand.



**Figure 9.3: Expected policy discourse outcomes in improving vocational education**

### **9.2.3 Data analysis on improving higher education**

Studies have shown that improving higher education plays an important role in addressing skill labour shortage (Ho & Ge 2011; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011; Skeldon 2008), and that higher education is necessary to produce highly skilled workers (International Labour Organization 2008), especially for technology- and knowledge-intensive industries. Countries that want to move up the economic value chain of the global economy (see details on the economic value chain in Chapter 5) need to have a well-established higher education system (International Labour Organization 2008). From this study's literature, several policy responses have emerged in regard to improving higher education: (1) increasing the number of higher education institutes (Ho & Ge 2011; International Labour Organization 2008; Sidhu, Ho & Yeoh 2011); (2) internationalisation of higher education (Chalapati 2007; Sidhu, Ho & Yeoh

2011; Skeldon 2008; Ziguras & Law 2006); and (3) stakeholder participation in higher education policy (Fleming & Soborg 2010; Haukka 2011; Huggins 2001).

From the data analysis, there are four main policy discourse outcomes that have emerged in relation to improving higher education during 1992-2014: (1) dedication of government on quantity and quality of higher education; (2) encouraging internationalisation of higher education; (3) establishing autonomous university status; and (4) encouraging the greater role of the private sector in higher education. These four policy outcomes will be further discussed in the following sections.

#### ***9.2.3.1 Dedication of government on both quantity and quality of higher education***

Higher education is viewed as important to the development of a highly skilled workforce as required by technology-intensive industries (Ho & Ge 2011; International Labour Organization 2008; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011). Based on the extant literature, countries that want to move up the economic value chain must have the highly skilled workforce as a prerequisite to support technology-intensive industries (Borensztein, Gregorio & Lee 1998; Keller 2004; Metwally 2004; Noorbakhsh, Paloni & Youssef 2001). In line with this, there need to be government policies dedicated to improving higher education both quantity- and quality-wise, to produce a highly skilled workforce (International Labour Organization 2008). For example, in Singapore the government has shown its commitment to improving the delivery of higher to match the economic and industrial policies of the country (Ho & Ge 2011; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011). As part of this, new universities, both local and international, have been established, and curriculums aligned with industrial needs have also been encouraged.

This study's data analysis highlights the Thai Government's commitment to improving higher education via the expansion of the amount of universities and students during 1992-2014. As reported in Chapter 6, the extended number of universities in Thailand is seen as important to helping reduce skill labour shortage. In Thailand, significant policies were implemented to expand higher education, especially in the rural areas. This shows the Thai Government's commitment to expanding higher education across the whole country. Based on the data analysis, it would appear that increasing the amount of higher education institutes can influence growth in the number of higher education students. In terms of quantity, the Thai Government has been successful in expanding higher education throughout the country via both an increase in universities and students.

However, this study's data analysis also suggests that the Thai Government still needs more focus and effort to improve the quality of higher education. For example, a mismatch between university graduates and the needs of the labour market has been identified, which has caused underemployment of Thailand's university graduates. Hence, it is a challenge for universities to ensure that the courses offered are based on the requirements of the labour market in order to reduce the skill labour shortage problem. The following proposition is forwarded for future research:

**Proposition 9: Expanding higher education institutes through the dedicated commitment of government to both quantity and quality of higher education will reduce the skill labour shortage problems.**

### ***9.2.3.2 Encouraging internationalisation of higher education***

From the literature review, the internationalisation of higher education is crucial to improving a country's higher education (Cameron & O'Hanlon-Rose 2011; Tremblay 2005; Ziguras & Law 2006). This internationalisation can help to provide a highly skilled workforce that better matches the requirement of the global marketplace. To be internationalised, English is an important medium language (Altbach & Knight 2007; Chalapati 2007; Pang 2006; Pimpa 2011).

Pang (2006) conveyed the importance of English as the first or second language of a highly educated workforce. The use of English would attract foreign universities and international students to flow to Thailand, and create the internationalisation of higher education in the country. It was also believed that the establishment of foreign universities in Thailand would attract international staff in addition to international students (Marginson 2007). In addition, an International Labour Organization report (2008) stated that the attracting of foreign universities, cooperation between local and foreign universities, and student exchange programs would expand the pool of skilled workers.

When a country becomes an international community, this international environment creates the characteristics of a world city, which likely will attract more international skilled workers (Chanda & Sreenivasan 2006; Hugo 2006). Furthermore, as the ASEAN is planning on integrating to become one market in 2015, there will soon be a freer movement of people in the ASEAN region. Hence, Thai people will need to use English more to communicate with people from other nations, and there will be further demand for a skilled workforce with English speaking abilities.

The data analysis in this study suggests that the determination of Thai government to be internationalised is well supported. Both public and private universities have aimed to attract international students, especially from the Southeast Asian region, to study in Thailand. However, the main obstacle for Thailand remains its inability to use English as a spoken language in its society.

Based on the above, it is argued in this thesis that the Thai Government needs to encourage the wider use of English to achieve its internationalisation goals. The government is a key conduit in the nation's efforts to create an international society, and encouraging the use of English needs to start from primary school level. Thailand's Office of Higher Education Commission and OBEC need to collaboratively encourage the use of English as an additional language in Thai society. In support of this, the following proposition is forwarded for future research:

**Proposition 10: Internationalising higher education via policies that allow foreign university campuses, recruit foreign students, encourage cooperation between local and foreign universities, and encourage the use of English in society will reduce skill labour shortage.**

### ***9.2.3.3 Establishing autonomous university status***

This policy discourse outcome was not highlighted in the extant literature. Based on the data analysis, Thailand's public universities have often been ineffective due to the country's bureaucrat system. The concept of autonomous university status has been put forward as a potential contributor to improving higher education, where Thai universities would be independent from government control (Todd 2002; Vargo 1998; Wannasiri 1998). When the university becomes autonomous or independent from government control, they can respond directly to the needs of the community. In other words, the universities can provide courses and curriculum that better meet with the requirements of the labour market, which will help reduce the country's skill labour shortage problems.

The data analysis indicates that the process of transforming public to autonomous universities in Thailand is ongoing. There have been many debates about this issue over the decades, especially during the periods of NESD plans 7 to 9 (1992-2006). Two main controversial issues that have consistently obstructed this autonomy plan from processing further have been financial resources and job security for university staff. Since 2007, no newspaper articles could be found in relation to autonomous university status. This may be due to the ongoing

political turmoil in Thailand during this period, involving short-lived governments, prime ministers and parliaments, which has often disrupted policy continuity. Thus, the process of transforming public universities to autonomous universities is still ongoing.

Based on the data analysis, it is argued in this thesis that a clear policy on autonomous universities is needed for the purpose of improving the quality of higher education, and thereby providing a skilled workforce that matches the requirements of the labour market. A proposition is therefore put forward for future research:

**Proposition 11: The concept of autonomous universities which allows universities to be self-reliant in terms of administration and finances can reduce skill labour shortage problems.**

#### ***9.2.3.4 Encouraging greater role of private sector in higher education***

The extant literature is mostly silent on policy outcomes with regard to the role of the private sector in higher education. However, as Thailand is facing a skill labour shortage, this policy discourse outcome is deemed highly important to address this problem. Private higher education providers can play an important role in absorbing students who miss the opportunity to enter public university, providing alternative training as demanded by the labour market.

Similar to private vocation education, the role of the private sector in higher education was recognised by the Thai Government during the periods of NESD Plan 7 (1992-1996) and NESD Plan 8 (1997-2001). At that time, the government attempted to encourage and improve the role of private investment in higher education – but this was continued in later periods. This lack of emphasis may be due to the increasing number of public universities. Since 2004, there have been more public than private universities in Thailand (see Graph 6.17 in Chapter 6), which may be a result of the nationwide upgrading of teacher and technical colleges to become Rajabhat and Rajamangala universities during NESD Plan 9. Kulachol (1995) also previously argued that the Thai government did not adequately support private higher education – there were unclear policies, limited subsidies and unfair regulations.

In 2003, the *Private Higher Education Act B.E.2546* was enacted; which at face value, could be construed as the Thai Government shifting its attention to private higher education. However, when read the Act thoroughly, it is indicated that this legislation was enacted to ‘control’ rather than ‘support’ the role of private sector in higher education. For example, there is only one article in the act that refers to government support, compared with 20 articles which refer

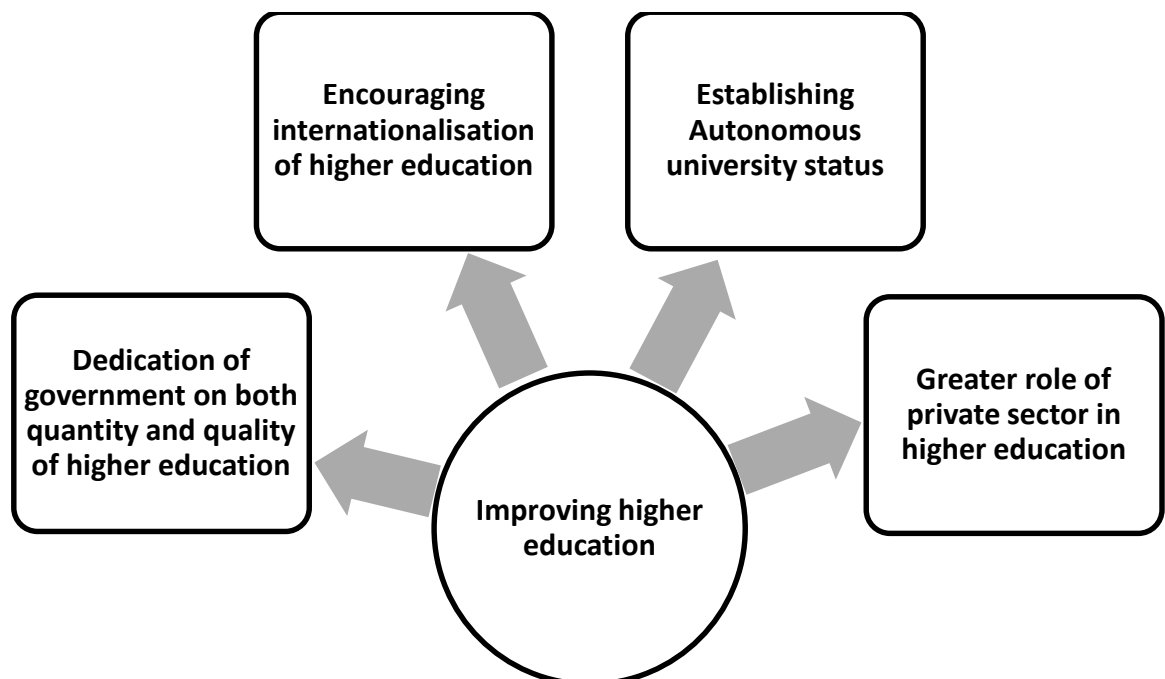
to the control of private educational providers (Private Higher Education Institutes B.E.2546 2003).

