



Shortage Amid Surplus: Emigration and Human Capital Development in the Philippines

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Executive Summary

The Philippines has the most sophisticated labour-exporting model in the world; 1.8 million temporary workers were deployed in 2014 alone. While Filipino migrant workers contribute significantly to the national economy with the remittances they send home (over USD 27 billion in 2014, according to the Philippine Central Bank), this reliance on exporting labour raises an important question: Has the nation's focus on preparing workers to leave compromised human capital development at home?

Focusing on sending workers overseas may result not only in the physical loss of talent—popularly known as brain drain—but also in mismatches between jobs and skills, as educational and training institutions align themselves with the needs of the international labour market rather than of local ones. Even as the Philippines sends a robust supply of workers abroad, it suffers labour shortages in key industries, such as science, technology, engineering, mathematics (STEM), medicine and aviation. On the other hand, there is broad agreement that remittances have improved access to education and reduced child labour in families that receive these funds. The effects may be even broader: the existence of opportunities overseas can inspire a greater number of people to gain additional skills and qualifications than the number who will eventually leave.

While the Government of the Philippines cannot (and should not) prevent skilled workers from leaving, it would do well to invest in creating more opportunities for them to use their skills at home—especially in sectors and occupations most critical to development. Two promising sets of ideas could help to build up domestic human capital. First, policymakers could work more closely with local employers to ensure that domestic education and training systems are producing skills that businesses need. Second, the government could better support (and in some cases build) industries within the country that reflect domestic workers' skills and training—particularly maritime shipping, medical tourism and scientific-process outsourcing.



I. Introduction

In 2014, 1.8 million temporary migrant workers left the Philippines to work in more than 190 countries, each one bearing an employment contract issued and certified by the Government of the Philippines (POEA, 2015). From factory and domestic workers to engineers and nurses, Filipinos occupy a wide range of jobs abroad. Legal movements of temporary workers on this scale are unparalleled elsewhere in the developing world. Those who leave to work overseas join a huge Filipino diaspora, estimated by the Commission on Filipinos Overseas (CFO) at approximately 10.2 million people at the end of 2013, making it one of the largest emigrant populations in the world (Office of the President of the Philippines, CFO, 2013). Nearly half of the Filipinos abroad are legal temporary workers.

Many international observers point to the Philippine system of managing migration as a model for other developing countries hoping to access the benefits of global labour mobility. But while the Philippine migration policies receive accolades abroad, they attract criticism at home, including questions regarding the government’s ability to protect migrants’ rights while abroad. Tapping the global labour market seems to effectively ease immediate problems, such as unemployment and the public deficit. Yet many local observers, especially in civil society, complain that the government has yet to deliver on the kind of development that benefits all households, not just those of emigrants and their immediate families.

Of particular concern is the potentially negative impact of the Philippine labour-exporting model on the country’s skills pool. Sceptics warn that the departure of migrants has resulted in “brain drain”, particularly in priority sectors, such as health, tourism, business-process outsourcing and education.¹ The national focus on preparing youth to work overseas may have contributed to mismatches between skills and local jobs, as students take courses that are demanded abroad but not at home.

Optimists, on the other hand argue that emigration, even of the highly skilled, may positively affect the country of origin. In this view, a migration regime optimized for development could actually enable migrants—both the educated and those with few formal skills—to gain skills relevant to local markets. As migrants return home, they can facilitate the transfer of the critical human capital needed by the developing world. Indeed, the increasing use of concepts, such as “brain bank”, “brain trust” and “brain circulation” highlights a growing interest in migrants’ skills and experiences and how countries of origin can tap them. There is also the possibility

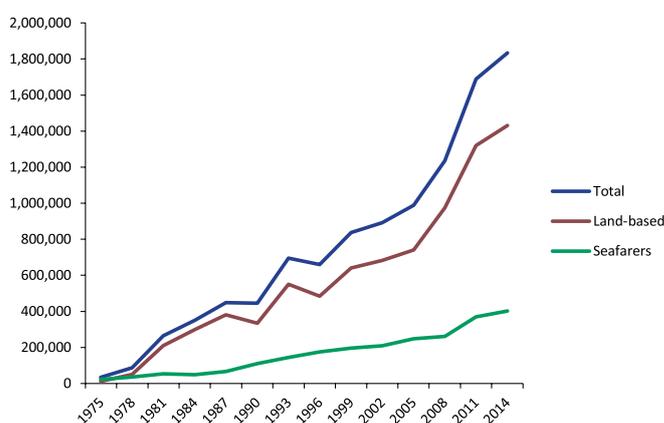
of “brain gain” in the domestic labour market; while some Filipino workers invest in their human capital in the hope of going abroad, many of them will actually stay, resulting in a deeper talent pool.

