ERIA Research Project Report 2017, No. 19

Rethinking Migration Governance in the Mekong Region:

From the Perspective of the Migrant Workers and Their Employers

Edited by

Naomi Hatsukano

IDE-JETRO

ERIA

ERIA Research Project FY2017 No.19

Published in February 2019

Contents

List of Project Members

Naomi Hatsukano: Associate Senior Research Fellow, Bangkok Research Center, JETRO Bangkok / IDE-JETRO

Luch Likanan: Research Director, Council for the Development of Cambodia (CDC)

Kuoch Somean: Deputy General Director of the National Employment Agency (NEA), Ministry of Labour and Vocational Training (MoLVT)

Atsuko Mizuno: Associate Professor, Kyushu University

Archanun Kohpaiboon: Associate Professor, Thammasat University

Juthathip Jongwanich: Assistant Professor, Thammasat University

Kenjiro Yagura: Associate Professor, Hannan University

Maki Aoki: Associate Senior Research Fellow, IDE-JETRO

List of Figures

List of Tables

Chapter 1

Overview of Migration in the Mekong Subregion

Naomi Hatsukano

Introduction

The labour market in the Mekong Subregion is integrated as a matter of practice, even though the free movement of unskilled workers is not mentioned by the ASEAN Economic Community. Thailand now hosts more than 3 million unskilled workers from neighbouring countries, including Cambodia, Lao PDR, and Myanmar.[1] The migrant workers' households in their home country are supported by remittances from the migrants' work in Thailand. Migrant workers from neighbouring countries have been coming to Thailand because of employers' huge demand for migrant workers due to the recent chronic labour shortage in Thailand and because migrant workers are seeking better opportunities than can be found in their home country.

The long land borders of these Mekong countries and the relatively weak governance and insufficient capacity to control the flow of migrant workers by the sending and receiving countries have made it almost impossible to control the influx of migrant workers effectively. Therefore, most workers are undocumented, and their status remains vulnerable and unstable (Castles and Miller, 2009; Yamada, 2014; Hatsukano and Chalermpol, 2015). Previous research has often focused on the policy measures and the failure aspects, such as human trafficking

[1] In general, the Mekong Subregion includes Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam, and sometimes China. In this project, we discuss migrant workers from Cambodia, Lao PDR, and Myanmar to Thailand. Cambodia and Myanmar are a particular focus because they provide a larger flow of migrant workers. Viet Nam agreed to send workers officially to Thailand in 2016, and some Vietnamese workers must have migrated unofficially even before 2016. However, the information about Vietnamese workers in Thailand, including their number, is unclear. Therefore, this discussion will not include data about Vietnamese unskilled migrant workers.

and undocumented workers, because infringement of their human rights has become a serious problem.

With the role of migrant workers in economic activities and regional industrial development increasing each year, we aim to (i) understand the overall impact of migration on regional development and development strategies in the Mekong Subregion; and (ii) examine migration governance, including the overall system of legal and economic institutions in the subregion, from the viewpoints of the workers, employers, and governments. Workers decide whether to migrate, how they migrate, and what they do at the destination, and employers decide whether to employ migrants and how they treat them under certain government rules and various economic conditions. By examining the motivation, choices, and consequences for both the workers and employers and the various governments' policies, we have tried to rethink how to handle migration governance in the Mekong Subregion in the following six chapters.

As an introduction, this paper provides an overview of migration trends in the Mekong Subregion and the background, such as the push and pull factors that create migration.

1.Migration Trends in the Mekong Subregion

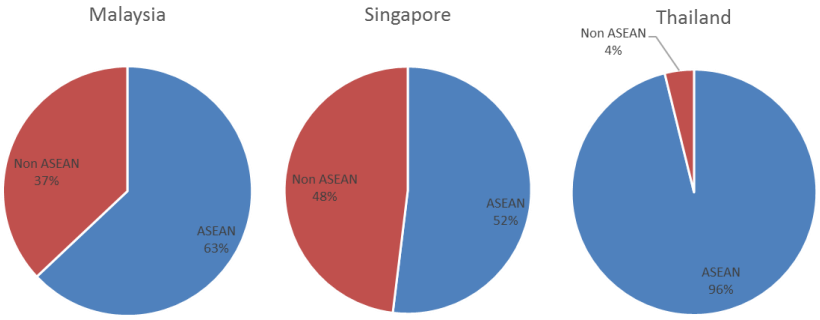
1.1. A brief history of migration from neighbouring countries

Thailand is considered the hub destination of migrant workers in the Mekong Subregion. The majority come from neighbouring countries, and it has been estimated that there are more than 3 million workers from the neighbouring countries working in Thailand (Yamada, 2014). Interestingly, some other members of the Association of Southeast Asian Nations (ASEAN), such as Malaysia and Singapore, that receive unskilled workers from other countries accept migrant workers from ASEAN Member States as well as from South Asia. In contrast, most of the unskilled migrant workers in Thailand come from neighbouring ASEAN Member States. About 96% of all migrant workers in Thailand are from ASEAN Member States, whereas almost

40% of migrant workers in Malaysia and almost 50% in Singapore are from non-ASEAN countries (Figure 1.1).

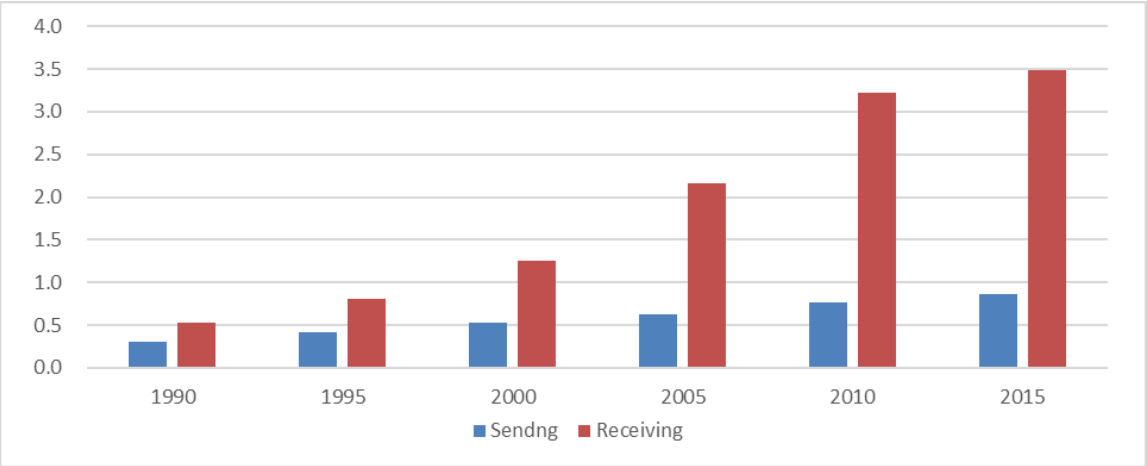
Thailand used to be known as a worker-sending country rather than a worker-receiving country. Thai workers have worked in Japan, the Middle East, and other ASEAN countries (Paitoonpong and Chalamwong, 2011). Although Thailand still sends workers abroad, the number of the foreign workers flowing into Thailand has risen (Figure 1.2). The workforce in the informal sector and the 3D (dirty, dangerous, and difficult) sector in Bangkok previously included domestic migrant workers mainly from north-east Thailand. Since 1990, however, Thailand has become a major labour-receiving country in the region as well as a labour-sending country, and its 3D sector has come to include migrant workers from neighbouring countries.

Figure 1.1: Migration within the Association of Southeast Asian Nations in 2015 (%)



ASEAN = Association of Southeast Asian Nations.
Note: Of the ASEAN migrants in Thailand, 96% are from neighbouring countries.
Source: Department of Economic and Social Affairs, Population Division, United Nations.

Figure 1.2: Migration Flow in Thailand (Million persons)



Source: Department of Economic and Social Affairs, Population Division, United Nations.

Until the late 1980s, people moved to Thailand from the neighbouring countries primarily as refugees. For example, people from Cambodia were displaced from their homeland due to the long-lasting civil war that began in the 1970s. In the 1990s, migrant workers from Myanmar included refugees and people fleeing their country because of the military coup in 1988 or conflict in the border areas (Maltoni, 2007).

In the early 1990s, as peace returned to the countries in the subregion, migrant workers from neighbouring countries seeking economic opportunities gradually began to fill the growing demand in the urban informal and 3D sectors, replacing Thai workers from the country's north-east.

In the mid-1990s, this migration movement accelerated. As the countries in the subregion began to focus more on economic development, people also started to seek paid employment. The movement of migrant workers became more active and included economic migrants rather than refugees. Initially, the Government of Thailand refused to accept foreign unskilled workers under the Immigration Act. However, several amnesties have been approved by Cabinet resolution on an ad hoc basis since 1992 (Natali, McDougall, and Stubbington, 2014; Yamada,

2014).[2] The government began to officially accept foreign unskilled workers through registered agencies under a memorandum of understanding (MoU) on Cooperation in the Employment of Workers signed with Lao PDR in 2002 and with Cambodia and Myanmar in 2003. However, the official routes were more expensive and involved a longer wait than the unofficial routes. In Cambodia, the official process to apply for a passport, visa, and working permit costs $500–$700, and applicants must wait 1–3 months in the shortest cases (Chan, 2009; ILO, 2015; Hatsukano and Chalermpol, 2015). Therefore, the MoU route is unpopular with would-be migrant workers, and more of them opt to use unofficial routes through brokers or family networks.

1.2 Workers from Cambodia and Myanmar

In Cambodia, after the Paris Peace Agreement in 1991, trade relations with the European Union and the United States were normalised in the mid-1990s. Since then, garment factories from other countries – most of them Chinese-owned – moved to Cambodia, mainly to Phnom Penh. Traditionally, it was not considered appropriate for rural girls to migrate to the city for work. However, attitudes changed, and gradually more female workers began to migrate from the rural areas to Phnom Penh (Derks, 2008).

For the people who lived in the provinces bordering Thailand, such as Battambang and Banteay Meanchey, it was not unusual to cross the border to seek work in Thailand because of the greater opportunities within a reasonable distance. For those living inland, however, working in Thailand was not the first option. They initially sought job opportunities in Phnom Penh. However, in the 2000s, information on jobs and from human networks motivated them to work far from their home towns. For example, in Prey Veng Province, where the people are poor and have limited agricultural land, workers have been migrating to the fishery sector in Rayong Province in eastern Thailand since the early 2000s.[3]

[2] See the Chapter 7 for details.

[3] Based on interviews with the staff of a nongovernment organisation in Rayong Province, Thailand

Migrant workers from Myanmar include (i) ethnic minorities living near the border and suffering unstable situations due to the ethnic conflicts or, more recently, seeking economic opportunities in relatively peaceful situations; (ii) people from urban areas who have a higher level education and have worked in white-collar jobs but were displaced from the country after 1988 and chose to work as blue-collar labourers in Thailand (Mon, 2014, 2016);[4] and (iii) rural people seeking better economic opportunities. Previously, their main destination was Malaysia. However, Thailand has become a more popular destination recently, both because the MoU system became available and because economic stagnation and inflation became a push factor (IOM and ARCM, 2013; Fujita et al., 2010). A 2012–2013 survey by the International Organization for Migration and Asian Research Center for Migration found that Myanmar migrant workers' primary reasons for migration were economic (80%), personal (13%), and security- and safety-related (7%) (IOM and ARCM, 2013).

1.3 Recent changes in migration and economic performance

The neighbouring countries developed quickly in the 2000s. Various factors in Thailand, such as the continuous political deadlock and coups in the 2000s, severe flooding in 2011, and the rise in the statutory minimum wage in 2013, have allowed labour-intensive industry in Thailand to move to neighbouring countries in search of a cheaper labour force and to hedge risk.[5] In an effort to avoid the middle-income trap, Thailand tried to upgrade its industry during this time through greater promotion of the research and development sector by amending the investment policies from a zone-based scheme to one classified by industry preference.

At the same time, some neighbouring countries have improved their investment environment. Since drastic political reforms began in 2011, Myanmar's economy has begun to boom, and more foreign direct investment has been entering the country. Cambodia has not changed its

(October 2014) and the village chief in Prey Veng Province, Cambodia (October 2015).

[4] Based on an interview with the staff of a nongovernment organisation in Mahachai Province, Thailand (August 2015).

[5] This model is called 'Thailand plus one' (BOI, 2015; Oizumi, 2013).

system because its investment law has been sufficiently open since the 1990s, although many problems remained regarding implementation and lack of transparency. However, due to the continuous effort to improve the investment environment little by little through dialogue with the private sector, Cambodia started to attract opportunities from Thailand in the 2010s.

The investment environment changes in Thailand, efforts by neighbouring countries, and improvements to the transport infrastructure of the subregion have encouraged more factories in Thailand to move to neighbouring countries.[6] Thus, foreign direct investment from Thailand into the neighbouring countries has grown (Table 1.1). The border areas, where the factories can utilise the neighbouring country's labour force and benefit from the better infrastructure in Thailand in particular, offer more advantages for this type of investment from Thailand.

Table 1.1: Outbound Foreign Direct Investment from Thailand to Cambodia and Myanmar
(B million)

Recipient country	2005	2013
Cambodia	213.3	4,141.6
Myanmar	7,866.5	23,061.3

Source: Bank of Thailand.

Some migrant workers in Thailand have started to consider returning to their home countries to take advantage of these new job opportunities. Recent research has found that many Myanmar migrant workers wish to return home within 5 years (IOM and ARCM, 2013; Mon, 2016). In reality, however, the better wage and living conditions in Thailand mean that few migrant workers choose to return soon, and newcomers continue to arrive.

Demand for unskilled workers in Thailand's labour-intensive manufacturing industries may decrease in the future if these industries succeed in upgrading their productivity or shifting to neighbouring countries. However, the service sector will continue to need more workers, and demand will continue to grow if stimulated by economic growth (ILO, 2015). Therefore, migration in the Mekong Subregion will diversify from a one-way flow to a bidirectional flow.

[6] The relationship between the workers' movement and the factories' movement is examined in Chapters 4 and 5, with a focus on the garment industry.

2. Statistical Data on Migrant Workers in Thailand

2.1 Limitations of the statistics

The statistical data on migrant workers in Thailand do not accurately reflect reality. From the 1990s to the early 2000s, statistics for only a limited number of workers given temporary permission through amnesties were available. Thailand began to officially accept migrant workers from neighbouring countries through official agencies under the MoU signed in 2002 and 2003, and these 'MoU workers' started working in Thailand in 2006. However, because of the long history of unofficial migration, higher administrative costs, and longer waiting times (mainly in the original countries), most migrant workers do not use the official route and instead choose to migrate and work unofficially. Therefore, the data coverage has limitations. Furthermore, even for workers who used officially registered agencies, the governments of the sending and receiving countries failed to track their movements; thus, there is a large gap in the official statistics between the sending and receiving countries.[7]

This chapter primarily uses data from the Government of Thailand's Department of Employment, Ministry of Labour, because it includes migrant workers from Cambodia, Lao PDR, and Myanmar. However, it should be noted that the statistics include only officially recognised workers. These include (i) MoU workers using officially registered agencies; (ii) workers registering retroactively and confirming their nationality though their embassy's staff, henceforth referred to as nationality verification (NV) workers; and (iii) workers migrating to work unofficially, but later registered temporarily when the government provided amnesties. Information by sector and by location is available for the first and second groups, but not for the third group, because their registration was only temporary.

[7] For example, the statistics of the Ministry of Labour and Vocational Training, Cambodia show 16,837 Cambodian workers worked in Thailand in 2011 (Yamada, 2014).

2.2 Statistical data

2.2.1 Total number by registration status

Of the three source countries, Myanmar has the largest number and Cambodia the second-largest number of migrant workers in Thailand. As of January 2016, there were 280,000 MoU workers and 990,000 NV workers from the three countries (Table 1.2). In addition, about 600,000 people were waiting to complete the nationality verification process, and an unknown number have been smuggled into Thailand without permission or official documents.

Table 1.2: Migrant Workers by Registration Status, 2016 (number)

Country	MoU workers	NV workers	One-Stop Service Centres			Total
			Labourers	Dependents	Subtotal	
Myanmar	139,158	848,987	623,648	40,801	**664,449**	**1,652,594**
Cambodia	114,779	94,929	696,338	42,609	**738,947**	**948,655**
Lao PDR	28,739	47,649	213,689	9,150	**222,839**	**299,227**
Total	**282,676**	**991,565**	**1,533,675**	**92,560**	**1,626,235**	**2,900,476**

MoU = memorandum of understanding, NV = nationality verification.
Note: The numbers of MoU workers and NV workers are as of January 2016. The number of temporarily registered workers at one-stop service centres is as of November 2014. Some workers overlapped between NV and temporary registration. On 2 February 2016, the Cabinet decided that the workers from neighbouring countries who entered Thailand illegally and were working in fishing vessels and seafood processing factories would have chance to register until 31 July 2016 and 22 August 2016 respectively. In 2015, 75,000 workers in fishing vessels and 42,000 in seafood processing industry had been regularised. The borderpass holders in the border provinces were not included.
Sources: Ministry of Labour, Thailand and International Organization for Migration.

The number of migrant workers officially registered or recognised by any type of public authority is increasing. The total number of MoU workers has increased drastically in the last few years, despite the higher cost of the MoU route. At the same time, the number of workers receiving official documents through the nationality verification process has also increased. Thousands of people are waiting for this process to be finalised, and the deadlines are often extended.

More Cambodian workers tend to possess official documents, especially after their 'exodus' in June 2014.[8] Cambodian workers tend to use the MoU route more than Myanmar or Lao migrant workers. In 2014, the Government of Thailand introduced an easier registration service at the one-stop service centre in each province's Department of Employment office.[9] The number of officially recognised Cambodian workers increased from about 416,000 in 2012 to 738,947 or more in 2016 because of the lower cost (Yamada, 2014; Table 1.2). It could also reflect the unstable bilateral relationship that often affects the border control between the two countries.[10] Cambodians may have been concerned about their security or safety and believed that registration or official documents could lower the risk.

2.2.2 Sectors employing migrant workers

Construction is the major employment sector for migrant workers regardless of their legal status or country of origin. Agriculture or agro-processing and food-related sectors are also prominent (Table 1.3). Among Myanmar workers, the agriculture sector is the most popular (15% of the total Myanmar workers). Migrant workers from Lao PDR show slightly different employment characteristics. Food sales is the third-largest employment sector, with 10% of Lao workers but only 4% of Myanmar and 3% Cambodian workers in food sales sector. Household work (domestic work as housemaids) is the fifth-largest employment sector, with 9% of Lao workers but only 3% Myanmar workers and 1% Cambodian workers, probably because of the lower language barrier.[11]

[8] More than 200,000 Cambodian workers without valid official documents quickly returned home in June 2014, in fear of a mass crackdown after the coup in May 2014.

[9] The one-stop service centres provided temporary registration from the end of June 2014 to October 2014, and the NV process was to be completed by March 2015. However, this schedule was not achieved, and the workers' status remained ambiguous.

[10] For example, between 2008 and 2011, the governments of Cambodia and Thailand confronted each other over the border demarcation in the Preah Vihear Temple area.

[11] The Thai and Lao languages are similar, and many people who speak these languages can understand each other without an interpreter.

Table 1.3: Migrant Worker Occupations by Sector, January 2016

(number)

	Myanmar				Lao PDR				Cambodia			
Sector	MoU	NV	**Total**	%	MoU	NV	**Total**	%	MoU	NV	**Total**	%
Fishing	1,788	10,264	**12,052**	1	25	510	**535**	1	113	1,664	**1,777**	1
Seafood process	12,387	74,116	**86,503**	9	1,200	532	**1,732**	2	4,055	1,960	**6,015**	3
Agriculture	5,539	145,687	**151,226**	15	2,416	4,806	**7,222**	9	1,868	9,403	**11,271**	5
Construction	33,525	148,470	**181,995**	18	3,831	4,293	**8,124**	11	22,471	24,538	**47,009**	22
Agric. Process	10,678	82,362	**93,040**	9	2,947	1,951	**4,898**	6	21,145	6,975	**28,120**	13
Meat processing	6,692	10,456	**17,148**	2	1,316	617	**1,933**	3	7,312	2,182	**9,494**	5
Recycling	1,200	13,820	**15,020**	2	536	709	**1,245**	2	1,080	3,431	**4,511**	2
Metal sales	2,638	22,936	**25,574**	3	1,036	971	**2,007**	3	3,613	2,781	**6,394**	3
Food sales	3,303	38,785	**42,088**	4	3,480	3,788	**7,268**	10	3,563	3,356	**6,919**	3
Const. materials	3,135	16,332	**19,467**	2	1,137	638	**1,775**	2	1,972	3,261	**5,233**	2
Garment business	9,473	53,896	**63,369**	6	1,210	7,672	**8,882**	12	7,106	2,905	**10,011**	5
Plastic business	2,939	27,032	**29,971**	3	1,248	1,522	**2,770**	4	5,798	3,110	**8,908**	4
Electronics	9,068	12,795	**21,863**	2	1,302	362	**1,664**	2	4,128	1,414	**5,542**	3
Trade	2,280	25,574	**27,854**	3	1,068	1,937	**3,005**	4	2,102	2,237	**4,339**	2
Household	1,802	29,965	**31,767**	3	2,106	4,493	**6,599**	9	603	2,170	**2,773**	1
Other	32,711	136,497	**169,208**	17	3,881	12,848	**16,729**	22	27,850	23,542	**51,392**	25
Total	**139,158**	**848,987**	**988,145**	**100**	**28,739**	**47,649**	**76,388**	**100**	**114,779**	**94,929**	**209,708**	**100**

MoU = memorandum of understanding, NV = nationality verification.
Note: 'Other' includes mining and quarrying, stone processing, paper business, transport, car repair and service, fuel and gas, education foundations/associations, and other (in the original data).
Source: Department of Employment, Ministry of Labour, Thailand.

2.2.3 Scale of the employers

Employers of migrant workers also differ in sector and scale. There are 21,757 employers of MoU workers, and 177,428 employers of NV workers. The average number of migrant workers is 13.0 per MoU employer and 5.6 per NV worker employer. This indicates that factory scale is larger for the MoU employers than the NV employers. The larger MoU employers include meat processing (66.3 persons/employer), electronics (38.3 persons/employer), and seafood

processing (37.1 persons/employers). Among the employers of NV workers, seafood processing (15.8 persons/employer) and the garment business (10.6 persons/employer) are the sectors that employ more than 10 migrant workers on average. This indicates that MoU workers are often employed in factories by larger employers, whereas NV workers tend to be employed in smaller-scale workplaces. This may be because the larger employers have relatively longer-term human resources planning and can wait several months for the MoU recruitment process to be completed.

2.2.4 Location of migrant workers

Migrant workers can usually be found in Bangkok and the suburbs, where more employment opportunities exist, and in areas closer to their country of origin (Table 1.4).

Myanmar migrant workers are dominant in all regions except the north-east. Many Myanmar workers are in Bangkok and its suburbs. There are also large numbers of Myanmar workers in the northern and southern regions, and border districts such as Mae Sot. Most Cambodian migrants work in the suburbs of Bangkok and the central region, including industrially developed areas such as Rayong Province and border areas where there are more agricultural farms.

Table 1.4: Migrant Workers by Location, January 2016 (number)

Location	Myanmar		Lao PDR		Cambodia		Total
	MoU	NV	MoU	NV	MoU	NV	
Bangkok	30,989	51,513	4,858	5,714	17,121	8,261	**52,968**
Suburbs	40,561	288,760	8,912	27,224	35,820	48,382	**85,293**
Central	28,261	124,952	7,299	7,014	48,010	33,712	**83,570**
North	7,316	143,996	244	1,366	355	416	**7,915**
North-east	3,968	5,700	1,895	2,854	2,342	669	**8,205**
South	28,063	234,066	5,531	3,477	11,131	3,489	**44,725**
Total	**139,158**	**848,987**	**28,739**	**47,649**	**114,779**	**94,929**	**282,676**

MoU = memorandum of understanding, NV = nationality verification.
Source: Department of Employment, Ministry of Labour, Thailand.

2.2.5 Gender

Women account for 39% of MoU workers 43% of NV workers. They often work in households (domestic work), the garment sector, and seafood processing factories. Women make up about 40% of Cambodian and Myanmar migrant workers and almost 50% of Lao migrant workers.

Despite the Mekong Subregion's conservative traditions regarding female behaviour, it has become more common for female migrants to cross borders. Employers at factories often prefer female workers. There are even female migrant workers in construction and agriculture, because migration with family members or friends and villagers is not rare in Thailand. Some recruitment agencies also recommend that employers hire workers from the same village or family, because this can dissuade them from running away and prevent them from feeling homesick.[12]

[12] Base on the author's interviews with a recruitment agency in Bangkok (August 2014) and one employer in Rayong Province in Thailand (November 2014).

3. Background of the Workers' Movement

This section reviews the basic socio-economic conditions in the Mekong countries. The migration of workers to Thailand is mainly explained by the (i) population structure in each country, (ii) lower unemployment rate in Thailand and fewer job opportunities in the home country, (iii) higher wages in Thailand and lower wages in the home country, (iv) labour market mismatch in Thailand, and (v) long land border and lack of strict border control.

3.1 Population structure

Thailand still has a larger population than its neighbouring countries. However, it is facing the challenge of an ageing population with a diminishing number of children. The growth rate of the working-age population (aged 15–64) has decreased drastically from 18% in 1985 to 2% in 2015 (Table 1.5).

In neighbouring countries, young people and children make up a larger share of the population. In Cambodia, Lao PDR, and Myanmar, about 30% of the population is under 15 years old in 2010. However, in Thailand, the proportion of this age group has been less than 20% since 2010.[13]

[13] United Nations Population Statistics.