Hence, it is contended in this thesis that a clearer strategy and stronger support is needed from the Thai Government for private higher education providers to support skilled workforces that match the direction of the country's economic development and its labour market needs. The following proposition is therefore suggested for future research:

**Proposition 12: The greater role of the private sector in higher education can reduce skill labour shortage by increasing student numbers to support labour market needs.**

#### ***9.2.3.5 Summary of policy discourse outcomes on improving higher education***

Based on the above discussion, it is put forward in this thesis that the following four policy outcomes are essential to improving higher education in Thailand: (1) dedication of government on both quantity and quality of higher education; (2) encouraging internationalisation of higher education; (3) establishing autonomous university status; and (4) greater role of private sector in higher education. Figure 9.4 shows these policy discourse outcomes for improving higher education in order to reduce Thailand's skill labour shortage.



**Figure 9.4: Expected policy discourse outcomes in improving higher education**

#### **9.2.4 Data analysis on lifelong training programs**

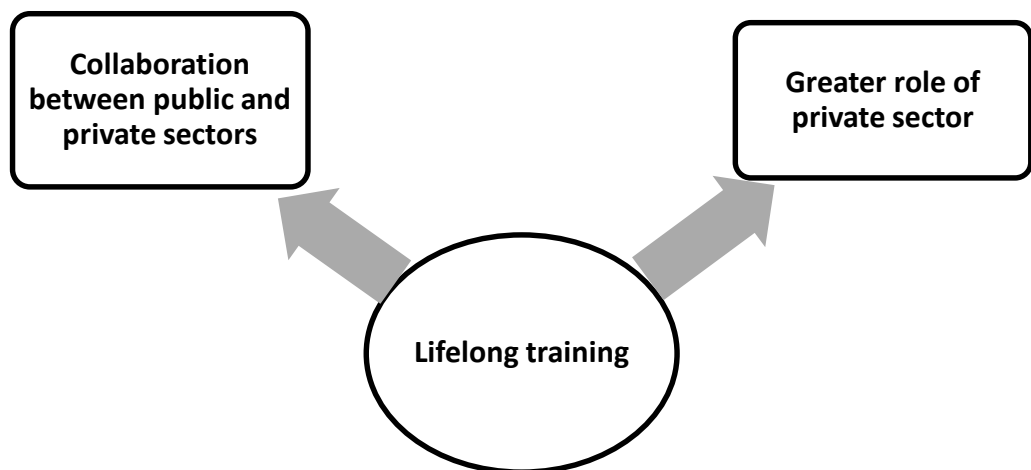
It is widely recognised that lifelong learning programs supports economic development through the advancing and upgrading of new skills that address labour workforce needs (Andersson & Fejes 2010; Hawley & Paek 2005; Hussein, Manthorpe & Stevens 2011; Walker 2006). In particular, collaboration between the government and private sector helps ensure effective lifelong training (Hussein, Manthorpe & Stevens 2011; Kalafsky 2008; Nieuwenhuis 2012). In line with this, greater involvement by the private sector is often encouraged (Fleming & Soborg 2010; Mackenzie, Kilpatrick & Akintoye 2000; Osman-Gani & Chan 2009).

When the normal education system cannot singly address skill labour shortage, lifelong training programs could be the answer (Hawley & Paek 2005). In South Africa, for example, there are a large number of people who left school at an early age – lifelong training programs can help them to gain skills to find jobs (Nieuwenhuis 2012). Such programs can also provide or upgrade knowledge and new skills for the labour workforce (Fleming & Soborg 2010; Hussein, Manthorpe & Stevens 2011; Nieuwenhuis 2012). Other examples are from Singapore (Osman-Gani & Chan 2009) and Malaysia (Fleming & Soborg 2010), most private sector companies organise their own training programs which are subsidised by their governments.

This study's data analysis indicated that there are two policy discourse outcomes in Thailand in relation to lifelong training: (1) collaboration between the public and private sectors; and (2) the greater role of the private sector in lifelong training. Collaboration between public and private sectors including both employers and employees is essential to delivering effective training programs (International Labour Organization 2011). The public sector generally needs the private sector to keep it up-to-date on the latest skills requirements demanded by the labour market, so it can provide training in the right skill areas (Abelman et al. 2001). Hence, cooperation between these two parties is highly important for lifelong training purposes. In fact, it is only proper to allow the private sector to play a leading role in lifelong training, where the government is perceived as playing more of a supportive role.

From this study's data analysis, various Thai Government incentives and support plans to provide skills training programs to the private sector were identified during the period of 1992 to 2014. Figure 9.5 shows the two main policy discourse outcomes in relation to Thailand's lifelong training.





**Figure 9.5: Expected policy discourse outcomes in lifelong training programs**

Based on the above discussion, this thesis affirms that the public and private sectors need to effectively collaborate on lifelong training programs to reduce Thailand’s skill labour shortage. In addition, as the private sector has a better understanding of the type of skills needed in the labour market, it should play a leading role in organising lifelong training programs, with the government (public sector) providing support in areas like financial incentives and experienced instructors. Based on this, the following proposition for future research is put forward:

**Proposition 13: Collaboration between public and private sectors on lifelong training programs will address market demands and can reduce skill labour shortage, via the leading role of the private sector and the supportive role of the public sector.**

### **9.3 Migration policies**

In this study, three policy discourses on migration policies were identified in the extant literature: (1) attracting foreign citizens; (2) attracting repatriates; and (3) brain networking. However, as explained in Chapter 7, the contexts of repatriates and brain networking overlapped; hence they are combined and presented as one in this thesis.

In addition, from the data analysis a new policy discourse on illegal migrant workers emerged, and has thus been presented as an additional factor supporting the labour market in Thailand. The context of illegal low-skilled migrant workers also overlapped with Hill-Tribe villagers and refugees in Thai policy in relation to substitute workforces; hence the three have been combined.

Based on the above, the three final policy discourses to be discussed in this section are: (1) attracting foreign skilled workforce; (2) attracting repatriates and brain networking; and (3) illegal migrant workers/Hill-Tribe/refugees.

### **9.3.1 Data analysis on attracting foreign skilled workforce**

Numerous governments have used migration policy to attract foreign skilled workforces to address skill labour shortage in their countries (Abella 2006; Ducanes & Abella 2008; Iredale 2000; Lowell 2001b; Orłowska 2011). The main reasons for applying this policy discourse relate to declines in population growth (Ducanes & Abella 2008; Holland, Sheehan & Cieri 2007), and saving on education and training costs by recruiting a ready-to-use foreign skilled workforce (McGrath-Champ, Rosewarne & Rittau 2011; Smith 2008; Wickham & Bruff 2008).

In the case of Thailand, this study's data analysis indicated that the government's policies on attracting skilled foreign labour have been unclear. The two key factors that have contributed to the lack of development of a supportive foreign labour policy are: (1) out-of-date legislation that does not reflect labour needs; and (2) unclear policy on labour needs. The data analysis also shows that there have been numbers of regulations implemented in Thailand to control the entry of foreign citizens. For instance, two legislative acts have been implemented to control foreign citizens working in Thailand – *Immigration Act B.E.2522 (1979)* and *Foreigners' Working Act B.E.2551 (2008)* – and there is further legislation relating to foreigners who want to operate businesses in Thailand. In addition, while the NESD plans specify the importance of science and technology, which the country needs to progress its economic development, there is no clear policy on attracting foreign citizens to provide technology transfers in this field. These outdated legislation and unclear policies have led to the conclusion that the Thai Government does not prioritise the attracting of foreign skilled workforces.

Based on this finding, it is argued in this thesis that the Thai Government needs to show more dedication to attracting foreign skilled workforce. There are several reasons identified in the data analysis to support this proposition about attracting foreign skilled workers to Thailand. Firstly, the ASEAN community will be integrated by the end of 2015, which will generate more movement of people within the region. Hence, the Thai Government cannot avoid an increased inflow of foreign skilled workers. Secondly, as the data analysis indicated, the Thai Government needs to improve the country's science and technology expertise; hence, a foreign skilled workforce could be used to provide relevant knowledge and technology transfers. Thirdly, the immigration of a foreign skilled workforce would increase the skilled talent pool of the country, which has been reduced due to the decreasing of population

growth (as discussed in Chapter 5). All of these factors have generated a proposition for future research:

**Proposition 14: Attracting foreign skilled workforces can reduce skill labour shortage and accelerate economic growth.**

### **9.3.2 Data analysis on attracting repatriates and brain networking**

Repatriation or reverse brain drain (Groenhout 2012; Leclerc & Meyer 2007; Lowell 2001b; Skeldon 2008) and brain networking (Biao 2007; Ciumasu 2010; Lowell 2001b; Tung 2008) are other policy discourses that can be used to address skill labour shortage. Repatriation is based on the concept of returning skilled diaspora or repatriates from foreign countries to their home countries. Most of these repatriates will bring foreign knowledge and technologies with them to help their home countries achieve economic growth (Leclerc & Meyer 2007; Lowell 2001b; Quaked 2002). The other policy discourse, brain networking, is based on the concept of connection between skilled diaspora and their peers in their home countries. Researchers who support this concept believe that skilled diaspora can better contribute to their home country's economic growth while they are overseas rather than moving back home permanently (Biao 2007; Ciumasu 2010; Tremblay 2005; Tung 2008).