This issue in brief reviews the impacts of the Philippines’ successful labour export policy on skills development and human capital growth within the country. It starts with an overview of key migration trends, followed by a discussion of domestic labour conditions. The brief ends with recommendations on workable solutions to build the local talent pool.

II. Emigration from the Philippines: An overview

The Philippines exports more labour emigrants than any other country in the world, and in the most organized way. Although a substantial number of Filipinos abroad have settled permanently (most in North America), nearly half are contract or temporary workers, officially called Overseas Filipino Workers, or OFWs (Office of the President of the Philippines, CFO, 2013).² Figure 1 provides an overview of the astonishing growth of land- and sea-based OFWs from 1975, when the government initiated its labour export policy, until 2014.

Figure 1: Number of Overseas Filipino Workers, 1975–2014



Note: Figures for 1975 to 1981 refer to number of contracts processed; figures from 1984 to 2014 refer to number of workers deployed abroad.

Source: Asis, 2006; Republic of the Philippines, POEA, 2007, 2013, 2015.

Most OFWs go to the Middle East (see Figure 2). Other top destinations include Hong Kong, China and Singapore. A significant proportion of OFWs are on sea vessels—400,000 in 2014—comprising roughly 35 to 40 per cent of all seafarers in the world (see Table 1) (SunStar Cebu, 2014; Mejia, 2014).

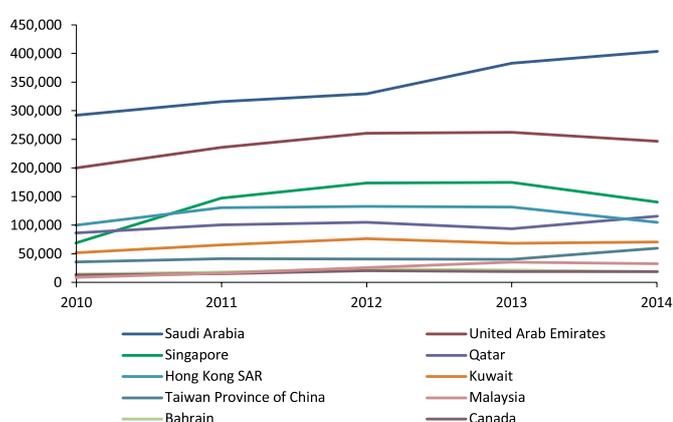
Table 1: Number of deployed Overseas Filipino Workers, by type, 2008–2014

Type	2008	2009	2010	2011	2012	2013	2014
Total	1,236,013	1,422,586	1,470,826	1,687,831	1,802,031	1,836,345	1,832,668
Land-based workers	974,399	1,092,162	1,123,676	1,318,727	1,435,166	1,469,179	1,430,842
New hires	376,973	349,715	341,966	437,720	458,575	464,888	487,176
Rehires	597,426	742,447	781,710	881,007	976,591	1,004,291	943,666
Sea-based workers	261,614	330,424	347,150	369,104	366,865	367,166	401,826

Note: New hires refer to workers leaving for the first time or returning to a different employer. Rehires refer to workers returning to the same employer.

Source: POEA, 2013, 2015.

Figure 2: Top destinations of Overseas Filipino Workers, 2010–2014



Source: Republic of the Philippines, POEA, 2015.