Table 1.5: Population Structure and Labour Force Population in the Mekong Subregion

Country	Item	1985	1990	1995	2000	2005	2010	2015
Myanmar	Total population	38,508.8	42,007.3	44,710.9	47,669.8	49,984.7	51,733.0	53,897.2
	Labour force population	21,605.1	24,429.5	27,100.8	30,186.4	32,190.8	33,717.5	36,159.5
	Growth rate of labour force	14%	13%	11%	11%	7%	5%	7%
Lao PDR	Total population	3,680.1	4,247.8	4,857.8	5,342.9	5,745.0	6,260.5	6,802.0
	Labour force population	131.3	150.2	171.0	190.5	210.7	230.5	259.2
	Growth rate of labour force	13%	16%	14%	12%	13%	16%	12%
Cambodia	Total population	7,743.1	9,008.9	10,694.5	12,197.9	13,320.1	14,363.6	15,577.9
	Labour force population	4,240.6	4,758.5	5,399.9	6,748.2	7,931.5	9,040.5	10,013.4
	Growth rate of labour force	12%	12%	13%	25%	18%	14%	11%
Thailand	Total population	52,041.5	56,582.8	59,266.1	62,693.3	65,864.0	66,692.0	67,959.4
	Labour force population	31,847.7	36,932.6	39,923.8	43,545.8	46,191.1	47,955.5	48,806.6
	Growth rate of labour force	18%	16%	8%	9%	6%	4%	2%

Source: United Nations Population Statistics.

3.2 Unemployment rate and job opportunities

In Thailand, the unemployment rate has been decreasing since the late 1990s. Since 2010, it has decreased to less than 1%, and labour shortage has become a serious issue. This and the lack of job opportunities in the neighbouring countries have motivated the movement of migrant workers in the Mekong Subregion.

In the neighbouring countries, on the other hand, industrial development has begun but has not expanded fast enough to absorb the growing labour force. Myanmar experienced a long period under government junta control, with economic sanctions imposed by the European Union and the United States, and the economy was closed from 1988 to 2016. In Cambodia, even though the garment industry has been booming since the mid-1990s, the employment opportunities it created could not meet the needs of the growing younger population. The recent relocation of factories and investment from Thailand to the neighbouring countries, as explained in the previous section, is still at an early stage, and has not yet created enough job opportunities for young people.

3.3 Higher wages in Thailand

Minimum and average wages are two to three times higher in Thailand than in the three neighbouring countries. In 2013, the Government of Thailand raised the minimum wage to B300 per day across the country and the average wage rose to more than $300 per month. Neighbouring countries also attempted to increase the minimum wage. In Cambodia, the minimum monthly wage increased from $60 in 2010 to $128 in 2014, and to $140 in 2016. In Myanmar, the minimum wage was MK3600 ($2.80) per day in 2015 (Table 1.6), which means workers can earn an a average of $80–$90 per month.

Table 1.6: Comparison of the Wage Levels in the Mekong Subregion ($)

Wage level	Thailand Bangkok	Cambodia Phnom Penh	Lao PDR Vientiane	Myanmar Yangon
Worker	113	363	111	127
Engineer	323	669	173	338
Minimum	9.09 (daily, 2013)	140 (monthly, 2016)	77 (monthly, 2012)	2.8 (daily, 2015)

Note: The wage level for workers and engineers shows average monthly wage level. The minimum wage in each country is in daily and monthly figures according to each country's regulations.
Source: Japan External Trade Organization website.

3.4 Labour market mismatch

Due to the recent expansion of higher education in Thailand, younger Thai workers have begun to avoid 3D sector jobs among lower-skilled jobs, and this has led to a serious labour market mismatch. The gap between the additional demand for workers and the new workforce entrants with an education attainment higher than primary school was estimated at 800,000 persons in 2012 (Chan, 2009; Vasuprasat, 2010). Migrant workers have filled this gap.

3.5 Long land border with weak border control

Thailand has a long land border with its neighbouring countries. The border it shares with Myanmar is more than 1,800 kilometres long. The land border between Thailand and Cambodia is about 800 kilometres long, and that between Thailand and Lao PDR is about 1,700

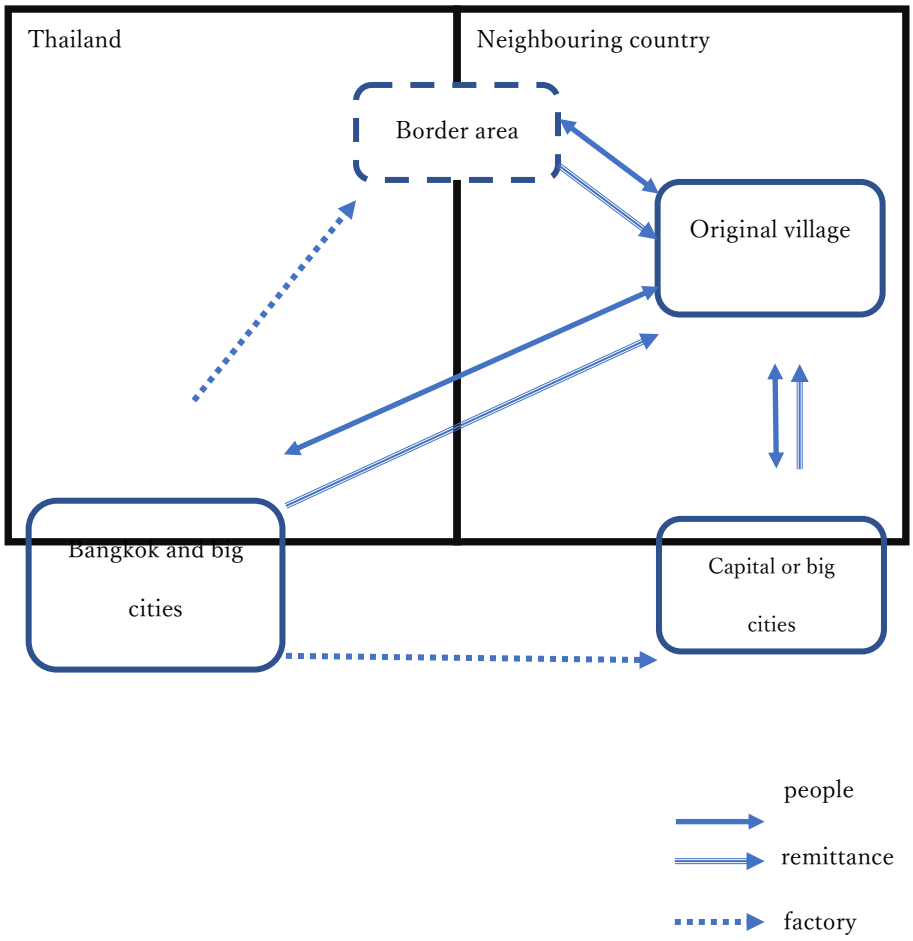
kilometres in length. Borders always play mixed, contradictory roles as bridges, gateways, and meeting points, and as barriers, obstacles, and points of separation (Diener and Hagen, 2012). Thailand's border with neighbouring countries has played mixed roles as well. As a bridge, special economic zones have been developed recently to create more employment, and the economic corridor connecting the neighbouring countries has become more dynamic. At the same time, the subregion's border areas in the have experienced unwelcome activities, such as illegal drug smuggling, hazardous waste disposal, human trafficking, and illegal wildlife and timber trafficking. Historically, the long, mountainous land border between Thailand and Cambodia and poor border management due to Cambodia's lack of capacity have allowed these crimes to flourish (IOM, 2015). This border has large and small checkpoints along its length, and many natural border-crossing points for local people. However, it is not possible to control the border completely.

4. Points for Discussion in this Report

Workers in the Mekong Subregion migrate within and beyond their home country borders to seek better opportunities. Factories and other enterprises in the region also relocate within and beyond home country borders to optimise opportunities and minimise costs. In the era of the ASEAN Economic Community, an overview of the overall migration system in the region is needed to inform the future development strategy of the Mekong Subregion (Figure 1.3).

Considering the new development trends in the region, there is a need for serious study of migration in the Mekong Subregion, including workers' decision to work within or beyond their home country border, the related consequences, and the employers' and enterprises' situation and their attitude towards migrant workers. Moreover, it is important to understand the policy environment, including migration policies and the Mekong Subregion's development.

Figure 1.3: Mobility of People, Money, and Factories



Source: Author.

Therefore, the following chapters, grouped under three perspectives – those of the migrant workers, industry, and government – analyse migration in the Mekong Subregion. All of the chapters were mainly based on the survey conducted in 2015–2016.

Part I: Migrant Workers' Choices and the Consequences in Cambodia

Chapter 2, by Luch and Kouch, examines the impact of international and internal migration on the households of origin of Cambodian migrant workers. Remittances have contributed to

increased education and health expenditure, debt repayments, and house improvement in the country. Chapter 3, by Hatsukano, examines why migrant workers who returned to Cambodia chose to return, and the degree to which they utilise the migration experience in their subsequent economic activities.

Part II: Upgrading of the Garment Industry in Thailand

Thailand's garment industry employs foreign workers in the country. It has often been argued that using migrant workers as cheap labour may disrupt the upgrading of the industry. Chapters 4, 5, and 6 examine the situation in the garment industry in Thailand and its employment of Myanmar migrant workers.

Chapter 4, by Mizuno, reviews the garment industry in Thailand and Myanmar, and examines how the industry is upgrading productivity and relocating factories to Myanmar in search of growth opportunities. Chapter 5, by Kohpaiboon and Jongwanich, considers the enterprises' view on employing migrant workers and the relationship with productivity improvement. A survey of garment firms suggests that the decision to upgrade is independent of that to hire foreign workers. Chapter 6, by Yagura, analyses the development of Myanmar workers' skills based on a survey of the workers . The human resource management practices of garment firms can influence Myanmar workers' motivation to develop skills.

Part III: The Government of Thailand's Policy

Chapter 7, by Aoki, examines the relationship between Thailand's migrant management policy and its regional development strategy. The Government of Thailand has started to consider providing development assistance to the neighbouring countries to better manage the flow of migrant workers.

References

Board of Investment (BOI) (2015), 'Thailand +1: Towards the AEC', *Thailand Investment Review,* March. http://www.boi.go.th/tir/issue/201503_25_3/358.htm (accessed 1 March 2016).

Castles, S. and M.J. Miller (2009), *The Age of Migration: International Population Movements in the Modern World.* Hampshire: Palgrave Macmillan.

Chan, S. (2009), 'Review of Labour Migration Management, Policies and Legal Framework in Cambodia,' *ILO regional Office for Asia and the Pacific Working Paper Series*. Bangkok: ILO.

Derks, A. (2008), *Khmer Women on the Mov*e. Honolulu: University of Hawai'i Press.

Diener, A.C. and J. Hagen (2012), *Borders: A Very Short Introduction.* Oxford: Oxford University Press.

Fujita, K., T. Endo, I. Okamoto, Y. Nakanishi, and M. Yamada (2010), 'Myanmar Migrant Laborers in Ranong, Thailand'. IDE Discussion Paper No. 257. http://www.ide.go.jp/English/Publish/Download/Dp/257.html (accessed 1 March 2016).

Hatsukano, N. and C. Chamchan (2015), 'Cambodian workers in Thailand: Socio-Economic Situation and Recruitment Process' in 'Labour Migration in Thailand and Neighboring Countries: Situation and Challenges of the Migrant Workers', *ERIA Research Project Paper*. Jakarta: ERIA.

International Labour Organization (ILO) (2015), 'Review of the Effectiveness of the MOUs in Managing Labour Migration between Thailand and Neighbouring Countries.' Bangkok: ILO Regional Office for Asia and the Pacific. http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_356542.pdf (accessed 1 March 2016).

International Organization for Migration (IOM) (2015), *Health and Human Trafficking in the Greater Mekong Subregion: Findings from a Survey of Wen, women and Children in Thailand, Cambodia and Viet Nam*. http://publications.iom.int/bookstore/free/Steam_Report_Mekong.pdf (accessed 1 March 2016).

IOM and the Asian Research Center for Migration (ARCM) (2013), *Assessing Potential Changes*

in the Migration Patterns of Myanmar Migrants and Their Impacts on Thailand. https://thailand.iom.int/assessing-potential-changes-migration-patterns-myanmar-migrants-and-their-impacts-thailand (accessed 1 March 2016).

Maltoni, B. (2007), 'Migration in Cambodia: Internal vs. External Flows' 8th ARPMN Conference on 'Migration, Development and Poverty Reduction', in Fuzhou (China), 25–29 May.

Mon, M. (2014), 'Mobility, Identity and Contributions of Skilled Burmese Migrant Workers: An Exploratory Study in Bangkok,' *ABAC Journal*, 34(1), pp.45–61.

Mon, M. (2016), 'Senmonteki Chishiki Gijutsu wo Yusuru Tai Zaiju Myamajin Imin', *Ajiken Warudo Torendo*, 245, March 2016. (Japanese). IDE-JETRO.

Natali, C., E. McDougall, and S. Stubbington (2014),'International Migration Policy in Thailand.' in J. Huguet, ed., 2014. *Thailand Migration Report 2014*. Bangkok: United Nations Thematic Working Group on Migration in Thailand.

Oizumi, K. (2013), 'The Potential of the "Thailand-Plus-One" Business Model: A New Fragmentation in East Asia.' https://www.jri.co.jp/MediaLibrary/file/english/periodical/rim/2013/50.pdf (accessed 1 March 2016).

Paitoonpong, S. and Y. Chalamwong (2011), 'Managing international Labor Migration in ASEAN: A Case of Thailand.' Bangkok: Thailand Development Research Institute.

Vasuprasat, Pracha. 2010. 'Agenda for labour migration policy in Thailand: Towards long-term competitiveness.' ILO/Japan Project on Managing Cross-border Movement of Labour in Southeast Asia, Regional Office for Asia and the Pacific, ILO. http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms_145130.pdf (accessed 1 March 2016).

Yamada, M. (ed.) (2014), Higashi Ajia ni Okeru Iminrodosha no Hoseido: Okuridashikoku to Ukeirekoku no Kyotsukiban no Kochiku ni mukete (Laws and Labour Migration Policies in East Asia: Seeking a Common Platform of Sending and Receiving Countries). *Kenkyu Shosho* (IDE Research Series), 611. Tokyo: IDE–JETRO.

Chapter 2

Economic Impacts of Remittances from Migrants on Educational Expenditure, Health Expenditure, and Debt Payment: Empirical Evidence from Rural Cambodia

Luch Likanan and Kuoch Somean

1. Introduction

New economic opportunities in urban areas, wage differentials between urban and rural areas, poverty, and strategic coordination within family members to maximise family welfare have been hypothesised to induce rural–urban and international migration around the world (Harris and Todaro, 1970; Stark and Bloom, 1985; Chan, 2009; Hing and Lun, 2011; Hing, Pide, and Dalis, 2011; Maltoni, 2007; Godfrey et al., 2001; Escobar et al., 1998). At the same time, remittances have increased exponentially (World Bank, 2014), and their impact has been documented extensively, (e.g. Calero et al., 2008; Rodriguez, 1998; Vargas-Lundius et al., 2008; Wendy et al., 2011; Amuedo-Dorantes and Pozo, 2006, 2010; Cox-Edwards and Ureta, 2003; Adam, Rechard, and Cuecuecha, 2010; Halliday, 2006; Taylor, 2003; Mansour et al., 2011),[1] but empirical studies on the economic impact of internal and international migration in Cambodia are not up to date. Amongst them, Tong (2011), provided empirical evidence of the impact of remittances, finding that internal and international remittances could reduce the poverty ratio by 4.73% and 7.35%, respectively, and poverty could be reduced even more by taking the poverty gap into account. In line with Tong (2011), Roth and Tiberti (2017) found that remittances contributed significantly to reducing the poverty

[1] Net inflows of foreign direct investment are $0.8 billion and net official development assistance received was $0.7 billion in 2008. It is also worth noting that the amount of internal remittances was not available (World Bank, 2014).

headcount, although by a much smaller magnitude, as remittances ease consumption constraints. Remittances from migrant factory workers in Phnom Penh contributed to household income in Takeo Province (Luch, 2010). Using the 2009 Cambodia Socio-Economic Survey, Luch (2012a, 2012b) and Fukui and Luch (2017) found that migration and remittances have a significant impact on household income variations and children's education. In addition, both remittances and migration were found to have a positive impact on child educational expenditure (Fukui, Miwa, and Luch, 2013; Fukui and Luch, 2013); child health expenditure (Iwasawa, Inada, and Fukui, 2014); and household expenditure, credit constraint, and investment in agriculture (Mong, 2014).

However, this study fills the gap in the literature regarding the impact of remittances on education expenditure, debt payments, and health expenditure by using a unique survey data compiled by the authors in the two provinces that have the largest number of migrants, Battambang and Prey Veng. Unlike data used in the above-mentioned studies in the context of Cambodia, which was not designed to study migration issues, this study uses data specifically designed for studying migration, and includes detailed amounts of internal and international remittances over a 1-year period that each household receives from each migrating family member. Therefore, this study can identify the impact of internal and international remittances on health expenditure, education expenditure, and debt payments that the previous studies could not. The analyses cited assess only the impact of internal remittances or migration because the data do not provide enough information on remittances from the international migrants. Moreover, to reduce multicollinearity that can lead to an upward bias in the estimate of remittances regarding other important factors, such as income and assets that were bought using remittance receipts, the questionnaire was designed to exclude the impact of remittances on these items.

This study investigates the economic impact of internal and international remittances on educational expenditure, health expenditure, and debt payments using survey data collected from Battambang and Prey Veng provinces in 2015. It is structured as follows. Section 2 explains the research method,

including the process of data collection and descriptive statistics; Section 3 provides empirical evidence and discussion points; and Section 4 concludes the study.

2. Descriptive Statistics

Table 2.1 presents important variables, such as expenditure, household characteristics, and assets at the household and individual levels. On average, expenditure on education is smaller than expenditure on health (4.5 versus 7.4 on the logarithmic scale). Some households spend a significant proportion of total expenditure on debt payment, implying that debt payment is one of the major reasons for rural–urban and international migration. According to informal discussions with village and commune chiefs and other focal people in Prey Veng Province, several households in Prey Veng Province migrated to Thailand and other parts of Cambodia because indebtedness had forced them to sell their small parcel of land to pay the debt, leading to landlessness in several cases.[2]

Table 2.1: Descriptive Statistics

	Household Level		**Individual Level**	
Variable	Obs.	Mean	Obs.	Mean
Expenditure and house improvement				
Educational expenditure (log)	635	4.121	2,660	4.539
Health expenditure (log)	635	7.435	2,660	7.396
Debt payment (log)	635	3.452	2,660	3.636
House improvement (if yes=1)	635	0.031	2,660	0.040
Type of remittances				
Total remittances (log)	635	2.912	2,660	3.575
Internal remittances (log)	635	1.404	2,660	1.642
International remittances (log)	635	1.508	2,660	1.933
Assets				
Value of electronics (log)	635	10.953	2,660	11.020
Value of furniture (log)	635	7.531	2,660	7.593
Value of equipment (log)	635	4.587	2,660	4.723
Value of transports (log)	635	11.584	2,660	11.572

[2] Informal discussion with village chiefs in Prey Veng Province (November 2015).

Value of agricultural asset (log)	635	3.399	2,660	3.289
Value of livestock (log)	635	6.531	2,660	6.476
Land category				
Landless	635	0.348	2,660	0.376
0.1–5000	635	0.337	2,660	0.306
5001–10000	635	0.195	2,660	0.184
10001–20000	635	0.054	2,660	0.060
20001–40000	635	0.030	2,660	0.036
40001–80000	635	0.024	2,660	0.028
80001+	635	0.013	2,660	0.010
Income				
Net agricultural income (log)	635	9.223	2,660	9.586
Other incomes (log)	635	7.578	2,660	7.268
Household characteristics				
Sex of household head/sex of member (male=1)	635	0.809	2,660	0.194
Status of head/members				
Single	632	0.016	2,610	0.422
Widow	632	0.160	2,610	0.061
Married	632	0.809	2,610	0.493
Divorced	632	0.014	2,610	0.015
Others	632	0.002	2,610	0.008
Education of head/members				
No class	564	0.000	2,363	0.000
Preschool	564	0.087	2,363	0.071
Class 1 completed	564	0.016	2,363	0.034
Class 2 completed	564	0.025	2,363	0.042
Class 3 completed	564	0.044	2,363	0.053
Class 4 completed	564	0.092	2,363	0.093
Class 5 completed	564	0.090	2,363	0.083
Class 6 completed	564	0.119	2,363	0.098
Class 7 completed	564	0.083	2,363	0.087
Class 8 completed	564	0.131	2,363	0.104
Class 9 completed without certificate	564	0.098	2,363	0.082
Class 10 completed	564	0.085	2,363	0.091
Class 11 completed	564	0.041	2,363	0.042
Class 12 completed without certificate	564	0.009	2,363	0.023
Lower secondary diploma	564	0.057	2,363	0.043
Higher secondary diploma			2,363	0.004
Technical/vocational pre-secondary diploma	564	0.007	2,363	0.018
Technical/vocational post-secondary diploma			2,363	0.000
Bachelor’s degree	564	0.002	2,363	0.009
Master’s degree	564	0.014	2,363	0.018
Doctoral degree			2,363	0.004

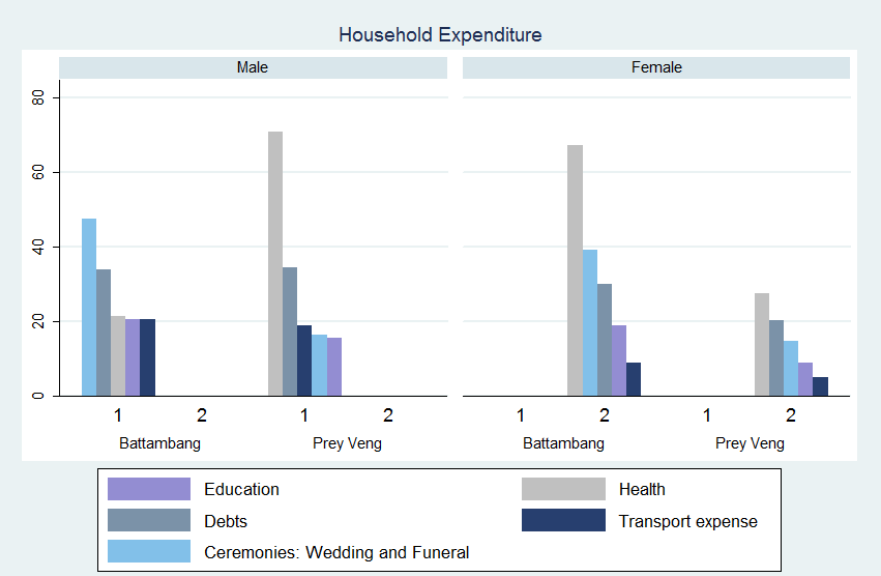
Age of head/members				
0–3			2,613	0.056
4–11			2,613	0.126
12–15			2,613	0.064
16–18			2,613	0.052
19–35	629	0.221	2,613	0.339
36–44	629	0.231	2,613	0.123
45–54	629	0.312	2,613	0.137
55+	629	0.235	2,613	0.101
Sex of school-aged children 4–18 (male=1)	634	0.811	2,612	0.479
Household members				
No. of young dependents			2,660	0.242
No. of school age	635	1.098	2,660	1.266
No. of working age	635	3.162	2,660	3.355
No. of dependents (65+)	635	0.427	2,660	0.407
House characteristics				
Clay	635	0.019	2,660	0.018
Wooden planks	635	0.773	2,660	0.778
Bamboo strips	635	0.030	2,660	0.031
Cement/brick/stone	635	0.117	2,660	0.128
Parquet/polished wood	635	0.022	2,660	0.019
Polished stone/marble	635	0.000	2,660	0.000
Vinyl	635	0.002	2,660	0.001
Ceramics tiles	635	0.003	2,660	0.003
Others	635	0.109	2,660	0.108
Lighting				
State electricity	635	0.883	2,660	0.882
Generator	635	0.002	2,660	0.002
Battery	635	0.069	2,660	0.069
Kerosene lamp	635	0.014	2,660	0.013
Candle	635	0.003	2,660	0.003
None	635	0.002	2,660	0.001
Solar	635	0.006	2,660	0.006
Others	635	0.017	2,660	0.020
Use of toilet				
Own toilet	635	0.803	2,660	0.814
Public toilet/pit latrine or shared with others	635	0.047	2,660	0.048
Open land	635	0.137	2,660	0.123
Main source of drinking water				
Piped in dwelling or on premise	635	0.161	2,660	0.185
Public tab	635	0.013	2,660	0.014
Tubed/piped well or borehole	635	0.025	2,660	0.024
Protected dug well	635	0.071	2,660	0.080

Unprotected dug well	635	0.409	2,660	0.362
Pond, river or stream	635	0.279	2,660	0.295
Water treatment				
Boil	635	0.584	2,660	0.576
Filter	635	0.241	2,660	0.256
With aluminium	635	0.014	2,660	0.014
No	635	0.164	2,660	0.155
Districts				
Battambang	635	0.031	2,660	0.040
Aek Phnom	635	0.227	2,660	0.254
Pea Reang	635	0.323	2,660	0.280
Sithor Kandal	635	0.146	2,660	0.141
Thmor Kol	635	0.272	2,660	0.284

Source: The authors' calculation from Household Survey (2015).

