

Applied Economics Journal Vol. 23 No. 2 (December 2016): 1-28
Copyright ©2016 Center for Applied Economics Research
ISSN 0858-9291



Received: 9 January 2016

Received in revised form: 21 May 2016

Accepted: 31 August 2016

The Labour Attributes of Demand in the ASEAN Economic Community

Sakchai Naknok*

Economics Department, Faculty of Management Science

Valaya Alongkorn Rajabhat University under the Royal Patronage E-mail: sakchai_nak@hotmail.com

Abstract

This article examines the relative importance of attributes that will directly affect labour markets and employment earnings after Thailand participates in the ASEAN Economic Community agreement in 2016. This research paper considers two types of company: (1) companies under ASEAN free movement of labour and (2) companies not under ASEAN free movement of labour in 2016. The conjoint analysis is utilised with an additive model of five variables to generate a parsimonious orthogonal array of 12 profiles. The five variables are presented in full profile form with all possible combinations, which resulted in 12 rank ordered combinations. Two hundred and seventeen individual recruiters participated in this study. Overall, this study finds that the most important attributes for employees in both types of company are ASEAN nationality and having a higher degree of education. Speaking an ASEAN language is found to be crucial for companies under ASEAN free movement of labour, while speaking English is revealed to be critical for companies not under ASEAN free movement of labour. Finally, attributes of workplace and identity skill are not significantly important for both types of company.

Keywords: labour attributes, conjoint analysis, highest total utility

JEL Classification: E24, J23, J78, O15

* Corresponding author: Sakchai Naknok, Economics Department, Faculty of Management Science, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani, Thailand, Tel: +66 2529 3847, Fax +66 2529 3847, E-mail: sakchai_nak@hotmail.com

Introduction

The implementation of building an ASEAN Economic Community (AEC) by 2016 is challenging as the ASEAN economic community will have targets of regional economic integration. The realisation of the end goal of economic integration is between Southeast ASEAN countries. The governments of ASEAN countries will establish the Association of Southeast Asian Nations (ASEAN) as a single market and production base. The ASEAN region is a political, cultural and economic organisation of nations in Southeast Asia, which includes Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam as members. The AEC will focus on strengthening the implementation of existing economic development, accelerating regional integration and facilitating movement of skilled labour. An ASEAN single market and production base will consist of the free flow of goods and services, investment, capital and skilled labour. The AEC not only improves the economic and political interests of the region, but it also encourages cooperation in social and cultural development, as well as regional stability. Other areas of cooperation also include human resource development, labour capacity and professional, infrastructure and regional connectivity. Although there are differing styles of government in the nations of the ASEAN region, they have been implementing the same goal of high-level market stability on ASEAN economic integration. Some ASEAN countries are experiencing rapid economic advancement and, therefore, the AEC has become very important in representing the region's development. The ASEAN was formed in 1967 as the successor to the Association of Southeast Asia, which had five member nations.

In recognition of the fundamental importance of improving the ASEAN for its people and the economic development of their countries, the leaders of the ASEAN countries agreed in Kuala Lumpur to establish the ASEAN on 15 December 1997. The ASEAN was designed to reach a single market and production base to enhance ASEAN competitiveness, to activate regional integration and to facilitate movement of business connections and wider participation in ASEAN activities. The ASEAN Economic Community is the first step toward the full potential capacity of labour to enhance human capital development that contributes to the advancement of ASEAN member countries in many industries as the productive members of the association. In addition, ASEAN countries will also endeavour to develop and implement a comprehensive trade programme, which will promote mutual assistance, equitable economic development and alleviation of poverty in the region (Associate of Southeast Asian Nation, 2008).

According to the ASEAN agreement, the accumulation of human capital is an important contributor to economic growth. Finding and hiring the best employees who match a specific job description with responsibilities in high-growth rate economies are challenging. From this case, the better managed firms have to systematically recruit and improve on employees with higher than average human capital. A workforce with higher qualifications will be paid on disparity of performance, skill and productivity expectation. The effectively different employers will be considered in the recruiting process to select new workers with higher human capital and how long it will take for developing countries to catch up to the

standard level of human capital in industrialised countries. Overall, many countries should focus on the critical role that human capital development plays in generating economic growth and reducing poverty. From a macroeconomic perspective, the accumulation of human capital: improves labour productivity; fosters economic growth; enhances working professionalism; facilitates technological innovation; increases national income, making economic growth more sustainable, all of which, in turn, support poverty reduction among geographical ASEAN members. Likewise, higher education level increases the probability of being employed in the labour market and improves earnings capacity as individual income. Thus, human capital is regarded as a key factor of the production function contributing to sustainable economic growth at the macro level, while at the micro level education is a key component of human capital in business, contributing to an individual's labour productivity, organisational growth and profitability. Workforces that have human capital can adapt a set of skills to drive their ability to affect business outcomes and individual earnings. In other words, human capital accumulation contributes to the ability and efficiency of labour to transform raw materials and capital into goods and services. As a result, economic and organisational growth are developed by people's abilities in countries, regions, or communities. The term profitability. Workforces that have human capital can adapt a set of skills to drive their ability to affect the most important combination both from the micro and the macro perspectives. In conclusion, the micro perspective refers to an increasing individual value and income, increasing the skill levels of knowledge workers, improving employee performance and developing organisations from a suitable of specific job position. In terms of the macro perspective, human capital is relevant to economic growth as it can increase the capacity of an economy to produce goods and services, thereby contributing to countries' industrial development as a whole (Petroni & Colacino, 2008).

Under a dynamic and competitive labour market, one of the most important factors of human capital formation is the set of distinguished skills of workers as a form of individual capital contributing to their productivity. Human capital formation is related to investment in people and their development as factors of production. Factors of production describe the inputs that are used in the production function to produce goods or services. The factors of production include land, labour, capital and entrepreneurship. Labour is the second factor of production. The competitive labour market such as specific career, labour supply, and labour mobility has a profound challenge to the many labour. So, human capital formation is a process through which the knowledge, skills and capabilities of people are increased. The quality of business will be reflected by the current labour performance in which they work. Human capital is certainly essential for the business transformation; if the workforce is well educated and well skilled, they can produce goods and services at peak efficiency and performance. Many economists have pointed out the essential of human capital accumulation. An education is required, as well as useful capabilities in all organisations and societies (Smith, 1776). Marshall (1920) emphasises that investment in human capital,

such as education, is the most significant and valuable factor. Moreover, the key factors of success in many organisations are increasing human capital, especially knowledge workers (Murale & Ashrafali, 2010). Organisations require leaders to improve their operating processes to enhance employee motivation (Boddie et al., 2007; Yung et al., 2009).

For this reason, Thailand envisions the ASEAN as a competitive economic region. In order to increase Thailand's national competitiveness and to achieve sustainable economic growth within the AEC, Thailand needs to strengthen productivity throughout its economy. Thai workers must be capable in terms of effective skills and strengthen education to maximise opportunities for employment competitiveness for sustainable economic growth and enterprise development. Employment liberalisation and labour mobility in this region have become more competitive. Thai workforces have to learn how better to meet the needs of their employers. Because of these factors, this article aims to explore the attributes of labour that are demanded in labour markets for companies under ASEAN free movement of labour and those not under ASEAN free movement of labour in 2016, as well as their impact on employment earnings across a range of industries, both Thai and foreign, following Thailand's participation in the ASEAN agreement in 2016.

Theoretical Framework

Human capital

Economic growth measured as an increase in real output is basically a measurement of the total volume of goods and services produced in an economy. Human capital demonstrates an important role in economic growth and poverty reduction. Education level has been emphasised as an economic growth determination since the introduction of Solow's (1956) growth model. Nelson and Phelps (1966) explain that human capital investment means that workers needed more education to utilise new technological developments used in organisations in order to increase total productivity and support economic growth. A few decades later, the economic growth model influenced technological development and economic growth determined by human capital. According to new growth theories, the accumulation of human capital through education and on-the-job training accelerates economic growth by facilitating movement of business development, producing goods and services, improving labour productivity, promoting technological innovation and adaptation and strengthening the economic prosperity (Lucas, 1988; Romer, 1990).