Based on this study's data analysis, there was no clear statement or legislation from the Thai Government on these policy discourses. Several prime ministers during this period (1992-2014) were supportive of the Reverse Brain Drain project, but this project has barely progressed, mainly due to its limited budget. In addition, it was found that many Thai professionals were reluctant to return home due to low wages, the inability to readapt to the quality of life in Thailand, lack of networking with their peers in Thailand, and the mismatch of their skills and the needs of the country. The data analysis indicates that the Thai Government has not dedicated any policy to the concept of repatriation, while brain networking has only received minimal government support.

This study's data analysis also suggests that 'networking' is the keyword for ensuring the success of these two policy discourse. Networking helps connect skilled diaspora with their home countries. In the literature it was put forward that dual citizenship is an important policy response to support the concept of networking (Birrell et al. 2001; Chanda & Sreenivasan 2006; Lowell 2001b; Whitaker 2011). However, there was no data found in this study about government policy on dual citizenship.

Based on the above discussion, it is suggested in this thesis that the Thai Government needs to establish effective networks with Thai professionals who live overseas by using dual citizenship. In addition, overseas agencies could be established to maintain networks between Thai expats and the Thai government, as already done in Singapore (Pang 2006) and China (Zweig 2006). The following proposition is therefore suggested for future research:

**Proposition 15: Dual citizenship is an attractive incentive to support networking between professionals living overseas and their home countries, which can reduce skill labour shortage.**

### **9.3.3 Data analysis on illegal low-skilled migrant workers/Hill-Tribe villagers/refugees**

Illegal migrant workers were not highlighted in the extant literature as a policy discourse to address Thailand's skill labour shortage. However, it has been widely discussed and debated in Thai society throughout the period of 1992-2014. The context of these debates has also often been imbricate and covered other groups of people who do not hold Thai citizenship, such as Hill-Tribe villagers and refugees. The issue of refugees is proposed as a substitute workforce that may help reduce Thailand's skill labour shortage problems. Hence, these three groups have been combined to be discussed below.

In regard to Thailand's illegal migrant workers, Hill-Tribe villagers and refugees; three policy outcomes emerged from this study's data analysis: (1) citizenship; (2) refocusing the concept of policy on economic purpose rather than national security; and (3) the explicit direction of policy and dedicated legislation. Firstly, it was identified in the data analysis that the Hill-Tribe people and some refugees who have been in Thailand for a long time cannot develop their skills to the full capacity of becoming professionals because they do not hold Thai citizenship; in addition, their children can only receive basic education in Thailand. Hence, the Thai Government may need to consider granting citizenship to these groups, which is the key to creating work and study opportunities so they can develop and contribute to Thailand's skilled labour needs (e.g. higher-level education).

Secondly, with regard to refocusing the concept of policy, the key focus when planning migration policy in Thailand has always related to national security. This is from a short-term perspective, where it is expected that the illegal migrant workers will eventually go home; a mindset that has been proven wrong. As the data shows, most of Thailand's illegal migrant workers including their families have been in Thailand for a long period of time and harbour no

thoughts of leaving (Huguet, Chamrathirong & Richter 2011). This is mostly because there are numerous labour-intensive jobs in the Thai market for these migrant workers – jobs that most Thai workers do not want to do (Brees 2008; Huguet & Punpuing 2005; International Labour Organization 2008). Hence, Thailand needs these foreign migrant workers as a supportive workforce, and its policymakers should refocus their migrant policy on economic development rather than national security. Based on the data analysis, this is a proposition for future research:

**Proposition 16: Refocusing the concept of migration policy by granting citizenship to Hill-Tribe villagers and long-term refugees, especially the children, can reduce skill labour shortage.**

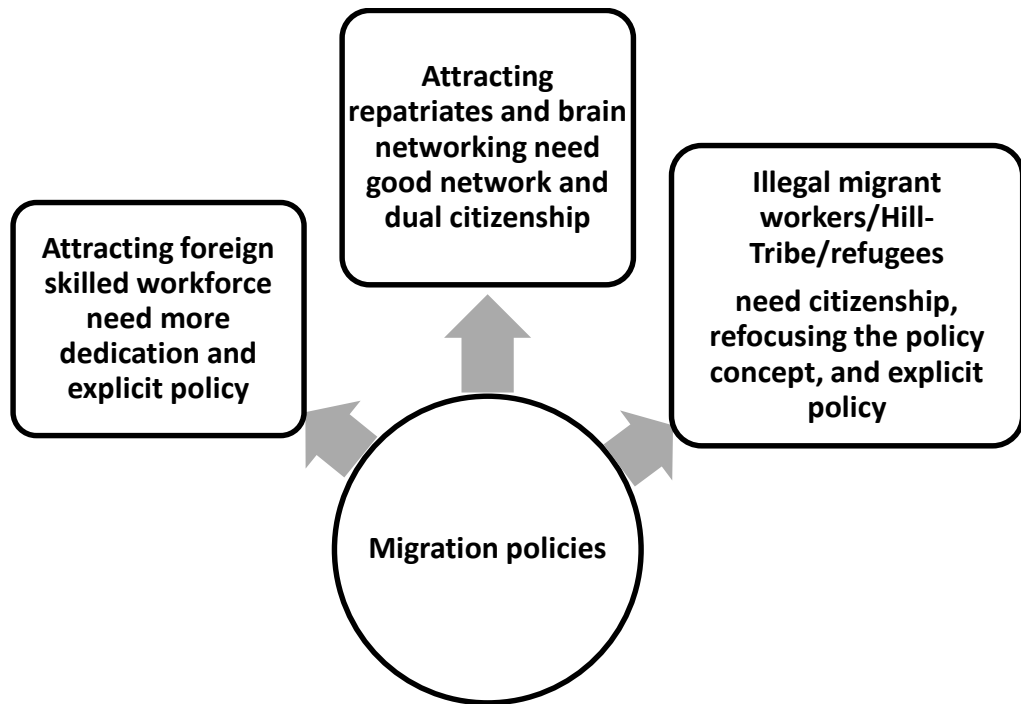
Thirdly, in regard to the explicit direction of policy and dedicated legislation, the data analysis in this study indicates that Thai government policy on illegal migrant workers has been filled with irony and contradiction. There appear to be substantial job vacancies in local businesses, especially in labour-intensive industries, which do not attract the local workforce but rather low-skilled migrants from neighbouring countries. Yet Thailand's laws and regulations forbid these foreign workers from entering and working in the country legally, even though there is demand from industry. However, these laws and regulations have been temporarily exempted on numerous occasions to allow illegal migrant workers to engage in industries that are unable to attract local labour. This obviously highlights unreliable and poorly developed policies with regard to legitimising immigrant workers to support labour market needs. Hence, it has been identified in this thesis that Thailand needs effective legislation to respond to the problems of illegal migrant workers. Based on the above discussion, the following is a proposition put forward for future research.

**Proposition 17: Effective legislation on illegal migrant workers based on economic development purposes can reduce skill labour shortage.**

#### **9.3.4 Summary of policy discourse outcomes on migration policies**

In this study, three policy discourses in relation to migration policies have been identified that can help reduce Thailand's skill labour shortage: (1) attracting foreign skilled workforce; (2) attracting repatriates and brain networking; and (3) illegal migrant workers/Hill-Tribe/refugees. In each policy discourse, there are different policy outcomes which are expected to address the skill labour shortage. Figure 9.6 below displays both the policy

discourse and their expected outcomes in relation to migration policies that address skill labour shortage in Thailand, based on the research findings.



**Figure 9.6: Expected policy discourse outcomes in migration policies**

## **9.4 Substitute workforces**

In regard to substitute workforces in Thailand, three policy discourses were identified in the extant literature: (1) female workforce; (2) disabled workforce; and (3) ageing workforce. The policy discourse outcomes of each of these discourses will be discussed in this section.

### **9.4.1 Data analysis on female workforce**

In the previous literature it was commonly noted that females are used as a substitute workforce in the labour market in many countries (Browne & Braun 2008; Bryant & Jaworski 2011; Fang 2009; Souness & Morrison 2006; Wallace & Marchant 2009). However, obstacles that prevent women from entering the labour market were also identified, such as the gender-job stereotype (Bryant & Jaworski 2011; Thomas 2004; Wallace & Marchant 2009); unequal employment opportunities (Ducanes & Abella 2008); and flexible employment (Fosslund 2012; Souness & Morrison 2006).

Based on the data analysis, it is argued in this thesis that the key deterrent females to enter Thailand's labour market is the gender-job stereotyping which leads to unequal opportunity between male and female. This finding runs parallel to the identification of this main obstacle in the extant literature (Bryant & Jaworski 2011; Thomas 2004; Wallace & Marchant 2009). Unequal opportunity then leads to unequal education and employment, which impact on the skills and capacity of the labour workforce. The data analysis therefore indicates that the attitude of Thai society towards its female workforce needs to change.