Figure 2.1 depicts the type of expenditures by households in the previous month converted into a year and split by the gender of the household head and migrant status in the target provinces. Health expenditure accounts for the largest household expenditure (more than $60 per month) in households headed by women in Battambang Province for the returned migrant household and by households headed by men in Prey Veng Province for the non-migrant household. Debt payment reaches $90 for migrant households headed by women and $220 for migrant households headed by men in Prey Veng Province.

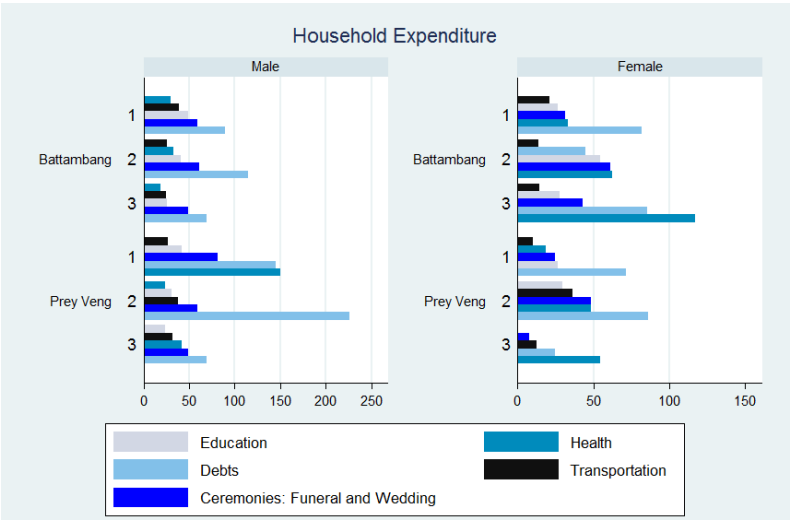
Figure 2.1: Type of Expenditure of Households Headed by Men and Women by Province ($)



Note: The expenditure is for the last month in United States dollars.
Source: Household Survey (2015).

Figure 2.2 reveals the difference in expenditure amongst households with migrants, without migrants, and with returned migrants, by province and gender. The amount of expenditure in United States (US) dollars is similar to the percentage shown in Figure 2.1 for which debt payment, health expenditure, and ceremonies remain higher.

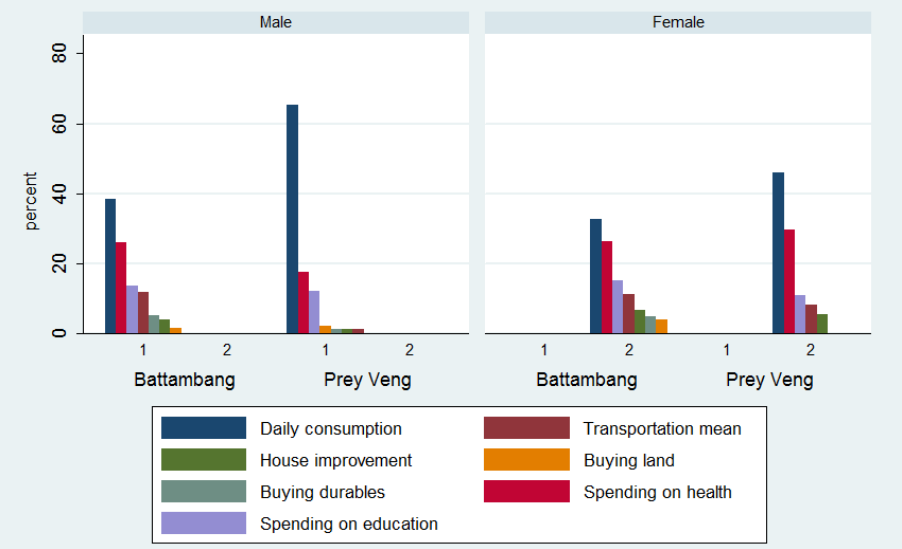
Figure 2.2: Type of Expenditure by Type of Migrants and Province ($)



1 = non-migrant households, 2 = migrant households, 3 = returned migrant households.

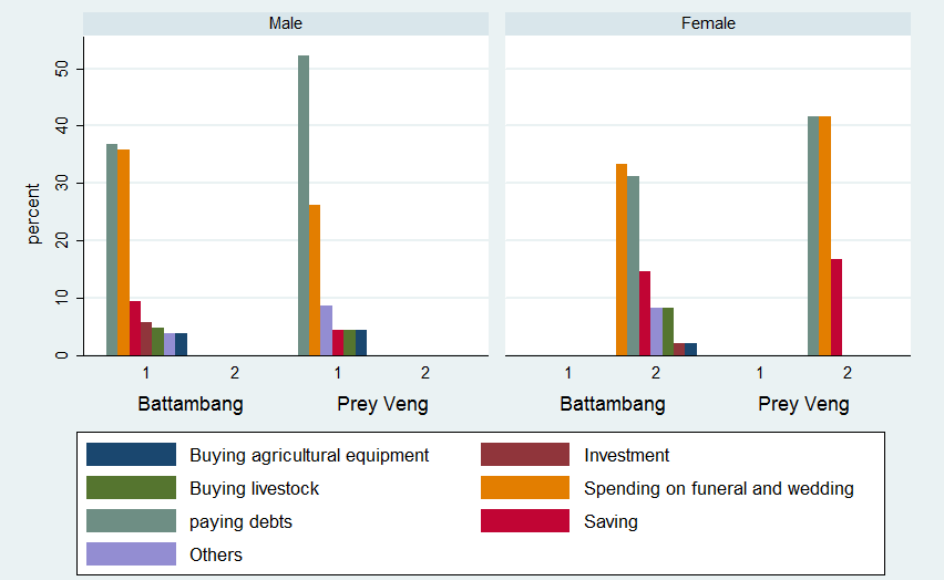
Source: Household Survey (2015).
Figure 2.3a shows that households use about 3% of remittances for house renovation and maintenance. Remittances are reportedly used mostly for daily consumption, followed by health, and education, which is in line with the findings of Maltoni (2007).

Figure 2.3a: Use of Remittances of Households Headed by Men and Women by Province (%)



Source: Household Survey (2015).

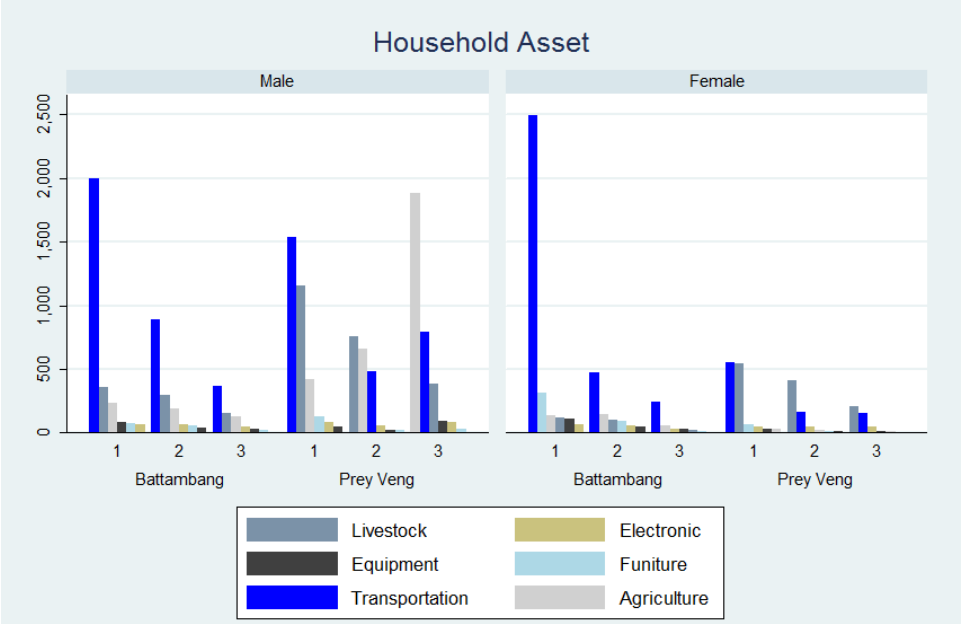
Figure 2.3b: Use of Remittances of Households Headed by Men and Women by Province (%)



Source: Household Survey (2015).

Table 2.1 also reveals that amongst the assets that households acquire, transportation is the largest in the logarithm form, followed by electronic items, and furniture. Figure 2.4 provides the value of assets in US dollars. To avoid multicollinearity, these values exclude any assets bought with previous remittances. The value of transportation is especially large in Battambang Province regardless of whether the household head is male or female.

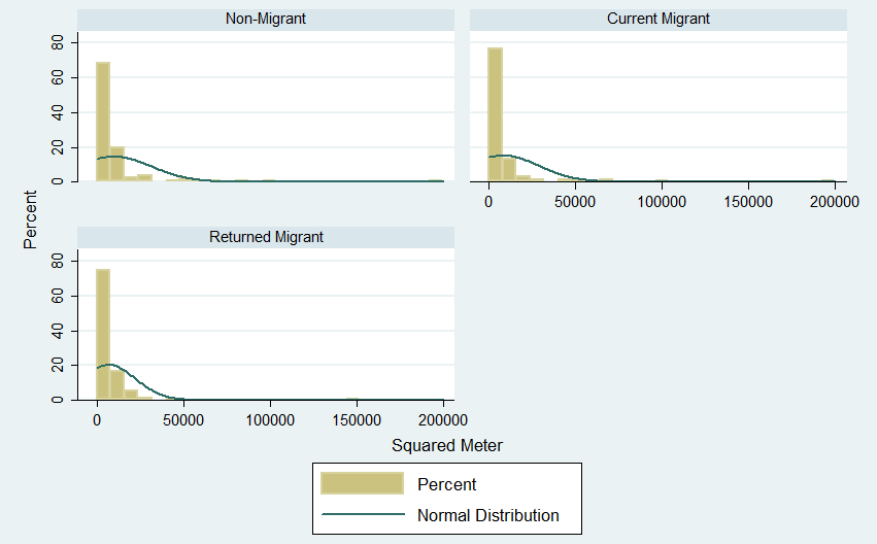
Figure 2.4: Value of Assets by Province ($)



1 = non-migrant household, 2 = current migrant household, 3 = returned migrant household.
Note: Value of current assets that do not use remittances for purchase in United States dollars.
Source: Household Survey (2015).

In the land category, 35% of households are landless and 33% have landholdings of 0.1–5,000.0 square metres. Households with 5,001–10,000 square metres of land make up only 19% of the total. The remaining households own more than 10,000 square metres of land. Figure 2.5 depicts land ownership by migrant status. Households that have had no migrants in the last 5 years own more agricultural land compared with households that have current migrants. This result is consistent with the informal discussions about the tendency for migrant households to own smaller pieces of agricultural land.

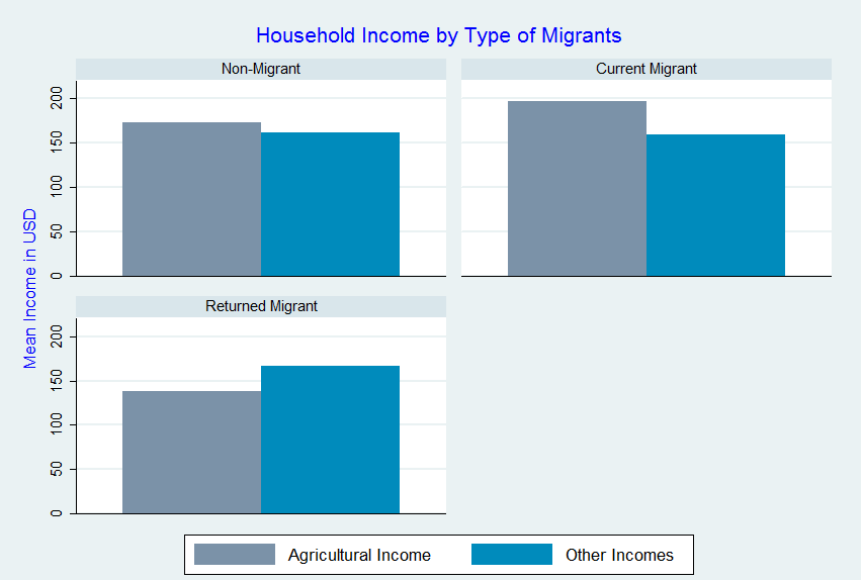
Figure 2.5: Agricultural Land by Migrant Status (%)



Source: Household Survey (2015).

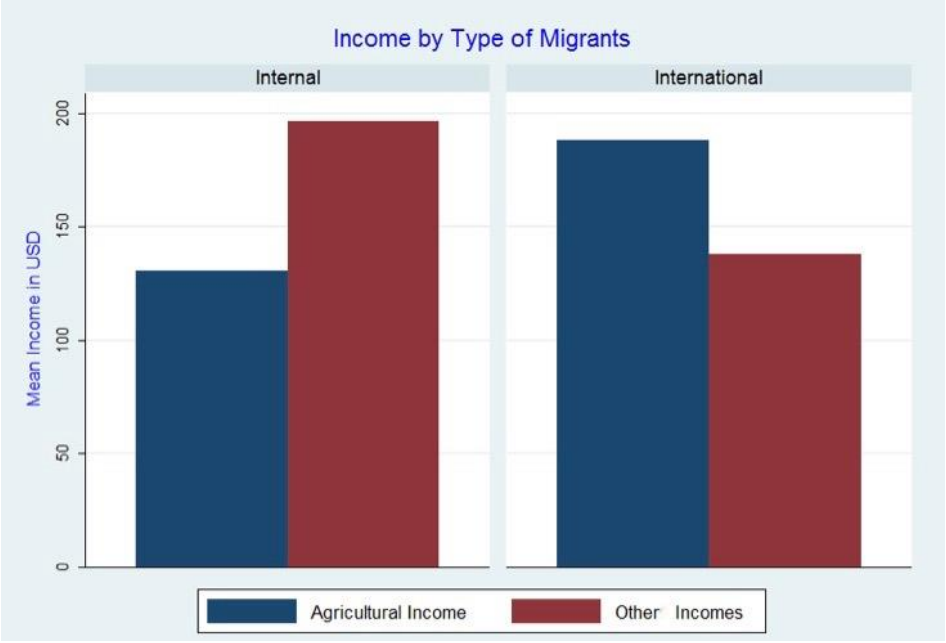
Figures 6 and 7 show that the agricultural incomes of households that have current migrants are larger than those that do not. Taking internal and international migration into consideration, households that have current international migrants have a larger agricultural income, whereas those with internal migrants have a larger income from other sources.

Figure 2.6: Income by Migrant Status ($)



Source: Household Survey (2015).

Figure 2.7: Income by Internal and International Migrants ($)



Source: Household Survey (2015).

There are 1.3 school-age children and 3.0 working-age members in each household on average (Table 2.1). Household members aged 4–11 account for 12%, and those aged 12–17 make up 12%. This suggests that school-age children account for 24% of total household members.

3. Estimation Results and Discussion

This study uses the Ordinary Least Squared method, to provide empirical evidence of the impact of total remittances in logarithmic form.

3.1 The impact of remittances on educational expenditure

The impact of remittances on schooling has been documented in several studies around the globe (Acosta et al., 2007; Acosta, 2011; Adam, Rechard, and Cuecuecha, 2010; Alcaraz, Chiquiar, and Salcedo, 2012; Amuedo-Dorantes and Pozo, 2006, 2010; Borraz, 2005; Antman, 2011; Bansak and Chezum, 2009).

Appendix 1, Table A1.1 provides the estimation result using the Ordinary Least Squared method on the impact of remittances on educational expenditure to fill the gap in the literature regarding Cambodia. Remittances are classified into total remittances, remittances from international migrants, and remittances from internal migrants. Educational expenditure in the form of a logarithm is the total educational expenditure by households in the last year. The amount of expenditure increases in proportion to the number of school-age children. To investigate the different effects of remittances, this study takes advantage of the household-level and individual-level estimates. The coefficients of remittances are expected to be positive and exogenous. This study also includes other important variables, such as household assets; household income; the number of household members, especially the number of school-age children in each household; and the education level of each household member. In theory, educational expenditure increases in tandem with household income, which includes agricultural income and income from other sources.

The estimation results in Appendix 1 indicate that the estimate of total remittances is positive and significant at the 5% and 1% levels at both the household and individual levels, but the magnitude of the estimated total remittances at the household level is larger than at the individual level. Educational expenditure increases by 0.084% and 0.055% with every 1% increase in total remittances (columns (1) and (2)). From the existing findings on the impact of remittances on school attendance by children aged 6–17, using the Cambodia Socio-Economic Survey 2009, it is interesting to note that school attendance increases by 0.5% if households received remittances from migrant workers (Luch, 2012b). Mong (2014), using the Cambodia Socio-Economic Survey 2009, found a positive impact of remittances on educational expenditure, but the magnitude of the estimate was significantly greater than the estimates provided in Appendix 1. In Mong (2014), a 1% increase in remittances leads to a 35% increase in educational expenditure.

In greater detail, educational expenditure regresses the internal remittances to distinguish the impact of such remittances. The estimation provides that internal remittances do not contribute to educational expenditure at the household level but contribute significantly to the increase in educational expenditure of 0.07% at the individual level. In the same set, it is interesting to study in detail the number of school-age children and the number of working-age family members at the individual level. The estimate of the number of school-age children is as expected and positively significant at a 1% level, suggesting that educational expenditure increases according to the number of school-age children. In contrast, the estimate for the number of working-age members is negative and significant at a 1% level in all the models. This implies that educational expenditure decreases by about 0.5% for each additional working-age member. However, it is important to note that the educational level of the household head is one of the most important factors for the educational status of the children (Benhabib and Spiegel, 1994; Barham and Boucher 2010) in relation to educational expenditure (Mong, 2014). In this study, educational expenditure increases according to the educational level of the household head. The estimate

of household members with a bachelor's degree at the household level is significant at a 1% level, indicating that these households tend to value education and spend more on their children's education.

Sources of income are, in theory, amongst the main predictors of educational expenditure. Table A1.1 shows that the effect of remittances on educational expenditure is smaller when income from agriculture and other sources is controlled, as part of these two sources of income is spent on the children's education. In this estimation, the contribution by agricultural income is about 0.04% at the individual level. The estimate of remittances from international migrants is larger than that of internal migrants, but its significant level is only at the 10% level (column (5)). This implies that agricultural income plays an important role in the expenditure on children's education, although internal remittances and international remittances contribute more.

It is important to note that the sources of income in rural households in Cambodia are diverse. Remittances are one of the important sources of income (Luch, 2010), and are used as one of the risk-coping mechanisms, as rural households are prone to shocks (Luch, 2012a), and such remittances could prevent them from falling further into chronic poverty (Tong, 2011). As a result, remittances and other sources of income play a crucial role in stabilising household consumption (Combes and Ebeke, 2011), especially educational expenditure. Other empirical studies of rural Cambodia have found the importance of cash transfers on school attendance and the dropout rate by school-age children, especially girls. School-age children from the households that were chosen for the study are predicted to attend school on a more regular basis than before, and as a result they are less likely to drop out from school, especially the female students (Filmer and Schady, 2008, 2010).

3.2 Impact of remittances on health expenditure

The share of expenditure on health is larger in rural Cambodia. Maltoni (2007), in his descriptive evidence, found that health expenditure accounted for more than 30% of the remittances

households received. In this study, health expenditure is as high as 60% in Prey Veng and Battambang provinces, regardless of the gender of the household head, and about 30% of total remittances are reportedly spent on health treatment. Damme et al. (2004) found that people in rural areas spend about 50% of the per capita income on medical treatment. These descriptive findings are in line with existing studies. Ruger (2003) suggested that health expenditure could be a root cause of poverty, as people in rural Cambodia reduce future consumption and are willing to take on debt to stabilise future consumption. Yagura (2005 and 2011) found that in the absence of a social safety net, rural households facing serious health issues sell their productive assets to cope with health shocks. However, people in rural areas use several financial channels to fund medical treatment (Damme et al., 2004), and remittances have been found empirically to smooth household income variations at times of shock (Luch, 2012a) and increase the total household income (Luch, 2010) in rural Cambodia.[3] Therefore, this study investigates the impact of total remittances, and the remittances from internal and international migrants, on households' expenditure on health.

However, it is worth distinguishing between health expenditure to improve health status and health treatment that increases expenditure as a result of health shocks in a given period of time. Notably, households from a higher economic stratum that have a good education level and access to better sanitation may spend more on health improvement than poorer households. In this study, the data we collected lacked such fine detail, so it is difficult to separate the various effects, especially those on education, energy usage, and water usage.

Table A1.2 shows that the estimate of total remittances at the household and individual levels are positive and significant at a 1% level, indicating the strong impact of total remittances on health expenditure via the welfare of the household in the community of origin of the migrants. Total remittances contribute about 1% and 0.07% to households' expenditure on health at the

[3] In Burkina Faso, remittances have empirically been found to be one of the factors that increase the chance of households living above the poverty line (Yameogo, 2014).

household and individual level. The estimate of internal remittances is greater than that of total remittances and international remittances. A 1% increase in internal remittances leads to an increase in household health expenditure by 0.14% at the household level and 0.06% at the individual level. Compared to the estimate of internal remittances, household expenditure on health increases by 0.04% for every 1% increase in international remittances at the individual level (Table A1.2, columns (5) and (6)).

It is interesting to compare the estimates for technical and vocational training for a post-secondary diploma, higher education diploma, and attending university. The estimate for the higher diploma and technical and vocational post-secondary diploma is negative and significant at the 10% and 5% levels at the household level, suggesting that households whose heads have a diploma tend to spend less on health. This could be because they have enough capacity to receive greater disseminated information and are more hygiene-conscious than those with lower levels of education, for example using sanitary toilets and drinking boiled water. The coefficients for public toilets and open land are positively significant at the individual level, which suggests that these households are more likely to be exposed to disease, and therefore spend more on health treatment. The same logic can be drawn from the significant impact of water use of and access to energy. The estimate for using water from a river or pond is negatively significant, meaning that such households are relatively poorer and less likely to spend on health treatment. Moreover, households that have a generator, solar panels, or report having access to electricity are likely to be richer, and the prediction is strongly in line with this; they are more likely to spend on health improvement.[4]

Health expenditure is expected to rise with an increase in the number of household members. The estimation results provide strong empirical evidence accordingly. In contrast to the number

[4] Please also note that we do not report the estimates of toilet and water usage in Table A1.2 to reduce the length of the chapter. For curious readers, this information is available upon request.

of school-age children and the working-age population, an additional number of members is associated with a 0.28%–0.35% increase in health expenditure at the individual level.

House characteristics are also a good indicator of household wellbeing. The results show that the estimate for a house with a polished or parquet floor is negatively significant at a 1% level, indicating that such households are more likely to be wealthier and healthier, and to spend less on health treatment. Agricultural income has a negative effect on health expenditure. The higher the agricultural income, the smaller the health expenditure. Agricultural income has a positive association with the optimal size of agricultural land and agricultural assets. The estimation results show that health expenditure at the household level increases by 1.1%–1.2% if the households have 1–4 hectares of agricultural land, and this increases by 0.09% with every 1% increase in the value of agricultural assets and livestock.

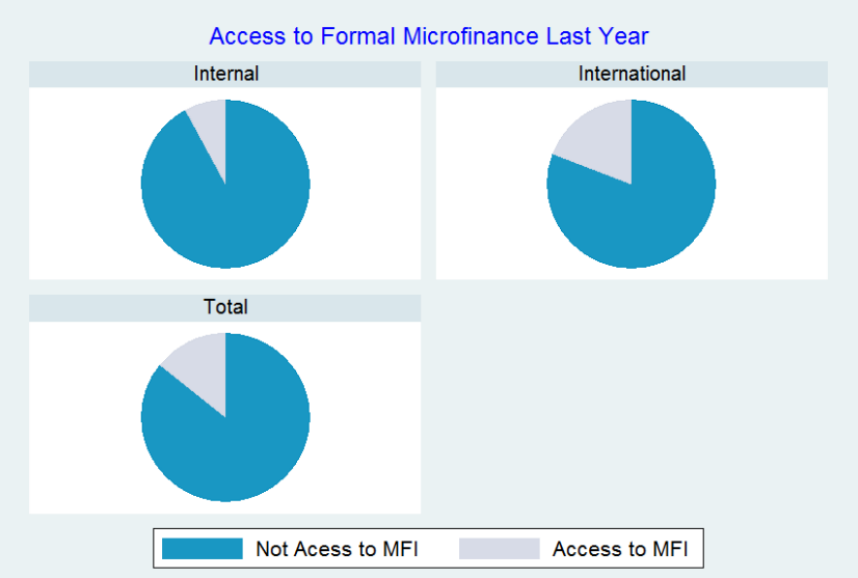
3.3 Impact of remittances on debt payments

Indebtedness is a serious issue in Cambodia. Loans are one of the strategies to mitigate health shocks (Damme et al., 2004) for medical treatment that could result in poverty (Ruger, 2003), and to some extent a natural calamity, such as drought and flood, that leads to a decrease in income and an increase in debt (CARE, 2011). The absence of social insurance and solid networks that protect rural people from borrowing at high interest rates (Ruger, 2003) and selling productive assets (Yagura, 2007) could lead to poverty if households lack sufficient wealth. However, remittances are found to be a coping mechanism to smooth income variations (Luch, 2012a) that could reduce household budget constraints and prevent poverty (Mong, 2014). In Mong (2014), a 1% increase in migrant remittances leads to a 0.27% reduction in borrowing shocks. The estimation results in this study are consistent with the above-mentioned studies, but only remittances from international migrants go to debt payments.