Moreover, the raising of human capital is a measure of the economic value of the individual or group skill set. A skill set comprises areas of knowledge, skills, abilities, attitudes and experiences (Heckman & Cunha, 2007; Jaw, Wang & Chen, 2006; Schultz, 1961; 1971). Schultz (1971) defines human capital as 'attributes of acquired population quality, which are valuable and can be accumulated by appropriate investment'. The feature of human capital is identified as specific attributes matched to a position completely provided in a specific type of work. Schultz (1971) notes that a specific attribute is

human because it is embodied in people and capital because it is a source of both future productive satisfaction and earnings towards actual improvements in living standards. Schultz (1971) and Fitz-Enz (2000) are of the view that the education, knowledge, skills, attributes and efforts of the worker cause a positive difference in particular employment situation.

Education and training are particularly important at present. Today, job descriptions increasing the quality of applicants are challenging in the rapidly emerging global workplace. To maintain actual living standards, workers must improve both their educational and skill levels in the contemporary workforce. The dynamic aspects of global technological innovation and product innovation have challenged workers. The continuous education, training, skills improvement and retention will be crucial to the chances of the best person being hired for the job and keeping employment within the contemporary workforce. Any ability that increases the quality (productivity) of labour must be considered as further investment in human capital. Human capital investments include not only expenditure on formal education and training but also health investment, schooling, reducing wasted resources from unskilled workers and increasing overall employee efficiency. Workers can also become more productive by improving their physical and/or health and by moving from locations and jobs where their productivity and income are relatively low to other locations and jobs where their productivity, income and opportunities are higher.

Since the 1960s, economists have suggested that organisational development is not matching economic growth. The difference has resulted from an imbalance between investment in human capital and economic growth (Schultz, 1961). The contemporary growth theory, introduced in the 1980s, asserts that accumulation of human capital will solve the problem of the diminishing marginal productivity of capital. Romer (1990) and Lucas (1988) further assert that the independent variable, human capital accumulation, should be introduced into economic growth models to explain and solve the economic inconsistencies between labour quality and economic growth, because human capital is directly related to economic growth. The relationship can be measured by how much people are invested in education. Furthermore, economists believe that the accumulation of human capital can generate significant disparities in economics, robust productivity and wage growth differences across countries and can create an economy of scale effect. They further explain that the employer and the company can help to increase human capital and increase economic growth as well. Human capital is the decisive factor in modern economic growth and the differences in economic growth between countries are due mainly to differences in accumulation of human capital. Actually, human capital is the ability and quality of a person, i.e. their knowledge, personal skills, working experience, attributes and proficiency. It is the personal capital formed through investment in people and from their self-development. It also can be expressed as the expenditure enhanced in principally promoting human resources, including education level, on-the-job training and expenditure in movement of labour. Since human resource is a capital, then the level of human capital can be expressed in terms of income, progress and opportunity of labour (Schultz, 1961; 1981). The major

human capital factors affecting labour performance are not only education but also skill, ability and experience are included in human-capital-generated increased productivity and higher opportunity in the labour market.

The labour productivity concept

In essence, productivity is not a complex concept: it is simply a relationship between real output (the quantity of goods and services produced), and the quantity of input used to produce the output. Productivity can therefore be expressed as the ratio;

$$\text{Productivity} = \frac{\text{output}}{\text{input}}$$

The critical determination of productivity growth can be classified under the average quality of the labour force and the efficiency with which labour, capital, and other inputs are combined.

The quality of labour depends on workers, skill, education and training, their health and vitality, and their age, experience and gender composition. Other factors being equal, a better educated, better trained, better skilled workforce can produce more output per hour than a less educated, inadequately trained and poorly skilled one. Indeed the discussion of education and training as an investment in human capital that increase labour productivity and earnings is highly relevant.

The Effective Communication Skills of labour

Most jobs need workers with excellent communication skills. During work, having excellent communication skills in the workplace is essential in many companies in order to be able to convey information to people clearly. Effective communication skills prevent misunderstandings that lead to disagreements and frustration. Effective communication skills also mean that the workforce can improve themselves to better and new situations, and avoid and resolve conflict negotiation. Companies have preferred foreign nationals from neighbouring workforces who demand to work out of their country because foreign labour can communicate clearly and effectively in more than one language and can use its communication skills effectively. Moreover, workers with excellent communication skills can use their messages for different situation, different environments, different audiences and different opportunities. These skills include interpersonal and organisational negotiation. Interpersonal communication skills connect the worker with another person so that messages are understood. These skills also include: listening skills, body language, writing skills, making eye contact and maintaining agreement between the purpose and the audience. If a worker has effective communication skills, particularly the skill of having more than one language, they are guaranteed to have much greater opportunities in life and their career.

Worker Mobility

While the flow of workers across national stages is not a new phenomenon, the labour mobility policy in the ASEAN is one part of the establishment of the AEC. Labour mobility is one part of the modern liberalisation process. Mutual recognition agreements (MRAs) are framework arrangements established to support the qualifications of professional services suppliers to facilitate the movement of professional and skilled labour in the ASEAN region. The impact increases in the presence of workers who fluently speak different languages, particularly English in Southeast Asia, and come often from poorer countries, moving to better jobs and income. The higher income and positive developmental impacts are the major of labour mobility in the ASEAN. The earnings of foreign workers after arrival rise relatively quickly compared with their home countries. In this case, there is no doubt that neighbouring workforces tend to invest in human capital to enhance their performance and opportunity. After entry, foreign workers still typically invest in themselves by acquiring work experience and improving proficiency, not only in English but also in the local language, and this investment generates the new wage rate increase, by which they can command and increase of actual living standard. Worker mobility plays a critical role in labour markets and economies. The research will use economic theory to identify the labour movement decision and the labour attributes of demand by examining personal abilities as factors influencing labour demand in the host country. However, an analysis of the causes and consequences of worker mobility is important because these factors affect local workers. Thus, local workers should be able to practice their abilities, such as education and skill, to maintain certain standards for the specific needs of ASEAN member countries. Some businesses have been focusing foreign workers the major factor of production, and the labour market relies on the free movement of workers among employers to allocate labour in a way that achieves maximum satisfaction for both workers and employers. For this reason, these companies have preferred neighbouring workforces because foreign labour commands lower wages and may supply complementary language skills in more than one language. Employers bear lower costs of production but utility can be enhanced.

Identity Skills

Many positions require personal skill regarding their business. Identity skills or personal skills in this research, are composed of relatively permanent self-performance, such as personality attributes, knowledge of business management, knowledge from occupation and hobbies, technical skills, problem-solving skills and working experiences. Identity skills of the worker include their specialised knowledge, working with their colleagues in different circumstances as tools to work productively and effectively after accepting work in a company. Identity skills are further the implementation of best practices to rise to professional careers, which implies that workers are able to use their identity as skilled

professionals. In summary, the personal skills or identity skills of workers have always been a source of tools for both the employee and the employer. The ability to apply the personal skills of workers, enabling them to work to the best of their abilities has generated higher earnings in many countries particularly in modern knowledge-based economies. The different skills are valuable for workers in industrialised countries in terms of economic prosperity (Hanushek & Woessmann, 2012). Additionally, improving individual productivity differences is a necessary element at the working level and the inequality of economic outcomes for countries is affected by future technological change. Castex and Dechter (2014) found that employers were looking for employees who had cognitive skills to meet the employer's best interests as a professional and to meet a substantially larger impact on incomes in the 1980s than in the 2000s. Returns from differently personal abilities were higher in the 2000s. As economies change, the workforce needs to quickly enhance ability since it can be attributed to differences in the growth rate of technology between the 1980s and 2000s.