Although government policy focused initially on exporting professionals, OFW occupations have diversified since the 1970s to include factory, construction and service workers (in-home caregivers and domestic helpers are included in this last category). Chronic under- and unemployment at home, coupled with increasing job opportunities abroad, continue to prompt qualified workers to emigrate. Today, professionals—a category that includes nurses and engineers—remain the third-largest group of OFWs. In the seven-year period (2008–2014), almost 540,000 workers left to take new jobs in professional, technical, managerial, administrative, clerical and sales-related occupations, (see Table 2). These jobs typically require workers with degrees from higher education institutions. Another 950,000 workers took jobs in production-related occupations such as plumbing and machine operation, which typically require vocational training.

Table 2: Number of deployed land-based Overseas Filipino Workers, new hires by major occupational group, 2008–2014

Type	2008	2009	2010	2011	2012	2013	2014
Total	376,973	349,715	341,966	437,720	458,575	464,888	487,176
Professional, technical and related	49,649	47,886	41,835	61,598	54,617	53,840	53,296
Administrative and managerial	1,516	1,290	1,439	4,950	3,241	1,947	1,909
Clerical	18,101	15,403	10,706	14,115	13,960	12,893	11,579
Sales	11,525	8,348	7,242	8,932	9,346	9,220	8,402
Service	123,332	138,222	154,535	201,512	222,260	230,030	251,747
Agriculture	1,354	1,349	1,122	1,757	1,563	2,233	2,452
Production	132,295	117,609	120,647	141,215	146,448	147,776	149,008
Others	39,201	19,608	4,440	3,641	7,140	6,949	8,783

Source: POEA, 2013, 2015.

Celebrated nationally as “modern-day heroes”, diaspora members send back a significant volume of remittances, which averaged 8.9 per cent of gross national product (GNP) over the past five years and over 23 per cent of export earnings (Mendoza, 2015).

According to the Central Bank of the Philippines, remittances exceeded USD 27 billion in 2014, the third-highest in the world that year, trailing only India and China (Mendoza, 2015).

III. The Philippines' labour market situation

While the Philippines' labour export model has been a topic of intense research and evaluation, the predominant focus has been on the rights and employment conditions for workers abroad. Little research has specifically evaluated the impact of emigration on human capital development at home. Government initiatives have prioritized limited resources on making sure that Filipinos are productively employed and protected abroad. Efforts to capture information on departing migrants come at the expense of data on returnees. Another obstacle to understanding how migration affects the domestic skills pool is the impossibility of seeing a counterfactual—that is, what would the Philippines look like today without its export labour programme?

Despite these research constraints, there is widespread agreement on two points. First, the working-age population remains large and is expected to increase in the foreseeable future. Second, despite the abundant supply of workers in the local labour market, there are domestic labour shortages in select occupations and industries due to mismatches between jobs and skills.

A. The Philippines' robust supply of labour

The National Statistics Office projects that the pace of growth in the working-age population is faster than the projected growth of the total population,

generating 1.5 million new workers each year on average (DOLE, 2013: 5). In fact, the Philippines has one of the highest rates of labour force growth in Asia, and the highest fertility rate in Southeast Asia (Roy et al., 2012: 3–4).

The capacity of the education sector to train this large supply of workers remains strong; higher education institutions and technical and vocational schools churn out millions of graduates every year. Appendix 1 illustrates the growth in the number of enrollees in higher education institutions over the past 10 years; nearly 3.5 million students were enrolled in 2012–2013. Since 2003, around 500,000 students have graduated annually with at least a bachelor's degree.

Almost 4,500 schools nationwide also offer around 20,000 technical and vocational courses (Hernandez, 2014). In 2012 alone, nearly 2 million students were enrolled in technical and vocational courses, while 1.6 million graduated the same year (Hernandez, 2014). The government, meanwhile, has strived to standardize the assessment and certification of workers' skills. In 2012, the Technical Education and Skills Development Authority (TESDA) assessed nearly 1 million workers and certified another 800,000, most of them in the tourism and health and wellness sectors. The number of certified workers has increased annually by 18.2 per cent. A 2013 report by the Government of the Philippines indicated that people planning to emigrate were partly responsible for these high enrollment rates, though TESDA does not have information on how many eventually leave (DOLE, 2013: 9).