Table A1.3 provides the estimates of internal remittances at the individual level, with international remittances significant at a 5% and 1% level. The estimate of internal remittances

at an individual level is negative, which is against common sense but justifiable, as internal remittances are used mainly for consumption items, and international remittances are more likely used for debt payments. As indicated in Figure 2.8, international migrant households have greater access to formal microcredit. It is reasonable to believe that internal remittances are more likely to be spent on daily consumption, in contrast to international remittances, which are more likely spent on debt payments. The estimation results in columns (5) and (6) provide empirical evidence that a 1% increase in international remittances leads to an increase in debt payments of 0.14% at the household level and 0.09% at the individual level.

Figure 2.8: Access to Microfinance Last Year



Source: Household Survey (2015).

The ability to pay debt is strongly related to the number of working-age members in a household. Compared to educational expenditure, which has a negative relationship with the number of school-age members, the estimates in Appendix 2 provide that the estimate of the number of working-age members is positive and significant at a 5% and 1% level. From this estimation, households that have more working-age members can earn more income, or can diversify their income sources, and sending migrants is one of the options. Another good predictor is the value

of assets. Table A1.3 shows the positive association between the value of furniture and equipment and payment of debt. Households that possess a greater value of these two assets can pay debt at 0.04% and 0.07%. However, the value of transportation, such as a hand tractor, car, or motorbike, has a negative relationship with debt payment, which implies that households that hold such assets may borrow money to buy them. According to interviews with the village chiefs in Prey Veng Province, more and more villagers have secured loans from microcredit institutions to buy transportation. Buying a hand tractor to replace agricultural workers is a trend in the villages studied, as a considerable number of people aged 15–40 have chosen to migrate internally or internationally. This provides a very clear picture of the relationship between migration, remittances, and debt payments.

In contrast to the case of educational expenditure, for which the level of education of the household head plays a crucial role in the level expenditure, debt payments are negatively associated with a higher level of education of the household head. The estimates for the household heads that have earned a secondary technical or vocational training degree, bachelor's degree, or master's degree have negative associations with debt payments.[5]

4. Conclusion

In Cambodia, remittances from migrants have contributed to the development of the migrants' communities of origin via various channels, but there have been only a few empirical studies so far (i.e. Tong, 2011; Luch, 2010, 2012a, 2012b; Mong, 2014; Iwasawa, Inada, and Fukui, 2014). This study could fill the gap in the literature regarding the impact of internal and international

[5] It is important to note that to reduce the length of the chapter, we do not report the estimates of head education in Table A1.3. Curious readers may make a request the full estimation results.

remittances on the welfare of the migrants' households. By taking advantage of the survey data collected from Prey Veng and Battambang provinces and applying a simple econometric method (the Ordinary Least Squared method), breaking the estimation into household and individual levels, we found that total remittances contribute about 0.8% at the household level and 0.5% at individual level to educational expenditure for every 10% increase in total remittances. We also found a similar impact due to internal and international remittances on educational expenditure. It is interesting to note that internal and international remittances contribute to education expenditure by the same magnitude.

The impact of remittances on health expenditure is greater in our estimation. A 10% increase in total remittances leads to increases in health expenditure of 0.94% at the household level and 0.6% at the individual level. Moreover, the estimate of the internal remittances is bigger than that of international remittances, 1.3% and 0.6%, versus 0.39% and 0.44% respectively. This implies that remittances by internal migrants are more likely to be used for health expenditure than remittances by international migrants.

It is also interesting to investigate the impact of remittances on debt payments. Total remittances have no impact on debt payments, but international remittances have contributed significantly to debt payments. A 10% increase in international remittances leads to increases in debt payments of 1.4% at the household level and 0.9% at the individual level. This finding suggests that international remittances play an important role in relaxing credit constraints in rural Cambodia and could reduce the incidence of poverty.

Although remittances have contributed to the welfare gain of the recipient household in the short run by increasing the likelihood of health consumption, educational expenditure, and debt payments, any policy implication drawn from this should be cautious. The estimates of remittances are statistically significant, but the magnitude is smaller than 1, suggesting that remittances are inelastic and have little role to play, perhaps because of the endogeneity and selectivity problems. As found in the study of Roth and Tiberti (2017) in Cambodia, although

remittances ease consumption at household level, they are likely to reduce the household labour supply and increase leisure. Short-term migration policy that aims to increase the number of migrants to solve for short-term labour market issue would bring a long-term systematic change in rural labour supply and demand. The impact of migration and remittances deserves more investigation using panel data and more advanced econometric models.

References

Acosta, P. (2011), 'School Attendance, Child Labor and Remittances from International Migration: The Case of El Salvador', *Journal of Development Studies,* 47(6), pp.913–36.

Acosta, P., P. Fajnzylber, and J. Humbero Lopez (2007), 'The Impact of Remittances on Poverty and Human Capital: Evidence from Latin American Household Surveys.' *World Bank Policy Research Working Paper Series*, No. 4247, Washington, DC: World Bank.

Adam, H., J.R. Rechard, and A. Cuecuecha (2010), 'Remittances, Household Expenditure and Investment in Guatemala.' *World Development,* 38(17), pp.1626–41.

Alcaraz, C., D. Chiquiar, and A. Salcedo (2012), 'Remittances, Schooling, and Child Labor in Mexico', *Journal of Development Economics,* 97(1), pp.156–65.

Amuedo-Dorantes, C. and S. Pozo (2010), 'Accounting for Remittances and Migration on Children's Schooling.' *World Development,* 38(12), pp.1747–59.

Amuedo-Dorantes, C. and S. Pozo (2006), 'Migration, Remittances, and Male and Female Employment Patterns.' *American Economic Review,* 96(2), pp.222–6.

Antman, M.F. (2011), 'The intergenerational effects of paternal migration on schooling and work: What can we learn from children's time allocations?' *Journal of Development Economics,* 96(2), pp.200–8.

Bansak, C. and B. Chezum (2009), 'How Do Remittances Affect Human Capital Formation of School-Aged Boys and Girls?' *American Economic Review: Papers and Proceeding,* 9(2), pp.145–8.

Barham, B. and S. Boucher (1998), 'Migration, Remittances, and Inequality: Estimating the Net Effects of Migration on Income Distribution', *Journal of Development Economics,* 55(2), pp.307–31.

Benhabib, J. and M.M. Spiegel (1994), 'The Role of Human Capital in Economic Development', *Journal of Monetary Economics,* 34(2), pp.143–73.

Borraz, F, (2005), 'Assessing the Impact of Remittances on Schooling: the Mexican Experience', *Global Economy Journal,* 5(1), pp.1–30.

Calero, C., A.S. Bedi, and R. Sparrow (2008), 'Remittances, Liquidity Constraints and Human Capital Investments in Ecuador', *World Development*, 37(6), pp.1143–1154.

CARE. (2011), *The Impacts of the 2011 Cambodia Floods on Household Debt. Survey Report*. Phnom Penh: CARE.

Chan, S. (2009), 'Costs and Benefits of Cross-Country Labor Migration in GMS: Cambodia Country Study'. *Working Paper Series*, No. 47, Phnom Penh: CRDI.

Combes, J.L. and C. Ebeke (2011), 'Remittances and Household Consumption.' *World Development* 39(7), pp.1076–89.

Cox-Edwards, A. and M. Ureta (2003), 'International Migration, Remittances, and Schooling: Evidence from El Salvador', *Journal of Development Economics,* 72(2), pp.429–61.

Cox-Edwards, A and M. Ureta (2003), 'International Migration, Remittances and Schooling: Evidence from El Savador', *Journal of Development Economics,* 72(2), pp.429–61.

Damme, W.V., L. Van Leemput, W. Hardeman, and B. Meessen (2004), 'Out-of-pocket health expenditure and debt in poor households: evidence from Cambodia.' *Tropical Medicine and International Health,* 9(2), pp.273–80.

Escobar, A.L., P. Martin, G.L. Castrol, and K. Donato, (1998), *Factors that Influence Migration: A Case Study from Mexico,* in 'Migration between Mexico and the United States: Binational Study' Volume 1, U.S. Commission on Immigration Reform.

Filmer, D. and N. Schady (2010), 'Does More Cash in Conditional Cash Transfer Programs Always Lead to Larger Impacts on School Attendance?' *Journal of Development Economics*, 96(1), pp.150–7.

Filmer, D. and N. Schady (2008), 'Getting Girls into School: Evidence from a Scholarship Program in Cambodia.' *Economic Development and Cultural Change*, 56(3), pp.581–617.

Finlay, K. and L.M. Magnusson (2009), 'Implementing Weak-Instrument Robust Tests for a General Class of Instrumental-Variables Models', *The Stata Journal,* 9(3), pp.1–26.

Fukui, S., Miwa. K, and Luch. L. (2013), 'The Impact of Migration on Child Health: A Panel Data Analysis of Household Data in Rural Cambodia', *Journal of Rural Problems*, 49 (2), pp.397–402.

Fukui, S. and Luch. L. (2013), 'The Impacts of Migration on Health Expenditure and Child Nutrition: An Econometric Analysis using CSES 2009.' *Natural Resource Economic Review*, 11, pp.131–40.

Fukui, S. and Luch. L. (2017), 'The Impacts of Migration and Remittances on School Attainment of Children in Rural Cambodia.' *Natural Resource Economic Review*, *22*, pp.41—60.

Godfrey, M., et al. (2001), 'A Study of Cambodian Labor Market: Reference to Poverty Reduction, Growth and Adjustment to Crisis', *CDIC Working Paper Series*, No. 8, Phnom Penh: CDIC.

Halliday, T. (2006), 'Migration, and Liquidity Constraints in El Savador', *Economic Development and Cultural Change*, 54(4), pp.893–925.

Harris, J.R. and M.P. Todaro (1970), 'Migration, Unemployment and Development: A Two-Sector Analysis.' *American Economic Review*, 60(1), pp.126–42.

Hing, V., L. Pide, and P. Dalis (2011), 'Labor Migration Situation and Policy Framework in Cambodia', *Annual Development Review*,' Chap. 4 by CDRI, pp.83–102. Phnom Penh: CDRI.

Hing, V. (2011), 'Addressing Irregular Migration from Cambodia.' *Development Review* (Cambodia Development Resource Institute) 15(3), pp.1–24.

Iwasawa, M., M. Inada, and S. Fukui (2014), 'How Migrant Heterogeneity Influences the Effect of Remittances on Educational Expenditure: Empirical Evidence from the Cambodian Socio-Economic Survey*', Discussion Paper,* 898, Kyoto University, Kyoto: KURENAI.

Luch, L. (2010), 'The Impact of the Remittances from the Garment Factory Workers on Income Sources: The Case Study from Rural Cambodia', *Journal of Rural Economics,* Special Issue*,* pp.433–9.

Luch, L. (2012a), 'A Role of Remittances for Smoothing Variations in Household Income in Rural Cambodia', *The Journal of Rural Problems,* 48(2), pp.10–21.

Luch, L. (2012b), *The Economic Impacts of Migration and Remittances on Sources of Income, Variations in Income, and Children's Education: Case Studies of Rural Cambodia*. Kyoto: Kyoto University.

Luch, L. (2014), 'The Current Skills and Talents Gap in today Job Market.' Symposium Presentation. Phnom Penh: Cambodia Development Resource Institute (CDRI), September 11.

Maltoni, B. (2007), 'Migration in Cambodia: Internal vs. External Flows', *IOM Working Paper Series*, Phnom Penh: IOM.

Mansour, W., J. Chaaban, and J. Litchfield (2011), 'The Impact of Migrant Remittances on School Attendance and Educational Attainment: Evidence from Jordan.' *International Migration Review,* 45(4), pp.812–51.

Mong, L. (2014), *Assessing the Economic Impacts of Migration and Remittances on Household Expenditure Patterns, Credit Borrowing, and Agricultural Expenditures: Evidence from Cambodia*, Kobe: Kobe University.

Rodriguez, E.R. (1998), 'International Migration and Income Distribution in the Philippines.' *Economic Development and Cultural Change,* 46(2), pp.329–50.

Roth, V, and L. Tiberti (2017), "Economic effects of migration on the left-behind in Cambodia." The Journal of Development Studies, 53(11), pp.1787–805.

Ruger, J.P. (2003), 'Catastrophic health expenditure.' *Lancet,* 362(9388), pp.996–97.

Stark, O. and D.E. Bloom (1985), 'The Economic of Labor Migration.' *American Economic Review* 75(2), pp.173–8.

Stark, O. and R.E.B. Lucas (1988), 'Migration, Remittances, and the Family.' *Economic Development and Cultural Changes,* 36(3), pp.465–81.

Taylor, J.E., S. Rozelle, and A. DeBrauw (2003), 'Migrantion and Income in Source Communities: A New Economic Migration Perspective from China.' *Economic Development and Cultural Change* 52(1), pp.75–101.

Tong, K. (2011), 'Migration, Remittances and Poverty Reduction: Evidence from Cambodia'. *CDRI Cambodia Development Review, 15(4),* pp.7–12. Phnom Penh: CDRI.

Vargas-Lundius, R., G. Lanly, M. Villareal, and M. Osorion (2008), 'International Migration, Remittances and Rural Development', *IFAD and FAO Working Paper Series,* Rome: IFAD and FAO.

Wendy, K., R. Esteban, J. Quinones, and P. Winters (2011), 'Migration and Food Consumption Patterns in Ghana.' *Food Policy* 36(1), pp.41–53.

World Bank (2014), *World Bank Data 2014*. Washington, DC: World Bank. http://data.worldbank.org/ (accessed 19 January 2014).

Yagura, K. (2005), 'Why Illness Causes More Serious Damage than Crop Failure in Rural Cambodia.' *Development Change,* 36(4), pp.759–83.

Yagura, K. (2011), 'Does Labour Migration Offer Opportunities for Meeting Prospective Spouses? The Case of Migrant Workers in Cambodia.' *Population, Space and Place*, 18(3), pp.277–94.

Yameogo, N.D. (2014), 'Analysis of Household Expenditures and the Impact of Remittances Using a Latent Class Model: The Case of Burkina Faso', *Working Paper Series,* No. 200, Tunis: African Development Bank Group.

Appendix 1

Table A1.1: The Determinants of Educational Expenditure

Dependent variable: Educational expenditure (log)	(1)	(2)	(3)	(4)	(5)	(6)
	Total remittances		**Internal remittances**		**International remittances**	
	HH	**Individual**	**HH**	**Individual**	**HH**	**Individual**
Remittances (log)	0.0840**	0.0550***	0.0718	0.0695***	0.0767*	0.0278
	(2.26)	(3.48)	(1.34)	(3.06)	(1.65)	(1.45)
Value of electronics (log)	–0.0598	–0.0497*	–0.0553	–0.0467	–0.0527	–0.0441
	(–0.97)	(–1.73)	(–0.89)	(–1.62)	(–0.86)	(–1.53)
Value of equipment (log)	0.00313	0.00709	–0.00379	0.00292	0.00104	0.00475
	(0.08)	(0.37)	(–0.10)	(0.15)	(0.03)	(0.25)
Value of furniture (log)	0.0711**	0.109***	0.0752**	0.112***	0.0695**	0.111***
	(2.01)	(6.58)	(2.15)	(6.79)	(1.96)	(6.72)
Value of transports (log)	0.00813	0.0122	–0.00857	0.00216	0.00509	0.00682
	(0.23)	(0.75)	(–0.25)	(0.13)	(0.14)	(0.41)
Value of agricultural asset (log)	0.0425	0.0467***	0.0423	0.0449**	0.0492	0.0503***
	(1.12)	(2.61)	(1.10)	(2.48)	(1.30)	(2.82)
Value of livestock (log)	0.0215	0.0168	0.0282	0.0217	0.0215	0.0194
	(0.71)	(1.15)	(0.93)	(1.50)	(0.70)	(1.32)
Net agricultural income (log)	0.0369	0.0477**	0.0239	0.0338*	0.0403	0.0464**
	(0.98)	(2.57)	(0.64)	(1.84)	(1.06)	(2.44)
Other incomes (log)	0.0159	0.00601	0.0204	0.00859	0.0146	0.00447
	(0.33)	(0.25)	(0.42)	(0.36)	(0.30)	(0.19)
No. of school age	2.263***	2.044***	2.271***	2.042***	2.274***	2.046***
	(12.64)	(23.11)	(12.62)	(23.03)	(12.70)	(23.08)
No. of working age	–0.487***	–0.442***	–0.467***	–0.442***	–0.458***	–0.416***
	(–3.79)	(–8.20)	(–3.60)	(–8.06)	(–3.65)	(–7.80)
No. of dependents (65+)	0.435	–0.164	0.297	–0.186	0.441	–0.0928
	(0.94)	(–1.09)	(0.64)	(–1.23)	(0.95)	(–0.62)
Sex of household head	Yes	Yes	Yes	Yes	Yes	Yes

Marital status	Yes	Yes	Yes	Yes	Yes	Yes
Education of heads/member	Yes	Yes	Yes	Yes	Yes	Yes
Age category	Yes	Yes	Yes	Yes		Yes
Sex of child	Yes	Yes	Yes	Yes	Yes	Yes
Land Category	Yes	Yes	Yes	Yes	Yes	Yes
House characteristics (made from)	Yes	Yes	Yes	Yes	Yes	Yes
Lighting sources	Yes	Yes	Yes	Yes	Yes	Yes
Use of toilet	Yes	Yes	Yes	Yes	Yes	Yes
Main source of drinking water	Yes	Yes	Yes	Yes	Yes	Yes
Water treatment	Yes	Yes	Yes	Yes	Yes	Yes
Districts	Yes	Yes	Yes	Yes	Yes	Yes
Constant	2.215	0.417	2.953	0.921	2.351	0.570
	(0.75)	(0.38)	(1.00)	(0.82)	(0.80)	(0.50)
N	558	2338	558	2338	558	2338
Adj. R^2	0.364	0.414	0.360	0.414	0.361	0.411

HH = household.
Note: t-statistics is in parentheses. * p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimation using Household Survey (2015).

Table A1.2: The Determinants of Health Expenditure

Dependent variable: Health expenditure (log)	(1)	(2)	(3)	(4)	(5)	(6)
	Total remittances		**Internal remittances**		**International remittances**	
	HH	**Individual**	**HH**	**Individual**	**HH**	**Individual**
Remittances (log)	0.0940***	0.0605***	0.137***	0.0613***	0.0388	0.0439**
	(2.91)	(4.57)	(3.87)	(3.55)	(0.88)	(2.57)
Value of electronics (log)	0.0261	-0.0299	0.0265	-0.0256	0.0359	-0.0246
	(0.49)	(–1.33)	(0.49)	(–1.13)	(0.67)	(–1.09)
Value of equipment (log)	–0.0702**	–0.0925***	–0.0769**	–0.0972***	–0.0763**	–0.0941***
	(–1.98)	(–5.54)	(–2.18)	(–5.81)	(–2.15)	(–5.63)
Value of furniture (log)	0.0636*	0.0697***	0.0695**	0.0726***	0.0642*	0.0714***
	(1.89)	(4.67)	(2.08)	(4.87)	(1.91)	(4.78)
Value of transports (log)	0.00372	–0.0251	–0.0139	–0.0363**	–0.00898	–0.0284*
	(0.11)	(–1.61)	(–0.43)	(–2.33)	(–0.27)	(–1.78)
Value of agricultural asset (log)	0.0454	0.0889***	0.0406	0.0879***	0.0522	0.0933***
	(1.37)	(6.25)	(1.22)	(6.11)	(1.57)	(6.61)
Value of livestock (log)	0.0415	0.0613***	0.0494*	0.0667***	0.0453	0.0628***
	(1.40)	(4.54)	(1.67)	(4.97)	(1.50)	(4.59)
Net agricultural income (log)	–0.0733**	–0.0550***	–0.0910***	–0.0688***	–0.0769**	–0.0533***
	(–2.12)	(–3.39)	(–2.63)	(–4.26)	(–2.18)	(–3.19)
Other incomes (log)	–0.0610	–0.0556**	–0.0551	–0.0535*	–0.0596	–0.0580***
	(–1.48)	(–2.48)	(–1.33)	(–2.37)	(–1.42)	(–2.60)
No. of school age	–0.286*	–0.109	–0.285*	–0.111	–0.271*	–0.106
	(–1.79)	(–1.58)	(–1.80)	(–1.60)	(–1.68)	(–1.53)
No. of working age	–0.215**	–0.0913**	–0.211*	–0.0849	–0.173	–0.0636
	(–1.96)	(–2.03)	(–1.94)	(–1.90)	(–1.61)	(–1.46)
No. of dependency (65+)	0.534	0.282**	0.368	0.278*	0.463	0.356***
	(1.20)	(2.08)	(0.85)	(2.03)	(1.01)	(2.64)
Sex of household head	Yes	Yes	Yes	Yes	Yes	Yes
Marital status	Yes	Yes	Yes	Yes	Yes	Yes
Education of member	Yes	Yes	Yes	Yes	Yes	Yes
Age category	Yes	Yes	Yes	Yes	Yes	Yes
Land category	Yes	Yes	Yes	Yes	Yes	Yes
House characteristics (made from)	Yes	Yes	Yes	Yes	Yes	Yes
Lighting sources	Yes	Yes	Yes	Yes	Yes	Yes
Use of toilet	Yes	Yes	Yes	Yes	Yes	Yes

Main source of drinking water	Yes	Yes	Yes	Yes	Yes	Yes
Water treatment	Yes	Yes	Yes	Yes	Yes	Yes
Districts	Yes	Yes	Yes	Yes	Yes	Yes
Constant	–1.508	–0.108	–0.730	0.429	–0.950	–0.0648
	(–0.50)	(–0.11)	(–0.24)	(0.44)	(–0.31)	(–0.07)
N	559	2348	559	2348	559	2348
Adj. R^2	0.174	0.203	0.176	0.200	0.162	0.198

Note: t-statistics is in parentheses. * p<0.10, ** p<0.05, *** p<0.01. HH = household.

Source: Authors' estimation using Household Survey (2015).

Table A1.3: The Determinants of Debt Payments

Dependent variable: Debt payment (log)	(1)	(2)	(3)	(4)	(5)	(6)
	Total Remittances		**Internal Remittances**		**International Remittances**	
	HH	**Individual**	**HH**	**Individual**	**HH**	**Individual**
Remittances (log)	0.0371	0.0224	–0.0966	–0.0618***	0.140**	0.0931***
	(0.83)	(1.24)	(–1.61)	(–2.64)	(2.48)	(3.92)
Value of Electronics (log)	–0.0698	–0.0277	–0.0575	–0.0203	–0.0711	–0.0312
	(–1.04)	(–0.84)	(–0.86)	(–0.61)	(–1.07)	(–0.95)
Value of Equipment (log)	0.0922*	0.0728***	0.0869**	0.0707***	0.0998**	0.0782***
	(2.23)	(3.53)	(2.10)	(3.42)	(2.47)	(3.83)
Value of Furniture (log)	0.0591	0.0452**	0.0578	0.0476**	0.0528	0.0421**
	(1.37)	(2.31)	(1.35)	(2.45)	(1.23)	(2.17)
Value of Transports (log)	–0.0646	–0.0995***	–0.0745*	–0.104***	–0.0450	–0.0864***
	(–1.46)	(–4.77)	(–1.69)	(–5.00)	(–1.00)	(–4.11)
Value of agricultural asset (log)	–0.0173	0.0132	–0.00711	0.0193	–0.0129	0.0160
	(–0.38)	(0.64)	(–0.16)	(0.94)	(–0.29)	(0.79)
Value of livestock (log)	0.0265	0.0150	0.0286	0.0171	0.0178	0.00871
	(0.74)	(0.90)	(0.79)	(1.03)	(0.49)	(0.52)
Net agricultural income (log)	–0.0342	–0.0125	–0.0327	–0.0100	–0.0153	0.00555
	(–0.77)	(–0.58)	(–0.75)	(–0.47)	(–0.34)	(0.25)
Other incomes (log)	0.100*	0.0776***	0.0997*	0.0743***	0.0936*	0.0741***
	(1.88)	(2.73)	(1.86)	(2.60)	(1.80)	(2.65)
No. of school age	0.0367	0.149	0.0551	0.153*	0.0338	0.153*
	(0.19)	(1.60)	(0.28)	(1.64)	(0.17)	(1.64)
No. of working age	0.239	0.426***	0.292**	0.464***	0.232	0.428***
	(1.64)	(6.76)	(1.98)	(7.33)	(1.62)	(6.84)
No. of dependents (65+)	–0.342	–0.376*	–0.374	–0.273	–0.161	–0.345*
	(–0.60)	(–1.90)	(–0.67)	(–1.39)	(–0.28)	(–1.79)
Sex of household head	Yes	Yes	Yes	Yes	Yes	Yes
Marital status	Yes	Yes	Yes	Yes	Yes	Yes
Education of member	Yes	Yes	Yes	Yes	Yes	Yes

Age category	Yes	Yes	Yes	Yes	Yes	Yes
Land category	Yes	Yes	Yes	Yes	Yes	Yes
House characteristics (made from)	Yes	Yes	Yes	Yes	Yes	Yes
Lighting sources	Yes	Yes	Yes	Yes	Yes	Yes
Use of toilet	Yes	Yes	Yes	Yes	Yes	Yes
Main source of drinking water	Yes	Yes	Yes	Yes	Yes	Yes
Water treatment	Yes	Yes	Yes	Yes	Yes	Yes
Districts	Yes	Yes	Yes	Yes	Yes	Yes
Constant	12.70**	2.280	13.13**	2.334	11.84**	1.616
	(2.37)	(0.97)	(2.43)	(0.94)	(2.30)	(0.71)
N	559	2348	559	2348	559	2348
Adj. R^2	0.075	0.124	0.078	0.125	0.086	0.129

Note: t-statistics is in parentheses. * p<0.10, ** p<0.05, *** p<0.01. HH means household.
Source: Authors' estimation using Household Survey (2015).