Yamaguchi (2012) explains the role that job preferences play in occupational choices for two reasons. First, workers who have identical skills may be hired to perform different occupations according to certain tasks. The second reason for employers considering job preferences is the wage into different occupations on the basis of their skills to adapt successfully to changing technologies and environments.

Literature reviews

Under rapid industrialisation and region growth, goods and service markets and labour markets are both making improvements in response to the internationalised workforce, especially the competent workforce. The labour market has reformed to improve the employment prospects for workers of different careers and industries and different place, both internal and external. The impact of industrialisation on the labour market can be identified in the employment growth of the human capital of workers that identifies significant differences in worker attributes. Human capital represents the aggregate knowledge, skills, abilities and other competencies of an organisation (Ployhart, Weekley & Baughman, 2006). When an organisation is looking for a new workforce to work effectively, qualified applicants will be sought out with effective procurement systems being used to select and recruit qualified new workers from many places of potential employees. The focus of current employers is on resources in the form of human capital accumulation and high skills. While human capital is defined as a key element in the improvement of firms' assets in order to increase productivity, it has been referred to as 'the ultimate determinant of organizational performance' (Youndt, Snell, Dean & Lepak, 1996). Human capital has been considered as the 'productive capabilities of human beings' (Snell & Dean, 1992). In the developing countries, human capital accumulation is needed the productive capabilities of human beings within the growing organisation (Ployhart et al., 2006).

With regard to human capital in developing countries, it is important to tackle competitiveness in the organisation and to recruit from the higher education level because economic development requires the expansion of the supply of the right type of skills. Unfortunately, the reality is that labour market mismatches remain a challenge faced by many developing countries. It is an important factor to consider (Pastore 2009; Hung 2008). Governments in developing countries need to solve these mismatches in order to accelerate and sustain economic growth.

Furthermore, the importance of human capital has been confirmed by numerous researchers (Carmeli & Tishler, 2004; Dencker, Gruber & Shah, 2009; Hatch & Dyer, 2004) and has been cited as a source of competitive advantage for workers in terms of economic prosperity (Barney, 1991; Dierickx & Cool, 1989; Penrose, 1955; Wernerfelt, 1984). In fact, many researchers would suggest that enhanced human capital may lead to sustained competitive advantage. In addition, some researchers have cited human capital as a source of competitive advantage, specifically arguing that human capital may be both the most unique and valuable asset.

There are a lot of definitions of the importance of knowledge and knowledge application in business organisations. Knowledge is a core combination of framed human capital, comprised of values, education levels, technological skills, know-how and skills that provide a framework for evaluating and incorporating new experiences and information (Davenport & Prusak, 2000). Employers seeking qualified workers, acknowledge that workers represent good investments (Drucker, 1999). Drucker states, 'The most valuable asset of a 21st century institution will be its knowledge workers and their productivity'. Petroni and Colacino (2008) add that knowledge workers are a special kind of asset because they increase in value with time. Astute employers seek effective labour procurement to maximise the potential of knowledge workers (Manville & Ober, 2010).

Because of the focus of organisations on skilled knowledge and changes in technologies, workers face challenges to leaders hoping to improve employee performance in a knowledge economy (Petroni & Colacino, 2008). Knowledge workers as individual may contribute more in the way of opportunities to an organisation through knowledge rather than through physical labour (Drucker, 1999). Murale and Ashrafali (2010) emphasise that the increase of knowledge workers is the key to the success of organisational development. Managing newer generations of workers, especially knowledge workers, requires leaders to adjust their approaches to employee motivation (Boddie et al., 2007; Yung et al., 2009). In the workforces of developing countries, the number of knowledge workers has rapidly increased. Increasing knowledge such as technological skills, language skills, and other disciplines are of core importance to the success of organisations and give knowledge workers increased power and influence (Murale and Ashrafali, 2010).

Seidler-de Alwis and Hartmann (2008) found that the amount of organisational development influence acquired by knowledge workers reflects the value knowledge workers bring to an organisational development under economic growth. The National Association of Colleges and Employers' (2012) Job

Outlook report explains the top five overall abilities that employers are seeking in employees: (1) the ability to work in team management; (2) effective communication skills; (3) the ability to make decisions and solve problems properly; (4) the ability to obtain and process information; and (5) the ability to plan, organise and prioritise work.

Some workers possess specialised knowledge that contributes significantly to the success of an organisation and industry (Murale & Ashrafali, 2010). Such highly skilled knowledge workers apply their knowledge in their field of expertise for the success of both the organisation and the industry (Seidler-de Alwis & Hartmann, 2008). Because emerging industries rely increasingly on skilled knowledge workers, it is correspondingly important for employers to realise knowledge workers' perceptions. For the country's economic growth and development, industries dependent on advanced technologies are increasingly seeking a workforce that possesses skills critical to the organisation's performance (Seidler-de Alwis & Hartmann, 2008).

Schultz (1961) found that a substantial increase in worker productivity in many countries has brought about a process transformation. Human resource management is defined as the process of acquiring employees to contribute effectively to the processes of organisational productivity. Furthermore, the development of human resources is needed in poor and developing countries due to international business development and rapid economic improvement. Human resource development systems can be designed to help to raise productivity in terms of essential goods and services and also enhanced the dignity, worth and income of the labour force. Card, David, Heining and Kline (2015) currently express the perspective of the estimated employee models for understanding the rise in wages on further increasing productivity, thereby eventually benefitting the organisation. This increase suggests that a fundamental change in the way workers are sorted to labour movement. It is important to consider that both the workplace and productivity are set by the structure of wages. The magnitude of the workplace component of wages for both the employer and the employee plays an integral role in increasing the productivity of the organisation. The workplace may have become more important in recent decades. Harbison and Myers (1970) support the view that the goals of modern societies, economies, politics, and organisation management could be attained through the development of human resources.

Considering labour attributes, a single market of goods and services facilitates the development of a production network in the region and enhances specific production capacity. Employers finding the right person for a job require not only someone who matches the job description and abilities to successfully complete or exceed the responsibilities of the position but also require identification of individual attributes that should make achievement in a specific job an indispensable resource (Brey-Casiano, 2008). The types of abilities to successfully work ensure timely growth and development of every organisation. Thus, a successful administrator of recruitment possesses the attributes of a visionary, and has the ability to motivate employees. Identifying important attributes matched to positions is crucial to create a complete

picture of successful people working in specific types of job. People who possess distinguished attributes are frequently more successful than others in particular specific situations.

The main effect of foreign labour on wages crucially depends on labour market institutions. In terms of foreign labour, the growing presence of foreign workers has been continuing in many countries. It affects the employment opportunities of local workers due to the increase in foreign workers. The theoretical arguments rely on substitution and scale effects. As more foreign workers enter a region, firms are driven to substitute foreign labour for native labour for the reasons of output and cost. This effect is called the substitution effect. When native and foreign labour can be substitutes, native workers will have decreased job opportunities (Fong and Lim, 1982). Wagner (2009) points out that increased inflows of foreign labour lead to lower costs of production and lower wages.

Felbermayr et al. (2010) present that foreigner labour has a positive effect on GDP per capita a result of higher or complementary human capital among new foreign workers. Munch JR, Skaksen JR (2011a) demonstrate that foreign workers may contribute to higher productivity and firms have been hiring foreign experts who are more productive. Both Longhi et al. (2005) and Borjas (2008) point out the substitution effect between wages and foreign labour. Their analyses suggest that there is a negative wage effect, which is related to the native workers' response to mobility, leading to lower wages for both local and foreign labour (Borjas, 2006b). In a free movement of labour market, increased usage of foreign labour will usually be due to lower wages (Friedberg 2001; Ottaviano & Peri, 2005; 2006; 2008). There is a negative effect on wage growth, which also depends on the degree to which native and foreign labour are substitutes (Wagner 2009).