In terms of quantity, Graph 8.1 in Chapter 8 shows the increasing engagement of women in education, with high ratios of female to male enrolments in primary, secondary and tertiary education. These results indicate an increasing number of Thai female workers who have improved their skills through education.

In terms of quality, Graph 8.3 in Chapter 8 compares the percentage of female employees in the agricultural, industrial and service sectors between 1992 and 2012. These results show that during this period, the majority of Thailand's female workforce moved between the two less skilled-intensive industries, from agricultural to service, while the low amount women in the more skilled-intensive industrial sector remained relatively unchanged. In line with this, in Graph 8.4 which shows vocational students in Thailand by vocational education type and gender in 2014, the results highlight a larger proportion of male than female students in industry education, as required by the labour market.

This data analysis clearly indicates that Thailand's female workforce lacks training in skilled-intensive courses, and again reflects unequal employment opportunities in Thailand's labour market due to unequal education opportunities. Women workforce should therefore be encouraged to participate equally in education which would lead to the equal opportunity in employment (International Labour Organization 2008). It is therefore suggested in this thesis that the attitude of Thai society needs to be changed to promote and encourage the greater role of women in skilled-intensive employment. Based on this discussion, the following proposition is put forward for future research:

**Proposition 18: Promoting positive attitude of the society towards the female workforce can change gender-job stereotyping and provide equal opportunities in education and employment to women, which will reduce skill labour shortage.**

#### **9.4.2 Data analysis on ageing workforce**

It was also commonly identified in the extant literature that an ageing workforce can be used as a substitute workforce in response to skill labour shortage (Costa & Milia 2008; Davey 2008; Fang 2009; Fenwick 2012). Extending the retirement age has been strongly focused on in response to skill labour shortage (Bloom et al. 2011; Costa & Milia 2008; Davey 2008; Ducanes & Abella 2008); along with the flexibility of working conditions (Costa & Milia 2008; Ducanes & Abella 2008; Kalirajan & Shantakumar 1998; Walker 2006); and retraining (Fenwick 2012; Kalirajan & Shantakumar 1998).

Based on this study's data analysis, similar to its female workforce, the attitude of Thai society plays an important role in encouraging its ageing workforce to remain in the labour market. As the data indicated, the long-held traditional attitude of Thai society is that the adult children look after their ageing parents and grandparents. Based on this, it is commonly perceived that any family that lets their elderly stay on in the labour market will not be respected by their neighbours and friends.

As a result, this research found that the Thai Government had been reluctant to provide training or upgrading of skills for the elderly to remain in the labour market as a substitute workforce. The data showed that Thai policy on ageing population during the period of 1992 to 2014 was mainly about the welfare of the elderly and the promoting of relationships between the elderly and their families, rather than skills improvement. The data analysis also revealed that the issue about extending Thailand's retirement age has been discussed for a long time, but nothing has been accomplished.

Based on the data analysis, it is argued in this thesis that as Thailand is facing a skill labour shortage, its ageing population would be an ideal substitute workforce. To enable this, the positive attitude of Thai society towards the existence of the elderly in the labour market needs to be promoted. Additional policies and plans such as training programs, extending retirement age and employers' support will also need to be provided in order to attract the ageing workforce to remain in the labour market (Fang 2009; Fenwick 2012; Osman-Gani & Chan 2009). Based on this discussion, the following proposition is put forward for future research:

**Proposition 19: Promoting a positive attitude in society towards extending the retirement age, flexible employment, and retraining and updating skills in the ageing workforce can reduce skill labour shortage.**



### **9.4.3 Data analysis on disabled workforce**

In the extant literature, the disabled have also been identified as a substitute workforce for addressing skill labour shortage (Berkowitz & O'Leary 2000; Campbell 2010; Gröschl 2004; Tufan, Yaman & Arun 2007). In line with this, the government needs to be a key player in supporting its disabled workforce (Campbell 2010; Ducanes & Abella 2008), and employer support is also essential (Berkowitz & O'Leary 2000; Gröschl 2004). Therefore, both the government and employers need to work together to effectively use a country's disabled workforce in the labour market.

This study's data analysis showed that the Thai Government has consistently provided education and skills training for the country's disabled. However, these policies and plans have only provided basic education and skills training for welfare purposes rather than matching with the requirements of the labour market. There was no clear statistical evidence in the data on the number of disabled workforce in the labour market and their type of employment during the period of 1992 to 2014. This again emphasises the Thai Government's lack of recognition of the disabled as a productive resource in the employment market.

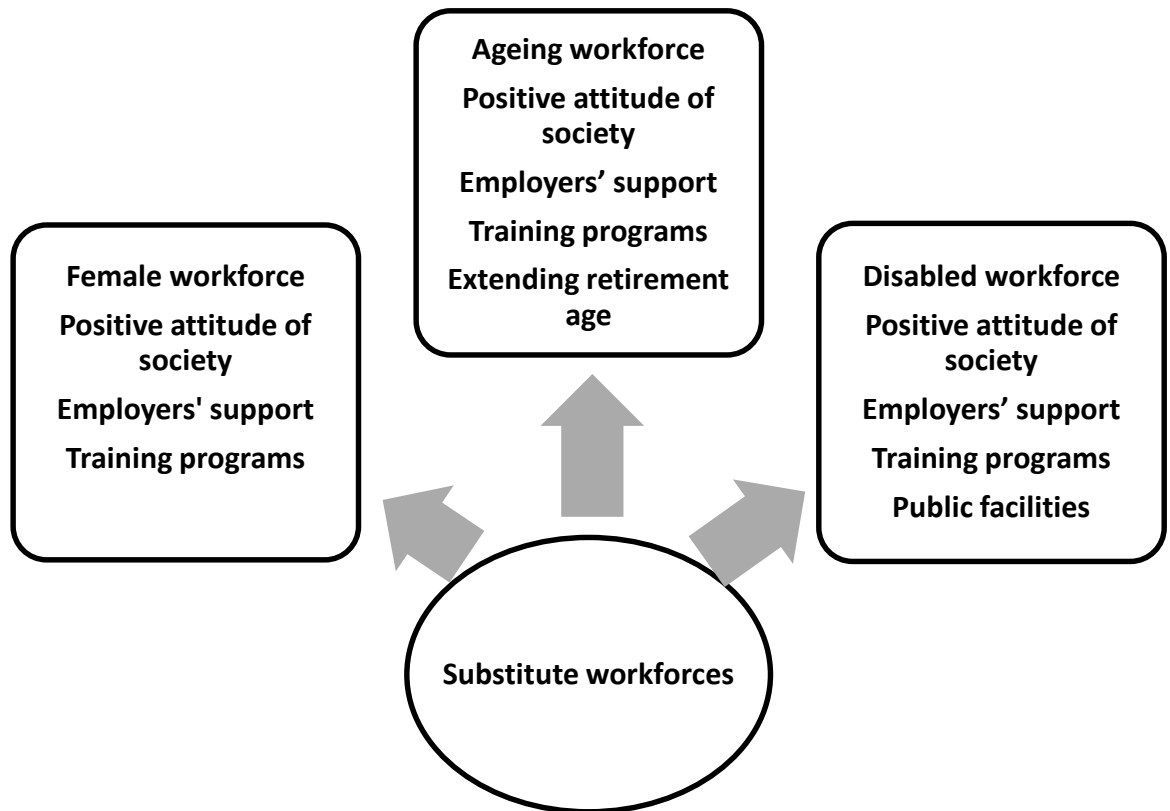
Even more so than Thailand's female and ageing workforces, there is minimal positive recognition of the disabled workforce, and a general lack of recognition of the disabled in the community. For example, no effective public infrastructure has been provided for the disabled in Thailand, which has caused disconnection and disengagement between the disabled and Thai society at large. Based on these research findings, it is argued in this thesis that the positive attitude of society is essential to effectively using the disabled as a substitute workforce in response to skill labour shortage. The following proposition for future research is therefore put forward:

**Proposition 20: Promoting positive attitude of society towards the disabled workforce via policies such as public infrastructure for disabled, training programs, and flexible working arrangements can support the disabled workforce to perform in the labour market and thereby reduce skill labour shortage.**

### **9.4.4 Summary of policy discourse outcomes on substitute workforces**

It has been identified in this study's data analysis, that the attitude of Thai society is the key factor to transform these three workforces into substitute workforces. The Thai Government needs to determine and dedicate resources to change the attitude of its society to address its

skill labour shortage. There are also other policy outcomes in each of the three workforces, as shown in Figure 9.7 below.



**Figure 9.7: Expected policy discourse outcomes in substitute workforces**

### **9.5 Model of reducing skill labour shortage in Thailand**

The model for reducing the skill labour shortage in Thailand illustrated in Figure 9.8 has been designed based on the discussions of the themes in this chapter. The process that has culminated in the final model commenced with the process of analysing the data which started by collecting newspaper articles from the 1992-2014 period, which was done via Factiva (online newspaper database provided by Swinburne University’s library). A vast number of keywords were used to search for newspaper articles related to skill labour shortage generally and to items reflecting the themes of the three policy responses as stated in the conceptual framework (Figure 4.1 in Chapter 4).

Next the data was sorted by policy categories, sub-policy categories and time periods via qualitative data analysis software NVivo (QSR International 2015). The articles were categorised by identifying the similarity of the keywords between articles (Boyatzis 1998;

Braun & Clarke 2006). As stated in Chapter 4, this research aimed both deductive and inductive analysis in identifying the themes to address Thailand's skill labour shortage. At this stage, most data matched the concepts developed in the conceptual framework. However, although based on extant literature, the themes in the conceptual framework were developed, the documentation analysis and subsequent policy discourse identified items that were not reflected in the conceptual framework. One of these items was the contribution of illegal migrant workers, which was not highlighted in the extant literature but emerged from the documentation analysis. The extant literature also did not address the contribution of Hill-Tribe villagers and refugees, and these two were combined with the illegal migrant workers under migration policy in the data analysis.

