

Siar, Sheila V.

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## Prospects and Challenges of Brain Gain from ASEAN Integration

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## Prospects and Challenges of Brain Gain from ASEAN Integration

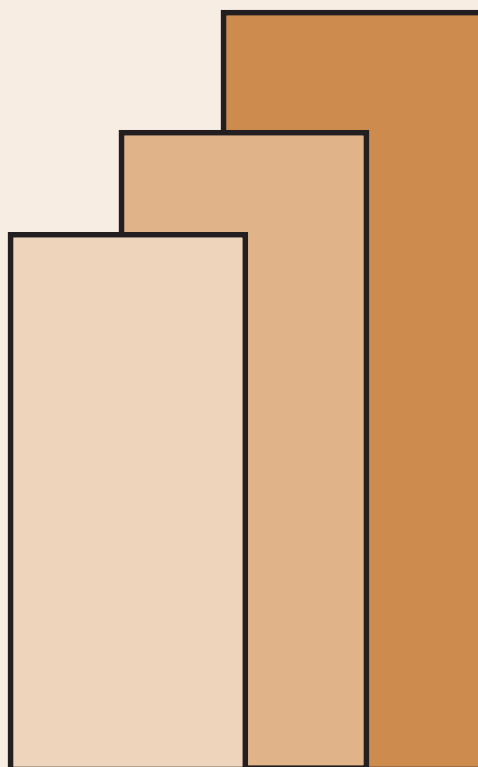
*Sheila V. Siar*

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For comments, suggestions or further inquiries please contact:

**The Research Information Staff**, Philippine Institute for Development Studies

5th Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines

Tel Nos: (63-2) 8942584 and 8935705; Fax No: (63-2) 8939589; E-mail: [publications@pids.gov.ph](mailto:publications@pids.gov.ph)

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# PROSPECTS AND CHALLENGES OF BRAIN GAIN FROM ASEAN INTEGRATION<sup>1</sup>

Sheila V. Siar<sup>2</sup>

## Abstract

South-North migration has largely characterised international migration patterns for decades. The South has traditionally been the source of both low-skilled and high-skilled labour of developed countries. This has fuelled serious concerns about the apparent loss of valuable knowledge and skills in developing countries, or what became known as 'brain drain'. However, the extent of migration between developing countries, or South-South migration, has intensified in recent years due to the economic progress in some regions, such as East Asia. This paper suggests that the ASEAN economic integration can be viewed as an opportunity for brain gain for the ASEAN member-countries. The envisaged ASEAN economic community (AEC) may boost both South-South and North-South movements of skilled labour as a result of the growth of cross-border education, increased mobility of professional workers with the implementation of the mutual recognition arrangements (MRAs), and the possible return migration of expatriate professionals to the ASEAN region given a vibrant regional economy in the long run that can provide more competitive remuneration packages. In turn, these will facilitate knowledge exchanges and collaborations, technology transfers, economic and business linkages, investment flows, and increased remittances. However, the more advanced economies in the region will have an edge in exploiting these opportunities in the initial years of the AEC. The ASEAN integration can be a double-edged sword for member-countries that may not be able to improve their competitiveness in the long run.

**Keywords:** ASEAN economic community, brain gain, brain drain, cross-border education, mutual recognition arrangements, return migration

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<sup>2</sup> Director for Research Information, Philippine Institute for Development Studies. Email for correspondence: [ssiar@mail.pids.gov.ph](mailto:ssiar@mail.pids.gov.ph) and [sheila.siar@gmail.com](mailto:sheila.siar@gmail.com).

## Introduction

South-North migration has largely characterised international migration patterns for decades. The developing countries, also known as the South, have traditionally been the main source of migrant labour of the North or the developed countries.<sup>3</sup> In the late 1980s, with the advent of the knowledge economy, a more intense economic competition arose that required the continuous supply of highly skilled people for the North. Rapid advancements in information technology (IT) have spurred a strong demand for IT professionals to keep up with the expanding use of technology in business, government, health and education. Trade liberalization policies and various innovations in global operations have also eased the transfer of production activities to more cost-effective locations for transnational companies. This gave rise to global production networks as well as the movement of technical and managerial people across borders. Combined with the ageing populations in the North, there has been an instantaneous demand for highly skilled medical and healthcare personnel. All of these factors led to the expansion of South-North migration which saw the most increase in the last two decades among the four migration pathways, based on the 2013 *World Migration Report* of the International Organization for Migration (IOM).<sup>4</sup>

As a result, serious concerns about the apparent loss of valuable knowledge and skills in the South, or what became known as 'brain drain', were brought to the fore. From the 1970s to the early 1990s, and even up to the present, migration was seen as causing underdevelopment for countries of origin. It came to be viewed as a detrimental process depleting sending countries, particularly developing ones, of their human resources (Papademetriou 1985).

Many of the source countries of migrant labour are located in developing Asia and some of them are part of the regional grouping of the Association of Southeast Asian Nations (ASEAN). These source countries include Bangladesh, Myanmar, Cambodia, China, India, Indonesia, Lao PDR, Nepal, Pakistan, Philippines, Sri Lanka, and Viet Nam (Hugo 2005:8 as cited in Castles and Miller 2009). While most Asian migration is characterised by lower skilled workers, the mobility of professionals, executives, and other highly skilled people is growing (Castles and Miller 2009). Traditional immigration countries such as the United States, Canada, Australia, and New Zealand are the usual destinations of permanent migrants. Temporary labour flows from Asia into the Middle East developed rapidly in the 1970s after the oil price hikes, to the Gulf states in the 1990s for reconstruction programs after the war, and within Asia starting in the mid-1980s to the industrial economies of East Asia such as Japan, Korea, and Taiwan due to their rapid economic growth and ageing populations and to the emerging economies of Southeast Asia such as Singapore and Malaysia.

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<sup>3</sup> The terms "North" and "South" refer to the economic status of countries and not to a geographical or spatial reference. Broadly speaking, "North" refers to high-income countries and "South" to low- and middle-income countries (IOM 2013). This paper follows the World Bank's categorization of North and South countries. There are 70 countries in 2010 that belong to the Global North.

<sup>4</sup> The *World Migration Report 2013* identified South-North and South-South as the first and second most prevailing migration pathways. They accounted for 45 and 35 percent of the total migration flows in 2010, respectively. However, it also argued that "South-South flows, which are much more likely to be underrecorded, could possibly be the (more) dominant pathway" (p. 56). North-North and North-South get a smaller share at 17 and 3 percent, respectively.

In 2015, the envisaged integration of the ASEAN member-countries, better known as ASEAN Economic Community or AEC, will come into fruition. Part of the preparations for this integration is removing restrictions to labour flows within ASEAN by liberalising trade in services which is regarded as a critical component in the formation of an AEC. Services trade has four modes, one of which is the physical movement of professional workers. In the ASEAN, this mode is being facilitated through the implementation of mutual recognition arrangements (MRAs) in key professional areas. These MRAs will enable the qualification of professional workers from one member-country to be recognized by another, thereby easing the movement of professional workers within the ASEAN. AEC 2015 also aims for greater cooperation in cross-border education among the member-countries, which suggests increased mobility of students and professionals.

Against this background, this paper explores the possibilities that can be opened by the increased mobility of skilled people within the ASEAN under the envisaged AEC. In particular, it proposes that AEC 2015 may facilitate brain gain for the ASEAN and its member-countries from a brain circulation perspective. Skilled movements should be perceived as circulatory flows of knowledge and skills and not as permanent outflows for the countries of origin. In this context, the ASEAN region may benefit from AEC 2015 from increased remittance and investment flows, technology transfer, business and professional linkages, and return migration of expatriate professionals.