The free movement of labour markets is accelerating the expanding of technology and the pace of negotiation. New occupations are emerging and workforces with skills are required for the jobs. Each occupation's required skills and competencies are evolving. The importance of skill levels may be considered differently across regions (Gries et al. 2011). In the context of foreign labour, skill levels are important for the growth effect of foreign labour (Borjas 2006a; 2006b; Borjas et al. 2008; Wagner 2009). People with poor skills will be at a comparative disadvantage in an occupation that emphasises people-specific jobs, especially if poor language skills are associated with less opportunity, which could substantially hinder future job development (Borghans, Ter Weel & Weinberg, 2014). On the other hand, the effect of foreign labour is neutral when foreigners become employed in low-skill jobs that native workers are unwilling to perform (Fong and Lim 1982). For this impact, educational attainment and training may be of importance for regional development and unemployment, making an inflow of specific skills potentially important (Mollick and Mora, 2012; Nistor 2009). Educational achievements vary widely both across and within countries. In conclusion, the increases in wage earnings play on the supply side, i.e. labour mobility, while the setting of payments and hiring policies are determined on the demand side, i.e. employers (Barth, Erling & Freeman, 2014).

Considering the impact of the ASEAN on labour migration, there is a need to develop the professional skills of Thai workers, so that they will be able to compete effectively with their competition from neighbouring countries. Thai government policy should stress the need to produce more skilled workers because of growing demand in the labour market. Utis Sanglaoid, Sumalee Santipolvut and Laemthai Phuwanich (2014) analysed the impacts of ASEAN labour migration to Thailand upon the Thai economy. Their findings identified two parts. Part one was based on the policy establishment involving the hiring of newly registered foreign labour and registered unskilled foreign labour from three neighbour countries, Myanmar, Laos, and Cambodia. Because of this, it was expected to increase GDP, household income and the amount of imports and exports but decrease unskilled worker wages and reduce the equality of income distributions. Part two, based on the free movement of eight professions in accordance with ASEAN MRAs, was expected to increase the number of skilled workers. From this case, an increase in skilled workers causes an increase in GDP, household income and exports, and results in more equal income distributions but decreased unskilled workers' wages.

As the ASEAN Community has already come into being, the demand for skills labour has grown. Native workers are needed to accelerate the development of human resources, so that the Thai workforce will be developed with more skilled labour. Until recently, it seemed to be that migration would be facilitated by the process toward the AEC. However, given the trend toward liberalisation of both goods and services, there will be an increase in total migration of skilled workers, mainly through services liberalisation, i.e. the ASEAN Framework Agreement on Services. The primary destinations for movement of people in the ASEAN are Singapore, Malaysia and Thailand. However, it is taking some time for the Mutual Recognition Arrangements (MRAs) for eight professions to be fully implemented. Thus, the Thai government and the Ministry of Labour must be prepared for labour migration playing an important role in the labour market for job positions and individuals' career roadmaps.

Method

Conjoint Analysis

Conjoint analysis is a popular marketing research technique that marketers and researchers use to determine what features a new product should have. Conjoint analysis became popular because it can identify the best choice for each component or factor contributing to the total utility of a product. The main purpose of conjoint analysis is to answer the research question: to what extent does each component (factor) contribute to the highest total utility of the product? It assumes that total utility is equal to sum of all partial utilities.

Conjoint analysis begins on the premise that factors and their values can be defined by the researcher in advance. The key nature of the conjoint analysis is that respondents evaluate product profiles (labour attributes for this current research) composed of multiple conjoint elements (attributes or

features). Conjoint analysis quickly became the most broadly used and powerful survey based technique for measuring and predicting consumer (employers for this research) preferences. The various combinations of the factor values yield fictive products that are then ranked by the interviewed person or respondent. Conjoint analysis can be used to derive metric partial utilities from the ranking results. The current study was designed as a quantitative research exercise, and the data were collected by survey. In the conjoint method, choices are presented in full-profile (with multi-attributes by carding type), which is realistic. This choice activity is thought to simulate an actual recruiting situation, thereby mimicking actual employer recruiting. Choice-based conjoint requires the respondent to make a choice of their preferred full-profile concept. Research respondents were asked to rank full-profile of labour attributes or to check which full-profile feature(s) they prefer. Respondents will rank or score a set of profiles, or cards, according to preference. Each profile describes a complete product or service (individual attributes of labour for this research), and consists of a different combination of factor levels for all factors (attributes) of interest.

With full profile conjoint analysis, the researcher carefully constructed a conjoint rds, accordi card described a product profile, namely a labour attributes profile. Respondents evaluated each card and ranked or rated them in order from best to worst. Based on the reserved ordering, the researcher could statistically deduce for each individual which attributes were the most important, and which levels were most preferred. Each respondent needed to evaluate and rank only a fraction of the total combinations contained in the fraction cards. Because each attribute level appeared exactly once with other level in the study, there is a simple way to estimate attributes level utilities (also known as part-worth). Therefore, the part-worth scores are useful for determining: which levels were preferred; and the relative importance of each attribute. A specific questionnaire (carding type survey) was designed for the study. The summation of these partial utilities therefore resulted in metric total utilities. The utility structure of a number of persons or respondents can be computed through aggregation of the individual results. The conjoint analysis variables have both independent and dependent variables. The Independent variable is objective attributes, whilst the dependent variable consists of the preferences of the interviewed persons or respondents for the fictive products - in this case is the best labour attributes.

Orthogonal Array

A potential problem with the full-profile approach soon becomes obvious if more than a few factors are involved and each factor has more than a couple of levels: the total number of profiles resulting from all possible combinations of the levels becomes too great for respondents to rank or score in a meaningful way. To solve this problem, the full-profile approach uses what is termed a fractional factorial design which presents a suitable fraction of all possible combinations of the factor levels. The resulting set, known as an orthogonal array, is designed to capture the main effects for each factor level. Interactions between levels

of one factor with levels of another factor are assumed to be negligible. The generate orthogonal design procedure is used to generate an orthogonal array and is typically the starting point of a conjoint analysis. It also allows one to generate factor-level combinations, known as holdout cases, which are rated by the subjects but are not used to build the preference model. Instead, they are used as a check on the validity of the model.

Orthogonal Array (OA) design is a type of general fractional factorial design. It is a highly fractional orthogonal design that is based on a design matrix. OA allows the respondent to consider a selected subset of combinations of multiple factors at multiple levels. OAs are balanced to ensure that all levels of all factors are considered equally. For this reason, the factors can be evaluated independently of each other despite the fractionality of the design. The foregoing objectives are approached by seeking specific research questions to be analysed. The proposed model included five attributes: nationality, language, education level, workplace and identity skills. Each of these attributes and levels have still too many ($2*2*3*2*2 = 32$) possible profiles for respondents to rank. By using an OA design, this study ends up with 12 profiles, as shown in Table1.

Table 1 Labour attributes generated from the orthogonal array design

Card no.	Labour Attributes					Ranking
	Nationality	Language	Education	Workplace	Identity skills	
1	Nationality in ASEAN	English	Higher Degree	Unable to work outside	Yes	
2	Nationality in ASEAN	English	Bachelor Degree	Able to work outside	No	
3	Nationality in ASEAN	ASEAN Language	Lower degree	Unable to work outside	No	
4	Thai	ASEAN Language	Bachelor Degree	Unable to work outside	Yes	
5	Nationality in ASEAN	ASEAN Language	Lower degree	Able to work outside	Yes	
6	Thai	ASEAN Language	Higher Degree	Able to work outside	No	
7	Thai	English	Lower degree	Able to work outside	Yes	
8	Thai	English	Lower degree	Unable to work outside	No	
9	Thai	English	Higher Degree	Unable to work outside	No	

10	Thai	English	Bachelor Degree	Unable to work outside	No
11	Nationality in ASEAN	English	Lower degree	Unable to work outside	No
12	Nationality in ASEAN	ASEAN Language	Higher Degree	Unable to work outside	No

Part-worth calculation

A form of preference model is the part-worth function model which estimates the part-worth function for a set of selected attribute levels; the part-worths for the remaining stimulus sets are then obtained by interpolation. The general representation of the part-worth model is as follows.

$$U_j = \sum_{p=0}^n f_p(X_{jp})$$

Where: U_j = the utility of alternative j ,

X_{ip} = the level of the p^{th} attribute of the j^{th} item

Note: U_j is formed by summing the importance weighted desirabilities of the attributes and attribute levels that make up the profile.