Next, during the thesis writing process, the data in each category was triangulated with government policies, government documents, policy statements, international organisations' reports, government statistics, and academic journal articles. Triangulation was employed as a research technique to intensify the strength of the research findings (Denzin & Lincoln 2003; Robson 2011; Swanborn 2010). This research was based on the thematic analysis method, which was described by Braun and Clarke (2006) as a process of analysis that goes back and forth – at times, moving back to the collecting step, searching for more information and coding the data while writing the chapters.

In creating the final model, the policy discourse outcomes from the themes were summarised and included. The resultant model in relation to reducing skill labour shortage in Thailand is shown below in Figure 9.8 is therefore, the summary of the skill labour shortage discourse in this thesis.

**Themes addressing skill labour shortage problems in Thailand**



**Improving basic education**  
 Legislation increases students; teachers are key; decentralisation and stakeholder participation; policies focusing on quality

**Improving vocational education**  
 Dedication of government; role of private sector; collaboration between government and the industry; positive attitude of society

**Improving higher education**  
 Dedication of government; role of private sector; establish autonomous university status; internationalisation

**Lifelong training programs**  
 Collaboration between public and private sectors; role of private sector

**Attracting foreign skilled workforce**  
 Government dedication; explicit policy

**Attracting repatriates and brain networking**  
 Good networking; dual citizenship

**Illegal migrant workers/Hill-Tribe/refugees**  
 Citizenships; refocusing the policy concept; explicit policy

**Female workforce**  
 Positive attitude of society; employers' support; training programs

**Ageing workforce**  
 Positive attitude of society; employers' support; training programs; extending retirement age

**Disabled workforce**  
 Positive attitude of society; employers' support; training programs; public facilities



**Developing effective policy responses to reduce skill labour shortage in Thailand**

Figure 9.8: Model for reducing skill labour shortage in Thailand

## **9.6 Summary of the chapter**

Skills and capacities of human capital are the most important factors for the long-term economic progression of a nation (The Human Capital Report 2015). In this chapter, the three key policy responses – education and training policies, migration policies, and substitute workforces – for addressing Thailand’s skill labour shortage problem were presented and discussed. This thesis recommends that if Thailand wants to achieve economic development for the long term, based on the empirical documentary evidence, it may want to consider using the model presented in Figure 9.8 in relation to reducing the country’s skill labour shortage.

However, as this study’s data analysis suggested, a significant factor that may prevent the development of a holistic approach to reducing skill labour shortage in Thailand is the inefficiency of the Thai public sector in achieving long-term results from policies. The analysis clearly reveals constant changes in Thai policy – legislation that has been changed or terminated for no other reason than political. For example, there were 23 education ministers across the 1992-2014 period studied in this thesis (Ministry of Education, <http://www.moe.go.th/moe/th/profile/index.php>); on average, those ministers only acted in their role for a year. There have therefore been continual interruptions to the effective implementation of Thai education policies, as discussed in Chapter 6.

It is a long process to develop a skilled workforce. Children normally spend at least 15 years completing primary and secondary education, before choosing to enhance their skills in vocational education, or going onto upper secondary and then higher education, or entering straight into the labour market. Thai policymakers therefore need to maintain a long-term vision and possibly a bipartisan approach towards policy development and implementation.

## Chapter 10: Conclusion

### 10.1 Introduction

This chapter aims to provide conclusions to this study which was conducted based on the following research problem: the Thai Government's inability to meet its human resources capacity building to enable economic progress. This research problem led to the research objective of exploring and identifying how the Thai Government responds to its skill labour shortage to achieve its economic development goals. Based on the research problem and objective, the main research question for this thesis was: What are the Thai Government's policy responses to the skill labour shortage to meet its economic development goals?

As the concluding chapter, this section begins with a summary of the research process, with the aim of providing background to this research and the importance of the phenomenon of the Thai Government's responses to its skill labour shortage. The data analysis explores these government responses that impact on the country's sustainable economic, which forms the thrust of this thesis. In addition, data from newspaper articles in the period of 1992 to 2014 were analysed and triangulated with other documents. Based on the data analysis, the implications for theory are also provided, highlighting the contributions of this research. This chapter concludes with recommendations for practitioners, followed by the study's contribution and implications for future research and the limitation of the study.

### 10.2 Summary of research process

This research was conducted based on the notion that Thailand is currently facing a significant skill labour shortage, which is seen as a barrier to achieving further economic growth (JETRO 2006; Russell 2007; Theparat 2005; Wongboonsin & Wongboonsin 2009). There are several factors that have caused this shortage of skilled labour such as demographic change (JETRO 2006; Wangkiat 2013); economic structural change (Nafziger 2005; Robbins 2012; Todaro & Smith 2009); and mismatch between education policy and labour market needs (Ducanes & Abella 2008; Park 2008a; World Bank 2012). All of these factors have contributed to Thailand's current status in the MIT, as Surin Pitsuwan, a former ASEAN secretary, confirmed in *Surin points out Thailand is trapped for the long term* (2015). Many believe that Thailand needs to transform its economic structure from labour-intensive manufacturing to skilled-intensive manufacturing and service industries (Jimenez et al. 2012; Jitsuchon 2012; Phasuk & Wann 2013).

Based on the literature, a skilled labour workforce plays a crucial role in increasing the productivity of a country and thereby contributing to its economic growth (Abella 2006; Banks 2010; Keller 2004; Todaro & Smith 2009; World Bank 2012; Xu 2000). Further, to increase economic activity, FDI is deemed an important input, and to enable the inflow of FDI, skilled labour is essential (Borensztein, Gregorio & Lee 1998; Kok & Ersoy 2009; Lall & Narula 2004; Noorbakhsh, Paloni & Youssef 2001; Wint & Williams 2002). Therefore, it has been suggested that the Thai Government needs a skilled labour workforce by building its human resources capacity to attract FDI (Chatterji & Montagna 2008; Hanson 1996; Kottaridi 2005; Noorbakhsh, Paloni & Youssef 2001).

In this thesis, extant literature on skilled labour needs was sourced and analysed, with the following policy responses to skill labour shortage forwarded for further analysis: (1) education and training policies (Hawley & Paek 2005; Osman-Gani & Chan 2009; McGrath-Champ, Rosewarne & Rittau 2011; Nieuwenhuis 2012; Skeldon 2008; Tremblay 2005; Truong, van der Heijden & Rowley 2010); (2) migration policies (Ciumasu 2010; Ducanes & Abella 2008; Groenhout 2012; Iredale 2000; Lowell 2001b; Orłowska 2011); and (3) substitute workforces (Andersson & Fejes 2010; Browne & Braun 2008; Bryant & Jaworski 2011; Ducanes & Abella 2008; Fenwick 2012). The purpose was to explore how the Thai Government responded to its skill labour shortage problems between 1992 and 2014.

This period was chosen because the term 'skill labour shortage' first appeared as an issue in Thai society around late 1980s, according to *Shortage of engineers stifling industrial growth* (1989). The term was also stated for the first time in the Thai Government's NESD Plan 7 (1992-1996). At the beginning of 1990s, the Thai economy was growing rapidly; although this was halted when the AFC occurred in 1997. This incident emphasised the impact of the skill labour shortage to Thai policymakers, and since then the Thai economy has fluctuated. The economic situation of Thailand has been suppressed further by ongoing political unrest, starting with the military coup in 2006 and another in May 2014.

Hence, this research investigated the phenomenon by examining newspaper articles in the period from 1992 to 2014, and triangulated this data with other documents such as government policies, policy statements, academic journal articles and international organisations' reports to answer the main research question. The research methods used in this study were documentation analysis, data triangulation and thematic analysis.

### **10.3 Overview of data analysis**

From the extant literature data analysis, three policy themes – education and training, migration, and substitute workforce – were identified, and the following six additional sub-questions were added to address the theme:

1a. What kind of education and training policies has the Thai Government implemented that respond to the skill labour shortage?

1b. What are the education and training policy suggestions from society for addressing skill labour shortage?

2a. What kind of migration policies has the Thai Government implemented that respond to the skill labour shortage?

2b. What are the migration policy suggestions from society for addressing skill labour shortage?

3a. What kinds of substitute workforces does the Thai Government need to address skill labour shortage?

3b. How does the Thai Government maximise the use of substitute workforces to address skill labour shortage?

In the following sections, the three themes and responses to these themes are summarising.

#### **10.3.1 Education and training policies**

To answer sub-research questions 1a and 1b, four policy discourses have been identified in relation to education and training policy during 1992-2014: (1) improving basic education; (2) improving vocational education; (3) improving higher education; and (4) lifelong training programs. Analysis and discussion on these four policy discourses were provided in Chapters 6 and 9.

Firstly, for improving basic education, four policy outcomes emerged from the data analysis: (1) legislation to help increase the number of students; (2) policies focusing on improving education quality; (3) the greater role of decentralisation and stakeholder participation; and (4) teachers as a key player in improving the quality of basic education. Figure 9.2 in Chapter 9 displayed these four policy outcomes as expected factors for improving basic education in Thailand.



The data analysis shows that the Thai Government has applied effective legislation such as its pledges in Constitution B.E.2540 (1997) and Constitution B.E.2550 (2007) to increase attainment of basic education for students. This effective legislation has already provided the groundwork for Thailand's future workforce with basic skills in literacy and numeracy which are necessary for further skills development. The Thai Government had also attempted to improve the quality of basic education, but this policy has often been interrupted. Based on data analysis, the key problem for the Thai Government is the discontinuity of policy implementation – Thai politicians have not been able to implement consistent policy. For example, from 1992 to 2014, there have been 14 governments and 11 prime ministers in Thailand.