In the next section, a brief profile of the ASEAN region is given, focusing on selected socioeconomic indicators that explain the relatively high rates of mobility from and within the region. This is followed by a discussion of the prospects of brain gain through the increased movement of international students and the growth of cross-border education, the cross-border movement of professional workers, and the possible return migration of expatriate professionals. These are discussed in the paper along with the challenges that should be addressed to make the ASEAN integration a beneficial process for the member-countries in terms of the brain gain argument. The last section provides the conclusion.

### **The ASEAN region**

ASEAN is a multifaceted regional grouping due to the varying levels of socioeconomic development of its 10 member-countries. High rates of unemployment and poverty incidence persist in most member-countries, which could explain the large numbers of their people crossing the borders to find better economic opportunities.

Official data from the latest *Asian Development Outlook* published by the Asian Development Bank on the rate of economic growth from 2009 to 2013 show how some ASEAN countries are faring better than others. It is obvious that majority of the member-countries were severely affected by the 2009 financial crisis. The ASEAN-5 countries (Indonesia, Malaysia, Philippines, Singapore, Thailand) immediately recovered and registered favourable growth rates in 2010 but others were not able to sustain the auspicious trends in the succeeding years. Looking at the economic growth from 2012 to 2013, only four countries registered an expansion: Myanmar, Philippines, Singapore, and Viet Nam.

**Table 1. Rate of economic growth, GDP, 2009-2014**

| Country           | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------|------|------|------|------|------|
| Brunei Darussalam | -1.8 | 2.6  | 3.4  | 0.9  | -1.4 |
| Cambodia          | 0.1  | 6.0  | 7.1  | 7.3  | 7.2  |
| Indonesia         | 4.6  | 6.2  | 6.5  | 6.3  | 5.8  |
| Lao PDR           | 7.3  | 7.5  | 7.8  | 7.9  | 7.6  |
| Malaysia          | -1.5 | 7.4  | 5.1  | 5.6  | 4.7  |
| Myanmar           | 5.1  | 5.3  | 5.9  | 7.3  | 7.5  |
| Philippines       | 1.1  | 7.6  | 3.6  | 6.8  | 7.2  |
| Singapore         | -0.8 | 15.7 | 6.0  | 1.9  | 4.1  |
| Thailand          | -2.8 | 7.8  | 0.1  | 6.5  | 2.9  |
| Viet Nam          | 5.4  | 6.4  | 5.9  | 5.2  | 5.4  |
| ASEAN             | 1.4  | 8.0  | 4.8  | 5.7  | 5.0  |

Source: *Asian Development Outlook 2014*, p. 270

The inclusiveness of economic growth is a central issue in the development discourse. Growth to be considered inclusive should translate to a better quality of life for all, including the poor. Official data on the unemployment rates for the period 2004-2011 compiled by the ASEAN Secretariat show that joblessness is still a pressing problem in much of the ASEAN, thus reflecting the lack of inclusiveness of economic growth. High-population countries like Indonesia and Philippines have high unemployment rates but Indonesia has managed to steadily reduce unemployment where it closed at 5 per cent in 2011 (Table 2). The Philippines has continually registered high unemployment rates; joblessness in the country from 2008 to 2011 was the highest among the ASEAN members. Singapore, Malaysia, and Viet Nam registered a tapering of unemployment from 2004 to 2011. Thailand has continued to record low unemployment rates. Cambodia's situation should be interpreted with caution as the majority of its labour force works in the informal sector.

**Table 2. Unemployment rate and labour force**

| Country                | Unemployment rate of 15 years old and over (%) |      |      |      |      |      |      |      |
|------------------------|--|------|------|------|------|------|------|------|
|                        | 2004   | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Brunei Darussalam      | 3.5  | 4.3  | 4.0  | 3.4  | 3.7  | 3.5  | 2.7  | 2.6  |
| Cambodia               | 2.3  | 0.8  | n.a. | 0.7  | 0.3  | 0.1  | 0.3  | 0.2  |
| Indonesia              | 9.9  | 10.3 | 10.3 | 9.1  | 6.5  | 5.8  | 5.5  | 5.0  |
| Lao PDR                | -  | 1.3  | -    | -    | -    | -    | -    | -    |
| Malaysia               | 3.5  | 3.5  | 3.3  | 3.2  | 3.3  | 3.7  | 3.3  | 3.1  |
| Myanmar <sup>3</sup>   | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Philippines            | 11.0   | 7.5  | 7.4  | 6.3  | 6.8  | 7.1  | 7.1  | 6.4  |
| Singapore <sup>1</sup> | 5.8  | 4.1  | 3.6  | Na   | 3.2  | 3.1  | 3.1  | 2.9  |
| Thailand <sup>2</sup>  | 2.1  | 1.8  | 1.5  | 1.4  | 1.4  | 1.0  | 1.0  | 0.7  |
| Viet Nam <sup>4</sup>  | 5.6  | 4.8  | 4.8  | 4.6  | 4.7  | 4.3  | 4.3  | 3.6  |

Source: *ASEAN Statistical Yearbook 2012*, p. 24

Notes: - not available at the time of publication; n.a. – not applicable; <sup>1</sup>Singapore's resident unemployment; <sup>2</sup>Thailand's unemployment rate using average period; <sup>3</sup>Myanmar unemployment rate is 10 years and over; <sup>4</sup>Unemployment rate at urban areas of Viet Nam.

High rates of unemployment induce more poverty. Looking at the proportion of population below the national poverty line from 1990 to 2010, it is clear that some countries in the ASEAN have large numbers of poor people (Table 3). In 2010, Cambodia, Lao PDR, and the Philippines have more than 20 percent of their population living in extreme poverty, while Indonesia and Viet Nam registered 13 percent. Malaysia and Thailand have managed to reduce their poverty rates to single digits at 4 and 7 percent, respectively, in 2010.

**Table 3. Proportion of population below the national poverty line in ASEAN and selected ASEAN member-states, 1990-2010**

| Country     | Year |      |      |      |      |
|-------------|------|------|------|------|------|
|             | 1990 | 1995 | 2000 | 2005 | 2010 |
| Cambodia    | 39   | 39   | 37   | 33   | 26   |
| Indonesia   | 15   | 11   | 19   | 16   | 13   |
| Lao PDR     | 49   | 43   | 36   | 30   | 24   |
| Malaysia    | 16.5 | 8.7  | 8.5  | 5.7  | 3.8  |
| Philippines | 34   | 32   | 26   | 26   | 24   |
| Thailand    | 34   | 17   | 21   | 10   | 7    |
| Viet Nam    | 72   | 52   | 35   | 19   | 13   |
| ASEAN       | 31   | 23   | 23   | 17   | 14   |

Source: 2011 ASEAN Statistical Report on the Millennium Development Goals (ASEAN 2012)

More encompassing measures of development such as the human development index (HDI) show the same trend. The HDI is a composite indicator that combines measures of life expectancy, educational attainment, and standard of living (gross national income per capita), thus it can serve as a frame of reference for both social and economic development.<sup>5</sup> As shown in Table 4, the CLMV (Cambodia, Lao PDR, Myanmar, Viet Nam) countries have the lowest HDI in the ASEAN in 2011. Among the ASEAN-5, Philippines and Thailand have the lowest HDI.

The net migration rate is one of the indicators of migratory movements. Countries with a positive net migration are net countries of immigration while those with a negative net migration rates are countries of emigration. Net migration data compiled by UNESCAP show the Philippines, Viet Nam, Indonesia, Myanmar, Cambodia, Lao PDR, and Thailand as countries of emigration for the period 2005-2010 (Table 5). As a leading immigration country, Singapore's foreign population has increased by more than 30 per cent between 1990 and 2010. Brunei and Malaysia remain as countries of immigration.

<sup>5</sup> The HDI is expressed as a value between 0 and 1 where 0 pertains to the lowest level of human development and 1 is the highest. Countries scoring 0.80 and higher on the HDI are considered to be countries that have achieved 'high human development'; between 0.50 and 0.79, medium human development; and below 0.50, low human development (<https://cyberschoolbus.un.org/infonation3/glossary.html>).