Data collection

Errors are deviations from the truth. In marketing research, researchers are always concerned with reducing error in cost-effective ways. Researchers have selected the appropriate modelling method. In conjoint analysis, the researcher reduces measurement error by including more conjoint questions on specific questionnaires with each question evaluating all attributes in the same card. Based on the theories above and appropriate observations of common practices in the labour market community, sample sizes for conjoint studies generally range from about 150 to 1,200 respondents (Bryan K. Orme, 2010). In conclusion, if the purpose of research is to compare respondents and detect significant differences, researcher should use a large enough sample size with a minimum of about 200 respondents (Orme, 2010).

In this study, 217 individual recruiters participated in the survey. 217 recruiters consisted of 97 companies under the ASEAN free movement of labour in 2016 and 120 companies not under the ASEAN free movement of labour in 2016. The sample was selected from both small and large organisations covering Bangkok and major urban areas in Thailand. The organisations were selected by the researcher. The 97 companies under the ASEAN free movement have established mutual recognition arrangements (MRAs) on eight professional services, including engineers, nurses, architects, surveyors, medical

practitioners, dental practitioners, accountants and tourism professionals. A total of 120 questionnaires for companies under the ASEAN free movement of labour were distributed by a judgemental sampling method covering Bangkok and major urban areas in Thailand. 23 questionnaires were dropped from analyses due to incomplete answers, with the final sample of 97 respondents representing a response rate of 81 per cent. For companies not under the ASEAN free movement of labour, 150 questionnaires were distributed covering Bangkok and major urban areas. Only 120 questionnaires were completed with the final sample representing a response rate of 80 per cent. All of the recruiters had screened resumes before or had worked in human resources, line management, or general administration, or were business owners, or others who worked as recruiters from various Thai and international companies. 35 per cent of the recruiters participating in this research had more than 20 years of working experience and their companies were likely to employ applicants with precise attributes in 2016. Lastly, all participating companies were located in Thailand.

Purposive Sample

When researchers have a specific group in mind, such as high-level business executives. A purposive sample or judgemental sample is the type of sample selection. This selection is based on the knowledge of the researcher and of the purpose of the study. The respondents were selected because of specific characteristics. A purposive sample refers to the selection of units based on the researcher's judgement rather than randomisation. This judgemental sampling is in some way 'representative' of the population of interest without sampling at random. In this study, variability with a random selection was expected to be excessively large and, hence, potentially more damaging than the bias inherent in selection by judgement. Purposive sampling can be very useful for situations in which researchers need to reach a targeted sample efficiently and where sampling for proportionality is not the primary concern. The field and experience of researchers often promotes the studying of extreme or deviant cases - that is, cases that do not fit into regular patterns of attitudes and behaviours. By studying the deviant cases, researchers can often gain a better understanding of the more regular patterns of behaviour obtained using a purposive sampling method.

In this research, the intrinsic labour details such as labour level, occupation, and labour categories were not specified. These requirements depend on each human resource manager/ respondent regarding their prospective employee demand during the ASEAN agreement.

Hypotheses of Research

Hypothesis 1: the identity skills of labour (e.g. technical skill, different skill, and experience) have a significant importance in labour attribute demand in ASEAN.

Hypothesis 2: the nationality of labour (both Thai and other ASEAN nationalities) has a significant importance in labour attribute demand in ASEAN.

Hypothesis 3: the educational level of labour (e.g. university undergraduate, graduate) has a significant importance in labour attribute demand in ASEAN.

Hypothesis 4: workplace flexibility (i.e. ability to work abroad within ASEAN, up-country and overseas measured by workplace) has a significant importance in labour attribute demand in ASEAN.

Hypotheses5: language of labour (e.g. ASEAN languages skill and English language skill) has a significant importance on labour attribute demand during ASEAN.

Empirical results

Conjoint analysis gathered the part-worth utilities and compared the utilities values. The results of the study examined the relative importance ranking of the research criteria. Respondents or recruiters were asked to rank in order different combinations of labour attributes on the cards. Respondents will rank a set of cards according to preference in order from 1 (best) to 12 (worst). Respondents evaluate labour attributes as the most important and demand to employ into companies during the countrymarket and employment eaASEAN agreement in 2016. This research consists of two parts, as follows:

1. Aggregate level results of companies under the ASEAN free movement of labour in 2016
2. Aggregate level results of companies not under the ASEAN free movement of labour in 2016

Aggregate level results of companies under the ASEAN free movement of labour in 2016

Participants were presented with all possible combinations of the variables across all levels and were asked to rank in order the statements from 1 (best) to 12 (worst). The five attributes shown in Table 1 were used to provide an adequate description of labour and maintain a manageable number of labour alternatives to be evaluated by the respondents. The following five attributes were selected: nationality, language, education, workplace and identity skills. The aggregate preference function was calculated by averaging the part-worth scores across all respondents. The regression estimates of the aggregate preference functions for the companies under the ASEAN free movement of labour in 2016 are reported in Table 2.

Table 2: Part-worth utility scores of companies under the ASEAN free movement of labour

Variable	Level	Utility Estimate	Standard	Contrasts
			Error	
Nationality	Thai	-0.353	.176	Nationality in ASEAN > Thai
	Nationality in ASEAN	0.353	.176	
Language	English	-0.095	.176	ASEAN Language except

	ASEAN Language except English	0.095	.176	English > English
Education	Lower degree (Diploma/Certificate)	0.238	.213	Higher Degree > Bachelor
	Bachelor Degree	0.476	.425	Degree > Lower degree
	Higher Degree	0.714	.638	
Workplace	Unable to work elsewhere	0.268	.176	Unable to work elsewhere >
	Able to work abroad, up-country and overseas	-0.268	.176	Able to work abroad, up-country and overseas
Identity skills	No	0.062	.176	No > Yes
	Yes	-0.062	.176	
	(Constant)	4.083	.412	

For the part-worth utility scores in Table 2, the part-worth of a higher value indicates a larger preference for that level of the factor. A lower or negative value indicates a lower preference for that level of the factor. By examining the preference weights, the weight given to each level of each factor can be compared across the entire design. In companies under the ASEAN free movement of labour in 2016, this study finds that (non-Thai) nationality in the ASEAN is considered by the participant sample to be preferred to Thai nationality. For language skills, ASEAN language is preferred over English language. The higher degree of education level has the highest preference, followed by Bachelor degree and lower degree (Diploma/Certificate), respectively. The article also reveals that employees being unable to work elsewhere is preferred to those being able to work up-country and abroad. Lastly, we found that no identity skill is preferred to having identity skill.

The relative importance scores (in per cent) give a more precise measure of the preference for each variable. The relative importance values of labour attributes can already be inferred from the part-worth utility scores presented below (Table 3). The range of the part-worth utility estimates shows the importance of each factor overall. A wider range in the part-worth estimates shows that other factors play a more important role in the participants' decision making.