The Thai Government should also encourage greater participation from the local community in regard to basic education policy. Such participation will better address the requirements of the community and create pressure for teachers and authorities to perform effectively in improving basic education (Pandey, Goyal & Sundararaman 2009). The role of teachers is a key element in improving basic education. Several obstacles in Thai basic education such as rote learning and students' inability to use English could be removed via high-quality teachers; Simola (2005) contended that good-quality teachers can impact on the quality of students.

Secondly, in relation to improving vocational education, three policy discourse outcomes were identified from the data analysis: (1) dedication of government to vocational education; (2) collaboration between government and the industry; and (3) greater role of private vocational providers. In addition, a significant proposed policy emerged from the data analysis – positive attitude of society towards vocational education. Figure 9.3 in Chapter 9 displayed these three policy outcomes and the proposed policy as expected factors to improve vocational education.

Based on the data analysis, the Thai Government is perceived as lacking commitment to producing a vocationally skilled workforce as required by the labour market. Both the quantity and quality of vocational education in Thailand are in severe circumstances. For instance, the data shows that when deciding their education path, most Thai students choose universities as their first preference rather than vocational colleges. The data also suggested that the collaboration between government and industry is insufficient, which reflects the mismatch of vocational education policy with the requirements of Thailand's labour market. In addition, the role of private vocational providers to help public vocational providers produce a vocational skilled workforce has not been sufficiently supported by the Thai Government. Hence, the Thai Government should encourage better collaboration between the public and private sectors,

including the greater role of private vocational colleges, in order to produce a vocationally skilled workforce that meets the needs of the labour market. Based on this study's data analysis, it is recommended in this thesis that the image of Thailand's vocational education be rebranded in order to attract and encourage more enrolments in vocational education.

Thirdly, with regard to improving higher education, four policy discourse outcomes were identified from the data analysis: (1) dedication of government on quantity and quality of higher education; (2) encouraging internationalisation of higher education; (3) establishing autonomous university status; and (4) encouraging greater role of private sector in higher education. Figure 9.4 in Chapter 9 displayed these four policy outcomes as expected factors to improve higher education.

Based on the data analysis, the Thai Government has been highly successful in raising the number of universities and students. However, it still needs to increase its dedication to improving the quality of higher education. For instance, the data showed that during the period of 1992 to 2014, there were multiple complaints about the mismatch between higher education policy and the requirements of the labour market. The data also highlighted the Thai Government's efforts to encourage the internationalisation of higher education; although the key obstacle of students and workers' limited use of English in communications remains. In the near future, Thailand will not be able avoid the trend of globalisation. For example, the ASEAN integration plans for the end of 2015 will create more movement of people across borders, and will also increase labour market needs for a skilled workforce with strong English language abilities. Therefore, the quality of higher education is an essential ingredient to improving Thailand's highly skilled workforce.

In addition, the data analysis indicates that the Thai Government needs to provide clearer directions and more support for the other two policy outcomes in relation to improving higher education – autonomous university status and greater role of the private sector. When universities become independent from government control, they are free to make decisions on their own matters, which can help to alleviate the administration process. It also enables the autonomous university to more directly respond to the requirements of the labour market. Private universities will also be an important player in helping public universities produce skilled labour with qualities that meet the labour market demands. However, the data analysis suggests that the Thai Government first needs to provide more support to private universities in addressing Thailand's skill labour shortage.

Lastly, with regard to lifelong training programs, two policy discourse outcomes emerged from the data analysis: (1) collaboration between the public and private sectors; and (2) greater role of private sector in lifelong training. Figure 9.5 in Chapter 9 displayed these two policy outcomes as expected factors in lifelong training as a response to Thailand's skill labour shortage.

Both of these policy outcomes were highlighted in the extant literature, where it was argued that the private sector should play a leading role in lifelong training as they know what kinds of skills they require (Abelman et al. 2001). In line with this, the public sector should play more of a supportive role in assisting the private sector to arrange training programs that suit their needs. It is therefore contended in this thesis that collaboration between the public and private sectors is important in addressing Thailand's skill labour shortage.

### **10.3.2 Migration policies**

To answer the sub-research questions 2a and 2b, three policy discourses in relation to migration policy have been identified which the Thai Government should apply to address its skill labour shortage: (1) attracting foreign citizens; (2) repatriation and brain networking; (3) and illegal migrant workers/Hill-Tribes/refugees. These three policy discourses were analysed and discussed in Chapters 7 and 9, while Figure 9.6 in Chapter 9 displayed these three policy discourses and their policy outcomes in relation to addressing Thailand's skill labour shortage.

Firstly, with regard to attracting foreign citizens, the data analysis suggested that the Thai Government has not been that focused on attracting skilled foreign citizens to Thailand, mostly based on its outdated legislation and unclear policy. There are a number of acts and regulations relating to foreign citizens migrating to and working in Thailand, which have been legitimised for a long time – they need to be updated and reformed. In addition, while there has been acknowledgement since NESD Plan 7 (1992-1996) of the need to recruit a foreign skilled workforce for fields lacking skilled labour such as science and technology, the Thai Government has not responded with any clear legislation. Some labour ministers have publicly declared that attracting foreign skilled citizens is a necessity for Thailand's economic growth, but there has been no relevant policy based on these statements.

Local pressure to attract skilled foreign citizens was evidenced in newspaper articles from this period (1992-2014). In addition, based on this study's data analysis, it is emphasised in this thesis that Thailand cannot avoid the growing trend of globalisation, particularly when ASEAN integration will be effective from the end of 2015. It is therefore recommended in this thesis that the Thai Government commit more time and resources to attracting skilled foreign

citizens to address the country's skill labour shortage – the context of this policy discourse should be clear, with out-of-date legislation improved.

Secondly, in relation to repatriation and brain networking, according to this study's data analysis, the Thai Government has also not conveyed much determination to address these policy discourses, mostly due to budget constraint. It is argued in this thesis that repatriation and brain networking are important policies to address Thailand's skill labour shortage, particularly via Thai professionals that are highly experienced in fields where Thailand lacks skilled labour, such as science and technology. Attracting these professionals to repatriate or establishing connections with them for brain networking will be beneficial to Thailand's economic advancement. The data analysis also indicates that networking and dual citizenships are key mechanisms for responding to these two policy discourses.

Thirdly, with regard to illegal migrant workers/Hill-Tribes/refugees, the research found that this policy discourse is not highlighted in the extant literature. Yet even though these groups are not skilled, they are highly important in terms of supportive workforces. They can fulfil the jobs in industries that Thai workers do not want to engage in such as cleaning, fisheries, agriculture and construction. Based on this study's data analysis, the Thai Government appears to have enacted relevant policy based on the concept of national security, which limits the entry to Thailand for these groups. However, this national security-oriented policy has often been contradicted by the demands of Thailand's labour market, which has created unclear policy and ineffective legislation for government officials to use with respect to illegal migrant workers/Hill-Tribes/refugees.

Based on the data analysis, if Thailand wants to step out of the MIT and move up the economic value chain it will need to transform most of its skilled workforce from labour-intensive to technology-intensive. However, it has also been identified in this data analysis that Thailand will need to maintain labour-intensive workers during and after this transition, which is where the illegal low-skilled migrant workers/Hill-Tribes villagers/refugees can help. In addition, due to the decreasing population growth in Thailand, it is contended in this thesis that it is time for Thai policymakers to think 'outside the square' in regard to its use of migrants and disadvantaged groups. These migrants may also have the potential to become a skilled workforce for Thai labour market – most have been in Thailand for a long time and their children have been educated in Thai primary schools. Yet they are not generally granted Thai citizenship, which bars them from accessing advanced education and social welfare. It is

therefore proposed in this thesis that the Thai Government consider granting citizenship to these illegal migrant workers/Hill-Tribes/refugees, especially their children.

### **10.3.3 Substitute workforces**

To answer sub-research questions 3a and 3b, three key policy discourses were identified which the Thai Government should apply to address skill labour shortage: (1) female workforce, (2) ageing workforce, and (3) disabled workforce. These three policy discourses were analysed and discussed in Chapters 8 and 9, and Figure 9.7 in Chapter 9 displayed these three policy discourses and their policy outcomes in relation to using substitute workforces to address Thailand's skill labour shortage.

Firstly, in relation to a female workforce, this study's data analysis revealed that in Thailand women are significant as income earners for their families. The results showed that the participation of Thai women in their labour workforce is higher than for neighbouring ASEAN countries. However, the data also found that gender-job stereotyping is a key obstacle for female workforce further development, which has often led to unequal opportunities. It is therefore contended in this thesis that if the Thai Government wants to further develop and improve female workers' skills, it needs to promote the changing of Thai community attitudes in relation to gender-job stereotyping. Skills training courses that adequately meet Thailand's labour market requirements should be offered to the female workforce, involving support from employers to promote these training courses to their female employees.

Secondly, in relation to Thailand's ageing workforce, the data analysis found that the Thai cultural norm of adult children looking after their elderly parents or relatives has a strong influence. The Thai Government has therefore been reluctant to encourage its ageing workforce to remain in the labour market. Thus, this data analysis showed that the attitude of society is highly important to ensuring Thailand's ageing workforce remains in the labour market. Hence, similar to the female workforce, it is recommended in this thesis that the Thai Government promotes a changing of Thai community attitudes in regards to the working abilities of the elderly. Other policies and plans to encourage Thailand's ageing workforce to remain in the labour market will also need to be applied, such as the extending of retirement age, employer support, and skills development training programs.