Table 3: Workers assessed and certified, by priority sector, 2012

Sector	Number assessed	Number certified
Tourism	280,435	247,104
Information technology–business-process management (IT–BPM)	85,662	50,419
Electronics	40,686	29,516
Agribusiness	12,576	11,412
Logistics	95,588	80,755
Home-style products	115	114
Garment and textile	8,612	7,317
Construction	49,142	43,320
Metals and engineering	54,174	46,738
Health and wellness	247,055	228,661
Manufacturing	10,960	10,393
Heating, ventilation and air-conditioning (HVAC)	6,175	5,428
Maritime	62,945	56,948
Total	954,125	818,125

Note: Home-style products include furniture and furnishings, holiday décor, houseware and ceramics, woodcraft, giftware (excluding toys), shell craft and basket work.

Source: DOLE, 2013.

Many scholars agree that the remittances Filipinos send home have improved access to education—and encouraged youth to stay in secondary school and pursue further education (Yang, 2003)—at least among remittance-receiving households.³ Tullao and Rivera (2008) find such households spend almost three times more on education than households whose income is from domestic sources alone. Pernia (2008) estimates that a 1 per cent increase in household income from remittances will result in a 1.1 per cent increase in educational expenditures. All else being equal, remittances significantly enhance household incomes and savings, which in turn increase spending on education.⁴

B. Mismatches between jobs and skills

Despite the abundant supply of workers in the local labour market, research reveals labour shortages in select occupations and industries. The many graduates trying to find jobs don't necessarily have the skills and qualifications businesses are looking for—especially in industries like STEM and medicine. A recent report from the Department of Labor and Employment (DOLE) emphasized that both the quantity and quality of the talent supply is a significant constraint (DOLE, 2013: 55–56). In 2013, DOLE identified 275 occupations as in-demand and another 102 occupations as hard-to-fill. In-demand occupations are advertised recurrently and characterized by high turnover or replacement rates, while hard-to-fill occupations have unqualified or no job applicants at all (DOLE, 2013: iv).

Another government body, the Bureau of Labor and Employment Statistics (BLES), conducts an annual survey to identify skill shortages. The 2011/2012 BLES Integrated Survey (BITS) categorized 273 occupations as hard-to-fill. The list includes chemists, geologists and geophysicists; aircraft pilots, navigators and flight engineers; ship deck officers and pilots; and plumbers, pipe fitters and related workers (DOLE, 2013: 50). Based on the BITS results, notable sectors experiencing shortages include STEM subjects, medicine and pharmaceuticals, education and aviation.⁵

BITS categorizes two types of hard-to-fill occupations: those with few applicants, and those with a large number of applicants but few that are sufficiently *qualified*. In the second case, applicants compete for a few slots, but most lack the required specific skill sets, qualifications or competencies. For instance, international demand for nurses prompted the number of nurse training programmes to grow from around 40 in the 1980s to approximately 470 in 2010 (Masselink and Lee, 2010), yet many graduates lack the necessary experience or qualifications to

find jobs, whether at home or overseas. A recent study estimated that 200,000 nursing graduates in the Philippines were unemployed (DOLE, 2013: 10). Many are unable to pass the Professional Regulation Commission (PRC) licensure exams due to the proliferation of nursing “diploma mills” or schools offering poor-quality nursing education. An investigation by the Commission on Audit (COA) found that in 2001–2005, only 42.2 per cent of the nursing schools across the Philippines saw at least 50 per cent of their graduates pass the PRC licensure exams; in 7.22 per cent of schools, nobody passed (Rainer, 2008).

C. Emigration-induced shortages

The extent to which migration has contributed to local labour shortages is hard to determine. Interviews of government officials in charge of technical and vocational education and training (TVET) and higher education reveal that training institutions in the country do not generally track graduates to see whether they eventually emigrate or not. Government data on the number of migrant workers per occupation capture only those who go through the government system; professionals and high-skilled individuals easily bypass this system by using irregular channels. For instance, a Migration Policy Institute (MPI) study of OFWs going to the United Arab Emirates found that most high-skilled workers left the Philippines as tourists to avoid the recruitment costs and time required to go through the government system (Agunias, 2010).