**Table 4. Trends in human development index, 1985-2011**

| Country           | 1985  | 1990  | 2005  | 2008  | 2009  | 2010  | 2011  |
|-------------------|-------|-------|-------|-------|-------|-------|-------|
| Brunei Darussalam | -     | -     | 0.830 | 0.834 | 0.835 | 0.837 | 0.838 |
| Cambodia          | -     | 0.512 | 0.491 | 0.513 | 0.513 | 0.518 | 0.523 |
| Indonesia         | 0.582 | 0.623 | 0.696 | 0.712 | 0.718 | 0.723 | 0.728 |
| Lao PDR           | 0.422 | 0.449 | 0.460 | 0.483 | 0.514 | 0.520 | 0.524 |
| Malaysia          | 0.693 | 0.720 | 0.800 | 0.750 | 0.752 | 0.758 | 0.761 |
| Myanmar           | -     | -     | 0.436 | 0.468 | 0.474 | 0.479 | 0.483 |
| Philippines       | 0.692 | 0.719 | 0.622 | 0.635 | 0.636 | 0.641 | 0.644 |
| Singapore         | 0.784 | 0.821 | 0.835 | 0.855 | 0.856 | 0.864 | 0.866 |
| Thailand          | 0.673 | 0.705 | 0.656 | 0.672 | 0.673 | 0.680 | 0.682 |
| Viet Nam          | 0.582 | 0.610 | 0.561 | 0.580 | 0.584 | 0.590 | 0.590 |

Source: *ASEAN Statistical Yearbook 2012*, p. 224

‘-’ not available at the time of publication

**Table 5. International migration data, Southeast Asia, 1990-2010**

| Country           | Foreign Population |       |       |       |       |                 |      |      |      |      | Net Migration Rate   |       |       |       |
|-------------------|--------------------|-------|-------|-------|-------|-----------------|------|------|------|------|----------------------|-------|-------|-------|
|                   | Thousands          |       |       |       |       | % of Population |      |      |      |      | Per 1,000 population |       |       |       |
|                   | 1990               | 1995  | 2000  | 2005  | 2010  | 1990            | 1995 | 2000 | 2005 | 2010 | 90-95                | 95-00 | 00-05 | 05-10 |
| Brunei Darussalam | 73                 | 87    | 104   | 124   | 148   | 28.5            | 29.6 | 31.4 | 33.8 | 37.0 | 0.8                  | 1.8   | 2.0   | 1.8   |
| Cambodia          | 38                 | 116   | 237   | 304   | 336   | 0.4             | 1.1  | 1.9  | 2.3  | 2.3  | 8.3                  | 5.1   | -1.1  | -5.4  |
| Indonesia         | 466                | 219   | 292   | 136   | 123   | 0.3             | 0.1  | 0.1  | 0.1  | 0.1  | -0.4                 | -0.2  | -0.5  | -0.6  |
| Lao PDR           | 23                 | 23    | 22    | 20    | 19    | 0.5             | 0.5  | 0.4  | 0.4  | 0.3  | -2.0                 | -5.1  | -6.2  | -2.5  |
| Malaysia          | 1,014              | 1,193 | 1,554 | 2,029 | 2,358 | 5.6             | 5.8  | 6.6  | 7.9  | 8.3  | 3.1                  | 3.6   | 4.0   | 4.8   |
| Myanmar           | 134                | 114   | 98    | 93    | 89    | 0.3             | 0.3  | 0.2  | 0.2  | 0.2  | -0.6                 | 0.0   | -4.1  | -3.1  |
| Philippines       | 159                | 210   | 323   | 375   | 435   | 0.3             | 0.3  | 0.4  | 0.4  | 0.5  | -2.1                 | -2.1  | -2.8  | -2.8  |
| Singapore         | 727                | 992   | 1,352 | 1,494 | 1,967 | 24.1            | 28.5 | 34.5 | 33.2 | 38.7 | 15.3                 | 13.8  | 20.7  | 18.8  |
| Thailand          | 387                | 549   | 792   | 982   | 1,157 | 0.7             | 0.9  | 1.3  | 1.5  | 1.7  | -3.8                 | 2.0   | 3.4   | -2.2  |
| Viet Nam          | 29                 | 39    | 56    | 55    | 69    | 0.0             | 0.1  | 0.1  | 0.1  | 0.1  | -1.1                 | -0.8  | -1.9  | -2.0  |

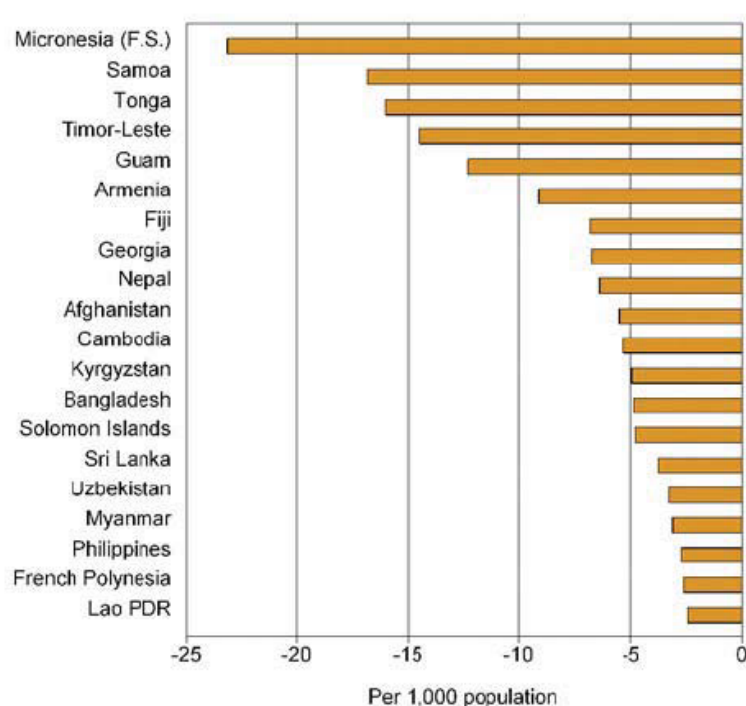
Source: *UNESCAP Statistical Yearbook for Asia and the Pacific 2013*, A.3.1. International Migration, page 24.

Looking at overall migration trends in the Asia-Pacific region for the period 2005-2010, three ASEAN member-countries belong to the top 20 emigration countries. Cambodia, Philippines, and Lao PDR registered large outmigration rates, together with a number of small islands and lower-income or lower-middle-income economies (Figure 1).

Labour mobility in the ASEAN region may be expected to increase in the coming years given less restrictive cross-border movements under AEC 2015. The region has an abundant labour supply, which given high unemployment rates prevailing in many countries (refer to Table 2), remains untapped. Its 20-54-year old age group is the largest in 2011 at 51.2 per cent, which is contributed mainly by Indonesia, Philippines, Myanmar, Thailand, and Viet Nam (Table 6). This age group will further expand as the younger age group of 5-19 matures, which at 2011 is already 27.3 per cent of the total.