Thirdly, with regard to Thailand's disabled workforce, the data analysis revealed a lack of connection between the disabled and Thai society was a key obstacle preventing them from becoming a substitute workforce. For example, public infrastructure for the disabled has not

been adequately provided, creating difficulties like independent travelling. The difficulty of commuting is a particularly significant obstacle for the disabled if they are employed.

This example shows the lack of recognition of the disabled in Thai society; and similar to the female and ageing workforces discussed above, it shows the negative attitude of Thai society towards the disabled. It is therefore recommended in this thesis that the Thai Government encourages a positive society attitude towards the disabled workforce. In addition, employer support via skills training programs should be encouraged, to assist the disabled in connecting with society and the needs of the labour market.

#### **10.4 Implications for theory**

This section provides theoretical implications and contributions to the knowledge of human resources capacity building in Thailand, especially in relation to government policy responses to the skill labour shortage. This study, employing a qualitative approach, culminated in the input-output categorisation of skill labour shortage policy discourses in the 1992 to 2014 period in Thailand (Figure 9.1), a final theoretical model for reducing skill labour shortage in Thailand (Figure 9.8), and a set of sub-models addressing the three themes in the study (Figures 9.2, 9.3, 9.4, 9.5, 9.6 and 9.7). As for future studies, 20 propositions have been put forward for future research – a summary of the propositions are provided in Figure 10.1 below. This is the first research that has taken a fully holistic view in addressing skill labour shortage in a nation and has provided propositions developed from a qualitative in-depth study of skill labour shortage in Thailand.

The importance of research outcome is to add and extend existing knowledge. To this end, this study has added to existing knowledge in skill labour shortage in the three theme areas identified in this study. The study's contributions to theory are further discussed by reviewing the three main policy themes in addressing skill labour shortage to meet economic development: education and training policies; migration policies; and substitute workforces in the sections below. The three policy themes, as shown in Chapter 9, are divided into various policy discourses.

<b>Propositions for future research</b>	
<b>Policy themes</b>	<b>Propositions</b>
<b>Education and training policies</b>	<b>Proposition 1:</b> Increase educational attainment via supportive legislation to reduce skill labour shortage
	<b>Proposition 2:</b> Skill labour shortage can be reduced by improving the quality of basic education via continuous policy implementation
	<b>Proposition 3:</b> Improving the quality of teachers can reduce skill labour shortage
	<b>Proposition 4:</b> The greater role of decentralisation and stakeholder participation can reduce skill labour shortage via basic education policymaking processes
	<b>Proposition 5:</b> Improving vocational education via alignment with economic policy will reduce skill labour shortage
	<b>Proposition 6:</b> Policy coordination and cooperation between the government, industry and education providers in both public and private sectors on vocational training will reduce skill labour shortage
	<b>Proposition 7:</b> Improving vocational education by supporting the greater role of private vocational providers can reduce skill labour shortage
	<b>Proposition 8:</b> Improving vocational education by encouraging positive attitude of society towards vocational education by increasing the quality of vocational students can reduce skill labour shortage
	<b>Proposition 9:</b> Expanding higher education institutes through the dedicated commitment of government to both quantity and quality of higher education will reduce the skill labour shortage problems
	<b>Proposition 10:</b> Internationalising higher education via policies that allow foreign university campuses, recruit foreign students, encourage cooperation between local and foreign universities, and encourage the use of English in society will reduce skill labour shortage
	<b>Proposition 11:</b> The concept of autonomous universities which allows universities to be self-reliant in terms of administration and finances can reduce skill labour shortage problems
	<b>Proposition 12:</b> The greater role of the private sector in higher education can reduce skill labour shortage by increasing student numbers to support labour market needs
	<b>Proposition 13:</b> Collaboration between public and private sectors on lifelong training programs will address market demands and can reduce skill labour shortage, via the leading role of the private sector and the supportive role of the public sector
<b>Migration policies</b>	<b>Proposition 14:</b> Attracting foreign skilled workforces can reduce skill labour shortage and accelerate economic growth
	<b>Proposition 15:</b> Dual citizenship is an attractive incentive to support networking between professionals living overseas and their home countries, which can reduce skill labour shortage
	<b>Proposition 16:</b> Refocusing the concept of migration policy by granting citizenship to Hill-Tribe villagers and long-term refugees, especially the children, can reduce skill labour shortage
	<b>Proposition 17:</b> Effective legislation on illegal migrant workers based on economic development purposes can reduce skill labour shortage
<b>Substitute workforces</b>	<b>Proposition 18:</b> Promoting positive attitude of the society towards the female workforce can change gender-job stereotyping and provide equal opportunities in education and employment to women, which will reduce skill labour shortage
	<b>Proposition 19:</b> Promoting a positive attitude in society towards extending the retirement age, flexible employment, and retraining and updating skills in the ageing workforce can reduce skill labour shortage
	<b>Proposition 20:</b> Promoting positive attitude of society towards the disabled workforce via policies such as public infrastructure for disabled, training programs, and flexible working arrangements can support the disabled workforce to perform in the labour market and thereby reduce skill labour shortage

**Figure 10.1: Propositions for future research**

#### **10.4.1 Implications for theory in education and training policies**

In particular, this study identified policy outcomes that add to existing theory for improving basic education in Thailand by identifying the importance of (1) legislation to increase the number of students; (2) policies focusing on improving education quality; (3) teachers as a key player in improving the quality of basic education; and (4) the greater role of decentralisation and stakeholder participation in basic education. These policy outcomes confirm the findings in previous research for improving basic education, such as government capability to increase class attendance, student retention, and quality of basic education (International Labour Organization 2008; Nieuwenhuis 2012), the development of teachers (Aluede & Idogho 2014; Davidson 2007; Simola 2005; Stone, Kaminski & Gloeckner 2009) and the community participation (Denessen, Bakker & Gierveld 2007; Doner 2009; Pandey, Goyal & Sundararaman 2009).

Secondly, based on data analysis, this research affirms that two policy outcomes – dedication of government to vocational education, and collaboration between the government and industry – can improve vocational education, as stated in previous literature (Birrell, Healy & Smith 2008; Hawley & Paek 2005; Ho & Ge 2011; International Labour Organization 2008; Mustapha & Abdullah 2004).

There was no prior research about the role of private vocational colleges in reducing skill labour shortage; yet this study's data analysis revealed that the role of private vocational colleges has become an important source for skilled labour. Therefore, this study has added private vocational colleges as a significant contributor, in addition to public vocational colleges, in producing a vocationally skilled workforce for Thailand.

In addition, based on the data analysis, another policy proposal emerged in this study – encouraging positive attitude of society towards vocational education. This proposed policy was in support of rebranding the image of vocational education to attract student enrolments. As a factor in support of this proposal, the Thai Government needs to improve the quality of vocational education.

Thirdly, two policy outcomes in relation to improving higher education – dedication of government on quantity and quality of higher education, and encouraging internationalisation of higher education – supports the proposed statements to improve higher education (Cameron & O'Hanlon-Rose 2011; Chalapati 2007; Ho & Ge 2011; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011; Tremblay 2005; Ziguras & Law 2006). The policy outcomes of the Thai Government's pledge to improve the quantity and quality of higher education highlight the



significant role of government in improving higher education. In addition, even though the Thai Government has a policy on internationalisation to improve higher education, it was found in the data analysis that the key obstacle for internationalisation in Thailand is the inability of its people to use English. The Thai Government needs to encourage nationwide use of English in support of internationalisation – it is an international language that Thailand needs to promote. In particular, this could provide a competitive advantage in relation to ASEAN integration in 2015.

In addition, there are two policy discourse outcomes that were not presented in the literature: establishing autonomous university status; and encouraging the greater role of private sector in higher education. Based on the data analysis in this study, the quality of higher education would be improved when a university becomes autonomous. In addition, skill labour shortage would be reduced when a private university is encouraged to take on a greater role in producing a skilled workforce.

Lastly, literature on lifelong training programs has been strengthened by this research providing two policy outcomes: collaboration between public and private sectors; and the greater role of private sector in lifelong training (Fleming & Soborg 2010; Hussein, Manthorpe & Stevens 2011; Kalafsky 2008; Mackenzie, Kilpatrick & Akintoye 2000; Nieuwenhuis 2012; Osman-Gani & Chan 2009). Good collaboration between public and private sectors needs to be established in Thailand to provide skills development programs that meet market requirements. The private sector should also occupy the leading role in lifelong training programs, so it can steer training programs in the direction they need.

#### **10.4.2 Implications for theory in migration policies**

This research confirms that (1) attracting foreign citizen and (2) repatriation and brain networking policy discourses are important for addressing skill labour shortage. However, the Thai Government has appeared reluctant to apply these policy discourses, due to budget constraints, out-of-date legislation and unclear policies. It is argued in this thesis that the free movement of people across borders is becoming unmanageable politically, and is economically perceived as an advantage to the Thai economy. The Thai Government should therefore update its policies and legislation to attract skilled foreign citizens and repatriates to work, stay and/or collaborate with local professionals, helping the country to achieve its economic development goals. This study believes this cross-border labour would be a source of manpower that would supplement Thailand's skilled labour needs.

In this research a policy discourse emerged identifying illegal migrant workers/Hill-Tribe/refugees as a new source of labour which has not been previously studied in terms of responding to skill labour shortage. As discussed in Chapter 9, even though these groups are not generally skilled, they are very important in terms of being supportive workforces in the industries where Thai locals do not want to be employed. In addition, as Thailand is in a transition phase in its economic development, it requires a shift in its value chain to lift the nation out of the MIT (see Chapter 5) from labour-intensive to technology-intensive, and these low-skilled workforces will help enable this. In addition, these workforces have been in Thailand for a long time and most of their children have had basic education in Thai schools; yet they are unable to develop their skills further due to being stateless. The Thai Government should grant citizenship and provide training to these workforces especially their children as it does for its citizens; thereby effectively increasing the labour pool.