Appendix 2: Sample Selection

Data for this study were collected from the third week of October 2015 to the second week of November 2015 in Prey Veng and Battambang Provinces.

1. Sampling Process

There are no available statistics on the number of migrant or non-migrant households. At 95% of the confidence interval, the ideal sample number is about 96. However, to achieve greater accuracy, we set the sample number of migrant and non-migrant households at 167 for each category. The sample size was adjusted to 172 to accommodate the possibility of a 10% non-response rate (Table A2.1).

Table A2.1: Sample Distribution by the Category of Respondents

Respondents	No. of Minimum Sample Size	No. of Adjusted Sample Size
Migrant households	166	172
Non-migrant households	166	288
Returned migrants (Individual and households)	332 (166 x 2)	440 (220 x 2)

Note: The questionnaire for returned migrants is divided into two parts—individual returned migrants and households with returned migrants. Returned migrants were interviewed individually and on behalf of their households. Therefore, this study can use a single data set consisting of migrant households, non-migrant households, and households with migrant workers plus returned migrants.
Source: The authors.

The number of samples is distributed in proportion between the non-migrant and migrant households in Prey Veng and Battambang Provinces. The sampling process began by collecting the total population in each selected province, the number of migrant households, and migrants who returned in between 2014 and 2015. Non-migrant households are those that have never had any member of the household migrate or have had no household members migrate in the last 5 years. Migrant households are those that currently have members working outside the community of origin. However, households that have both returned migrants and current migrants are excluded from the sample to avoid upward bias of the impact of migration and

remittances. Returned migrants are family members who have returned to their community of origin in the last 5 years and were living in the community of origin during the time of the survey.

The number of samples in each selected province was divided based on the population of each selected province. Battambang Province has a larger population than Prey Veng Province, so the number of samples selected in Battambang Province was larger than in Prey Veng Province. Because the number of international migrants in Battambang Province was larger than that of Prey Veng Province, the number of international migrant households selected was much higher in Battambang Province. The proportion of domestic migrant households selected in Prey Veng Province was higher than that in Battambang Province.

Quality control was handled by each supervisor at the respective study site before submission to the survey's team leaders for a final check. After quality control, the data was entered used the EPIC data plate form and was imported into Stata for the final analysis.

2. Location and Sample Size

Prey Veng Province. Consultation with the provincial municipality provided justification for the selection of Rumlech commune in Sithor Kondal district and Prey Pnov commune in Pea Reang district (Table 2.2).

Table A2.2 provides the characteristics of the population used to draw the number of samples. Table A2.3 shows the sample size in each selected commune based on the proportion of migrants to the total population. Table A2.4 describes the number of returned migrants selected for the sample frame. A total of 110 individual returned migrants were selected and invited to answer the household questionnaire. The returned migrants answered both the individual returned migrant questionnaire and the household questionnaire.

Table A2.2: Distribution of Total Population by Selected Communes

Commune	Total Population	Internal Migrants	International Migrants	Total Migrants	Total Non-Migrants
Rum Lech	9,543	2,000	1,600	**3,600**	**5,943**
Prey Pnov	21,849	1,203	4,265	**5,468**	**16,381**
Total	**31,392**	**3,203**	**5,865**	**9,068**	**22,324**

Source: Commune database (2015).

Table A2.3: The Selected Samples

Commune	Migrant Households			Non-Migrant Households	Total Households
	Internal	International	Total		
Rum Lech	13	11	**24**	40	**64**
Prey Pnov	8	28	**36**	110	**146**
Total	**21**	**39**	**60**	**150**	**210**

Source: The author's calculation from the Commune Database (2015).

Table A2.4: Returned Migrants

Commune	Internal	International	Total
Rom Lech	18	15	**33**
Prey Pnov	17	60	**77**
Total	**35**	**75**	**110**

Source: The author's calculation from the Commune database (2015).

Battambang Province. Tmor Korl district and Aek Phnum district were selected because Tmor Korl district has a high proportion of migrants, with an equal distribution between domestic and international migrants, and Aek Phnum district is located by Tonle Sap Lake, where agricultural activities are dominant.

Thmor Korl district stands second in terms of total migrants (16,244 migrant workers in 2014), of which domestic migrants account for 42.3% and the remainder are international migrant workers. From these figures, the two communes in Tmor Korl district that had the highest proportion of migrants were selected with an equal distribution of domestic and international migrants—Chrouy Sdau commune and Anlong Run commune.

Aek Phnum district is located by the Tonle Sap Lake. Migrants make up 8.5% of the population, distributed equally between domestic migrants (50.7%), and international migrants (49.3%). Preak Norint commune was chosen, because it has the highest proportion of migrants in this district.

Tables A2.5 and A2.6 present the total population size and the selected sample size from each commune, based on the proportion of the number of domestic and international migrants in each commune to the total population.

Table A2.5: Distribution of Total Population by the Selected Communes

Commune	Total Population	Internal Migrants	International Migrants	Total Migrants	Total Non-Migrant Households
Chrouy Sdau	11,129	723	2,419	**3,142**	**7,987**
Anlong Run	4,727	1,740	1,152	**2,892**	**1,835**
Preak Norint	13,000	1,425	1,476	**2,901**	**10,099**
Total	**28,856**	**3,889**	**5,047**	**8,936**	**19,920**

Source: Commune database (2015).

Table A2.6: The Distribution of the Samples in each Commune

Commune	Migrant Households			Non-Migrant Households	Total Households
	Internal	International	Total		
Chhrouy Sdao	9	30	**39**	55	**94**
Ang Lung Run	22	14	**36**	13	**49**
Prey Norrin	18	19	**37**	70	**107**
Total	**49**	**63**	**112**	**138**	**250**

Source: The author's calculation from the Commune database (2015).

Similarly, Tables A2.7 and A2.8 show the number of domestic and international returned migrants in each selected commune. It is worth noting that the sample size selected is not based on a random sampling process or a stratified random sampling process of the non-migrant households and migrant households. Because there were few returned migrants, to meet the project's objective of investigating returned migrants, any returned individual migrant was invited to interview at the individual and household levels.[6]

Table A2.7: The Distribution of Returned Migrants

Commune	Internal	International	Total
Chhrouy Sdao	10	33	**43**
Ang Lung Run	11	7	**18**
Prey Norrin	24	25	**49**
Total	**45**	**65**	**110**

Source: The author's calculation from the Commune database (2015).

[6] The questionnaire has two parts: The first part is the household questionnaire and the second part is the individual questionnaire for returned migrants only.

Total Sample Size in Prey Veng and Battambang Provinces. In summary, to avoid oversampling and to reduce attrition bias, the sampling process was based on a purposely stratified random sampling in proportion to the total population. The same method was not applied to the returned migrants due to the insufficient number of returned migrants. This method of selection could yield potential bias, but special treatment was given when analysing this factor. Table A2.8 summarises the sample size of migrant households, non-migrant households, returned migrants, and returned migrant households in Battambang and Prey Veng Provinces.

Table A2.8: Summary of the Number of Samples

Province	Prey Veng	Battambang	Total
Migrant households	60	112	**172**
Non-migrant households	150	138	**288**
Returned migrant households	110	110	**220**
Returned migrants	110	110	**220**

Source: The author's calculation from the Commune database (2015).

3. Limitations

This study adopted the purposefully stratified random sampling process, through which the samples were categorised into migrant households and non-migrant households within each selected province in selected communes with diverse characteristics. However, this selection can potentially induce attrition bias, as the number of samples within a selected commune is relatively small, and the selected households could be concentrated in one area.

It proved difficult to find returned migrants living in the survey sites between 2010 and 2015.[7] As one of the main objectives of the project is to investigate returned migrants, a sufficient number of returned migrants must be selected. To have a good representation, this study interviewed all returned migrants in the study sites. A significant drawback was that most of the returned migrants were selected and this created oversampling.

[7] It is important to note that returned migrants are not in the study frame, but the sample is collected for other purposes.

Chapter 3

Returned Migrant Workers in Cambodia: Motivations for Moving and Economic Reintegration

Naomi Hatsukano

Introduction

In recent years, migrant workers in member countries of the Association of Southeast Asian Nations (ASEAN) have often been economic migrants who intend to return home after a certain length of time. The migration pattern in the Mekong Subregion is similar to that of other ASEAN countries. Most migrants from Cambodia, Lao PDR, and Myanmar flowing into Thailand intend to return home after a certain period, unless they are refugees. There is a huge number of Cambodian workers in Thailand, and some have stayed in the country for more than 20 years. However, more people migrate temporarily, either alone or with their partner, to earn money, leaving their children at home, and then return home after working for some years. Some people repeat this process several times until they get older, and some stop when they become reintegrated to the community after returning.

Returned migrants offer many potential benefits for development. These include direct and indirect benefits from remittances, intellectual gains in terms of skills development, and newly introduced ideas from the migrants' experience. They revitalise the sending country's economy and society, reduce poverty, and improve the standard of living (De Haas, 2010; SMERU, 2015; Wahba, 2015). Return migration must be understood in the context of the final phase of the migration cycle or flow. To enjoy these benefits, it should end with the successful reintegration of the returning migrants into the community (Battistella, 2004; IOM, 2015).

Reintegration is an essential part of the return migration process because it generally contributes to the sustainability of the benefits of migration after the migrant's return. Reintegration has various related dimensions, including social reintegration, economic

reintegration, and psychological integration (IOM, 2015).[1] This paper focuses more on the economic dimension of the reintegration of unskilled or lower-skilled migrant workers from Cambodia, because most Cambodians migrate for economic purposes.

Indonesia and the Philippines, which are larger-scale migrant exporting countries among the ASEAN countries, have been the subjects of numerous studies on returning migrants. However, economic reintegration in the context of skills gained in the host countries is discussed more often regarding skilled or semi-skilled workers, such as nurses from the Philippines. For unskilled workers returning to Indonesia, the social adjustment aspects are emphasised, but economic reintegration, including the skills development of unskilled or low-skilled workers, has received less attention (SMERU, 2015).

Although returned migrant workers are not a new phenomenon in Cambodia, the topic has not been discussed much, because emigration raises more urgent human rights problems. More attention has been paid to the current migrants and their integration into the destination country (Chaisuparakul, 2015). Discussion of immigration policy for migrant workers in Thailand focuses on how to control the inflow, even though the memorandums of understanding with neighbouring countries also cover the way in which migrants return. In Cambodia's labour migration policy, return migration is mentioned as part of the productive migration cycle. However, it aims to collect accurate data first,[2] and this has not yet been achieved.

This paper aims to examine the situation of Cambodia's returning migrant workers; how and why they return; and their economic reintegration, focusing on job opportunities after returning. The main discussion points are (i) the motivation or reasons for returning, and how they choose their work location; (ii) how they apply their migration experience upon returning; and (iii) the role of public institutions. The analysis draws on limited data from a survey questionnaire, general statistical data, and in-depth interviewee information.

The first section provides an overview of migration from Cambodia and the employment opportunities in Cambodia. The second section is based on the returning migrant workers'

[1] In 2015, the SMERU Research Institute proposed a comprehensive framework on how to support migrants' reintegration into the community after their return.

[2] Goal 13 of the Labour Migration Policy and Action Plan for Cambodia 2015–2018 is as follows: 'The productive return and reintegration of men and women migrant workers will increase through data collection and policy formulation, and strengthened service provision including skills recognition, job matching, investment programmes, insurance schemes and support services for social and financial reintegration for both regular and irregular migrant workers.'

survey conducted in October–December 2015. It examines workers' motivation for migrating and returning, and their economic opportunities in Cambodia from the view point of the economic reintegration. The third section is a case study of workers in the city of Poi Pet, based on interviews in December 2015.

1. Overview of Migration from Cambodia

1.1 Flow of migration from Cambodia

Cambodia has sent migrant workers to other countries since the mid- to late 1990s because of the lower wages and lack of job opportunities within the country. The main destinations are Thailand, Malaysia, and the Republic of Korea (henceforth Korea).[3] In 2015, almost 0.8 million Cambodians were working in Thailand, equivalent to almost 10% of Cambodia's total labour force. In recent years, Cambodia has also started to send workers to Singapore and trainees to Japan, where the workers can earn – and are required to have – higher skill levels.[4]

In 2014, the main labour-sending provinces were Battambang, Banteay Meanchey, Siem Reap, Prey Veng, and Takeo (Table 3.1). Battambang, Banteay Meanchey, and Siem Reap provinces are located closer to Thailand, which is the biggest destination for Cambodian workers. The other provinces, such as Prey Veng and Takeo, have larger populations and less agricultural land, and are closer to Viet Nam. However, people rarely migrate to work in Viet Nam,[5] as the wage level is not high enough, and Viet Nam has a huge native population and unemployment is lower than in Thailand, which is troubled by a chronic labour shortage.

[3] Most migrants to Malaysia worked as housemaids and factory workers until the government banned sending housemaids to Malaysia in 2010. In Korea, small and medium-sized enterprises, agriculture, and construction are the main sectors for Cambodian workers. Korea accepts Cambodian workers through the government agency (Chan, 2009; Hing et al., 2011; Hatsukano and Chalermpol, 2015).

[4] "Migrant workers send home $1 billion a year," The Phnom Penh Post, 18 February 2016.

[5] It is said that some Cambodian people in these areas go to Ho Chi Minh City as beggars (The Phnom Penh Post, 23 December 2009).

Table 3.1: Main Source of Migrants from Cambodia by Province, 2014

Province	Number of persons
Banteay Meanchey	127,346
Battambang	84,393
Siem Reap	53,225
Prey Veng	49,648
Takeo	31,418
Other	193,907
Total	**539,937**

Notes: The numbers include internal and international migrants.
Source: Government of Cambodia.

Most Cambodian workers going abroad are unskilled or lower-skilled workers from rural areas. In Thailand, most Cambodian migrants work as construction labourers, food processing factory workers, and agriculture labourers at close to the minimum wage (Hatsukano and Chalermpol, 2015). Experienced workers have started to appear. For example, there are cases of migrants who worked as housemaids in Malaysia moving to work in Singapore, utilising their previous experience,[6] although such cases are still quite limited.

1.2 Employment opportunities in Cambodia

In Cambodia, 45% of the labour force work in the agricultural sector and 24% in the manufacturing and mining sectors (ILO and ADB, 2015). The garment industry is the largest manufacturing sector, providing about 700,000 jobs, but the country's growing younger population exceeds the number of available jobs,[7] and these are concentrated in the urban areas. According to the Inter-Censal Population Survey 2013, there are 754,000 paid employees in urban areas and 571,000 paid employees in rural areas (NIS, 2013).

The main Cambodian cities in which more manufacturing jobs are being created are (i) Phnom Penh, the capital city, which has the most factories; (ii) border cities, such as Bavet, Poi Pet, and Koh Kong, where the special economic zones (SEZs) are located; and (iii) Sihanoukville, the international port city (Hatsukano, Tsubota, and Kuroiwa, 2011). Moreover, Siem Reap is a

[6] This information is from an interview in December 2015 with an agency in Phnom Penh that sends housekeepers and company cleaning staff to Malaysia and Singapore. Experience includes housekeeping skills and proficiency in English, Chinese, and other languages.
[7] However, the unemployment rate in Cambodia is less than 1% because people who work for extremely low wages are counted as employed.

world-famous tourist site that offers employment opportunities in the service sector. Furthermore, Thailand is an important option for Cambodian workers. Therefore, their main options for work are in (i) the original village working as farmers or small business owners; (ii) Phnom Penh; (iii) the border SEZs, such as in Bavet and Poi Pet; (iv) Siem Reap in the tourism sector; (v) other rural areas in Cambodia;[8] and (vi) Thailand.

1.3 Data on migrant workers returning to Cambodia

Statistical data on returning migrants in Cambodia are not available. Although the migrant worker policy states the importance of collecting accurate data, and the Ministry of Labour and Vocational Training of Cambodia is trying to structure the system with outside donors' support, many workers migrate to Thailand unofficially, or enter officially but return without reporting to the official agents, making it difficult for the government to gather accurate data.

The number of deportees via the Poi Pet checkpoint is one available statistic to give an idea of the number of migrants returning from Thailand, but this is only a small part of the overall picture. Normally, several thousand workers per month are deported from Thailand because their documents are invalid. In 2012, 102,022 workers were deported; in 2013, 61,161 were deported; and in 2014, 281,218 were deported.[9] In June 2014, returnees and deportations spiked because of a rumour of a mass crackdown. Most migrant workers rushed to claim the authority to return home, and thus, the number of deportees was considerably higher than usual.

Besides deportees, some people return in an official way with a passport, some return through brokers, and some return by themselves without documents. This chapter examines the situation of Cambodian migrant workers returning to their original community from Thailand based on a questionnaire survey conducted in October–December 2015.

[8] There are more rural–rural migrants within Cambodia than rural–urban migrants. They often seek opportunities in the agricultural sector because they cannot obtain enough land in their home villages (NIS, 2008, 2013; Maltoni, 2007).

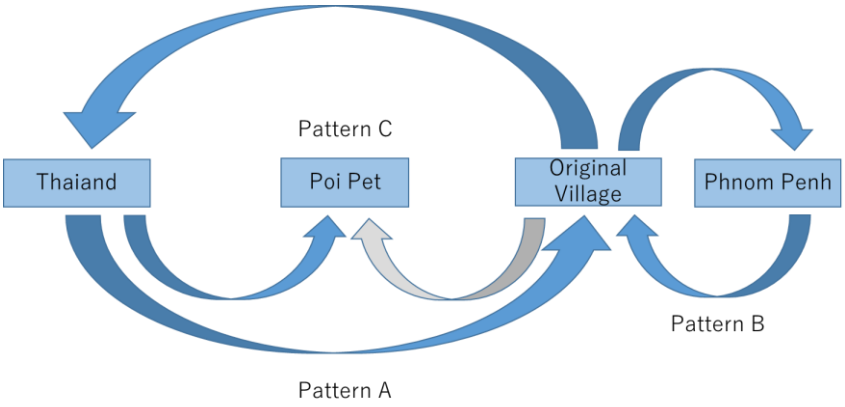
[9] These numbers include 206 victims of human trafficking in 2013, and 114 in 2014.

Survey on Returned Migrants in Prey Veng and Battambang Provinces

2.1 Overview of the survey

Target villages were selected in Battambang and Prey Veng provinces, which send more workers to Thailand than other provinces in Cambodia. We collected answers from 129 migrants returning from Thailand, 139 migrants returning from other countries, and 69 internal migrants.[10] The following analysis focuses on the 129 migrants returning from Thailand, because they represent the most typical case in Cambodia (pattern A). For comparison, internal migration to Phnom Penh was studied in the same area (pattern B); and, as one of the emerging workplace options, in-depth interviews with workers and employers in Poi Pet (pattern C) were undertaken to help understand the overall picture of the employment opportunities available to Cambodian workers (Figure 3.1).

Figure 3.1: Pattern of Migration



Pattern A: Original Village → Thailand → Original Village

Pattern B: Original Village → Phnom Penh → Original Village

Pattern C: Original Village → Thailand → Poi Pet

Source: Author.

[10] The survey was conducted together with the household survey to study the impact of the remittances for Chapter 2 by Luch and Kuoch. The sampling method is explained to detail in Chapter 2.

2.2 Reasons for migration

Most economic migrants decide to migrate internally or externally to seek a higher income. Debt often motivates them to find better income opportunities. If they cannot find job opportunities locally or near their hometown, the next option is to migrate (Table 3.2).

Table 3.2: Reasons for Migration (number of persons)

Reason	Migration within Cambodia	Migration to Thailand	Total
Search for better jobs and earn higher income	68	97	**165**
No employment opportunity locally	16	73	**89**
Lack of information regarding vacancies in Cambodia	2	4	**6**
In debt	14	29	**43**
Loss of land	3	6	**9**
Conflict within the household	0	3	**3**
Loss of livestock	2	2	**4**
Household's collective decision	37	38	**75**
By broker	1	1	**2**
Rumour in the village	0	3	**3**
Forced to go	0	1	**1**
Other	7	2	**9**

Note: Respondents can give multiple answers.
Source: Returned Migrants' Survey in Cambodia, 2015.

2.2 Reasons for returning

There are roughly four types of returning migrant worker in the ASEAN countries: (i) those who voluntarily return when they achieve their money-earning goal; (ii) those who change their motivation because of intolerable working conditions, family issues, and other reasons; (iii) those whose contract ends; and (iv) those who experience a crisis, such as repatriation, or unforeseeable circumstances, such as a war (SMERU, 2015).

The most frequent reason Cambodian workers return home is a change in motivation, such as feeling homesick, family illness, and difficult working conditions.[11] Almost half of the returning migrants said that feeling homesick was the main reason to return home. Family illness is the second most frequently stated reason. Those achieving their original purpose, such as earning enough money, or a pre-departure contract, were in the minority. Seventeen migrants returned

[11] This can include human trafficking. Although such cases should be categorised as an external crisis rather than as a matter of personal motivation.

due to accidental events, such as deportation by the Thai authorities, or being laid off by their employer (Table 3.3).

Table 3.3: Reasons for Returning to Cambodia

Types	Reasons	Number of Persons
Type 1	Earned enough money to start up a business in Cambodia	8
Type 2	Home sickness	59
	Family members' illness	28
	Illness	22
	Want to find a job in Cambodia	21
	Pregnant, or need to take care of a baby	8
	Bad working conditions	12
Type 3	Pre-departure agreed contract	6
Type 4	Laid off	8
	Deported by the Government of Thailand	9

Note: Respondents could give up to three reasons.
Source: Returned Migrants' Survey in Cambodia, 2015.

2.3 Pathway for migration

2.3.1 Institutional pathway

Most Cambodian migrant workers in Thailand do not have a passport. Among those that were unskilled, about 115,000 workers migrated with a passport, according to the Government of Thailand's statistics. This means only 12%–13% of Cambodian workers in Thailand hold a passport, and the rest receive a pink card providing temporary registration after entering Thailand illegally. In the survey, 30% of the returning migrants stated that they held a passport for purposes of migration (Table 3.4).

Table 3.4: Documents Held by Returning Migrants When They Entered Thailand

Document	Number
Passport	39
Border pass	29
Other	62
Total	**129**

Note: 'Other' includes migrants who travelled without documents.
Source: Return Migrants' Survey in Cambodia, 2015.

2.3.2 Geographical pathway

The main and official gateway used by Cambodian workers migrating to Thailand is the Poi Pet checkpoint in Banteay Meanchey Province. People who are officially deported by the Government of Thailand also use this checkpoint. O'smach, Ban Leam, and Koh Kong are also international checkpoints connecting Thailand and Cambodia. Some migrants also use the Doung checkpoint, which is another international checkpoint in Battambang Province, about 100 kilometres from the Poi Pet checkpoint. This gateway offers shorter access to the eastern Thai provinces, such as Rayong and Chon Buri, where most Cambodian migrants work. Other gateways, including smaller border checkpoints for local people's daily use, are used by border pass holders who are residents of the border provinces and work as labourers in the plantations in neighbouring provinces, or those who migrate to Thailand via brokers or family networks.

In the survey, 57% of people entered Thailand via Poi Pet, whereas 31% used the Ban Leam checkpoint. When returning, 50% used Poi Pet and 42% the Ban Leam checkpoint (Table 3.5).

Table 3.5: Border Checkpoints Used by Migrants

Checkpoint	Exit		Return	
	Number	%	Number	%
Poi Pet	74	57	64	50
O'smach	1	1	0	0
Ban Leam	40	31	54	42
Koh Kong	3	2	3	2
Phnom Penh	0	0	3	2
Other	9	7	3	2
No answer	2	2	2	2
Total	**129**	**100**	**129**	**100**

Source: Returned Migrants' Survey in Cambodia, 2015.

2.4 Cost of returning home

Generally, the cost of returning home is less than the cost of entering Thailand.[12] If entering officially, migrant workers only have to pay for transportation. If entering unofficially, they may have to pay a fine, or they pay the brokers or authorities to avoid being arrested. Among the 129 migrants returning from Thailand, 9 admitted paying B300–B3,000 to the Thai authorities, and 2 reported that they paid $2.80–$5.60 to the Cambodian authorities, in addition to the transport fee.

2.5 Migrants' occupations before migrating

Most migrants were originally farmers. However, some had experience of employment or running their own business before migrating. About 20% of the internal migrants had paid jobs before migrating, whereas 37% of international migrants had job experience before migrating. Among the former internal migrants, only 1 in 16 had worked in a factory before migrating. By contrast, among the 51 migrant workers returning from foreign countries, 13 had worked in a garment factory and 3 had worked in manufacturing.

Jobs in Thailand are different from those in Cambodia, and many migrant workers must start new types of job after migrating. Among 10 migrant workers who worked in the construction sector in Thailand, 3 were from the agriculture sector, 2 from the construction sector, and 2 had been drivers in Cambodia. Of six workers in the fishery sector, none had fisheries experience before migrating (Table 3.6).

[12] This information was from interviews to village chief and returned migrant workers in Battambang and Prey Veng provinces (December 2015).

Table 3.6: Occupation before Migration and in Thailand (number of persons)

Jobs before Migration	Jobs in Thailand
Construction (2) Agriculture (3) Driver (2) Seller (2) Other (1)	Construction (10)
Agriculture (2) Factory (1) Seller (2) Other (1)	Fishery (6)
Garment (1) Seller (2) Agriculture (1)	Rubber Plantation/Rubber Factory (4)
Seller (1) Agriculture (1) Garment (1)	Others (3)

Note: 'Others' includes unspecified paid jobs.
Source: Returned Migrants' Survey in Cambodia, 2015.