Table 3: Relative importance of labour attributes for companies under the ASEAN free movement of labour in 2016

Labour Attributes	Relative importance (%)	Contrasts
Language	22.538	Language > Education Level >
Education Level	22.081	Workplace >
Workplace	20.379	Nationality > Identity Skill
Nationality	19.643	
Identity Skill	15.359	

Language was the most important attribute to respondents in companies under the ASEAN free movement of labour, accounting for the highest percentage of explained variance (22.54 per cent). Education level was the next most important, accounting for 22.081 per cent of the variance. This was

followed by workplace (20.38 per cent). Nationality explained 19.64 per cent of the variance in the decision making among employers in companies under free movement of labour. Identity skills was found to be next in importance, explaining 15.36 per cent of the variance.

The Pearson r-value was 0.894 and Kendall's tau value was 0.857 indicating that the model provided a good fit with the data. This high degree of judgemental consistency provided assurance that the tasks were meaningful and that the respondents took their participation seriously.

Conjoint analysis results show that employers of companies under the ASEAN free movement of labour placed relatively low levels of importance on workplace, nationality and identity skill. It appears that although employers perceived identity skill and workplace, they were not amongst the most important factors for employment. This could be due to the association between identity skill and education level (higher degree) such that a higher degree is commonly associated with higher job learning. Employers are likely to hire higher degree holders for companies under the ASEAN free movement of labour for what is perceived as their higher productivity. In addition, these employers may favour employees speaking foreign language, in particular those languages from ASEAN countries. However, nationality was not in itself viewed as that important when compared to other attributes.

Aggregate Level Results of companies not under the ASEAN free movement of labour in 2016

The part-worth utility scores of the aggregate preference for the companies not under the ASEAN free movement of labour in 2016 are reported in Table 4 below.

Table 4: Part-worth utility scores of companies not under the ASEAN free movement of labour

Variable	Level	Utility	Standard Error	Contrasts
		Estimate		
Nationality	Thai	-0.558	.170	Nationality in ASEAN > Thai
	Nationality in ASEAN	0.558	.170	
Language	English	0.025	.170	English > ASEAN Language
	ASEAN Language except English	-0.025	.170	except English
Education	Lower degree	0.159	.205	Higher Degree > Bachelor
	(Diploma/Certificate)	0.318	.410	Degree > Lower degree
	Bachelor Degree	0.477	.615	
	Higher Degree			
Workplace	Unable to work outside	0.177	.170	Unable to work outside >
	Able to work outside, up-country			Able to work outside,
	and abroad	-0.177	.170	up-country and oversea
Identity skills	No	0.015	.170	No > Yes
	Yes	-0.015	.170	
(Constant)		4.222	.397	

With the part-worth utility scores, a higher value indicates a larger preference for that level of the factor. A lower or negative value indicates a lesser preference for that level of the factor. By examining the preference weights, the weight given to each level of each factor can be compared across the entire design. In companies not under the ASEAN free movement of labour in 2016, this study reveals that nationality in ASEAN is still considered by the participant sample to be preferred over Thai nationality. Moreover, we find that English language skill is preferred over ASEAN languages and higher degree of education has the highest preference over bachelor degree and lower degree (Diploma/Certificate). We also find that the workplace that employee is unable to work outside is preferred than employee is able to work outside, up-country and overseas. Lastly, no identity skill is preferred to having identity skill.

The factor relative importance values of labour attributes of companies not under the ASEAN free movement of labour in 2016 are presented in table 5. This table shows the relative importance values indicated by the overall weight assigned to each variable by participants. Part-worth utility scores indicate directionality for each variable level, whilst relative importance values indicate the weight of each variable in relation to the other variables.

Table 5 Relative importance of labour attributes for companies not under the ASEAN free movement of labour in 2016

Labour Attributes	Relative importance(%)	Contrasts
Language	25.047	Language > Nationality >
Nationality	24.203	Education Level >
Education Level	19.675	Workplace > Identity Skill
Workplace	16.609	
Identity Skill	14.466	

According to Table 5, the most important attribute to employer respondents in companies not under the ASEAN free movement of labour in 2016 was language, accounting for the highest percentage of explained variance (25.05 per cent). Nationality (neighbouring country workforce) was the next most important attribute, accounting for 24.20 per cent of the variance. This was followed by education level (19.68 per cent). Workplace explained 16.61 per cent of the variance in the decision making among employers in companies not under free movement of labour. Identity skills was found to be next in importance, explaining 14.47 per cent of the variance.

The Pearson r-value was 0.929 and Kendall s tau value was 0.857 indicating that the model provided a good fit with the data. This high degree of judgemental consistency provided assurance that the tasks were meaningful and that respondents took their participation seriously.

Respondents from companies not under the ASEAN free movement of labour placed relatively low importance on workplace and identity skill. It appears that, although respondents perceived identity skill and workplace as important, these attributes were not amongst the most important factors for employers

not under the ASEAN free movement of labour. This could be due to these companies' focus on language skills - especially English language skills - given that a language skill is commonly associated with higher communication and negotiation abilities. Employers are likely to hire employees with language skills (in particular English language skills) and higher degrees because of what they perceive to be high productivity and negotiation and communication skills. Therefore, these employers may favour employees speaking English, in particular those from ASEAN countries (neighbouring country workforce but speaking English). Clearly, for this case of wage effects, these companies prefer to hire neighbouring workforces on lower wages. Identity skill was not viewed as important in comparison with other attributes.

Why Nationality in ASEAN is Preferred

Companies preferred foreign nationals from neighbouring workforces because foreign labour would usually be expected to work for lower wages and their workers may supply complementary skills such as more than one language more diligence, commanding lower wages and having less bargaining power compared to native workers. Furthermore, some workers in ASEAN countries are willing to accept jobs in order to move to a country offering higher wages than their home country. These factors would lead to the preference for workers from neighbouring countries. Moreover, the preferred demand of ASEAN workers leads to lower costs of production and firms will expand production, thereby contributing to firms' growth in the production of goods and provision of services.

Why are Employees Unable to Work Outside the Workplace Preferred?

Some firms have grown by marketing to the public, acquiring new labour, merging with other firms and starting branch offices both up-country and abroad. In particular, local labour is hired by companies based on local minimum wages and transportation costs; decisions are not purely capitalistic. Local workers are preferred over labour coming from headquarters because they come from the local society.

Higher Education is Preferred

Most employers expect their employees who have higher education to work towards accomplishing the organisation's goals and, ultimately, its mission. Since these employees will be taking the initiative to do things better, they require insight. Instead of doing things the way they have always been done, these employees must also share their new ideas with their employer and make a case for new investment and problem solving. Even if their ideas are not as good as employers might have hoped, at least they did their best and learned and developed. In the case of the introduction of new technology and ideas, these employees are better enabled to adapt and increase their contribution to the company and are willing to take the time to learn new skills, learning how to use new technology while remaining productive and effective, thus making themselves more valuable employees.

No Identity Skill is Preferred

The process of finding and hiring the best-qualified candidate for a job is important in making businesses successful. Many companies build their own skill base. An intelligent and creative worker is expected for business recruiters. They need intelligent workers and the adaptability of each applicant better provides for excellent business performance and productivity. Companies require candidates who have the capability to cope with decision makings, hard work and solving problems for the well-being of the company. Accordingly, most employers desire employees who have higher education since these workers can work and learn in new situations and adapt to changing systems for the benefit of the employer's business. Moreover, training is as much about personal development as it is about learning set skills through formal training. For this reason, identity skill is not preferred for candidates.

Conclusion

This study aimed to explore which labour attributes are demanded in labour markets for companies under ASEAN free movement of labour and those not under ASEAN free movement of labour in 2016. 217 recruiters as respondents participated in the survey, from 97 companies under the ASEAN free movement of labour in 2016 and 120 companies not under the ASEAN free movement of labour in 2016. Conjoint analysis was used to answer the research questions. Here we found that, for companies under the ASEAN free movement of labour, the three highest important attributes for employers were: (1) speaking ASEAN languages except English; (2) higher degree of education; and (3) workplace (unable to work outside, up-country and oversea. In contrast, we found that nationality and identity skill were not important for the respondents. For companies not under the ASEAN free movement of labour, the three highest important attributes for employers were: (1) English language; (2) national in ASEAN (neighbour workforce); and (3) higher degree of education. But both workplace and identity skill were not important attributes of these companies.