**Figure 1. Net migration rate, top 20 countries and areas in Asia and the Pacific, 2005-2010**



Source: *UNESCAP Statistical Yearbook for Asia and the Pacific* 2013, p. 21, A.3 International Migration

**Table 6. ASEAN population by age group, 2011**

| Country                  | Number ('000) in 2011 |                 |                 |               |               | Total            |
|--------------------------|-----------------------|-----------------|-----------------|---------------|---------------|------------------|
|                          | 0-4                   | 5-19            | 20-54           | 55-64         | > 65          |                  |
| Brunei Darussalam        | 36.1                  | 108.6           | 242.6           | 20.7          | 14.7          | 423              |
| Cambodia                 | 1,544                 | 4,742           | 6,826           | 782           | 628           | 14,521           |
| Indonesia <sup>1</sup>   | 21,893                | 62,941          | 124,775         | 15,786        | 12,275        | 237,671          |
| Lao PDR                  | 934                   | 2,205           | 2,716           | 293           | 237           | 6,385            |
| Malaysia                 | 2,501                 | 8,098           | 14,913          | 1,977         | 1,475         | 28,964           |
| Myanmar                  | 5,741                 | 17,584          | 29,479          | 4,047         | 3,533         | 60,384           |
| Philippines <sup>1</sup> | 11,198                | 30,352          | 44,685          | 5,462         | 4,138         | 95,834           |
| Singapore <sup>2</sup>   | 188                   | 709             | 2,070           | 469           | 353           | 3,789            |
| Thailand                 | 4,086                 | 14,645          | 36,853          | 6,467         | 5,545         | 67,597           |
| Viet Nam <sup>3</sup>    | 7,197                 | 23,455          | 46,508          | 5,037         | 5,643         | 87,840           |
| Total ASEAN              | 55,317 (9.2%)         | 164,840 (27.3%) | 309,068 (51.2%) | 40,340 (6.7%) | 33,841 (6.6%) | 603,409 (100.0%) |

Source: *ASEAN Statistical Yearbook* 2012, p. 6

Notes: <sup>1</sup> Applying 2010 age structure; <sup>2</sup> total Singapore residents only; <sup>3</sup> Applying 2009 age structure

<sup>4</sup> Total ASEAN exclude Singapore's nonresident population.

### Prospects and challenges of brain gain under ASEAN integration

This paper proposes three pathways by which brain gain may be achieved under ASEAN integration: cross-border education (also called as 'transnational provision of higher education'), cross-border mobility of professional workers, and return migration of expatriate professionals

(which also includes diaspora engagement). The prospects and challenges of these brain gain pathways are discussed below.

### ***Increased international students and cross-border education***

International students have played an important role in the migration movements in many countries. They are considered a future source of skills and innovation. Student migration is considered a precursor to skilled migration (Castles and Miller 2009) and a strategy to attract the 'best and the brightest'.

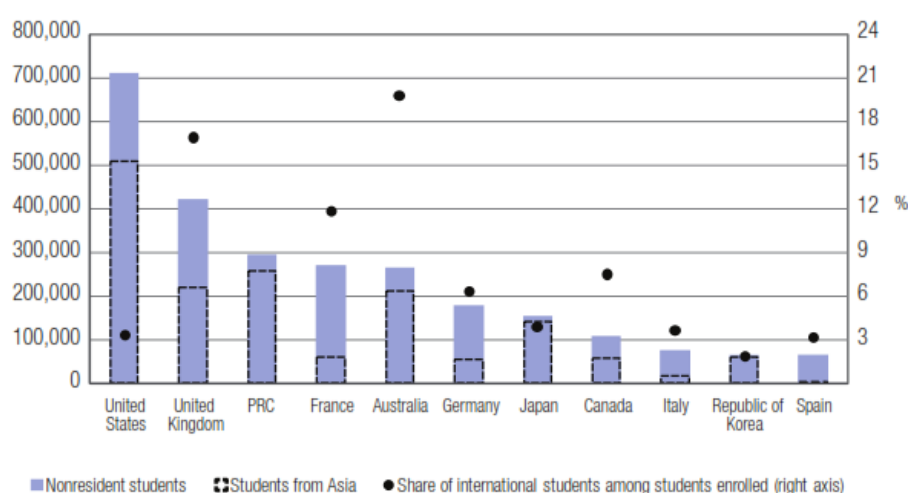
Estimates by Hugo (2005) indicate that between 1998 and 2003, 2.6 million Asian students left their home countries to study overseas; the largest group is the Chinese (471,000), followed by South Koreans (214,000), Indians (207,000), and Japanese (191,000). Compared with other countries, the outmigration of Chinese scholars is more state led rather than market led (Siar 2008). For the most part of the Cultural Revolution, leaving China to study was not an option for students, but toward the end of the 1970s, the central government pushed the Ministry of Education to start sending selected researchers to the West to study and learn advanced technologies. The policy was promoted by forging educational exchange agreements with the United States (e.g., the Sino-America Understanding on Educational Exchanges in October 1978 and the Agreement on Cooperation in Science and Technology in January 1979) (Zweg and Chen 1995 as cited in Xiang 2005).

English-speaking countries in the OECD have a natural advantage for attracting international students and are known to have the best educational institutions in the world. The 2014 joint report of the Asian Development Bank Institute (ADBI), Organisation for Economic Co-operation and Development (OECD), and International Labour Organization (ILO) on labour migration, skills, and student mobility in Asia puts the total of international students in the OECD countries at 2.8 million, with the United States hosting the largest percentage of international students at 25 per cent, followed by United Kingdom (15%), France (10%), Australia (9%), and Germany (6%). Other common destinations are Japan (with a share of 5%) and Korea (2%). However, relative to the total tertiary student population, the highest concentration of international students can be found in Australia (20%), United Kingdom (17%), and New Zealand (16%).

Among Asian non-OECD countries, China, Malaysia, and Singapore host the highest numbers of international students. In 2011, China had 292,600 students, an increase of 48 per cent from its 2005 figures. It is also ranked as the third main destination country of international students worldwide next to the United States and United Kingdom (ADBI/OECD/ILO 2014). Both Malaysia and Singapore registered increasing international student population from 2005 to 2011. Malaysia had 90,000 foreign students in 2011 from only 44,400 in 2005. Singapore had 91,500 foreign students in 2011 from 66,000 in 2005.

Figure 2 illustrates the top OECD and non-OECD destination of foreign students and the proportion of Asian students. The overwhelming majority of Asian students in these destination countries is apparent. But what is also striking is that among the Asian countries (China, Japan, and Korea), their international student population is made up mostly of students from other Asian countries.

**Figure 2. Top destination countries of nonresident students**



PRC = People's Republic of China.

Note: For Japan, the Republic of Korea, and Italy, data refer to noncitizen students. For the PRC, data on the share of students from Asia are based on 67% of the foreign students.

Source: OECD Education Database. For the PRC, calculations are based on Project Atlas.

Source: *Labor Migration, Skills, and Student Mobility in Asia* (ADB/OECD/ILO 2014)

These figures point to the opportunities for the ASEAN region both in international education provision and as a site for cross-border education. First, there is a strong demand for tertiary education from Asian countries. This can be attributed to rising economic levels in the industrialized countries in East Asia and the increasing premium given to higher education to access better socioeconomic opportunities. Second, non-OECD countries belonging to the ASEAN-5, particularly Singapore and Malaysia, are increasingly emerging as international education providers. This can be attributed to their sustained efforts to be globally competitive in a knowledge economy that are steadily gaining ground. The succeeding discussions below show their participation in different modalities of cross-border education.

Third, the growing population of Asian students in Asian schools indicates the latter's increasing comparative advantage over education providers in North America and Europe, particularly in terms of physical and cultural proximity and cheaper cost of education. These are windows of opportunities that the ASEAN should capitalize on. For example, the Philippines has become a popular destination of Koreans seeking to learn the English language. In 2008, Philippine Ambassador to Seoul Luis T. Cruz reported that about 200,000 South Koreans are in the Philippines to study English. Their reasons for choosing the Philippines are mainly due to its proximity to Korea (only three hours away) and the cheaper cost of studying in the Philippines than in the traditional English-speaking countries (Cerralbo 2008). In addition to education, the Philippines has also become a favourite destination of South Koreans for tourism reasons, according to a Gallup poll.