The general perception of policymakers and employers alike, however, is that emigration has contributed to shortages, especially in key occupations like nursing and aviation. Between 2010 and 2014, more than 81,000 professional nurses left the Philippines to work abroad (POEA, 2015). DOLE's JobsFit Labor Market Information Report (DOLE, 2013: 56) notes the challenges imposed by the “widespread practice of piracy and poaching of trained workers” and by Filipinos' “preference to work abroad”.

A 2010 stakeholder meeting of DOLE and business leaders from the banking, retail, education, transport and manufacturing sectors also identified “skills drain” as contributing to mismatches between skills and the needs of the domestic labour market. A report outlining the results of this meeting notes that the Philippines “has become the trainer of people around the world”. It highlights in particular how the nation's airline industry “spends millions to train aircraft mechanics for ten years only to lose them to foreign competitors. Pilots who trained for 12 to 15 years also get poached”. There is a concern among local businesses that “losing to competition with foreign



employers has become inevitable” amid local markets’ relatively low salaries, highlighting the “need for companies to integrate ‘employee exits’ in their plans” (DOLE, 2010: 25).

An analysis of available government data shows that some occupations listed as in-demand and hard-to-fill include the same jobs that Filipinos typically

take abroad. Table 4 lists the top 10 occupational categories of OFWs, the total deployment per occupational category and the equivalent or related occupation in the in-demand and hard-to-fill lists. There is room to argue that shortages in the occupations listed—such as nurses, food and beverage attendants, health-care personnel, electricians, pipe fitters and labourers—could be linked to emigration.

Table 4: Number of land-based Overseas Filipino Workers deployed in 2010-2014, by top 10 occupational categories in domestic in-demand and hard-to-fill lists, 2010–2020

Occupation category	Total deployment, 2010–2014	Equivalent or related occupations in domestic in-demand and hard-to-fill lists, 2010–2020
Household service workers	742,600	None
Nursing professionals	81,192	Nurse (licensed, experienced)
Waiters, bartenders and related workers	64,585	Food and service attendant
		Food beverage attendant/handler*
		Food technician
		Barista
		Bartender
Charworkers, cleaners and related workers	53,449	Housekeeping services (hotel)
Labourers/helpers	48,237	Labourer
Caregivers and caretakers	47,063	Health-care personnel
Wiremen and electrical workers	46,772	Electrician
Plumbers and pipe fitters	43,492	Pipe fitter*
Welders and flame-cutters	36,347	None
Cooks and related workers	28,827	Cake decorator*
		Chef
		Chef de partie
		Cook
		Cuisine chef *
		Executive chef*
		Culinary worker

* Indicates inclusion in the hard-to-fill list.

Source: Author’s analysis based on DOLE, 2010, 2013; POEA 2015.

To address shortages in these occupations, DOLE is developing the Skilled Occupational Shortage List (SOSL), which enumerates occupations that might be opened to foreign skilled workers. Foreigners applying to jobs in the listed occupations would be exempted from fees for the country’s labour market test (DOLE, 2013: 51).⁶ In 2012, DOLE created a Technical Working Group on Mission Critical Skills (TWG-MCS), in which officials from various government agencies determined skill supply and demand in various

industries and identify shortages of “mission critical skills” (MCSs, defined as those core to an occupation and not easily replaced). Based on recommendations from the group, DOLE categorized the ability to operate Computer Numerical Control (CNC) machines as an MCS from April 2012. As a result, CNC machinists are now required to give six months’ notice prior to resignation. Four more skills have since been categorized as MCSs (DOLE, 2012a).

IV. Policy solutions: Building local industries with talent honed abroad

While the government cannot and should not prevent skilled workers from leaving, policymakers and business interests would do well to create more opportunities for overseas Filipinos to return and use their skills at home—especially in the sectors and occupations most critical to the country’s development.

Viable solutions to this problem must start with recognizing every Filipino’s right to move and migrate. Although migration exacerbates labour shortages in important industries, the problem extends to fundamental issues beyond migration: the quality of training institutions, weak industry-government cooperation on identifying skills gaps, and inadequate dissemination of domestic labour market information to analysts, employers and workers.

Even more important, an increasing number of policymakers, scholars and businesses recognize that Filipino migrants, regardless of their location, forge and sustain ties with the Philippines. If they return home, they can facilitate the transfer of critical human capital. The traditional view that emigrants are “lost” to the sending country—and, by the same logic, that immigrants are “gained”—has been largely discredited in both policy and academic discourse, and replaced by a more nuanced and comprehensive understanding of how migration patterns affect the world over time.