According to the research findings, it is clear that the language skills of workers, both English and ASEAN languages, and the language requirements of their jobs provide remarkably strong support for the paper's main hypothesis. Thus, foreign labour and Thai workers with language skills have been an important factor of Southeast ASEAN economic development since the 1980s. The differentials in income and employment opportunities among the ASEAN economies have led to the movement of labour from low-wage to high-wage countries. According to the ASEAN agreement in 2016, labour mobility reforms would be developed by the Association of Southeast Asian Nations (ASEAN), in particular with the envisaged 2016 ASEAN Economic Community (AEC).

Thailand is attractive for skilled labour, covering eight sectors: engineering, accountancy, architecture, surveying, nursing, dentistry, medicine and tourism. Language requirements could be the most important factor, raising serious barriers to mobility (e.g. for a foreign nurse to practice in Thailand, the

candidate must pass the Thai national licensure exam in the Thai language). Another reason for the demand for employees with excellent language skills (and, hence, higher wages) is the changing structure of production requirement. It will affect the demand for low language skill workers who will be substituted by more highly skilled workers.

Education level was the next most important factor. Companies under ASEAN free movement of labour have been introduced into the labour market. Therefore, higher education level of labour is demanded by these companies. Some countries need many workers with higher degrees and so are capable of producing high-quality products. In such countries, the demand for individuals with lower degrees will decline, while the demand for more highly educated individuals will increase. As a result, the wages for higher education level workers will also increase automatically. In other words, if there is free movement of labour between countries, countries such as Singapore, Thailand and Malaysia will be the target for foreign labour and will be focused with foreign workers and applicants. As a result, the wages of foreign workers with high education levels will not be high. Hence, the employment and wage rates are determined by the relative supply of labour and higher/lower education levels of workers. Employers are likely to hire those with higher degrees and pay lower salaries.

These days, with the labour movement of competitive economies, domestic workers can be more easily replaced by foreign workers due to an increase in trade, liberalisation and labour skills. As a result, the bargaining power of workers has declined. International labour migration is likely to increase in the future. Around the world, it is an undeniable fact that migration cannot be stopped and migrant workers have become indispensable to many economies. Furthermore, there is good evidence that language capital and other forms of human capital, such as education level, tend to be complementary in production (Chiswick and Miller, 2003). So, language still remains the most important attribute to employers even though these companies are not under the ASEAN free movement of labour in 2016. Accordingly, Chiswick and Miller (2003) found that greater proficiency in English or French increases the immigrant return in foreign labour markets, suggesting that the human capital obtained through foreign work experience is language-specific. It may be that the structural economic shifts that have occurred in Thailand (especially for big companies) may have shifted employment towards different factors such as sales, business expansion and import-export business, where language specificity of foreign work experience is most essential.

In conclusion, the importance of language skills has increased. Clearly, English language skills - in particular communication skills - might influence productivity. Evidence from Ferrer, Green and Riddell (2006) indicates that workers with English skills are strongly related to higher wage outcomes. Nationality and neighbouring country workforce were the next most important attributes for these companies. The differentials in income and employment opportunities among the Asian economies have led to the movement of labour from low-wage to high-wage countries. International labour movement is likely to

increase in the future. Foreign labour or a neighbouring country workforce may provide complementary skills such as languages and be more diligent and have less bargaining power compared with native workers.

Implications

The opening of the AEC will bring both opportunities and challenges to the Thai workforce. At the domestic level, the expansion of markets and production will create more employment opportunities for both Thai and foreign workers. At a regional level, Thai workers will have chances to work abroad given the free mobility of skilled workers. However, the free movement of labour among member countries will force Thai workers into strong competition with other ASEAN workers in the labour market, both domestically and regionally.

In order to reap benefits from regional liberalisation and to survive the strong competition of the regional labour market, Thai workers will need to improve the quality of labour in Thailand with enhancements in matters such as Thai educational level and workforce skills in both English and ASEAN languages. According to the World Bank (2014), skills needed for productivity and economic growth require a combination of education, training and labour market competition. The Royal Thai government is formulating more appropriate education and skills development strategies that enhance productivity and competitiveness. In this regard, Thailand can learn from the experiences of other ASEAN members such as Singapore, Malaysia and Vietnam. Because these countries have successfully created the environment for providers of training to respond to the needs of the labour market via governmental issues. In addition, the Thai government should incorporate the restructuring of the national education system and that of incorporating workforce skill planning into the master development plan. Drucker (1999) states that, 'The most valuable asset of a 21st century institution will be its knowledge workers and their productivity'. The government should adopt a policy to support and develop fair employment practices to enhance competitive employment based on wage rates that lead to quality improvements in products and worker advantage, which is in accordance with Mastracci (2003), who demonstrates that organisational or governmental policy has focused on promoting the acquisition skill sets.

The Thai government and educational institutions should emphasise existing language tuition and provide more intensive skilled courses to students in order to improve labour qualifications in the national labour market, especially for those with higher degrees. As Petroni and Colacino (2008) write, institutions should improve existing language tuition and provide more intensive language courses to all levels of students in order to improve labour qualification, which is in accordance with the report by Murale and Ashrafali (2010).

Acknowledgement

The author profoundly owes thanks to my parents, elder sister, elder brother, close friends and Valaya Alongkorn Rajabhat University under Royal Patronage for all their support for this research. My completion of this research could not have been accomplished without them.

References

Associate of Southeast Asian Nations, ASEAN Economic Community Blueprint (2008). *ASEAN Secretariat, Jakarta, Indonesia*. Retrieved from <http://www.asean.org>.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. *Management Science*, 32(10), 1231-1241.

Barth, Erling, Alex Bryson, James Davis, and Richard Freeman, (2014), It's Where You Work: Increases in Earnings Dispersion across Establishments and Individuals in the U.S., *NBER Working Paper No. 20447*.

Boddie, W., Contardo, J., & Childs, R. (2007). *The future workforce: Here they come. The Public Manager*, 36(4), 25-28. Retrieved from ABI/INFORM Complete database. (Document ID: 236297536)

Borghans, L., Ter Weel, B. and Weinberg, B. A.: (2014), People skills and the labor-market outcomes of Under Represented groups, *Industrial & Labor Relations Review* 67(2), 287–334.

Borjas G (2006a) Immigration in high-skill labour markets: the impact of foreign students on the earnings of doctorates. *NBER Working Paper No. 12085*

BorjasG (2006b) Native internal migration and the labour market impact of immigration. *JHum Res* 41:221–258

Borjas G, Grogger J, Hanson G (2008) Imperfect Substitution between Immigrants and Natives: a reappraisal. *NBER Working Paper No.13887*

Brey-Casiano, C. (2008). *Leadership qualities for future library leaders. In Institute of Museum and Library Services & the Illinois State Library*. Thinking Outside the Borders: Library Leadership in a World Community, Washington, DC, Available at: http://www.library.illinois.edu/mortensen/book/10_bray_casiano.pdf

Bryan K, orme (2010). *Getting Started with Conjoint Analysis. Second Edition*, USA, Research Publishers LLC Press.

Card, David, Jörg Heining, and Patrick Kline, 2015, Organizational Inequalities: First Estimates of Wage Dispersion in German Workplaces, *Quarterly Journal of Economics* 128, 967-1015.

Carmeli, A., & Tishler, A. (2004). The relationships between intangible organizational elements and organizational performance. *Strategic Management Journal*, 25, 1257-1278.

Castex, G. and Dechter, E. K.: (2014), The changing roles of education and ability in wage determination,

Journal of Labor Economics 32(4), 685–710.