The traditional way of obtaining an international education is to travel overseas. Over the years, the face of cross-border education and the dynamics of internationalisation have changed. Foreign degrees can be pursued in the home country or in neighbouring countries at local institutions through various forms of collaborative arrangements with degree-awarding institutions from major education-exporting countries (Clark 2012). One modality is through branch or satellite campus established by an education provider in another country to deliver

courses and programs to local students (Wang n.d). Examples include Monash University in Malaysia, RMIT University in Viet Nam, and Nottingham University in Malaysia and China. Another modality is the independent institution type wherein a foreign education provider establishes a stand-alone education institution in another country (Wang n.d.). In-country partnership arrangements are also becoming popular. These include such modalities as franchising, double or joint degrees, twinning programs, and articulation agreements. Another method is distance or e-learning. All of these largely depend on well-harmonised education systems, uncomplicated credit transfer system, the recognition of academic units and local qualifications, and good internet connectivity.

Audits in various years (2006, 2009, 2011) conducted by the Quality Assurance Agency, a regulatory agency in the United Kingdom (UK) that conducts reviews of overseas provision of UK higher education by foreign institutions have identified some of the biggest and most important Asian education markets (Clark 2012). These are Singapore, China, Malaysia, and India. Table 7 shows the profile of transnational education (TNE) programs in these countries.

In Singapore, there were 471 TNE programs offered by 82 Singaporean institutions in partnership with 62 British education providers. A big chunk of these programs (89%) were offered in-country, meaning studied entirely in Singapore with a partner institution. A different modality is dominant in China. A total of 223 Chinese institutions are linked with 82 British HE educations and are offering 352 TNE programs. The most common links were found to be under progression arrangements, where Chinese students study for one or two years at a Chinese institution and progress to their final or two years of undergraduate study at a UK (awarding) institution (Clark 2012).

In Malaysia, in-country TNE provision was also the most dominant. The 2009 QAA audit found a total of 72 UK institutions having collaborative links with 107 Malaysian partners. Together they offer a total of 260 programs leading to the award of a UK qualification. Forty per cent of these programs are offered entirely in Malaysia, 36 per cent under articulation agreements, and the remaining as twinning arrangements. A total of 135 TNE programs are offered in India by 35 UK universities and their 53 Indian partner institutions. A little more than half of the programs (56%) were given entirely in India, 6 per cent through distance learning, 28 per cent through articulation arrangements, and 10 per cent through twinning arrangements.

**Table 7. British TNE provision in key Asian markets**

| Country          | No. of active UK institutions | No. of active partner institutions | No. of programs | Most common type of provision     | Percent of undergraduates |
|------------------|-------------------------------|------------------------------------|-----------------|-----------------------------------|---------------------------|
| Singapore (2011) | 66                            | 82                                 | 471             | Partner institution<br>In-country | 70                        |
| China (2006)     | 82                            | 223                                | 352             | Progression agreement             | n/a                       |
| Malaysia (2010)  | 72                            | 107                                | 260             | Partner institution<br>In-country | n/a                       |
| India (2009)     | 35                            | 53                                 | 135             | Partner institution<br>In-country | 62                        |

Source: QAA audits, cited in Clark (2012)

Despite the progress of Singapore and Malaysia, ASEAN faces a huge challenge in promoting the region as an international education destination and a viable partner in cross-border education. The high variation of the progress in tertiary education among its member-countries is a major constraint. Many are still confronting problems of underdeveloped education systems, low standards of living, and English still not being the primary language in many universities despite its being hailed as “the sole and official working language of ASEAN” (Kirkpatrick 2010, p. 14). Marginson (2011) emphasized the region’s immense variation in terms of education resources, tertiary participation, research outputs, and global connectedness. There is a great need to address these constraints to improve the prospects of the ASEAN region in cross-border education. The challenges remain on how to harmonise the different education systems in the region, establish accreditation tools, ensure quality, and resolve language issues (Kuroda 2012; Wang n.d.).

If some countries are lagging behind others in global competitiveness in higher education, Marginson (2011) noted that this can be explained by the degree of their global knowledge capacity. Marginson said that those with higher global knowledge capacity have well-developed knowledge economies as evidenced by their high-quality education systems with a strong research component, high tertiary education enrolment, and stable education policies. Analysing higher education in the Asia-Pacific region, he categorized countries into four groups. The first group is comprised of the highly developed knowledge economies, namely, Japan, South Korea, Hong Kong, China, Taiwan, Macau, Singapore, Australia, and New Zealand. The second group consists of the middle emerging knowledge economies—China, Thailand, Malaysia, and India. The third group is made up of the less developed emerging economies consisting of Viet Nam, Philippines, Indonesia, Pakistan, Sri Lanka, the Maldives, and Fiji. The fourth group consists of the incidence of pre-modern underdevelopment, which characterises the economies of Myanmar, Laos, Cambodia, Nepal, Bangladesh, and some of the island Pacific states. Based on this grouping, majority of the ASEAN member-countries belong to the third and fourth groups of less developed emerging economies and undeveloped economies, which clearly reflect the huge challenge that the region is facing.

The success of Singapore in attaining global competitiveness as an education provider and in forging collaborative arrangements with degree-awarding institutions of major education-exporting countries is worth revisiting. Singapore is the only member country in the ASEAN that has progressively developed its educational system, making it an important component of its national innovation system. The Singapore model is particularly geared toward the development of the education industry as a tradable export service (Wong, Ho and Singh 2007), which was carried out through internationalization.

Analysing the experience of the National University of Singapore, Wong et al. identified the most important features of the Singapore model, namely: (1) adopting an entrepreneurial university model by injecting entrepreneurship to the content of university education; (2) adequate investments in research and development to support knowledge creation; (3) promoting knowledge commercialisation, including technology licensing and publishing; (4) opening Singapore to leading overseas universities through branch campuses and other forms of operational presence in the country; and (4) active recruitment of foreign faculty members. The entrepreneurial dimension is seen in the Singapore model as a critical element for the “increasingly dynamic labour market of a global, knowledge-based economy, where creativity, entrepreneurial mindset, social skills, and international networking take on increasing importance” (Wong, Ho and Singh 2007, p. 935).

The experience of leading universities in Europe and Asia in achieving world-class university status has pointed to the strengthening of research capacity as a primary strategy (Deem, Mok and Lucas 2008). In Asia, this has been the path pursued by Hong Kong, Taiwan, and China. Hong Kong's higher education has undergone several research assessment exercises since the 1990s to benchmark with the top universities in the world and has vigorously implemented a publish-or-perish regulation; research assessments have also dominated academic universities in Taiwan. In China, the central government has implemented projects like the '211 Project' and the '985 Programme' to assist some higher education institutions to achieve world-class university status (Deem, Mok and Lucas 2008, p. 90). The 211 Project was aimed at developing 100 key universities and key disciplines in the 21<sup>st</sup> century by giving additional funding to improve their teaching and research facilities while the 985 Programme was intended to transform Beijing University and Tsinghua University to be world-class universities by 2015 and 2011, respectively.

Attaining world-class status may be facilitated through networks and alliances. Different forms of university research networks, alliances, and international research consortia are important avenues for strengthening research capacity, promoting international collaboration to earn higher ranking in international university assessments, and improving the quality of higher education (Deem, Mok and Lucas 2008). An example of these networks is the Asia Pacific Rim Universities (APRU), which aims to foster cooperation in education and research among the Pacific Rim economies.

There are also opportunities provided by existing university consortium type of arrangements to harmonize differences. An example is the University Consortium on Post Graduate Degree in Agriculture managed by the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), which is under the umbrella of the Southeast Asian Ministers of Education Organisation (SEAMEO), an intergovernmental body. This university consortium facilitates student and faculty exchanges and also has a North-South collaboration with universities in Canada, Australia, and Germany.

Collaborative arrangements such as franchising, double or joint degrees, and twinning programs with major education providers in developed countries are also beneficial in raising the standard of higher education and achieving an international reputation, as exemplified by the experience of Singapore, Malaysia, China, and India.

Efforts of international and intergovernmental organisations can help in improving the quality of higher education in the ASEAN member-countries and in accelerating the pace of cross-border education. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has done substantial work on standard setting, capacity building, and promoting international cooperation.