The challenge for the Philippines, therefore, is to ensure that workers are available to fuel domestic growth and development while recognizing every Filipino’s right to emigrate and, in the right circumstances, to return.

First, policymakers could increase investment in education and training by working more closely with local employers. Businesses could help develop curricula and training standards that match actual labour market needs, and support classroom use of state-of-the-art equipment. Enterprise-based training, such as apprenticeships and dual-training systems,⁷ could play a larger and more prominent role. Working closely with industry would ensure a better fit between jobs and skills.

For instance, in 2007, TESDA established a training partnership with Moog Inc.,⁸ an American company in need of CNC machinists. Over four years, the partnership produced 275 CNC machinists; this still did not meet the company’s annual demand for 131 CNC machinists. To address the problem, the Department of Science and Technology–Metals Industry Research and Development Center (DOST-MIRDC) embarked on

a project to produce 400 CNC machinists per year (at an initial investment of 47 million pesos, or USD 1.1 million). So far, the project, started in late 2013, has produced 260 graduates, and most have gotten jobs (DOLE, 2012b).

Similarly, the business-process management (BPM) industry—one of the fastest-growing in the country, and encompassing both call centres and information technology (IT) services—is working closely with higher education institutions to offer a Service Management Specialization (SMS) track to business and IT majors. It aims to train 685 teachers and to enroll 20,000 students annually to meet the ever-rising demand for BPM skills (Bongato, 2015).

A second idea that is gaining currency in local policy circles is the need to support, and in some cases build, industries within the country that reflect the skills and experience that Filipinos acquire overseas. In short, instead of labour export, there is a larger opportunity to develop domestic industries to capitalize on the existing Filipino talent pool.

For instance, the Philippines’ maritime industry is considered as critical to the economic growth of this huge archipelago, where shipping remains the major means of moving both goods and people. Filipino seafarers are already in management positions on board ships and in ancillary services worldwide. Industry insiders see a tremendous opportunity to develop a maritime industry cluster within the Philippines that offers a full suite of services, such as ship management, training and business process outsourcing. The Philippines could focus on hosting ship management companies in order to retain sea-based Filipino workers. It could also train seafarers from other countries in its universally recognized maritime schools (Ho, 2014; Mejia, 2014).

Similar opportunities exist in the medical and science and technology sectors.

- *Medical tourism:* Developing state-of-the-art medical tourism facilities within the country could address the nursing surplus and even encourage the return of experienced Filipino nurses working abroad. Though Filipino nurses return on short medical missions (ranging from a few days to several weeks) regularly, such returns will need to increase in length to augment the country’s inadequate training capacity. The Philippines could develop international and medical retirement havens offering holistic medicine and health services. The country is already a key destination for retirees from neighbouring countries like South Korea, but it could attract a wider clientele from within the region and countries where there is a large Filipino diaspora (Luz, 2014).



- *Scientific-process outsourcing:* A related and interesting development in the medical field is the USD 4 billion scientific-process outsourcing (SPO) global industry. Attracted by the large pool of highly qualified Filipino medical professionals, an increasing number of SPO companies have already established operations in the country. For instance, US-based Sciformix (an SPO company that studies the adverse effects of drugs) recently opened an office in Manila, citing the Philippines' high English language proficiency and US-style educational system and work culture. Sciformix, which has a staff of 50 Filipino doctors, most of whom have returned after working overseas, expects to hire 200 additional doctors and nurses to service the needs of 23 multinational drug companies utilizing their services (Mendoza, 2015).
- *Science:* DOST operates the Balik Scientist Program, which facilitates the short- and long-term return of Filipino scientists and technicians to the Philippines to share their expertise and promote scientific, agro-industrial and economic development. DOST works closely with the Philippine-American Academy of Science and Engineering (PAASE) in identifying potential returnees. The programme has successfully hosted a number of returnees, some of whom have been instrumental in identifying and even building new industries. For instance, the Philippine Genome Center—which aims to improve crops, conserve biodiversity, improve disease diagnostics and aid in forensics, among others—was established through this programme (Guevara, 2014).