Davenport, T. H., & Prusak, L. (2000). *Working Knowledge: How Organizations Manage What They Know*. Boston, MA: Harvard Business School Press.

Dencker, J. C., Gruber, M., & Shah, S. K. (2009). Pre-entry knowledge, learning, and the survival of new firms. *Organization Science*, 20(3), 516–537.

Dierickx, I., & Cool, K. (1989). *Asset stock accumulation and sustainability of competitive advantage*. *Management Science*, 35(12), 1504–1511.

Drucker, P. F. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review*, 41(2), 79–94. doi:10.2307/41165987

Felbermayr G, Hiller S, Sala D (2010) Does immigration boost per capita income? *Econ Lett* 107:177–179

Fitz-Enz, J. (2000). The ROI of human capital. New York: *American Management Association*.

Fong PE, Lim L (1982) *Foreign labour and economic development in Singapore*. *IntMigr Rev* 16:548–576

Friedberg R (2001) The impact of mass migration on the Israeli labour market. *Q J Econ* 116:1373–1408

Gries T, Kraft M, Pieck C (2011) Interregional migration, self-selection and returns to education in Brazil. *Ann Reg Sci* 46:707–732

Hanushek, Eric A., and Ludger Woessmann. 2012. "Schooling, educational achievement, and the Latin American growth puzzle." *Journal of Development Economics* 99, no. 2: 497–512.

Harbison, F. H., & Charles, A.M. (1970). Education Manpower and Economic Growth (pp. 13). Oxford & IBH publication Co. Delhi Press.

Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25, 1155–1178.

Heckman, J., & Cunha, F. (2007). The technology of skills formation. *Paper presented as American Economic Association Conference*. Chicago, IL: Jan 5-7.

Hung, C-Y. 2008. "Overeducation and Undereducation in [Taipei,China]." *Journal of Asian Economics* 19(2):125–37. Huws, U. (2006). What will we do? The destruction of occupational identities in the knowledge-based economy. *Monthly Review*, 57, 19–35. Retrieved April 3, 2006, from the Proquest Database.

Jaw, B., Yu PingWang, C., & Chen, Y. (2006). Knowledge flows and performance of multinational subsidiaries: The perspective of human capital. *International Journal of Human Resource Management*, 17(2), 225–244.

Longhi S, Nijkamp P, Poot J (2005) A meta-analytic assessment of the effect of immigration on wages. *J Econ Surv* 19:451–477

Lucas, R. 1988. "On the Mechanics of Economic Development." *Journal of Monetary Economics* 21: 3–46. Malchow-Møller N, Munch JR, Skakse JR (2011a) Do immigrants affect firm-specific wages? *Scand J Econ*

doi:10.1111/j.1467-9442.2012.01720.x, Retrieved from
<http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9442.2012.01720.x/abstract> Economics
 22(1):3–42.

Mankiw, N. G., D. Romer, and D. Weil. 1992. "A Contribution to the Empirics of Economic Growth." *The Quarterly Journal of Economics* 107(2):407–37.

Manville, B., & Ober, J. (2010). *Beyond empowerment: Building a company of citizens*. In G. R. Hickman (Ed.), *Leading organizations: Perspectives for a new era* (2nd ed., (pp. 567- 572). Thousand Oaks, CA: Sage Press.

Mastracci, S. (2003). Employment and training alternatives for non-college women: Do redistributive policies really redistribute? *Policy Studies Journal*, 31, 585-601. Retrieved April 6, 2006, from the Proquest Database. doi:10.1093/swr/33.2.107

Mollick AV, Mora MT (2012) The impact of higher education on Texas population and employment growth. *Ann Reg Sci* 48:135–148

Murale, V., & Ashrafali. (2010). *Impact of intellectual capital on firm value: A panel data analysis of Indian IT firms*. *Advances in Management*, 3(7), 49-57. Retrieved from *Business Source Complete database*. (AN: 52548172)

National Association of Colleges and Employers. *Job Outlook Report*. Bethlehem (2012), PA: NACE. Retrieved from http://www.naceweb.org/Research/Job_Outlook/Job_Outlook.aspx

Nelson, R., and E. Phelps. 1966. "Investment in Humans, Technological Diffusion, and Economic Growth." *American Economic Review* 56(1):69–75.

Nistor A (2009) Assessing the effectiveness of human capital investments on the regional unemployment rate in the United States: 1990 and 2000. *Int Reg Sci Rev* 32:65–91

Ottaviano G, Peri G (2005) Rethinking the gains from immigration: theory and evidence from the U.S. NBER *Working Paper* #11672

Ottaviano G, Peri G (2006) Rethinking the effect of immigration on wages. NBER *Working Paper* #12497

Ottaviano G, Peri G (2008) Immigration and the national wages: clarifying the theory and the empirics. NBER *Working Paper* #14188

Pastore, F. 2009. "School-to-Work Transitions in Mongolia." *European Journal of Comparative Economics* 6(2):245–64.

Penrose, E. (1955). Limits to the growth and size of firms. *The American Economic Review*, 45(2), 531-543.

Petroni, A., & Colacino, P. (2008). Motivation strategies for knowledge workers: Evidences and challenges. *Journal of Technology Management & Innovation*, 3(3), 21-32. Retrieved from *Business Source Complete database*. (AN: 39342711)

Ployhart, R. E., Weekley, J. A., & Baughman, K. (2006). The structure and function of human capital emergence: A multilevel examination of the ASA model. *Academy of Management Journal*, 49,

661-677.

Romer, P. (1990), "Endogenous Technological Change," *Journal of Political Economy*, 98:5, pp. 71 -102.

Schultz, T. (1961). Investment in human capital. *The American Economic Review*, 51, 1-17.

Schultz, T. (1971). *Investment in human capital*. New York: NY: The Free Press.

Schultz, T. W. (1981), *Investing in People: The Economics of Population Quality*. Los Angeles: Berkeley University Press.

Seidler-de Alwis, R., & Hartmann, E. (2008). The use of tacit knowledge within innovative companies: Knowledge management in innovative enterprises. *Journal of Knowledge Management*, 12(1), 133-147. doi:10.1108/13673270810852449

Solow, R. (1956). "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70(1):65–94.

Smith, A. (1776). *An Inquiry into the Nature and Causes Wealth of Nations* (1st ed.)(pp. 78-79). London: George Routledge & Sons Press.

Snell, S. A., & Dean, J. W., Jr. (1992). Integrated manufacturing and human resource management: A human capital perspective. *Academy of Management Journal*, 35(3), 467-504.

Uatis Sanglaoid, Sumalee Santipolvut, & Laemthai Phuwanich. (2014). The impacts of ASEAN labour migration to Thailand upon the Thai economy. *International Journal of Economics and Finance*; vol.6, No.8.

Wagner, C. (2009). When mentors and mentees switch roles: Baby boomers and millennials must learn to teach each other. *Futurist*, 43(1), 6-7. Retrieved from *Education Research Complete database*. (AN: 35537364)

Wagner M (2009) Understanding the labour market impact of immigration. *University of Chicago job market Paper*. Retrieved from http://www.elsevier.com/authored_subject_sections/S04/misc/Immig_MW_Jan09.pdf.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.

World Bank Group. World Bank, East Asia and Economic update. (2014). *Enhancing competitiveness in an uncertain world*. Retrieved from <http://www.worldbank.org>

Yamaguchi, S. (2012): "Tasks and Heterogeneous Human Capital," *Journal of Labour Economics*, 30(1), pp. 1–53.

Youndt, M. A., Snell, S. A., Dean, J. W., Jr., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4), 836-866.

Yung-Shui, W., & Tung-Chun, H. (2009). The relationship of transformational leadership with group cohesiveness and emotional intelligence. *Social Behavior & Personality: An International Journal*, 37(3), 379-392. doi:10.2224/sbp.2009.37.3.379