Another active entity is the SEAMEO Regional Centre for Higher Education and Development (RIHED) that is working for 11 member-countries in Southeast Asia. One of the main activities outlined in its 4<sup>th</sup> Five-Year Development Plan (2012-2017) is promoting the harmonisation of Southeast Asian higher education by fostering the development of a quality assurance framework and a credit transfer system, among others (Annual Report 2011/2012). It facilitates policy forums, workshops, training, information dissemination, and research. SEAMEO-RIHED also organises the annual meetings of the Directors General/Commissioners of Higher Education

in Southeast Asia, and implements student exchanges, regional student internships, and researcher exchanges.

Moreover, the ASEAN has identified cross-border mobility and internationalisation of education as a priority area in its 5-year Work Plan on Education (2011-2015). Prior to this, the ASEAN ministers of education signed the charter of the ASEAN University Network (AUN) in 1995. The main objective of the AUN is “to strengthen the existing network of cooperation among leading universities in ASEAN, by promoting cooperation and solidarity among ASEAN scholars and academics, developing academic and professional human resources, and promoting information dissemination among ASEAN academic community” (AUN website). The AUN currently has 30 member-universities from the 10 ASEAN member-countries. One of its programs is the ASEAN Credit Transfer System (ACTS) in which ASEAN students have the opportunity to study in other universities comprising the AUN through the AUN study exchange program; the units earned by the students will be recognized in their home country’s university. One of the outcomes of the ACTS is the adoption of a common grading scale for student exchanges among AUN member universities (The 3<sup>rd</sup> AUN-ACTS steering committee meeting, AUN website).

Aside from regional efforts, member states have also exhibited willingness to cooperate with one another in raising the standard of higher education and advancing cross-border education. As an example, President Benigno Aquino of the Philippines and Prime Minister Najib of Malaysia signed an Agreement on Educational and Cultural Cooperation in February 2014. The agreement includes collaborating on research and development, education and training; organising meetings and visits of experts; promoting cultural exhibitions and performances; cooperating on school and institutional linkages; teacher education and training; educational assessment, planning and research; technical vocation education; and curriculum design and development (OPP website). The agreement is said to be enforceable in three years and can be renewed for another three years.

### ***Increased cross-border movement of professional workers***

Labour migration is not a new phenomenon. Rural to urban migration for better work opportunities has occurred in the past, so does moving across national borders for economic reasons. However, the scale and intensity of labour migration, particularly skilled migration, has increased tremendously in the past two decades with modern communication and travel that have reduced time and cost and with the advent of the knowledge-based economy in the late 1980s.

As discussed in the first section, developing Asia is one of the main sources of migrant labour for years; some of these source countries are in the ASEAN region. What is striking from the latest trends is the increasing scale of South-South movement, such as the large numbers of Asians working in other Asian countries starting in the mid-1980s. Based on data from the late 1990s to the early 2000s compiled by Hugo (2007) from various sources, over 20 million Asians are working on labour contracts especially in the Middle East and other Asian countries such as Japan, Singapore, Malaysia, Thailand, Hong Kong, Taiwan, Brunei, and South Korea. The dawn of Asia as a labour migration destination can be attributed to the rapid economic growth of the so-called ‘dragon economies’ (Singapore, Hong Kong, South Korea, and Taiwan) and the economic restructuring of their labour markets “from being manufacturing dominated to being service led (Findlay 1998). The shift of global capital to Asia as a more cost-effective location for

production activities has also led to the reorganisation of the production process and the linking of the Asian region to global production systems, resulting in increased labour needs.

Although Asian labour migration is mostly low-skilled migration, the movement of highly skilled people has increased over the years. Of a significantly lesser scale (3% of global flows based on IOM data), Asian migration is also characterized by North-South movements or labour flows from developed countries to the newly industrialising or emerging economies of Asia. The rise of global production networks and the cheaper cost of labour in the Asian region have made it an attractive and cost-effective location for transnational companies that also require skilled personnel. Abella (2002, as cited by Castles and Miller 2009) estimated that China had 200,000 foreign specialists in 2000, Malaysia with 32,000, and Viet Nam with 30,000. They came from the USA, Europe, and Australia, and other Asian countries.

The value of high-skilled migration as an avenue for brain gain began to be recognised in the late 1990s when a more optimistic view of international migration emerged that proposed that it can enhance development in the countries of origin of the migrants not just through remittances but also through the knowledge and skills that they can transfer to their home countries. This paradigm shift from brain drain to brain gain appeared in various terms such as 'knowledge transfer', 'knowledge exchange', and 'knowledge circulation' (Meyer et al. 1997; Meyer and Brown 1999; Saxenian 2002a, 2002b; Hunger 2004).

A description of these concepts is given by Castles and Miller (2009, pp. 65-66) in their book, *Age of Migration*:

"The brain circulation argument goes as follows. If highly skilled people cannot be employed at home, they are not damaging the economy by leaving. Qualified personnel emigrate not only because salaries are higher in the North, but also because working and living conditions in the South are poor and opportunities for professional development are lacking. Indeed, training people to work abroad may be seen as a rational strategy, because in the short run, it will increase remittance flows, and in the long run, it may lead to return of experienced personnel and transfer of technology."

Within the ASEAN, the free trade agreement in goods came ahead that in services. In December 1995, the 10 member-countries signed the ASEAN Framework Agreement on Services (AFAS). Services, in this case, encompass all four modes of supply of services covered in the General Agreement on Trade in Services (GATS) signed by the members of the World Trade Organization as a result of the Uruguay round of negotiations.<sup>6</sup> The AFAS is intended to broaden the scope of liberalisation beyond those undertaken in the GATS to achieve a free trade area in services in the ASEAN region (Schott, Lee and Muir 2013).

One of the more recent developments in ASEAN cooperation on trade in services is the mutual recognition arrangement (MRA) in professional services. This policy instrument "enables the qualifications of services suppliers that are recognized by the relevant authorities in their home country to be mutually recognized by other signatory Member States" (ASEAN Secretariat 2011). An MRA promotes mutual agreement on standards, licensing, and certification of professional workers among the ASEAN member-countries. Considering that it will enable freer movement

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<sup>6</sup> Mode 1: cross-border trade; Mode 2: consumption abroad; Mode 3: commercial presence; and Mode 4: movement of natural persons.



and employment of qualified and certified skilled personnel in the region, in accordance with domestic rules and regulations, an MRA can potentially facilitate brain gain for the region. ASEAN and its member-countries can benefit not just from increased remittances but also from investment flows and knowledge and technology exchanges.

### Progress with the MRAs

Seven MRAs have already been signed for particular professional services, namely: engineering services, nursing, architecture, land surveying, medical practice, dental practice, and accountancy.

An MRA on Tourism Professionals (MRA-TP) was also adopted at the 12th Meeting of ASEAN Tourism Ministers (MATM) on 9 January 2009 in Ha Noi, Viet Nam. Thailand signed the MRA only on November 9, 2012, paving the way for its full implementation. In member-countries, efforts have started in raising awareness of key stakeholders on the MRA's implications with the impending AEC formation in 2015. For instance, in the Philippines, the Department of Tourism, in tandem with tourism industry groups, have begun to conduct awareness-raising in the tourism industry and other sectors involved in tourism education and tourism profession about the MRA-TP (Cruz 2013). Significant progress has been achieved in the tourism sector compared with the professional services mentioned earlier owing to lesser impediments to the practice of the tourism profession in national laws and regulations.