V. Conclusion: Linking migration with development at a time of great promise

The wisdom behind a deliberate policy of sending workers abroad, including the most talented, is obvious in a time of lingering economic problems, political instability and a general lack of opportunities at home. Remittances have more than compensated for whatever cost the departure of skilled workers has imposed on the Philippine economy, and over the past 40 years have been a critical source of foreign exchange. As a stable and less-cyclical form of capital flows, remittances have lowered the risk of macroeconomic instability in the Philippines.

Until now, any interest in keeping Filipinos at home—and enticing emigrants to permanently return—faced the obstacles of lingering economic problems, political instability and lack of opportunity. A 2002 book by Filipino scholars contends that the dream of migrants to reintegrate back into their communities will

“remain a dream unless the conditions that pushed them to work abroad are reversed” (Dizon-Añonuevo, 2002: 151).

However, the economic context has changed significantly since the turn of the millennium. The Philippines is now one of the fastest-growing economies in Asia. Its gross domestic product (GDP) grew by 7.2 per cent in 2013, nearly matching China's 7.7 per cent and outpacing other Southeast Asian economies, such as Indonesia (5.6%), Vietnam (5.4%) and Malaysia (4.7%) (World Bank, 2015).

During the same year, three major ratings agencies—Fitch Ratings, Standard & Poor's and Moody's—upgraded the Philippines' credit rating from a speculative grade to an investment grade (Yap, 2013), which is expected to spur investment and create more jobs. As real wages in China increase, companies will look to transfer their investments to other, less costly countries. This could lead to more employment opportunities in the Philippines than ever before.

Structural changes are taking place such as greater investment in the country's primarily consumer-driven economy coupled with broad-based industrial expansion. The National Economic Development Authority, the economic planning ministry, attributes the growth to sound macrofundamentals, reforms in fiscal and monetary policy and good governance (Balisacan, 2015).

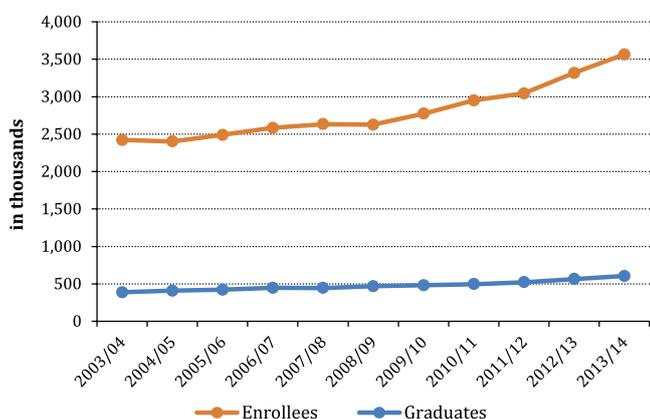
Now that the Philippines has taken a much more decisive road towards development, building the local talent pool has taken on new importance. To capitalize on the country's growth momentum, the Government of the Philippines has adopted a road map that, over the next two to three years, will prioritize massive infrastructure development, job creation (particularly in high-quality and highly productive industries that employ many workers), higher governance standards, improved access to health care and education and direct poverty relief (Republic of the Philippines, National Economic and Development Authority, 2014). To continue its trajectory of economic growth and social progress, the Philippines must strengthen existing reforms, particularly those that seek to improve governance and make growth more inclusive.

The stakes from backtracking from reforms have never been higher especially in a region like Asia, which is the fastest-growing region in the world today. The Philippines stands to gain much as prospects for growth in the region increase further, especially with the inauguration of the ASEAN Economic Community (AEC) by the end of December 2015. Through the AEC, the Association of Southeast Asian Nations (ASEAN), a political and economic organization of the 10 countries in Southeast Asia, including the Philippines, envisions robust growth through the creation of a single market and production base.

All things taken together, the Philippines offers a clear lesson: it will be difficult, if not impossible, to maximize the benefits of overseas employment without a strong development policy at home. Labour emigration, even among the highly skilled, is far from the panacea it is purported to be. At the same time, it has undeniably positive effects on key aspects of domestic development, including human capital formation, poverty reduction and macroeconomic stability. Success, however, ultimately depends on a sound national development policy. Overseas employment is not an end in itself, but a means to a higher end.