#### **10.4.3 Implications for theory in substitute workforces**

Based on the data analysis, this research emphasises the importance of (1) female workforce, (2) ageing workforce and (3) disabled workforce as substitute workforces in response to Thailand's skill labour shortage, as previous literature has highlighted. The data analysis also shows there is a similar obstacle preventing these three substitute workforces from entering the labour market – the negative attitude of society towards them. Hence, the Thai Government needs to cultivate a positive attitude towards these three substitute workforces. There are also other factors that will help to improve and develop the skills of these substitute workforces, including employer support and specifically designed training programs. In addition, factors such as extending retirement age for the ageing workforce and public facilities for the disabled workforce can encourage workforce participation.

#### **10.5 Implications for practice**

This research aims to explore and identify how the Thai Government responds to skill labour shortage to meet its economic development goals. Three key policy themes – education and training policies, migration policies, and substitute workforces – have been analysed. Based on the data analysis, recommendations have been made on how the Thai Government could respond to the country's skill labour shortage, in order to build human resources capacity to achieve economic development.

Firstly, in relation to education and training policies, the four policy outcomes that emerged from the data analysis for improving basic education, as stated above, support the literature (Cameron & O'Hanlon-Rose 2011; Kim 2012; Mattei 2012; Mustapha & Abdullah 2004;

Nieuwenhuis 2012; Osman-Gani & Chan 2009; Sidhu, Ho & Yeoh 2011). However, this research also revealed that a key obstacle is the discontinuity of policy implementation. The Thai Government needs to avoid policy interruptions such as changes due to frequent cabinet reshuffles. This research's emphasis is on economic rather than political outcomes, recommending that Thailand needs the continuity of bipartisan agreed policies to assist the country's development, including continuous implementation of policies.

For both vocational education and higher education, the role of private education providers was not highlighted in the literature. Yet based on this study's data analysis, Thai public education providers have limited capacity to produce skilled workforce both quantity- and quality-wise to meet market demands. Hence, the role of private education providers has been identified as significant in helping Thai public education providers produce a skilled labour workforce. This research recommends that the Thai Government provide more support to the private vocational and higher education providers.

In regard to vocational education, this research suggests that rebranding vocational education is a priority. Based on the demands of the labour market for a vocationally skilled workforce, the Thai Government should encourage a positive society attitude towards vocational education, which will nurture increased student enrolment in vocational education.

For higher education, based on the literature (Chalapati 2007; Sidhu, Ho & Yeoh 2011; Skeldon 2008; Ziguras & Law 2006) and the data analysis of this thesis, internationalisation is a necessity for higher education as a result of globalisation. Therefore, as English is becoming more important, the Thai Government should encourage more use of English among Thai students.

Secondly, migration policies, based on the data analysis of this thesis and literature (Abella 2006; Biao 2007; Ciumasu 2010; Ducanes & Abella 2008; Groenhout 2012; Hewitt 2006; Iredale 2000; Leclerc & Meyer 2007; Lowell 2001b; Orłowska 2011; Skeldon 2008; Tremblay 2005; Tung 2008; Wocke & Klein 2002), the Thai Government needs to establish policy in relation to attracting foreign skilled citizens, the repatriation of Thai professionals, and brain networking. The outdated legislation and a clear policy framework need to be amended and established. Dual citizenship should also be offered to Thai professionals, to assist in addressing the country's skill labour shortage and achieve economic development.

Based on the data analysis, this research recommends that the Thai Government identify and process long-term illegal low-skilled migrant workers, Hill-Tribe villagers and refugees as a

supportive workforce. The policy concept in relation to the processing and eligibility of these workforces will need to shift from a national security-focus to economic purpose-focus.

Thirdly, in relation to substitute workforces, the literature (Berkowitz & O'Leary 2000; Bloom et al. 2011; Browne & Braun 2008; Bryant & Jaworski 2011; Campbell 2010; Costa & Milia 2008; Davey 2008; Ducanes & Abella 2008; Fang 2009; Fenwick 2012; Gröschl 2004; Souness & Morrison 2006; Tufan, Yaman & Arun 2007; Wallace & Marchant 2009) and the data analysis in this research, identified that female, ageing and disabled workforces as significant to addressing Thailand's skill labour shortage. This research recommends that the Thai Government promptly engage in cultivating a positive society attitude towards these three workforce groups, to encourage their participation in the labour market.

### **10.6 Implications for future research**

In this research, there are several topics that have emerged for future studies and in summary a number of propositions based on the analysis and discussions have been forwarded for future research (see Figure 10.1). Also some overall suggestions for the future research are suggested.

Firstly, this research was conducted based on Thailand as a case study, about the policy responses of the Thai Government in addressing skill labour shortage. There is no comparative value in this thesis to confirm generalisation of the outcomes reported here. To enhance the knowledge of skill labour shortage and government responses, future research should be conducted in the context of other countries. This further study of other countries will provide a better understanding on the area of human resources capacity building to achieve economic development. Therefore, research, especially in the ASEAN nations, is encouraged.

Secondly, the context of cultural norms also emerged as a main factor relevant to addressing skill labour shortage. Cultural issues include policy discourse outcomes in reference to societal attitudes towards the three substitute workforces of women, the aged and the disabled, and society perceptions of vocational education. Future research should investigate the influence of cultural norms in human resources capacity building. This contextual emphasis will provide a better understanding of this study and future studies.

Lastly, the study of the role of illegal low-skilled migrant workers, Hill-Tribe villagers and refugees on economic development should be enhanced in future research. Based on the outcomes reported in this thesis, this workforce group is viewed as supportive, which when given the opportunity could provide skilled workers to the labour market. While currently

viewed as illegal and temporary, most are permanently settled in Thailand – their children have often grown up and been educated in Thailand. Hence, a further study should be conducted to investigate and provide a holistic understanding of the context of this workforce group within Thailand.

### **10.7 Limitations of this study**

A significant limitation of this research was the data collection which was based on documentation analysis, including newspaper articles, government policies, prime ministerial policy statements, academic journal articles, and reports from international organisations. There were several issues that emerged as shortcomings in the data collection.

Firstly, the researcher is based in Australia and the data from the Thai Government was collected via internet depository sites. While most of the recent documents such as policies and laws were available online, it was difficult to find older documents via the internet. This issue was somewhat overcome by the period of study being from 1992 to 2014.

Secondly, when the researcher was in Bangkok and attempted to collect data in person from government agencies, the public servants were reluctant to provide information. The researcher instead was told to search the data from the agencies' website. This avoidance of face-to-face dialogue is cultural – Thai people have been recognised as reluctant to have open face-to-face discussions (Selvarajah, Meyer & Donovan 2013). This is further compounded by the instability of the political situation in Thailand. Due to these shortcomings, data collection via the internet was most appropriate to this study.

Thirdly, Factiva, a business information database which provides articles from newspapers, magazines and journals, was used as the main source for newspaper articles from Thailand. There were only two English-language newspapers in Thailand – the *Bangkok Post* and *The Nation* – on Factiva that dated back to 1992, the starting year for this research period. There were several newspapers in Thai on Factiva, but Thai-language newspapers only presented articles for the current year. The data from the Thai-language newspapers, as referred to in this research, were derived from the internet, and the earliest article was in 2011. Hence, there was no data from Thai-language newspapers in this research that dated back from 1992 to 2011. However, most of the information reported in the Thai-language newspapers was also covered in the English-language papers, and this was therefore not perceived as a major shortcoming.

## **10.8 Summary of the chapter**

Human resources capacity building is acknowledged as highly important to the economic development of a nation. This is an important area that Thailand needs to concentrate on if it is to elevate itself out of the MIT. It is also acknowledged in the literature that skilled labour is an essential resource for a nation's progress towards developed status.

Based on the research objective – to explore and identify how the Thai Government responds to skill labour shortage to meet its economic development goals – this research investigated, analysed and discussed three key policy themes: education and training policies; migration policies; and substitute workforces. The data from newspaper articles in the period of 1992 to 2014 in relation to these three policy themes were triangulated with other policy documents, academic journal articles, and reports in order to find the answers to the main research question: What are the Thai Government's policy responses to the skill labour shortage to meet its economic development goals?

This chapter, as concluding chapter, synthesised the discussion on these three key policy responses addressing skill labour shortage and provided a holistic view of the government responses need to solve Thailand's skill labour shortage. In doing so, the research developed outcome responses to the themes and provided a set of propositions for future testing based on the Theoretical Model developed in chapter 9.

The implications for theory have been discussed, providing the contribution of this research on the three policy themes: education and training policies; migration policies; and substitute workforces. The implications for practice were also discussed. Recommendations on policy responses to the skill labour shortage have also been provided to build human resources capacity to achieve economic development. The implications for further studies were also discussed, aiming to enhance knowledge in the area of human resources capacity building, especially in terms of policy responses to skill labour shortage. Finally, the limitations of this study have been outlined.

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[3.jsp?top\\_serl=120439&key\\_word=%CD%D8%B4%C1%C8%D6%A1%C9%D2%20%CA%D2%A1%C5&owner\\_dep=&meet\\_date\\_dd=&meet\\_date\\_mm=&meet\\_date\\_yyyy=&doc\\_id1=&doc\\_id2=&meet\\_date\\_dd2=&meet\\_date\\_mm2=&meet\\_date\\_yyyy2=>](http://www.cabinet.soc.go.th/soc/Program2-3.jsp?top_serl=120439&key_word=%CD%D8%B4%C1%C8%D6%A1%C9%D2%20%CA%D2%A1%C5&owner_dep=&meet_date_dd=&meet_date_mm=&meet_date_yyyy=&doc_id1=&doc_id2=&meet_date_dd2=&meet_date_mm2=&meet_date_yyyy2=>).

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