Using the MRA-TP as an example, the gains from implementing MRAs can be described as follows (Hefner 2013):

The MRA-TP enables qualified foreign tourism professionals (FTPs) to compete for jobs in and to travel between ASEAN member-countries for work. They are eligible for the same pay and benefits as their counterparts in other ASEAN member-countries. However, they may be required to submit additional qualifications such as fluency both in the local language and in English if the same skill is also required of the local applicants of a member-country. To become a qualified FTP, a person should be able to obtain a certification of qualification by satisfying the assessment requirements of the ASEAN Common Competency Standards for Tourism Professionals which refers to the minimum requirements of competency standards in the hotel and travel services agreed upon by the ASEAN member-countries. Each member-country will also have a Tourism Professional Certification Board which will be responsible for assessing the FTPs and issuing the certification. A total of 32 tourism jobs have been identified for which an FTP can earn certification.

In terms of progress in other professional services, results of the mid-term review of the implementation of the AEC blueprint (ERIA 2012) shows that the MRAs on engineers and architects are approaching full implementation although this still appears to be unlikely by 2015. The ERIA report noted that regional and national structures and systems are already in place and a few countries have already made recommendations for regional accreditation and certification. However, it also emphasized that there are still changes in national laws that have to take place to enable the ASEAN-certified architects and engineers to practice their professions in other ASEAN member-countries. For example, in the case of the Philippines, the law that restricts the practice of professions to Filipino nationals is embedded in its Constitution, and almost all of the seven key professional areas where MRAs have already been signed are

restricted to Filipino nationals by law. Nevertheless, most of the related laws on hiring foreign workers contain reciprocity provisions.

Other professional areas are beset by the same dilemma given the lack of alignment of domestic laws and regulation on importing skilled migrant labour with the specific MRAs. Based on her review of the laws and regulations in the member-countries, Chia (2011, p. 240) enumerated the whole gamut of barriers that must be addressed:

“constitutional provisions reserving such jobs for nationals; requirements and procedures for employment visas and employment passes and permits; sectors and occupations closed to or with numerical caps for foreign professionals and skilled manpower; economic test to justify the need for employment of foreigners; requirement to have foreign professionals and skilled labor replaced by locals; lack of recognition of foreign professional education, training and experience; and licensing regulations of professional associations.”

The health profession is proving to be a thorny issue. Based on the AEC mid-term review, member-countries prefer to retain their national authority in deciding who can practice in their countries (AEC 2012). This could prejudice certain nationalities in the region and could create discord instead of cohesion among the member-states. However, this also reflects existing perceptions that there are health professionals from particular countries in the ASEAN that are more skilled than others because of their more advanced tertiary education systems. Unless laggard countries improve their competitiveness level, the mobility of their skilled workers, not only from the health professions, would remain constrained.

### ***Return migration of expatriate professionals***

Research on the extent of return migration of skilled professionals back to their home countries in the ASEAN region is limited. This may be attributed to the fact that the majority of the member-countries have higher rates of emigration than immigration.

Return migration or repatriation is part of the migration process. Migrants' motivations for returning are varied, such as to attend to family needs, having reached a pensionable age, having sufficient savings, difficulty of working abroad, and personal factors such as health or the feeling of nostalgia (Callea 1986). For others, their return is unplanned or forced on them due to political, economic, or environmental reasons.

The gains from return migration in terms of knowledge transfer and flows of investments and technology are highlighted in the brain circulation argument (Castles and Miller 2009). These have been seen in the experience of China and Taiwan that had success in luring their expatriate professionals to return and contribute to their countries' development. Among the highly skilled, Siar (2011) also found evidence of the strong ties that highly skilled migrants have with their countries of origin. In her study of Filipino professionals in Australia and New Zealand, such as those who participated in the Philippine government's Balik (Return) Scientist Program, she found that their strongest motivation in engaging in the program was their desire to help the Philippines. Cases of Filipino diaspora philanthropy (for example, see Opiniano and Castro 2006; Alayon 2009; Siar 2014) show migrants' deep commitment to contribute to the development of their home countries.

Return migration is not a remote possibility under ASEAN integration. A more vibrant ASEAN economy can generate more and better employment opportunities for professional workers that could encourage Asian expatriate professionals to return to their home countries or to work in ASEAN member-countries, bringing with them their skills and the social and professional networks that they have built overseas. Increased investments into ASEAN would require not only low skilled workers to meet labour needs but also professional workers to provide managerial and technical expertise. Return migration can boost both North-South and South-South movements of skilled labour, facilitate knowledge exchanges and collaboration, as well as economic and business linkages, and thus can be beneficial for the ASEAN and its member-states from a brain circulation perspective.

The more advanced countries in the region such as Singapore and Malaysia have an edge in attracting expatriate professionals. They can offer more attractive remuneration and compensation packages compared with the less developed countries. The literature on return migration, in fact, is largely about the experience of OECD or developed countries and there are only a few examples that could be found among non-OECD countries. These are Taiwan, India, and China, whose successful experiences have received much attention both in the academic and policy spheres (Hunger 2004; Saxenian 2005; Zweig, Chung and Donglin 2008).

A closer investigation by Meyer and Brown (1999) shows that the return option was effectively realised in Singapore, Korea, India, and China because of their structural and institutional readiness to absorb and utilize the skills of their expatriate professionals given the research, technical and industrial networks that their governments have gradually built (Meyer and Brown 1999). Parthasarathi (2006:1) calls this readiness 'absorptive capacity' which he regards as a 'necessary condition for significant reverse migration'. This view is shared by Dawson (2008) who argued that if South Korea and Taiwan had been successful in their efforts, this is because they were already well advanced when their return migration schemes were implemented and thus they have the capacity to absorb the high-level skills of their expatriate scientists.

These notions suggest that return migration is possible but it should not be left to market forces alone to be fulfilled particularly in the ASEAN context where member-countries are in varying levels of socioeconomic development. Enhancing competitiveness should be seriously pursued by member-countries with the objective of not only attracting more capital investments but also the intellectual and social capital of their expatriate professionals. Hunger (2004) noted that large emigration countries like the Mexico and Philippines can significantly benefit from return migration but this potential is heavily constrained by their low attractiveness to investments.

A good measure of the absorptive capacity of countries is their global competitiveness index (GCI), which measures variables such as the strength and reliability of institutions, overall quality of infrastructure, macroeconomic soundness, health and education, efficiency of markets, business sophistication, and level of innovation. It can be assumed that countries that have a high GCI also have a high capacity to absorb the skills of their returning expatriates.

A look at the latest global competitiveness rankings released by the World Economic Forum shows that most of the ASEAN countries still suffer from low competitiveness, particularly the CLMV countries (Table 8). Among the ASEAN-5, only Singapore, Malaysia, and Brunei Darussalam made it to the top 30 in 2013. Singapore has maintained its high ranking at second place and is the only Southeast Asian country in the top 10 which is dominated by a number of European countries. Nevertheless, there are bright prospects that can be seen in the rest of the

ASEAN-5 countries given the rise in their rankings in 2013: Indonesia to 38<sup>th</sup> in 2013 from 50<sup>th</sup> in 2012; Philippines to 59<sup>th</sup> from 65<sup>th</sup>, Thailand to 37<sup>th</sup> from 38<sup>th</sup>, and Viet Nam to 70<sup>th</sup> from 75<sup>th</sup>. The competitiveness of the East Asian countries is evident in their good rankings. Hong Kong and Japan figured in the top 10 while Taiwan, South Korea, and China made it to the top 30 in 2013.

**Table 8. Global competitiveness rankings of ASEAN member-countries, 2013 and 2012**

| Country           | Ranking                     |                             |
|-------------------|-----------------------------|-----------------------------|
|                   | 2013 (out of 148 economies) | 2012 (out of 144 economies) |
| Brunei Darussalam | 26                          | 26                          |
| Cambodia          | 88                          | 86                          |
| Indonesia         | 38                          | 50                          |
| Lao PDR           | 81                          | n/a                         |
| Malaysia          | 24                          | 25                          |
| Myanmar           | 139                         | n/a                         |
| Philippines       | 59                          | 65                          |
| Singapore         | 2                           | 2                           |
| Thailand          | 37                          | 38                          |
| Viet Nam          | 70                          | 75                          |

Source: Global competitiveness rankings (World Economic Forum 2014, 2013).