2.6 Occupations in Thailand and after returning

Economic reintegration forms the basis for self-sufficiency, which is one of the crucial aspects of returning migrants' integration (IOM, 2015). Returning migrants can reintegrate economically by participating in economic activities, such as working at a factory or starting a small business, or returning to agricultural work. Through these economic activities, the returning migrants can contribute to their original country's development by using the skills gained during migration as human capital (SMERU, 2015).

Only 50 of the 129 returning migrants stated clearly their present occupation. The others may support their families' agricultural work, but they may also have reported having no occupation because their earnings are quite low or because they did not take up a paying job after returning.

When comparing the occupations of the Cambodian migrants in Thailand and after returning to Cambodia, only construction workers tend to continue in the same type of job. This is probably because of the increasing demand for construction workers in Cambodia, including in the provincial areas. Other people choose to work in different sectors, and it was difficult to find people using the skills they gained from their migration experience in Thailand. Overall, as with

the comparison between the occupation before migrating and the occupation in Thailand, there is no continuity.

Among returned migrants, grocery store owners and factory workers succeeded in reintegrating economically into their original community. Grocery store owners include those who achieved their goal to earn a certain amount of money from migration and started new shops of their own. Factory workers returning to Cambodia look for job opportunities close to their hometown. Recently, garment factories have begun to appear in the suburbs of Phnom Penh and in provincial areas. Four garment and shoe factories were established in Prey Veng Province during 2010–2014. However, most provinces have few factories, but people nevertheless choose to work close to their home town after they return from Thailand.

Twelve migrants who gained construction experience in Thailand continue to work in the same sector in Cambodia. Details of their wages in Thailand were not available to make a clear comparison, but in Cambodia they earn $50–$280 per month – less than the wages Cambodian workers earn in Thailand.

Table 3.7: Occupations of Migrant Workers in Thailand and after Returning
(number of persons)

Jobs in Thailand	Jobs after Returning
Construction (12) Factory (3) Fishery (2) Seller (1)	Construction (18)
Fishery (1) Rubber (2) Other (1)	Grocery Store Owner (4)
Construction (1) Fishery (2) Factory (1) Other (5)	Sales (7)
Construction (1) Rubber (1) Factory (1) Other (1)	Factory Worker (7) (Garment 2, Unknown 5)
Construction (1) Fishery (1)	Fishery (3)
Construction (1) Seller (1)	Agriculture (2)

Source: Returned Migrants' Survey in Cambodia, 2015.

2.7 Skills support needed for economic reintegration

Cambodian migrants tend to want to be self-employed and start their own business. Therefore, many returned migrants stated that they need more skills support to learn how to run a business, as well as access to finance to start a new business (Table 3.8). However, in reality, most migrants return to work in agriculture, so they have a greater need for agricultural land and extension services. Returnees seeking job opportunities as employees report that they need more job vacancy information.[13]

Table 3.8: Support Needed by Returned Migrant Workers

Type of Support	Migration within Cambodia	Migration to Foreign Countries	Total
Access to finance	23	28	**51**
Knowledge of how to run a business	38	40	**78**
Information regarding investment opportunities	5	5	**10**
A skills development programme to secure a job	9	19	**28**
Information on available vacancies	6	13	**19**
Agricultural land	56	106	**162**
Agricultural extension programme	18	29	**47**
Other	8	11	**19**

Note: Respondents could give multiple choices.
Source: Returned Migrants' Survey in Cambodia, 2015.

2. Workers and Employers in Poi Pet City

The city of Poi Pet is one of the favoured destinations for Cambodian workers in the manufacturing and service sectors. Casino hotels and the factories in the SEZs provide most of the job opportunities in the city. In 2015, there were nine casino hotels providing employment in the SEZs and five factories employing several thousand workers. The city lies along the Southern Economic Corridor in the Mekong Subregion, which is a strategic area for the 'Thailand plus one' type of investment (Chapter 1). Labour-intensive industries in Thailand in search of a new destination to locate their factories started to choose Poi Pet in the 2010s because of the good connections with infrastructure in Thailand and the relatively cheaper

[13] The Government of Cambodia has sought to promote job opportunities in the country since 2009 by setting up the National Employment Authority. The agency provides job vacancy information in the Poi Pet area for job seekers through job fairs and information boards.

labour force in Cambodia.[14] There are plans to expand the SEZs, and a railway will connect Thailand and Cambodia through Poi Pet, so employment opportunities in this area are expected to increase further.

Poi Pet's workforce comprises people from the neighbouring villages, internal migrants from various provinces in Cambodia, and migrants returning from Thailand.

The development of the SEZs and casino hotels has provided the people in the neighbouring villages with employment opportunities without leaving their families. However, there are too few people living in the area to provide all the employees needed by the hotels and factories, so employers in Poi Pet must employ people from outside the local area as well. The internal migrants from various provinces consist of (i) those who migrate after gathering more information and having saved money to pay the brokers for the next international migration; and (ii) those who choose to stay in Poi Pet, satisfied with wages that are sufficient but lower than they could earn in Thailand and with the easier access to their families. For migrants returning after working in Thailand, Poi Pet offers reasonable opportunities for those who prefer not to return to their original village.

Employers in Poi Pet compete not only with Thailand for workers, but also with other areas of Cambodia. However, many Cambodians choose to work in this location because it is easier for them to visit their family members or because they are afraid to work in Thailand and prefer to stay in the country.[15] Therefore, despite Poi Pet's location close the Thai border and far from the central area of Cambodia, employers in the city can acquire the labour force they need.

3. Concluding Remarks

The number of Cambodian migrants working abroad has been increasing. Most of them are economic migrants who intend to return home in the future. It is necessary for them to utilise their experience strategically, as stated in Cambodia's Migrant Policy and Action Plan 2015, otherwise people will repeatedly migrate and return without achieving their goals, and Cambodia will be unable to utilise the labour force for the industrial development effectively.

[14] See chapters 1 and 4. Chapter 4 focuses more on the relocation of the garment industry and migrant workers.

[15] This finding is from interviews with nine workers (three working in casino hotels and six in two manufacturing factories) in the Poi Pet area in December 2015.

Cambodian workers currently choose to work in (i) their original village, (ii) Phnom Penh, (iii) other areas with factories or hotels, (iv) other rural areas with agricultural development, or (v)Thailand. The reasons for returning are often personal, such as feeling homesick, family illness, or not achieving their goal.

Returned migrants often work in sectors that are different from their job experience in Thailand. Some are grocery store owners who started their business from savings accumulated during migration, others are garment factory workers in the provinces who returned because they wanted to work closer to their families. These people are examples of those who have been successful in reintegrating economically.

Migrant workers' remittances improve the human capital of their families (Chapter 2). However, their job experience should be utilised to ensure their self-sufficiency and the country's development. Only a few of the returned migrant workers surveyed had applied the experiences they gained abroad in their original community.

Labour-intensive industries in the Mekong Subregion have started to relocate from Thailand to neighbouring countries. Vocational training and mutual skill recognition will facilitate labour migration to support human resources development in the interconnected labour markets of the subregion, while at the same time supporting the relocation of factories within the Mekong Subregion. The Mekong countries have begun to collaborate on vocational training. Although it will take several years to see the outcome, these collaborations will help the human resources development and industrial development in the Mekong Subregion.

References

Battistella, G. (2004), 'Return Migration in the Philippines: Issues and Policies', in D.S. Massey and J. Edward Taylor (eds.) *International Migration: Prospects and Policies in a Global Market*, Oxford: Oxford University Press, pp.212–29.

Chaisuparakul, S. (2015), 'Life and Community of Cambodian Migrant Workers in Thai Society,' *Journal of Population and Social Studies*, 23(1), pp.2–16.

Chan, S. (2009), "Review of Labour Migration Management, Policies and Legal Framework in Cambodia," *ILO Regional Office for Asia and the Pacific Working Paper Series*, Bangkok: ILO Regional Office for Asia and the Pacific.

De Haas, H. (2010), 'Migration and Development: A Theoretical Perspective.' *International Migration Review,* 44(1), pp.227–64.

Hatsukano, N., K. Tsubota, and I. Kuroiwa (2011), 'Economic Integration and Industry Location,' in I. Kuroiwa (ed) *Economic Integration and the Location of Industries: The Case of Less Developed East Asian Countries*. Tokyo: IDE-JETRO, pp.88–120.

Hatsukano, N. and C. Chalermpol (2015), "Cambodian workers in Thailand:

Socio-economic Situation and Recruitment Process" in 'Labour Migration in Thailand and Neighboring Countries: Situation and Challenges of the Migrant Workers', ERIA Research Project Paper in FY2014.

Hing, V., L. Pide, and P. Dalis (2011), 'Irregular Migration from Cambodia: Characteristics, Challenges, and Regulatory Approach,' *PIDS Discussion Paper Series, NO. 2011-26*, Philippine Institute for Development Studies.

ILO and ADB (Asian Development Bank) (2014), *ASEAN Community 2015: Managing Integration for Better Jobs and Shared Prosperity.* Bangkok: ILO and ADB.

IOM (International Organization for Migration) (2015), *Reintegration: Effective Approaches.* Geneva: ILO. https://www.iom.int/files/live/sites/iom/files/

What-We-Do/docs/Reintegration-Position-Paper-final.pdf (accessed 1 March 2016).

Maltoni, B. (2007), 'Migration in Cambodia: Internal vs. External Flows', Eighth ARPMN Conference on Migration, Development and Poverty Reduction, in Fuzhou (China), 25–9 May.

NIS (National Institute of Statistics) (2008), *General Population Census of Cambodia 2008*. Phnom Penh: NIS/Ministry of Planning.

NIS (National Institute of Statistics) (2013), Cambodia Inter-Censal Population Survey, 2013. Phnom Penh: NIS/Ministry of Planning.

SMERU (2015), Return Migration and the Importance of Reintegration Policies. *SMERU Policy Brief,* No.3. http://www.smeru.or.id/sites/default/files/publication/03_pb_rm.pdf (accessed 1 March 2016).

Wahba, J. (2015), 'Who benefits from return migration to developing countries?' *IZA World of Labor* 2015(123), pp.1–12. http://wol.iza.org/articles/who-benefits-from-return-migration-to-developing-countries.pdf (accessed 1 March 2016).

Chapter 4

Production Migration to Labour-Sending Countries, and Upgrading of the Thai Garment Industry

Atsuko Mizuno

Introduction

Unskilled foreign workers have allowed Thailand to continue with labour-intensive industries such as the garment industry. On the other hand, the countries that send labour to Thailand, especially Cambodia and Myanmar, increased their clothing exports at the beginning of 2000s. Low wages were their main source of competitiveness. Meanwhile, wage levels in Thailand have risen continuously, resulting in decreased competitive advantage. Thailand's clothing exports peaked in 2004–2008, and then began to trend downward. Higher production costs and labour shortages forced textile and garment manufacturers to implement industrial upgrading and move some production to neighbouring countries to stay competitive and even achieve some growth (Bank of Thailand, 2012).

However, the relationship between employing foreign workers, production migration to labour-sending countries, and the upgrading of the Thai garment industry has not been rigorously assessed. The main purpose of this study is to analyse the upgrading of Thailand's garment industry and its migration of production to Myanmar, the largest source of migrant labour.

Myanmar's garment industry stagnated from 2003, when the United States (US) imposed economic sanctions (an import ban). However, its clothing exports began to increase in 2010 and have continued to grow since power was transferred to the new government in 2011. The

migration of the garment production industry is influenced by preferential tariff treatments, such as the Generalised System of Preferences for Least-Developed Countries (LDC-GSP) (Fukunishi and Yamagata, 2014). Membership of the Association of Southeast Asian Nations (ASEAN) and the reduction or elimination of tariffs through the ASEAN Free Trade Agreement and other free trade agreements between ASEAN and other nations have also affected production migration from Thailand to Myanmar. The production network between Thailand and the CLMV countries (Cambodia, Lao PDR, Myanmar, and Viet Nam) is expected to be further consolidated by the formation of the ASEAN Economic Community and factors such as improved customs and standards harmonisation, better transport and logistics, and investment liberalisation and facilitation. However, labour migration is likely to continue, because the main drivers, namely economic and demographic disparities between Thailand and its neighbouring countries, are structural rather than cyclical (ILO and ADB, 2014).

This chapter is organised as follows. Section 1 analyses production migration to the labour-sending countries and the upgrading of the garment industry in Thailand. Section 2 discusses the aggregate picture of labour migration and the garment industry in the labour-sending and -receiving countries in the early 2000s. Section 3 reviews the changes that occurred in the 2010s, focusing on the continuous inflow of labour migration despite the growth of the garment industry in the labour-sending countries. Section 4 examines the production base of Thai garment firms in Myanmar. Section 5 examines the production shift and differentials of value-added products between the two countries. The final section draws conclusions.

1. Production Migration and Upgrading of the Garment Industry in Thailand

The most significant Asian apparel-exporting countries have changed from being the higher-income countries to lower-income countries. The changes in the apparel-exporting

countries can be divided into three types: Type 1: buyers shift their orders – or manufacturers outsource their production – to other countries; Type 2: foreign firms relocate their production from one country to another; and Type 3: local firms relocate their production from their home country to a foreign country. Among these types, Type 1 changes tend to occur first and on a larger scale than the others, as the apparel industry is a typical buyer-driven industry, where export-oriented garment firms in developing countries normally supply global buyers. Following Type 1's change of location, Types 2 and 3 appear in the form of foreign direct investment (FDI). Therefore, outward FDI by local firms is not simply a form of production migration, it is also a form of business growth to stay competitive and cope with the relocation of production to other countries. This is especially true for export-oriented firms that supply the global market.

Along with the changes in the apparel-exporting countries, upgrading of the apparel value chain and of the apparel supply chain has been assumed to occur in the Asian region (Gereffi and Fredrick, 2010). The upgrading of the apparel value chain is a functional upgrade (obtaining or moving to higher value-added functions) from (i) cutting, making, and packing (CMP), to (ii) original equipment manufacturing – so-called free on board, to (iii) original design manufacturing, to (iv) original brand manufacturing. Product and process upgrading are also accomplished (Fernandez-Stark et al., 2011). The upgrading of the apparel supply chain involves industrial upgrading by each country from (i) the most labour-intensive garments, to (ii) textiles, to (iii) fibres, and to (iv) the most capital-intensive machinery (Gereffi and Fredrick, 2005). Generally, higher-income nations predominate in the more capital-intensive segment, while lower-income countries predominate in the labour-intensive segment (Kilduff and Ting, 2006).

Consequently, a regional division of labour in the apparel industry has been established, meaning that there is a functional, horizontal, and vertical division of labour among the

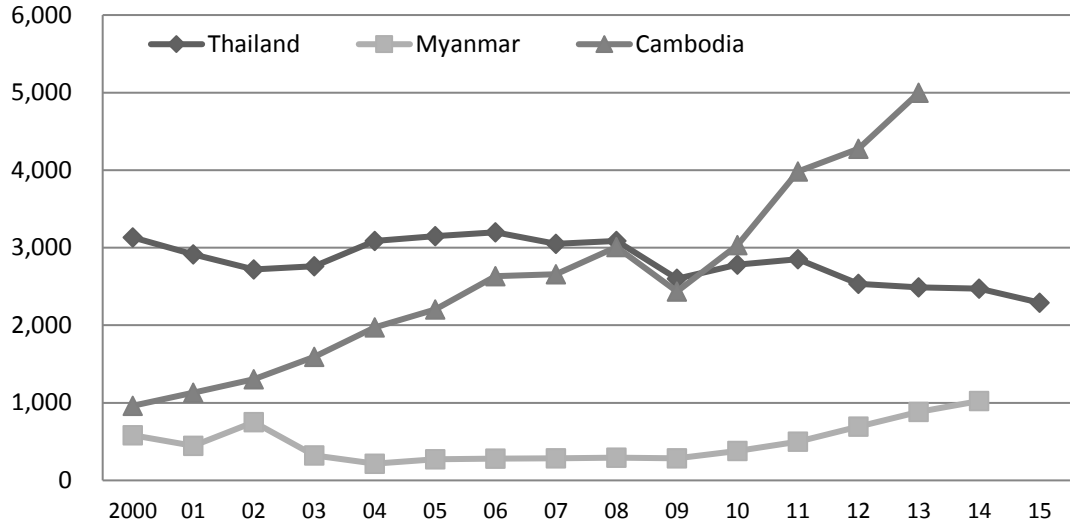
countries at different levels of development and with a variety of export roles in the region. Besides the level of development, differences in preferential tariffs from the export destination countries, such as the LDC-GSP and free trade agreements, affect the location of the production and export bases.

Labour migration must also be considered when discussing production migration in the garment industry from Thailand to the lower-income, labour-sending country. The critical question is how and to what extend does the employment of foreign labours affect the upgrading of the garment industry and industrial upgrading in general? Myanmar and, to a lesser extent, Cambodia are discussed in this study as labour-sending countries. Myanmar is the largest labour-sending country to Thailand, and Cambodia is the second-largest.

In the 2000s, Thailand's clothing exports were almost unchanged, except for a decrease in 2009 due to the global economic crisis; Cambodia consistently increased clothing exports, except for a decrease in 2009; and Myanmar's clothing exports stagnated from 2003, when the US imposed economic sanctions, until the end of the 2000s (Figure 4.1). From 2010, while Thailand's clothing exports levelled off and then trended downward, Cambodia's clothing surpassed those of Thailand, rising to about $5 billion in 2013 – approximately twice Thailand's garment export value in the same year, and Myanmar's exports increased rapidly.

Underlying these figures was a steady migration of garment industry production from Thailand to Cambodia and Myanmar in the 2010s that began in the early 2000s, particularly into Cambodia.

Figure 4.1: Garment Export Value from Cambodia, Myanmar, and Thailand ($ million)



Notes:

1. Clothing is defined as the garment by the source country in the cases of Myanmar and Thailand. Regarding Cambodia, it is HS61 and HS 62.
2. The horizontal axis indicates the calendar year for Cambodia and Thailand, but the fiscal year for Myanmar, which runs from 1 April to 31 March of the following year.

Source: Ministry of Commerce, Trade Statistics of Thailand, CSO 1995–2012a and 2010–2015b and United Nations Comtrade Database.

2. Labour Migration and the Garment Industry in the Labour-Sending and -Receiving Countries in the 2000s

Although Thailand's clothing exports remained almost unchanged during 2000–2009, its share of the US and EU clothing markets – its largest and second-largest markets respectively – decreased. During this period, Thailand's share of the US clothing market dropped from 3.1% to 1.9%, and its share of the EU clothing market declined from 2.3% to 1.6%. In contrast, Cambodia enlarged its market share in the US from 1.4% to 2.9% and in the EU from 0.7% to 1.0% in the same period (UN Comtrade). However, clothing imports to Japan from Thailand increased during the same period, and Thailand became the fourth-largest exporter.

Meanwhile, China, the top exporter, increased its market share to a peak of 82.9% in 2009. Cambodia's clothing exports to Japan, however, showed only a slight growth until the end of the 2000s.

Myanmar's clothing exports dropped sharply because of the US-imposed import ban, as this market had been the top destination for Myanmar's clothing exports, taking about half of the total clothing exports in the early 2000s. Its exports to the EU, which temporary withdrew the LDC-GSP from Myanmar in 1997, also followed a downward trend from 2005.[1] If Myanmar had been granted market access to the EU and the US, Myanmar's apparel industry would have grown rapidly in the early 2000s (Kudo, 2013). In addition, the increase in clothing exports to Japan, a difficult market for garment firms in lower-income countries, was small until 2009, when the ratio of total clothing exports began to increase gradually under the preferential tariff treatment of the LDC-GSP scheme (Mizuno, 2015). Consequently, clothing exports from Myanmar were broadly flat during 2005–2009.

Due to the recession, the number of garment firms in Myanmar decreased from 245 in 2000 to 150 by 2005 (MGMA, 2014), and tens of thousands of workers lost their jobs.[2] In addition, other modern industries with high employment potential remained undeveloped in the country. Wages for garment industry workers in Myanmar were quite low in 2007: MK12,000–MK20,000 ($12–$20) per month for unskilled sewing operators, and MK25,000–MK50,000 ($25–$50) for an operator with 2 years of experience（MSR, 2007). The shortfall in labour demand and the low wage rates in Myanmar's garment industry were the primary push factors for greater labour migration to Thailand.

The high demand for unskilled workers, and the expectation of receiving higher wages in

[1] The elimination of the Multifibre Arrangement in 2005 also became a factor for the decrease in Myanmar's clothing exports to the EU.

[2] According to Tin Aung Kyaw (2000), more than 300,000 workers were employed in the garment industry at the beginning of 2000. However, this estimate lacks supporting statistics. Kudo (2005) estimated the number of workers decreased by 135,000 in 2000–2001 to 55,000–61,000 by 2005, based on data collected by the garment industry survey in 2005.

Thailand were pull factors. Many garment workers migrated to Mae Sot, in Tak Province, where a large cluster of textile and clothing factories had operated with workers from Myanmar since the late 1990s (Arnold and Hewison, 2005; Kohpaiboon, 2009). Meanwhile, the garment industry in Thailand was losing competitiveness in the labour-intensive CMP functions, because of increasing wage levels since the 1990s. Thai garment firms moved to the rural areas, where cheaper labour was more readily available, and became increasingly dependent on migrant workers. Hiring foreign workers to reduce production costs was the option for firms that failed to upgrade. Firms that were late in improving process-based upgrading were likely to hire foreign workers during the structural adjustment process that occurred during this period (Kohpaiboon, Kulthanavit, and Jongwanich, 2012). As noted by Goto and Endo (2013), no significant increase in value-added in clothing products from Thailand had occurred between the late 1990s and the late 2000s.

3. Continuous Inflow of Labour Migration to Thailand Despite Growth of the Garment Industry in the Labour-Sending Countries

The apparel and textile industry remained one of the largest employment sectors in Thailand, despite a decrease in the number of firms and employees. In 2009, 4,344 textile and apparel firms in Thailand employed about 1.05 million workers; but by 2014, the number of factories had dropped to 4,041 and the number of employees had fallen to 566,581 (8.6% of total employment in the manufacturing sector) (THTI, 2015a). The flow of labour migration into Thailand's clothing industry has continued. According to the Office of Foreign Worker Administration (OFWA, 2015), 85,166 registered foreign workers were employed in the country's textile and clothing industry in 2015, of which 69,216 came from Myanmar.

Along with the high growth in clothing exports since 2010, the number of workers employed in

Myanmar's garment industry increased by about 60,000 in the mid-2000s (Kudo, 2005), reaching 230,000 by 2015 (MGMA, 2016). Furthermore, rapid economic growth generated new job opportunities in Myanmar after the transition to the new government. However, despite the rapid increase in employment and wage levels in the garment industry in Myanmar, the wage differential between Myanmar and Thailand for workers in that industry has not narrowed.

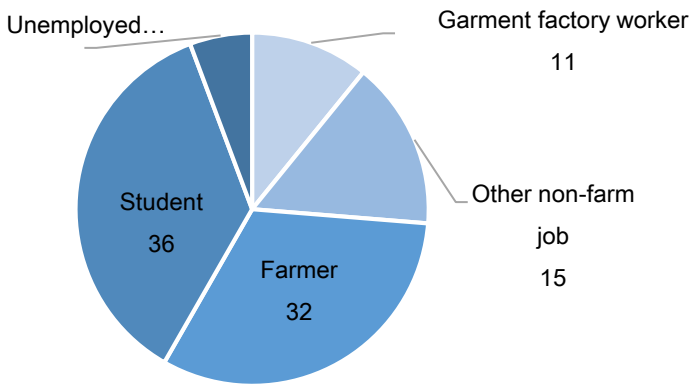
According to our interviews with 186 Myanmar workers in Thai garment factories, the average monthly wage was B11,115 ($308). This is still more than three times that in Yangon, where the wage level for semi-skilled sewing operators was about MK100,000 ($90) per month in 2015.[3]

Figure 4.2 shows the occupations of Myanmar's workers before migration to Thailand. Almost three-quarters of the total – comprising farmers (32%), students (36%) and the unemployed (6%) – entered the modern labour market for the first time after migrating to Thailand. Therefore, most of Myanmar's workers in the Thai garment industry are cross-border rural–urban migrants. Of those surveyed, 11% had some experience of working in a garment factory before migrating, with an average length of service of 3.81 years. Considering the status of the garment industry in Myanmar, where skilled workers are in short supply and most sewing operators are unskilled (Mizuno, 2015), emigration of workers with such skills represents a form of 'skill-drain'. Cross-border migration into the garment industry in Thailand has an effect on the garment industry of the labour-sending country, at least in terms of labour supply.

Although some returning migrants work in garment factories in Myanmar, the number is still small. The skills transfer by garment industry workers returning from Thailand to Myanmar is therefore limited at present.

[3] The figures are from the author's survey of garment factories in Yangon in March 2015.

Figure 4.2: Migrants' Previous Occupation in the Home Country (%)

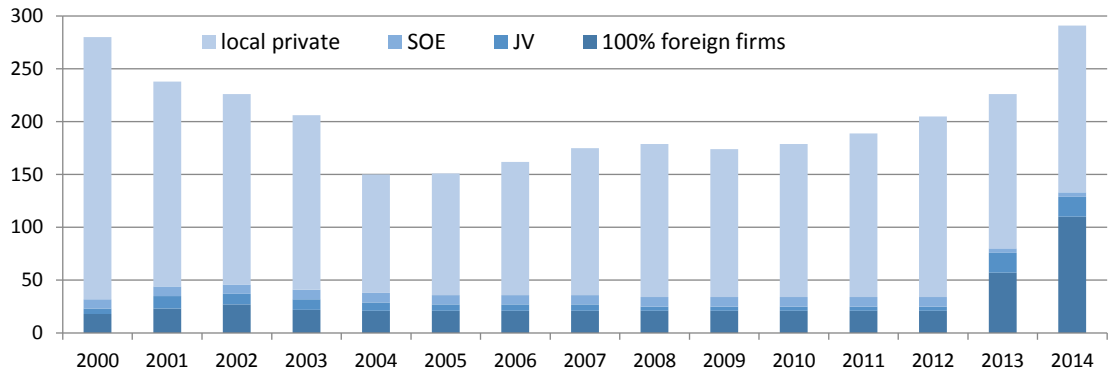


Source: Worker Survey.