Appendices

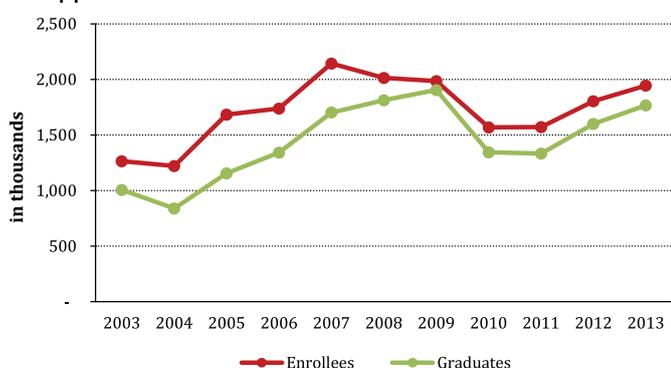
Figure A-1: Number of enrollees and graduates in Philippine higher education institutions, SY 2003/04–SY 2013/14



SY = school year

Source: Office of the President of the Philippines, CHED, 2014.

Figure A-2: Number of enrollees and graduates in Philippine technical-vocational education, 2003–2013



Source: Republic of the Philippines, TESDA, 2012, 2015.

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- Doris Magsaysay Ho, President and CEO, Magsaysay Group of Companies, 6 June 2014.
- Guillermo M. Luz, Private Sector Co-Chairman, National Competitiveness Council, 26 May 2014.
- Maximo Q. Mejia, Jr Administrator, Maritime Industry Authority, 16 May 2014.

Endnotes

1. For a more in-depth discussion of both critics and advocates of the Philippines' export of labour, see Agunias (2006).
2. Overseas Filipino Workers (OFWs) is the official term used by the Government of the Philippines to refer to Filipinos working abroad on finite or temporary contracts.
3. One empirical study, for instance, reveals that "for children aged 17-21, a rise in remittances equal to 10 per cent of household income leads to a 10.3 percentage-point increase in the proportion who are students and a decline in mean hours worked of 2.9" (Yang, 2003: 183). The study also notes that remittances have more beneficial effects when recipient children are male, and when overseas workers are older, have been away for shorter periods and are the mothers of the children in question.
4. This could be attributed to the tendency of Filipinos to spend on education, related to the high value Filipinos place on higher education.
5. Specific occupations in shortage include system analysts, engineers, programmers and those in the health services, particularly pharmacists, medical technologists and medical doctors in different fields of specialization. Other notable occupations experiencing shortages include geologists, geophysicists, statisticians, aircraft pilots, aircraft controllers, physiotherapists, aircraft technicians, industrial-robot operators, ship technicians, flight engineers, navigators, travel guides, pharmacists, medical equipment operators, ship deck officers, vocational education teaching professionals, authors and journalists.
6. The preliminary list of 15 occupations in the Skilled Occupational Shortage List (SOSL) include architects, chemical engineers, chemists, environmental planners, fisheries technologists, geologists (various types), guidance counsellors, librarians (licensed), medical technologists, sanitary engineers, computer numerical control (CNC) machinists, assembly technicians, test technicians, pilots and aircraft mechanics.
7. A dual training system is an instructional mode of delivery in which learning takes place alternately in two venues: the school or training center and the company.
8. Moog Inc. has a facility in Baguio City Economic Zone, and is a leading designer, manufacturer and distributor of devices and applications used in the aerospace parts and products manufacturing industry, with clients including Boeing and Airbus.

About the Author



Dovelyn Rannveig Mendoza is a Senior Policy Analyst at the Migration Policy Institute (MPI), where she manages MPI's work in the Asia-Pacific region. Her scholarship includes two books on diaspora policy—*Developing a Road Map for Engaging Diasporas in Development* (coauthor) and *Closing the Distance: How Governments Strengthen Ties with Their Diasporas* (editor)—and various reports on migration and development, with a focus on labour migration, the regulation of labour recruiters and governments' efforts to engage their diasporas.

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