### Diaspora engagement

Along with improving absorptive capacities, Hunger (2004) emphasized the need to implement policies that are specifically targeted to encourage return migration of skilled professionals. The Chinese model is worth considering given its success in luring expatriate professionals to return to China.

Between 1992 and 2002, a number of programs were implemented by the Chinese government to entice their expatriate professionals to return to China. These include (Zweig 2006): (1) The “Hundred Talents Programme” of the Chinese Academy of Sciences, which provides fellowships to institutes in the form of grant to start a laboratory for their proposed research, including financial support for buying equipment and hiring technical personnel; (2) Establishment of Overseas Study Service Centres to help returnees find jobs (33 of such centres have been formed as of 1989 and schools for the children of returnees have also been created to cater to their needs); (4) Setting up of ‘postdoctoral stations’ by the Ministry of Employment and the Ministry of Personnel to serve as holding stations for overseas PhD who could not find jobs in China; and (5) Giving of preferential treatment to returnees, such as more living space and higher professional titles and permitting students who have signed two- or three-year contracts with their research centres to either remain or switch jobs once their agreements expired.

In 2001, the government implemented a major policy that incorporated the diaspora option as an alternative for expatriate professionals and overseas scholars to serve their home country. This new policy highlighted the shift to temporary return and emphasized that ‘physical return is no longer regarded as a determinant’ (Wescott 2006, p. 8). This was a strategic and practical approach as there are expatriates who do not wish to return yet are still interested to maintain

ties with their home country and make a significant contribution. Repatriation also entails huge investments because the government has to match the salaries and benefits that they are getting abroad to entice them to return and has to provide the necessary equipment and facilities to enable them to undertake their research.

With this new policy, the government started to advocate the 'double base model' or dumb-bell model which means Chinese expatriates can both be in two countries simultaneously such as by having professional or/and business affiliations in both China and overseas and moving back and forth regularly (Xiang 2003).

Under this policy, members of the diaspora may remain overseas and contribute to their home country through seven types of activities, namely: utilizing the advantage of their professional bodies; holding concurrent positions in China and overseas; engaging in cooperative research in China and abroad; returning to China to teach and conduct academic and technical exchanges; setting up enterprise in China; conducting inspections and consultation; and engaging in intermediary services, such as running conferences, importing technology or foreign funds, or helping Chinese firms find export markets (Zweig, Chung and Donglin 2008).

The "Spring Light Project" of the Ministry of Education's Foreign Affairs Bureau is one of the activities implemented under the new policy. This project arranges and funds short visits for lecturing or research collaboration in Chinese universities. About 600 scholars participated during its first year.

To ease the entry of Chinese expatriates back to China, the government also simplified the residency requirements and entry visa for overseas scholars who wish to return or to come for short visits to engage in collaborative work. Longer term multiple-entry visas from three to five years were granted to overseas Chinese professionals (Xiang 2003).

#### Dual or multiple citizenship

Another strategy that could facilitate sustained ties of migrants with their home country is allowing them to have dual or even multiple citizenship. Home countries should recognize that migrants may have transnational loyalties (Siar 2012). Dual citizenship may help the remittances to keep flowing in, increase the migrants' interest in development projects, and encourage those who have accumulated wealth overseas to invest in their home country (Wayland 2006). In the light of the envisaged AEC, if migrants from ASEAN member-countries are allowed to retain their home-country citizenship while being citizens of their host country, they will have ease in doing business with their countries of origin. This could also encourage return migration of expatriate professionals as they can return and provide their services without having to hurdle immigration rules. Among countries in Asia, only a few recognize dual citizenship—Sri Lanka, Cambodia, Philippines, Bangladesh, Pakistan, and Viet Nam. As this list shows, only three of the 10 member-countries of the ASEAN recognise dual citizenship.

#### **Conclusion**

The ASEAN economic integration in 2015 can be viewed as an opportunity for brain gain for the ASEAN member-countries. The growth of cross-border education in the region, the increased labour mobility in the ASEAN through the implementation of mutual recognition arrangements, and the possibility of return migration of Asian expatriate professionals to the ASEAN region

given a more vibrant economy that can provide attractive compensation packages, can boost North-South and South-South circulatory movements of international students, professional workers, capital, and advanced technology. These can offset the losses from brain drain experienced by emigration countries in the region and facilitate knowledge exchanges and collaboration and economic and business linkages, all of which are beneficial for the ASEAN and its member-countries.

These prospects are, however, diminished by various issues affecting the competitiveness of many ASEAN countries as potential international education providers and cross-border education partners. They are still confronting problems of underdeveloped tertiary education systems, language issues, and low innovation capacity. There is also a need to harmonise the different education systems in the region, implement quality standards, establish accreditation tools, and resolve language issues.

The potential of return migration of expatriate professionals back to the region is also compromised by low global competitiveness, particularly of the CLMV countries, which reflects their low capacity to absorb high-level skills and global capital. As the successful experience of China and Taiwan shows, return migration largely depends on the absorptive capacity of home countries or their readiness to absorb and utilize the skills of their expatriate professionals. While some ASEAN-5 countries showed some progress in global competitiveness rankings, increased and sustained efforts are needed to catch up with Singapore and Malaysia and with the East Asian countries (Japan, South Korea, Hong Kong, Taiwan, and China).

Given these issues, the more advanced economies in the region will have more advantage in exploiting the opportunities of ASEAN integration during the initial years of the AEC. Prominent economist Joseph Stiglitz expressed the view that the ASEAN integration could even lead to more brain drain for the poorer countries in the region. In the World Economic Forum on “ASEAN Connectivity: Road Map to 2015” on June 1, 2012, Stiglitz said that increased skilled labour movements in the region could lead to a “hallowing out” in the poorer countries in favour of richer member-countries like Singapore (Chaitrong 2012). This is likely, but only in the beginning. Chia Sio Yue (2008, as cited in Rashid et al. 2009) noted that the brain drain effect is just “short term but this could be offset by remittances and a reverse brain drain in the medium and long term”.

The ASEAN integration can therefore be a double-edged sword for member-countries that may not be able to improve their competitiveness in the long run. The full implementation of the mutual recognition arrangements in key professional services will mean greater competition for skilled labour among the member-countries. This suggests the need to improve the quality of tertiary education in the member-countries, adopt an international curriculum with sufficient regional and global focus and with an entrepreneurial dimension similar to what Singapore has done, and enhance student and faculty exchanges to develop the human resource pool and make it more competitive. University networks and alliances are useful avenues for improving the quality of tertiary education and strengthening research capacity. The initiatives of UNESCO, SEAMEO, and ASEAN are valuable in harmonising Southeast Asian higher education and developing quality assurance frameworks and accreditation mechanisms but more gains can be achieved if they can harmonise their work and coordinate efforts.

The acid test of the mutual recognition arrangements is the free movement of professional workers in the ASEAN region and the granting of national treatment. The gains from these

arrangements cannot be enjoyed by the member-countries as long as impediments exist. The issue of harmonising domestic rules and regulations in each ASEAN member-country is still a major bottleneck.

Aggressive information campaigns on the benefits of these arrangements and what they entail may help generate support from stakeholders and convince them to make the necessary adjustments in their national laws and regulations (ERIA 2011). Greater cooperation and close coordination between government agencies and professional bodies is also critical in implementing current agreements and negotiating new ones.

Finally, it may benefit ASEAN to allow dual citizenship as it could facilitate the movement of financial and human capital into the member-countries and the Southeast Asian region as a whole. The portability of social security benefits should also be pursued as this promotes return migration and labour mobility, which will enhance circular flows of human capital, investment, and technology, to the advantage of the ASEAN member-countries. Complementary measures are also needed to remove the barriers that impede inclusive growth. The rising inequalities within and between countries and regions will persist if nothing is purposely done to make ASEAN development more inclusive and sustainable.

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