4. Upgrade of Functions and Integration with the Upstream and Downstream Sectors: Investment by Thai Garment Firms in the Labour-Sending Country

Lower wages in the labour-sending country may act as a push factor for labour emigration and a pull factor for immigration of production from the labour-receiving country. Thai garment firms are under pressure from cost competition and Thai FDI is motived mainly to achieve cost reduction, especially labour costs (Passakonjaras, 2012). According to TGMA (2013), there are 31 Thai garment firms in ASEAN countries, including 8 in Cambodia, 6 in Myanmar, and 5 in Lao PDR. Thai garment firms make up an insignificant share in these countries. Most garment firms in Cambodia are owned by East Asian companies, such as Taiwan (25% of factory ownership), Hong Kong (20%), China (15%), and the Republic of Korea (12%) (Kang, Sok, and Dannet, 2009). Furthermore, despite the notable increase in the number of foreign firms since 2013, most firms in Myanmar are locally owned (Figure 4.3). However, it is worth analysing the Thai garment companies' investment in Myanmar as a significant case of production migration between these two countries. Thai garment companies' FDI into neighbouring countries goes beyond production migration; it represents a form of business growth that enables Thai firms to remain competitive by shifting production to these countries.

Figure 4.3: Number of Garment Factories in Myanmar



JV = joint venture, SOE = state-owned enterprise.
Sources: Myanmar Garment Manufacturers Association (MGMA) (2014, 2015); and MGMA, *About MGMA Members,* http://www.myanmargarments.org/about/about-mgma/ (accessed 25 April 2015).

As of the end of 2015, there are eight garment factories established by six Thai firms in Myanmar, including three companies that were established by two Japanese affiliates in Thailand (Table 4.1). All are large export-oriented companies. Their production bases in Myanmar serve the global market, including the EU and Japan,[4] and there are plans to expand to the US market soon. Four of the six companies (except company TT (nil) and TW (unknown)) employ Myanmar workers in their factories in Thailand. Our survey of firms revealed that four of the five companies (80%) that were operating a production base in neighbouring countries employ foreign workers in their factories in Thailand.[5] Of the 17 firms that did not operate a production base in neighbouring countries, only 10 (59%) did so. This shows that employing foreign workers and exporting capital are supplementary activities rather than mutually exclusive ones. However, except company VT, which transferred some Myanmar workers from its factory in Thailand to its factory in Myanmar, intrafirm return migration of skilled production workers in the garment industry is limited.

[4] After the return of trade privileges (LDC-GSP) by the EU in July 2013, clothing exports by Myanmar to the EU increased.
[5] The survey was conducted at 25 garment firms in Thailand during October–November 2015. The number of valid responses received was 22.

Table 4.1: Thai Garment Firms with a Production Base in Myanmar at the End of 2015

Company Name/ Type	Yr. of est.	Business Type	Employees (foreign workers)	Production Base in Myanmar				
				Company Name/ Type	Yr. of est.	Employees	Main Products	Main Export Destination
VT Local	1980	OEM	2,400 (1,100)	MS JV with Myanmar	2012	450	Outer wear	EU Japan Korea, Rep. of
				SB 100%	2014	400	T-shirts outer wear	EU
TW JV with Japan	1970	ODM OBM	4,665 (N/A)	PM JV with Japan and Myanmar	2012	400	Brassiere	Japan ASEAN
				MW JV with Japan	2016 (planning)	240–710	Brassiere	Japan ASEAN US
NS Local	NA	OEM	700 (N/A)	SA JV with Myanmar	2013	500	Sportswear	EU (Germany)
TP Japan	2002	OEM ODM OBM	1,500 (150)	MP 100%	2014	80	T-shirts, Underwear	Japan
TT Local	1959	OEM	4,000 (0)	TT 100%	2014	1000	Sportswear	EU US (planned)
TR Local	1985	OEM	570 (80)	GT 100%	2015	500	Jeans, denim pants and skirts	Japan EU (planned)

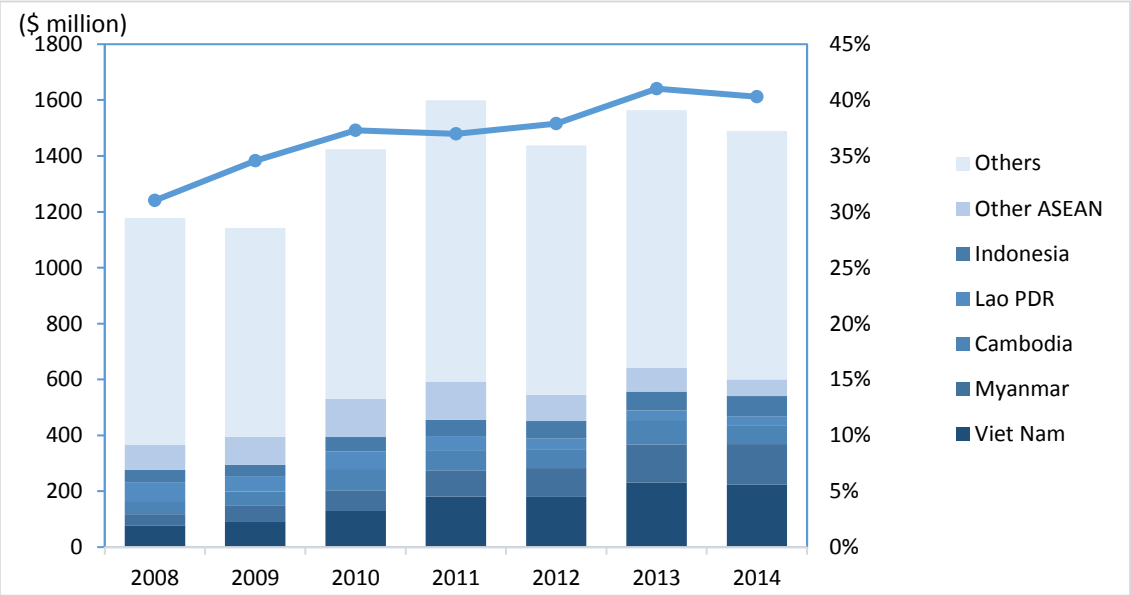
ASEAN = Association of Southeast Asian Nations, EU = European Union, GT =, JV = joint venture, N/A = not applicable, OBM = original brand manufacturing, ODM = original design manufacturing, OEM = original equipment manufacturing, US = United States.
Note: Other abbreviations refer to undisclosed company names.
Sources: Myanmar Garment Manufacturers Association (2015); Thai Garment Manufacturers Association (2013); annual reports by company TW and press releases by their mother company W; the author's survey for TT in 2014, MS, SB, SA and MP in March 2015, GT December 2015.

The factories in Thailand and Myanmar produce similar items. However, the production of items with lower volumes and shorter lead times tends to remain with the domestic production base. Almost all Myanmar's export-oriented firms handle the CMP business, whereby the foreign buyer or parent company arranges and supplies the raw materials to the Myanmar factory. All Thai garment factories in Myanmar operate based on CMP arrangements managed by the headquarters in Thailand, which has functional responsibility for providing inputs, product design, branding, sourcing strategy, and distribution and marketing.

Upgrading such functions is less affected by employing foreign workers, as it is a management matter. Employing foreign workers is an important option to cope with a tight labour supply. Therefore, employing foreign workers and upgrading functions are not mutually exclusive, as Kohpaiboon and Jongwanich discuss in detail in Chapter 5 of this volume.

In addition, Thailand's garment industry has developed a comprehensive and complete production and supply chain cycle that is totally integrated, meaning it has an upstream sector, a midstream sector, and a downstream sector, all within the country. Therefore, the vertical division of labour between Thailand and the production base in the neighbouring country is important. For Instance, the export value of textiles (upstream products) has exceeded that of apparel since 2007 (THTI, 2015a). There has been a corresponding increase in Thai fabric exports to the ASEAN countries since then (Figure 4.4), as Thailand's vertical division of labour with neighbouring countries has progressed.

Figure 4.4: Thailand's Fabric Exports to ASEAN Countries



ASEAN = Association of Southeast Asian Nations.
Source: Thailand Textile Institute.

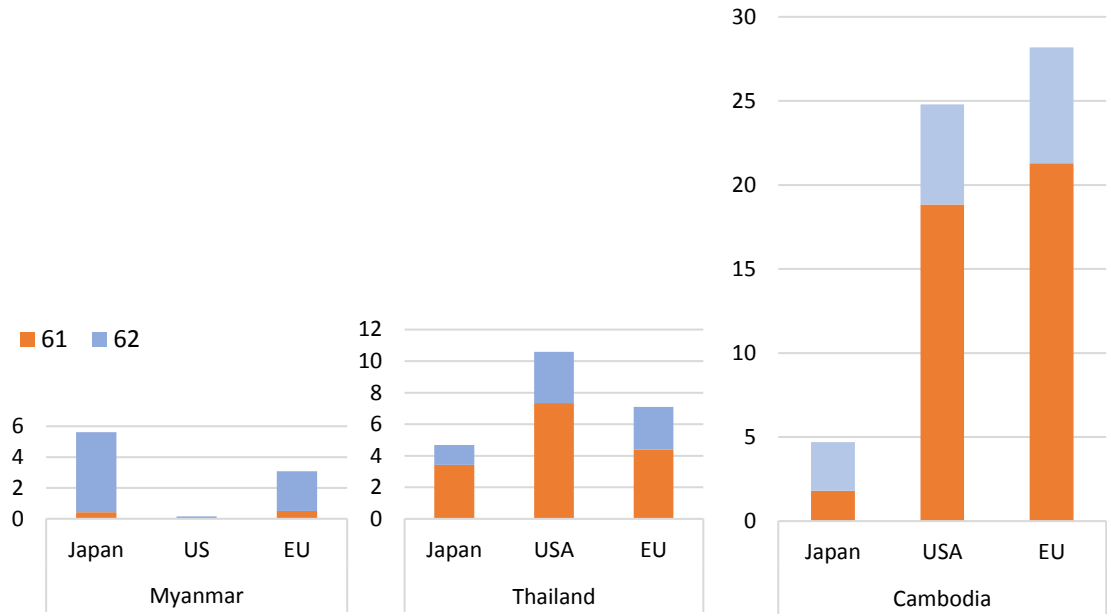
5. Production Shift and Value-Added Products

As discussed in Section 3, Thai garment companies invest in Myanmar to establish a lower-cost production and export base to supply the EU and Japanese markets. In this section, we discuss the production shift and horizontal division of labour in the 2010s between Thailand and Myanmar. Although the US is the largest destination for Thai clothing exports, this market is not discussed in detail in this paper, because Myanmar's clothing exports to the US only resumed in 2013.

Thailand's clothing exports to the EU decreased from $1,003 million in 2011, to $679 million in 2014, but its exports to Japan increased from $327 million to $400 million during the same period (THTI, 2015a,b). At the same time, clothing exports from Thailand to other countries increased, especially within ASEAN, reaching $167 million in 2014 (THTI, 2015b).

In the 2010s, Cambodia, and to a lesser extent Myanmar, increased their clothing exports to the EU and expanded their garment exports to Japan at a faster pace than Thailand did (UN Comtrade). A comparison of the clothing imports from Thailand by the major developed markets with those from Cambodia and Myanmar shows that Thailand is not dependent on a specific country or region (Figure 4.5). However, clothing exports from Cambodia and Myanmar are concentrated in a few developed markets, because the garment industry in these two countries has grown to become the export and production base for such markets.

Figure 4.5:Clothing Imports by the Major Markets from Thailand, Myanmar, and Cambodia, 2014($ billion)



EU = European Union; HS 61 = apparel and clothing accessories, knitted or crocheted; HS 62 = apparel and clothing accessories not knitted or crocheted; US = United States.
Source: Prepared by the author based on the UN Comtrade Database.

The EU imports mainly HS 61 products (apparel and clothing accessories, knitted or crocheted) from Thailand, but it imports much less from Thailand than it does from Cambodia. Clothing imports to the EU from Cambodia increased after the rules of origin of LDC-GSP for HS 61 products were eased in January 2011.[6] Similarly, Japan imports mainly commodities classified under HS 61 from Thailand, but it imports more HS 62 products (apparel and clothing accessories not knitted or crocheted) from Cambodia and Myanmar. The reason Japan imports fewer HS 62 products from Thailand and more from Cambodia and Myanmar is that the HS 62 products manufactured by the CMP process are granted duty-free treatment under Japan's LDC-GSP scheme.[7]

[6] Previously, the rules of origin for production classified under HS 61 and 62 required that when imported inputs are utilised, the manufacturing process of apparel should start from yarn. But this was eased to allow it to start from fabric. Hence, only the CMP process – a 'single jump' – is required to be carried out by the country receiving the export preference.

[7] The rules of origin of Japan's LDC–GSP scheme for production classified under HS 62 require that when

The trend of Japanese clothing imports from major countries (Table 4.2) shows that the presence of China, the largest supplier, has decreased rapidly since 2009, while imports from other Asian countries have increased. This clearly indicates that the clothing production base serving Japan diversified across the Asian region in the 2010s (Mizuno, 2015).

Along with the recent increase in export value to Japan, Thailand succeeded in upgrading its production to higher value-added products as follows. First, diversification of Thailand's clothing export items progressed. Comparing the composition of the principal commodity, clothing and accessories[8] imported by Japan from Thailand, with that of Cambodia and Myanmar (Table 4.3), Thailand supplies a wider range of items. The exports of Cambodia and Myanmar, on the other hand, despite the growing participation of these countries in Japan's clothing market, are concentrated in a much narrower range of products.

Table 4.2: Value and Share of the Major Countries Clothing and Accessory Imports by Japan, 2009 and 2015

2009			2015			
Country	**Value** (¥ billion)	**%**	**Country**	**Value** (¥ billion)	**%**	**Change**
China	**1,954.5**	**82.9**	**China**	**2,285.7**	**67.0**	**(15.9)**
Viet Nam	97.0	4.1	Viet Nam	350.6	10.3	6.2
Italy	75.1	3.2	Indonesia	112.1	3.3	2.6
Thailand	**30.4**	**1.3**	Italy	99.2	2.9	(0.2)
Korea, Rep. of	21.2	0.9	Bangladesh	94.0	2.8	2.3
India	18.5	0.8	**Cambodia**	**77.5**	**2.3**	**2.1**
Malaysia	17.5	0.7	**Myanmar**	**70.2**	**2.1**	**1.5**
Indonesia	15.8	0.7	**Thailand**	**66.0**	**1.9**	**0.6**
United States	15.3	0.6	Malaysia	41.4	1.2	0.3
Myanmar	13.9	0.6	India	30.0	0.9	0.1

( ) = negative.
Note: 'Clothing and accessories' has the principal commodity code of 807 in the Trade Statistics of Japan.
Source: Prepared by the author based on Trade Statistics of Japan, Ministry of Finance.

imported inputs are utilised, the apparel manufacturing process should start from woven fabric. Hence, only the CMP process – a 'single jump'– is required to be carried out by the country receiving the export preference. Japan eased the rules of origin for HS 61, which had required the manufacturing process from yarn, to the 'single jump' in April 2015. Thus, the ratio is expected to increase in the future.

[8] 'Clothing and accessories' is under principal commodity code 807 in the Trade Statistics of Japan, consisting of HS 6201~6208, 6209.20-21, 6209.20-222, 6209.30-21, 6209.30-222, 6209.90-21, 6209.90-29, 6210~6211 (Ministry of Commerce, 2016).

Table 4.3: Composition of the Principal Imports of Clothing and Accessories to Japan from Thailand, Cambodia, and Myanmar, 2015

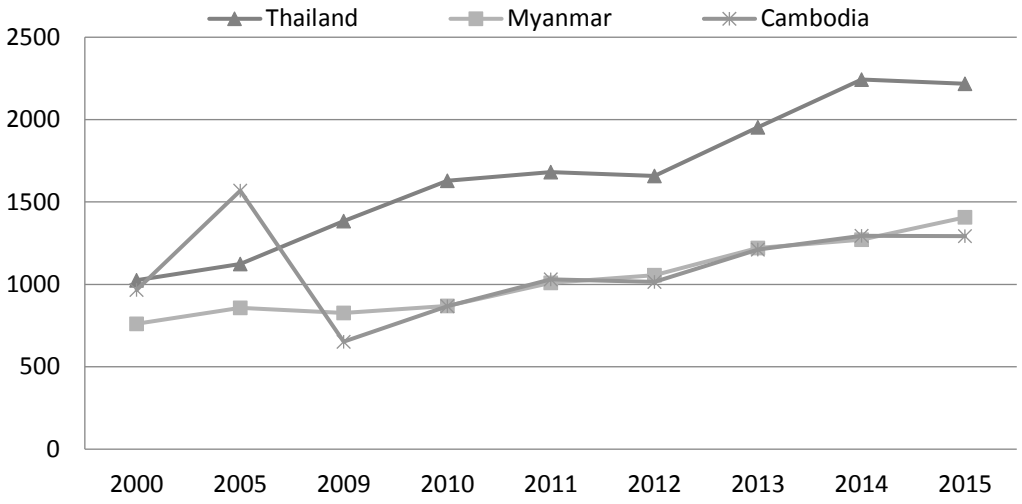
Code: Principal Commodity	Thailand		Cambodia		Myanmar	
	Value (¥ million)	%	Value (¥ million)	%	Value (¥ million)	%
80701: Clothing	**9,042**	**16.1**	**46,400**	**60.0**	**61,811**	**88.1**
8070101 Men's and boys' dress	4,283	7.6	19,064	24.7	41,293	58.8
8070103 Women's and girls' dress	3,782	6.7	26,372	34.1	20,381	29.0
8070105 Undergarments	414	0.7	964	1.2	138	0.2
Others	562	1.0	0	0.0	0	0.0
80705: Clothing, knitted or crocheted	**40,646**	**72.5**	**29,392**	**38.0**	**7,999**	**11.4**
8070501 Stockings and the like	8,374	14.9	12	0.0	201	0.3
8070503 Undergarments	16,415	29.3	5,314	6.9	1,056	1.5
8070505 Sweaters	9,500	16.9	15,237	19.7	2,873	4.1
Others	6,357	11.3	8,829	11.4	3,870	5.5
80703: Clothing accessories	**6,411**	**11.4**	**1,507**	**1.9**	**378**	**0.5**
Others	**9884**	**15.0**	**205**	**4.3**	**401**	**0.1**
Total	**65,983**	**100.0**	**77,504**	**100.0**	**70,230**	**100.0**

Notes: 80701: Clothing consists of HS 6201～6208, 6209.20-21, 6209.20-222, 6209.30-21, 6209.30-222, 6209.90-21, 6209.90-29, 6210～6211; 80705：Clothing, knitted or crochet consists of 61; 80703: Clothing accessories consists of 4203.21～4203.40, 6209.20-1, 6209.20-221, 6209.30-1, 6209.30-221, 6209.90-1, 6209.90-22, 6212～6217.
Source: prepared by the author based on the Trade Statistics of Japan, Ministry of Finance.

Second, the unit value of the main clothing items produced by Thailand increased significantly, although the absolute import volume from Thailand dropped below that of Cambodia and Myanmar in 2015. The unit value of imported men's and boys' dress[9] from Thailand to Japan has risen gradually (Figure 4.6), and the price differential with Cambodia, and Myanmar has increased. The unit price for other major clothing items from Thailand is also much higher than that of items from Cambodia and Myanmar (Table 4.4).

[9] 'Men's and boys' dress' is under principal commodity code 807 0101 in the Trade Statistics of Japan, which consist of HS 6201, 6203, 6205, 6210.20, 6210.40, 6211.11, 6211.20-31, 6211.32～6211.39 (Ministry of Commerce, Japan, principal commodity code list 01/01 2016 import, http://www.customs.go.jp/toukei/sankou/code/ GH201601i.html (accessed on 14 February, 2016)).

Figure 4.6: Increase in the Unit Price of Men's and Boys' Dress Imports by Japan from Thailand (¥/piece)



Source: Prepared by the author based on the Trade Statistics of Japan, Ministry of Finance.

Table 4.4: Unit Price of the Major Clothing Items Imported to Japan from Thailand, Myanmar and Cambodia, 2015 (¥/piece)

Code: Principal Commodity	Thailand	Myanmar	Cambodia
8070101: Men's and boys' dress	2,217	1,407	1,294
8070103: Women's and girls' dress	1,661	1,115	957
8070503: Knitted undergarments	309	276	265
8070505: Sweaters	1,148	740	1,053

Notes: 'Men's and boys' dress' consist of HS 6201, 6203, 6205, 6210.20, 6210.40, 6211.11, 6211.20-31, 6211.32～6211.39. 'Women's and girls' dress' consist of HS 6202, 6204, 6206, 6209.20-21,6209.20-222, 6209.30-21,6209.30-222, 6209.90-21, 6209.90-29, 6210.30, 6210.50, 6211.12, 6211.20-39, 6211.42～6211.49. 'Knitted undergarments' consist of HS6107～6109, 6111.20-21, 6111.30-21, 6111.90-21, 6115.10-1, 6115.21-6115.29. 'Sweaters' consist of HS 6103.31～6103.33, 6104.31～6104.33, 6110
Source: Prepared by the author based on the Trade Statistics of Japan, Ministry of Finance.

Interestingly, the unit price of Thai clothing products in the EU market is also higher than that of items from Cambodia and Myanmar, despite the drop in Thailand's clothing exports to the EU in the 2010s (Table 4.5). The unit price differential is greater for HS 61 commodities than for HS 62 commodities, indicating higher productivity in Thailand of HS 61 items, which integrate the knitting and sewing process, such as production of three-dimensional shaped knitted fabrics or cloth from high-tech yarns.

Table 4.5: Unit Price of Major Items of Clothing Imported to the European Union from Thailand, Myanmar, and Cambodia, 2014

Commodity	Thailand			Myanmar			Cambodia		
	Value ($ million)	%	Unit price ($)	Value ($ million)	%	Unit price ($)	Value ($ million)	%	Unit price ($)
HS61: apparel and clothing accessories, knitted or crocheted	**439.7**	**62.7**		**50.9**	**16.5**		**2,128.8**	**75.5**	
6104: Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts	39.8	5.7	6.5	6.7	2.2	3.6	417.3	14.8	5.0
6109: T-shirts, singlets and other vests	130.6	18.6	5.7	4.6	1.5	2.6	363.6	12.9	3.3
6110: Jerseys, pullovers, cardigans, waistcoats and similar articles	87.2	12.4	9.7	18.9	6.1	6.0	737.5	26.2	7.0
HS 62: apparel and clothing accessories, not knitted or crocheted	**261.8**	**37.3**		**258.4**	**83.5**		**689.1**	**24.5**	
6203: Men's or boys' suits, ensembles, jackets, blazers, trousers, bib and brace overalls, breeches and shorts	56.2	8.0	10.9	58.9	19.0	6.5	304.7	10.8	9.5
6204: Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts	52.0	7.4	7.5	30.6	9.9	8.0	267.5	9.5	7.2
6205: Men's or boys' shirts	24.5	3.5	10.9	54.5	17.6	7.0	97.6	3.5	8.6
Total	**464.2**	100.0		**105.4**	100.0		**2,226.4**	100.0	

Source: Prepared by author based on UN Comtrade.

The increase in the unit price of Thai clothing items implies that the export-oriented garment industry in Thailand has succeeded in upgrading its product and process, despite employing foreign workers. There is no clear evidence in our firm survey that employing foreign workers retarded productivity improvement.[10] Although firms must have workers with the necessary skills to perform multiple tasks for such upgrading to occur, their human resource management practices influence workers' productivity and their motivation to improve their skill level, as Yagura discusses in Chapter 6 of this volume. Furthermore, other conditions are also necessary, such as progress in equipment, materials, and working technology, to achieve productivity improvement.

Conclusion

This chapter examined upgrading of the Thai garment industry and production migration to Myanmar.

The key findings were as follows. First, the production shift of the garment industry from Thailand to the labour-sending countries expanded in the 2010s, despite continuous labour immigration to the industry in Thailand. Second, along with the production relocation to the labour-sending countries, production networks between Thailand and the neighbouring countries were consolidated. Third, through this process, Thailand's garment industry succeeded in upgrading its products and processes while employing foreign workers.

By moving the production of comparatively labour-intensive and low value-added processes and products to the labour-sending countries, the garment industry in Thailand has reduced the size of its domestic production base, successfully implemented functional upgrading, raised the efficiency of the production systems, and increased its value-added within Thailand.

[10] The relationship between hiring foreign workers and productivity upgrading is assessed rigorously by Kohpaiboon and Jongwanich in Chapter 5 of this volume.

Considering the structural factors of migration, and the economic and demographic disparities, labour migration in the region will not diminish and is likely to continue (ILO and ADB, 2014). Furthermore, regional economic integration, spurred by the ASEAN Economic Community and the Japan–ASEAN Comprehensive Economic Partnership, is expected to induce manufacturers to relocate production to the countries bordering Thailand, with Thailand becoming the regional focal point to control the satellite CMP production bases in these countries.

Further study is needed to determine the scope for the garment industry in the neighbouring labour-sending countries to grow even more by incorporation into the production network and supply chain in Thailand. Such studies could include analysis of the effects of production transfer and labour migrations on the development of the industry.

References

Arnold, D. and K. Hewison (2005), 'Exploitation in Global Supply Chain: Burmese Migrant Workers in Mae Sot, Thailand', *The Journal of Contemporary Asia*, 35(3), pp.319–40.

Bank of Thailand (2012), *Thailand Economic Condition 2012*, Bangkok: Bank of Thailand.

CSO (Central Statistical Organisation) Myanmar (1995–2012), *Statistical Yearbook*, Yangon/Nay Pyi Taw: CSO.

CSO (Central Statistical Organisation) Myanmar (2010–2015), Selected Monthly Economic Indicators, Nay Pyi Taw: CSO.

Fernandez-Stark, K., Fredrick, S. and G. Gereffi (2011), *The Apparel Global Value Chain Economic Upgrading and Workforce Development*, Durham: Duke University Center on Globalization, Governance and Competitiveness.

Fukunishi, T. and T. Yamagata (eds.) (2014), *The Garment Industry in Low-Income Countries: An Entry Point of Industrialization,* Basingstoke, UK/New York: Palgrave Macmillan.

Gereffi, G., and S. Frederick. (2010), The global apparel value chain, trade and the crisis—challenges and opportunities for developing countries. In O. Cattaneo, G. Gereffi, and C. Staritz, (eds) *Global Value Chains in a Postcrisis World: A Development Perspective*, pp. 157–208. Washington, DC: World Bank.

Goto, K. and T. Endo (2013), 'Upgrading, Relocation, Informalising? Local Strategies in the Era of Globalization: The Thai Garment Industry', *Journal of Contemporary Asia*, 44(1), pp.1–18.

ILO and ADB (International Labour Organization and Asian Development Bank) (2014), *ASEAN Community 2015: Managing Integration for Better Jobs and Shared Prosperity,* Bangkok Thailand: ILO and ADB.

Kang, K., S. Sok, and L. Dannet (2009), *Rapid Assessment of the Impact of the Financial Crisis in Cambodia,* Bangkok: ILO Regional Office for Asia and the Pacific.

Kilduff, P. and C. Ting (2006), 'Longitudinal Patterns of Comparative Advantage in the Textile Complex – Part 1: An Aggregate Perspective', *Journal of Fashion Marketing and Management: An International Journal*, 10(2), pp.134–49.

Kohpaiboon, A. (2009), 'International Labour Migration and Competitiveness: Evidence of Thai Clothing Industry at the Border', *Economic Research and Training Center Discussion Paper Series,* No.18, Bangkok: Faculty of Economics, Thamasat University.

Kohpaiboon, A., P. Kulthanavit, and J. Jongwanich (2012), 'Structural Adjustment and International Migration: An Analysis of the Thai Clothing Industry', *Oxford Development Studies*, 40(1), pp.231–60.

Kudo, T. (2005), 'The Impact of United States Sanctions on the Myanmar Garment Industry,' *IDE Discussion Paper Series, 42*, Chiba: Institute of Developing Economies, Japan External Trade Organization (IDE–JETRO).

Kudo, T. (2013), 'Myanmar's Apparel Industry in the New international Environment: Prospect and Challenges', *IDE Discussion Paper Series,* 430, Chiba: IDE–JETRO.

MGMA (Myanmar Garment Manufacturers Association) (2014), *Myanmar Textile and Garment Directory 2013–2014*, Yangon: MMRD.

MGMA (Myanmar Garment Manufacturers Association) (2015), *Myanmar's Garment Sector – Opportunities and Challenges in 2015*, Yangon: MGMA.

MGMA (Myanmar Garment Manufacturers Association) (2016), MGMA website, http://www.myanmargarments.org/about/about-mgma/ (accessed 12 February 2016).

METI (Ministry of Economy, Trade and Industry), Japan (2010), *White Paper on International Economy and Trade 2010,* Tokyo: METI.

Ministry of Commerce, Thailand (2016), *Trade Statistics of Thailand*, http://www.ops3.moc.go.th/infor/menucomen/stru1_export/export_topn_re/default.asp# (accessed 12 February 2016).

Ministry of Finance, Japan (2015), *Trade Statistics of Japan*, http://www.customs.go.jp/toukei/info/index_e.htm (accessed 14 February 2016).

Ministry of Finance, Japan (2016), Japan, the principal commodity code list 01/01 2016 import, http://www.customs.go.jp/toukei/sankou/code/GH201601i.html (accessed 14 February, 2016).

Mizuno, A. (2015), 'Growth of Garment Industry in Myanmar: Increasing employment and Export to Japan', *Annals of the Society for Industrial Studies*, *Japan*, 30, pp.159–74 (in Japanese).

MSR (Myanmar Survey Research) (2007), *Salary Survey 2007*, Yangon: MSR.OFWA (Office of Foreign Workers Administration), Department of Employment, Ministry of Labour,

Thailand (2015), วารสารสถิติจา นวนคนต่างด้าวกลุ่มประเทศอาเซียน ได้รับอนุญาตทา งาน ประจาเดือน กรกฎาคม 2558 *(Statistics of foreign workers permitted to work, July 2015*), Bangkok: OFWA (in Thai).

Passakonjaras, S. (2012), 'Thailand's Outward Foreign Direct Investment: The Case of the Garment Industry.' *ASEAN Economic Bulletin*, 29(2), pp.101–15.

TGMA (Thai Garment Manufacturers Association) (2013), *Directory 2013–2014,* Bangkok: TGMA.

THTI (Thailand Textile Institute) (2015a), Thai Textile Statistics 2014 / 2015, Bangkok: THTI.

THTI (Thailand Textile Institute) (2015b), *Textile Report*, http://thti.thaitextile.org:9704/analytics/saw.dll? Dashboard?NQUser =thti&NQPassword=thti (accessed on 14 February 2016).

Tin Aung Kyaw (2000), 'kyou'lai' kyazo. thungechin: (Let's sew, friends),' *Dana*, November, Yangon: Dana (in Myanmar).

United Nations (2015), UN Comtrade: United Nations Commodity Trade Statistics Database, http://comtrade.un.org/db/default.aspx (accessed on 14 February 2016).

Chapter 5

Structural Adjustment and International Migration in the Thai Garment Industry: Revisit

Archanun Kohpaiboon and Juthathip Jongwanich[1]

1. Introduction

One facet of the ongoing process of economic globalisation is the increasingly important phenomenon of cross-border movement of unskilled workers, driven by differences in economic development and demographic factors, such as population ageing (Salt, 1992; Global Commission on International Migration, 2005; World Bank, 2006: ILO, 2006). This issue is even more pronounced in the economic landscape in East Asia, and Indochina in particular, as income disparities in the region are considerable, and the scope for regional cooperation to achieve potentially mutual benefits from international migration is substantial. Thailand and its Indochina neighbours share long common borders. Any attempt to prevent cross-border movement is unlikely to be fully effective and could result in corruption and human trafficking.

On one hand, some countries in the region have only recently started to integrate into the global economy. They still have an abundance of labour and low wage rates. While these countries are gradually realising their economic potential, sending workers abroad to earn a living is seen as a short-term economic option to mitigate unemployment and poverty. In addition, skills gained by these workers could improve overall productivity and promote the economic development process in their home country.

[1] The authors would like to thank our research assistant team, which was led by Parnupong Sri-udomkajorn, as well as Suphol Jongwanich for helping us arrange foreign workers' interviews. The project was financially supported by JETRO and ERIA. The authors also benefited from comments and suggestions made in two workshops (14 September and 25 December 2015) in Bangkok

On the other hand, many countries in the region are facing a tighter labour market and continued increases in real wages. This is more pronounced in ageing economies, such as Thailand, and could catalyse structural adjustment. In this regard, the options are to (i) improve the productivity of existing workers; (ii) employ foreign workers; (iii) increase capital spending; and (iv) export capital, over and above the effort to improve productivity. Despite the need, governments in the labour-receiving countries have been reluctant to allow an inflow of workers, especially of unskilled labour. One of the many social and economic consequences of importing unskilled foreign workers relates to the possible negative effects on technological progress and the structural adjustment process by firms. When firms can employ unskilled foreign workers to support structural adjustment, they may eventually become too reliant on them. Subsequently, their investment and other decisions could be made on the premise that labour costs will continue to be held down by migration. As a result, such firms will remain at the low end of the value chain and rely on low wages as the key factor in competing in the global market. This will retard upgrading.

However, there are no a priori arguments suggesting that the decisions to upgrade and to employ unskilled foreign workers are related. They could vary from firm to firm. Domestic-oriented firms operating under a high tariff structure are more likely to experience adverse effects on their technological progress from employing low-wage, unskilled foreign workers. High tariffs would make such firms less likely to seek advanced technology, such that low-wage, unskilled foreign workers could make firms remain at the low end of the value chain and eventually abandon upgrading, compared with export-oriented industries, such as clothing and footwear, where multinational enterprises play an important role in global trade (Humphrey and Schmitz, 2002; Rabellotti, 1997; Schmitz and Navdi, 1999; Gereffi, 1999; Gereffi and Memedovic, 2003). These multinational enterprises not only negotiate price and delivery times, they also demand that suppliers implement specific procedures when fulfilling orders. In addition, multinational enterprises play a pivotal role in establishing decentralised

production networks in a variety of exporting countries. Combined with competition from the increasing number of labour-surplus economies integrating globally, it is unlikely that suppliers subject to the tight labour market will simply employ low-wage foreign workers to survive at the low end of the value chain.

These developments all point to the need for a systematic microanalysis to understand the corporate behaviour of employing unskilled foreign workers, including what employers are looking for, the extent to which the labour market is segmented, and what the alternative options are. A better understanding of this behaviour would be helpful in designing sensible policies regarding migrant workers.

This chapter aims to revisit the study by Kohpaiboon, Kulthanavit, and Jongwanich (2012) for two main reasons. First, the situation in Thailand (a labour-importing country) and its neighbours (labour-exporting countries) has changed. The Government of Thailand's policy stance on migrant workers has changed to managing, rather than preventing, the flow of these workers. Second, economic progress during 2010–2015 in the labour-exporting countries, such as Cambodia, Lao PDR, and Myanmar, encouraged some foreign workers to return home to benefit from the increasing job opportunities at home. This economic progress may have been supported by an influx of foreign direct investment into the labour-exporting countries, especially Myanmar.

These changes result in some uncertainty about employing foreign workers by the labour-importing country's firms, which could affect the decision to employ such workers, given that imported labour incurs fixed and sunk costs for firms. To gain a better understanding of the changes, a survey of enterprises and workers was implemented for this study.

The paper is organised as follows. Section 2 discusses the analytical framework, illustrating the choices facing firms undergoing structural adjustment and considering the relative merits of

the different options. Section 3 discusses the research methodology. Section 4 presents the policy environment, together with the overall performance summary of the clothing industry. The analysis is in Section 5, and the conclusions and policy options are considered in the final section.

2. Analytical Framework

Economic globalisation plays an important role in structural change, both within and across firms and industries. Within firms, structural adjustment requires the reallocation of labour and capital to more efficient uses. In theory, when a firm is undergoing a structural adjustment process because of labour market tightening and a continued increase in real wages, the options available are to (i) improve the productivity of the existing workers, (ii) employ foreign workers, (iii) increase capital spending, and (iv) export capital.

The first option seems to be an impulse response by firms facing a labour shortage and a straightforward option for all firms. Some export-oriented firms have integrated improvements in worker productivity as a routine response. However, the scope of productivity improvement activities is wide and each has a different impact on the firms' competitiveness. Firms under intense competitive pressure must prioritise such activities and allocate their limited resources accordingly. Different decisions might result in a different outcome.

Under the second option, firms can be expected to proceed in the same manner as during the labour-surplus phase of development. The only difference is that abundant supplies of labour at subsistence wage levels are drawn from abroad. However, in theory, importing labour could retard technological progress. Once entrepreneurs become accustomed to the steady availability of unskilled workers, this could slow productivity improvement. Investment and other decisions are then made on the premise that labour costs would continue to be held

down by migration. In general, a reliance on migrant workers is likely to postpone capital spending and technological progress in the labour-receiving country. In addition, there are always concerns about the non-economic consequences of importing low-wage foreign workers, such as cultural contamination and the disruption of social peace.

The third option involves implementing labour-saving technology (Kindleberger, 1967). In theory, this option occurs naturally. As the labour surplus is exhausted and real wages rise, firms have an incentive to introduce labour-saving technology, so that the country's capital–labour ratio increases over time. The public, especially in the developing countries, view this option as far superior to the other options, as it is seen as an indicator of a country's successful industrial development. In practice, a smooth adjustment does not occur automatically, and depends on how effectively the preconditions, such as skilled workers and infrastructure, have been established. More importantly, many preconditions are directly related to the role of government. Another factor is the involvement of multinational enterprises. If their entry is based predominantly on the relative cost competitiveness of the given country on a global scale and they operate in their own enclaves, they can always relocate to another low-wage location rather than upgrade and/or adapt their production process to suit the conditions in the domestic market.

The fourth option concerns exporting capital. In theory, this option is open to all types of firms; in practice, it is only available to large firms in the tradable goods sectors, operating in an oligopolistic market environment. As postulated in the literature on foreign direct investment, a firm contemplating this step must be able to use its proprietary technology abroad to offset any potential disadvantages it faces compared with local firms possessing superior knowledge on the availability of factor inputs, business practices, and/or consumer preferences in the host country (Dunning, 1993; Caves, 2007). In addition, foreign firms with global networks and more experience in doing business abroad would be better placed to use this option compared

to indigenous firms. This is particularly true for small and medium-sized enterprises. In addition, relocating factories abroad generally entails a reduction in national income of the capital-exporting country, and therefore a net loss to that country.[2] The exception would be relocation by locally owned firms, as they would reap the rewards of their foreign operations and increase national productivity. Nevertheless, labour's share of the national product would be hurt.

Choices between these four options are, to some extent, related to a firm's decision to compete in world markets at that firm's current stage of economic development and upgrading. For policymakers, the second option (employing foreign workers) is the least favourable and most controversial. One possible negative effect of this option on the structural adjustment process by firms concerns the upgrading process. After employing unskilled foreign workers, firms may eventually become too reliant on them, and remain at the low end of the value chain. This could ultimately hinder upgrading. However, there are no a priori arguments to suggest that decisions to upgrade and employ unskilled foreign workers must be related. This is especially true for export-oriented industries, such as clothing and footwear, where multinational enterprises play an important role in global trade (Rabellotti, 1997; Schmitz and Navdi, 1999; Gereffi, 1999; Humphrey and Schmitz, 2002; Gereffi and Memedovic, 2003). They also play a role in promoting the upgrading of processes and determining the trade success of the developing countries' exporters.[3] These multinational enterprises not only negotiate price and delivery times, they also demand that suppliers implement specific procedures when fulfilling orders. This is especially true for the North–South trade, for which there is a wide

[2] Welfare improvement could result by shifting production to foreign affiliates. This occurs when the entry of foreign affiliates is driven by tariff or protection motives (Bhagwati, 1973; Brecher and Diaz-Alejandro, 1977; Brecher and Findlay, 1983). In this circumstance, the investment-receiving country could experience immiserising growth induced by the entry of foreign firms, so that their departure could increase (rather than reduce) national welfare.

[3] For a more detailed discussion, see in Kohpaiboon (2006: Chapters 7 and 8) for the experience of processed food industries and Section 6.2 for garment industries. In Bair and Gereffi (2003), Gereffi (1995, 2002), Abernathy et al. (2005), the role of multinational enterprises is known as the buyer-driven value chains.

range of required quality parameters, including input specifications, quality measurement, product design, and labelling and packaging (Keesing, 1983; Rhee et al., 1984). While some aspects may be of little interest in the developing countries, consumers in the developed countries are highly sensitive to them, and these requirements are vital to market success. In the global trade structure, multinational enterprises play a pivotal role in setting up decentralised production networks in a variety of exporting countries. Combined with competition from the increasing number of labour-surplus economies integrating globally, it is unlikely that suppliers under the tighter labour market would simply employ low-wage foreign workers in order to survive at the low end of the value chain.

Numerous empirical studies of labour economics, mainly based on developed countries' experience, point to the impact of technological change on increasing the demand for skills.[4] As a result, capital-deepening and labour-importing options are presumed to be mutually exclusive. In addition, policymakers generally favour capital deepening to the other two options, as this is widely regarded as the most desirable form of economic development.

Nonetheless, empirical results for developing countries remain few, despite the immense policy relevance (Berman and Machin, 2004). It is also unclear whether there is a positive relationship between technological change and the demand for skilled workers for traditional, labour-intensive industries, such as garments and footwear, where labour remains a crucial primary input in the production process. In addition, the labour skills needed by these industries consist of both tacit knowledge and knowledge acquired through learning by doing, rather than through a formal education system. This implies that the degree of substitution between labour and capital is not perfect. Hence, it could be both possible and sensible for firms to choose these two options simultaneously as the labour market tightens. The capital-exporting option that might be an alternative to importing labour is also not generally

[4] See the literature survey by Katz and Autor (1999).

available to firms in these industries, most of which are small and medium-sized enterprises. Note that the capital-exporting option would include relocating factories to rural areas. It is economically difficult for them to recover the fixed and sunk investment costs abroad.

Finally, employing foreign workers could be the last resort for firms as their preference often favours local workers. Hence, wage would become the second factor in hiring one over the other in any work decision. Migrant workers enter a country primarily to take up occupations that the local workers shun. Such occupations can be either tasks that involve a monotonous work process or jobs that provide no opportunity for career progression. A clear example is jobs considered 'dirty, dangerous and difficult' (3D jobs) in the labour migration literature. These positions may entail relatively high wages, but the locals shun them because of the nature of the work involved.

3. Research Methodology

To address the issue, firm-level panel data are needed. Information relating to a firm's behaviour in productivity-enhancing activities (capital deepening and capital exporting) and employing foreign workers must be included in the data set. In addition, the time dimension in the panel data must be long enough to capture the productivity gains from the various productivity-enhancing activities. However, such data are unlikely to be available for many developing countries, including Thailand.

Given this data constraint, a compromise solution was to conduct surveys of enterprises and workers. The survey of workers was based on a well-prepared questionnaire, and the survey of enterprises was handled by a flexible questionnaire approach in which a formal questionnaire was developed and completed by personal interviews. The interviews lasted an average of 45 minutes and were conducted by the authors. Personal interviews were conducted to gain insight into the issues at stake. This minimised the chance of missing important aspects of the

story and maximised the insight into what was happening. The main advantage of this method is that it provides a useful insight into the firms' decision-making process between the four options (productivity improvement, labour importing, deepening of capital, and exporting of capital), and any potential interaction with a firm's productivity, all of which are unlikely to be revealed in a short panel data econometric exercise.

The survey was conducted during October–December 2015, and involved 25 garment firms, 186 Myanmar workers, and 120 Thai workers using three different questionnaires.[5] The interview samples were well-distributed across firms of different sizes, measured in terms of the number of workers. Eight of the firms surveyed employed fewer than 100 workers (referred to as small firms), eight firms employed 100–1,000 workers (medium-sized firms), and nine firms employed more than 1,000 workers (large firms). Two firms are located in Mae Sot District in Tak Province, in the border area between Thailand and Myanmar. The rest have factories, headquarters, or both, in or near Bangkok. The interview sample covered a wide range of products (Table 5.1).

[5] Questionnaires are available upon request.

Table 5.1: Products Manufactured by the Sample Firms Interviewed

Item	Number
Knitted	
T-shorts	9
Sport wear	4
Men's wear	5
Lady's wear	6
Underwear	5
Socks	0
Others (Babywear, uniforms, environmentally friendly)	5
Not knitted	
Working wear	4
Sport wear	6
Pants/Trousers	7
Men's shirt	6
Men's suits	2
Coat	2
Jacket	2
Lady's blouse/shirt	6
Skirt	5
Infants'/kids' wear	3
Underwear	2
Others (Uniforms, environmentally friendly)	2

Note: One enterprise can produce more than one product line.
Source: Research team.

Of the total, 16 firms employ foreign workers, from Myanmar in particular, and 19 firms are exporters. Nine firms have more than one factory in Thailand, most which employ more than 1,000 workers. Some have set up in or near Bangkok, whereas others have factories in the north (Mae Sot Province), central (Chai Nat Province), east (Prachinburi Province), and northeast (Kalasin, Nong Khai provinces) regions of Thailand. All of the firms access labour in these rural areas. Seven firms, all of them large enterprises, have affiliates in Cambodia, Myanmar, or Viet Nam.

There were 118 workers employed in five companies. Of these, 58 Thai workers have direct experience of working with foreign workers. The staff we interviewed at the five companies

hold middle management, upper management, or higher positions. There were 97 female and 21 male workers (Table 5.2). The average age of the workers was 34 years for women and 35 years for men. The oldest worker in the survey was 56 years old. Most workers had been with their current company for 7 years on average. About 60% of the workers were married and 54% had children. Nearly 70% were originally from the northeast region and 12% were from Bangkok.

Table 5.2: Summary of Thai Workers in the Survey

Item	Female	Male	Total
Number of workers	97	21	**118**
Age	34 (54)	35 (56)	**34**
Marital status	59	12	**71**
Number of children of workers	54	10	**64**
Years working at the current factory			**7.1**

The age of the oldest worker is in brackets.
Source: Compiled from the survey in this study.

All the foreign garment workers in the survey were originally from Myanmar. The total sample number was 186 employees working in 10 different companies (Table 5.3). We also interviewed 85 female and 101 male workers members of staff in middle management, upper management, or higher positions at 7 of the 10 companies. The average age of the workers interviewed was 27.6 years old. Half were married. Myanmar workers in this survey were mainly from the Bamar (84%) ethnic group, followed by the Mon (8%), Kayin (4%), Rakhine (2%), Kayah (1%), and other (1%) ethnicities (Table 5.4). They had been living in Thailand for nearly 6 years on average. Their previous jobs were in other industries.

Table 5.3: Summary of Foreign Workers in the Survey

Item	Female	Male	Total
Number	85	101	**186**
Age	29.1	26.3	**27.6**
Marital status	42	50	**92**
Average years living in Thailand	6.6	5.3	**5.9**
Average years working in Thailand	6.6	5.1	**5.8**
Average years working at the current factory	3.1	2.7	**2.9**

Source: Compiled from the survey in this study.

Table 5.4 Distribution of Foreign Workers according to their Ethnic Group

Ethnic Group	Number	%
Kachin	0	0.0
Kayah	2	1.3
Kayin	7	4.4
Chin	0	0.0
Mon	12	7.5
Bamar	134	83.8
Rakhine	3	1.9
Shan	0	0.0
Others	2	1.3

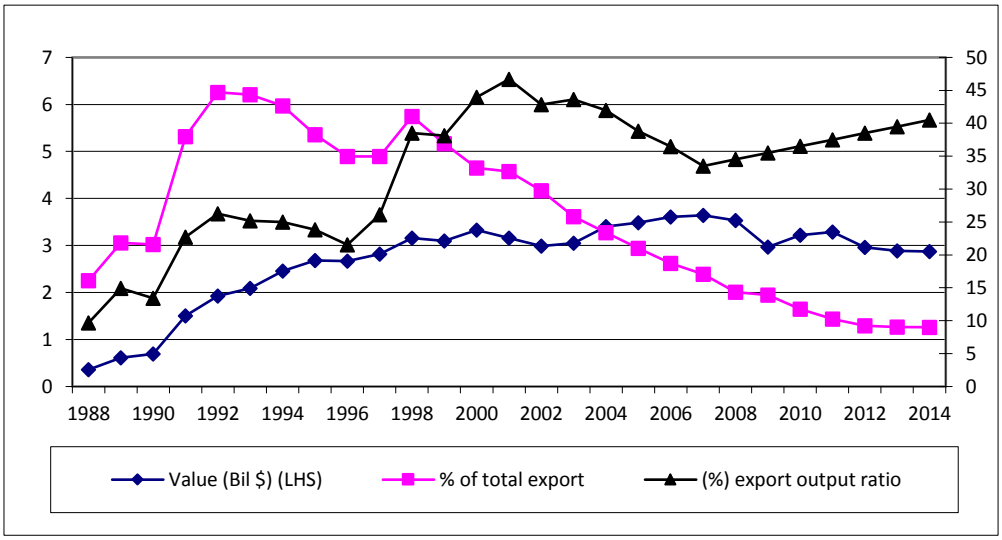
Note: Percentages may not total 100% because of rounding.
Source: Compiled from the survey in this study.

4. The Thai Garment Industry: A First Look

Clothing was the foremost manufacturing export product of Thailand from the late 1980s to the early 1990s (Figure 5.1). The surge in exports began during the mid-1980s. The annual value of clothing exports soared from $419 million during the first half of the 1980s to almost $2 billion in the second half. Clothing accounted for 5% of total exports in the early 1980s and rose to 12% during 1987–1993. Its share of total manufactured exports exhibited a similar upward trend. In 1996, Thai clothing exports experienced a sharp drop to $3.0 billion from $4.8 billion in 1995. This was due to continuous overvaluation of the real exchange rate between

1988 and 1996 (Jongwanich, 2008). Thereafter, the export value gradually recovered to reach a peak of $3.6 billion in 2007. During 2008–2014, the value of Thai clothing exports trended downward from $3.5 billion to $2.9 billion. This is due to several factors, including the global financial crisis and labour shortages. The share of total manufacturing exports declined markedly because of the slower growth rate of clothing exports compared to exports of electronics and electrical appliances and vehicles.

Figure 5.1: Thai Clothing Exports, 1970–2014

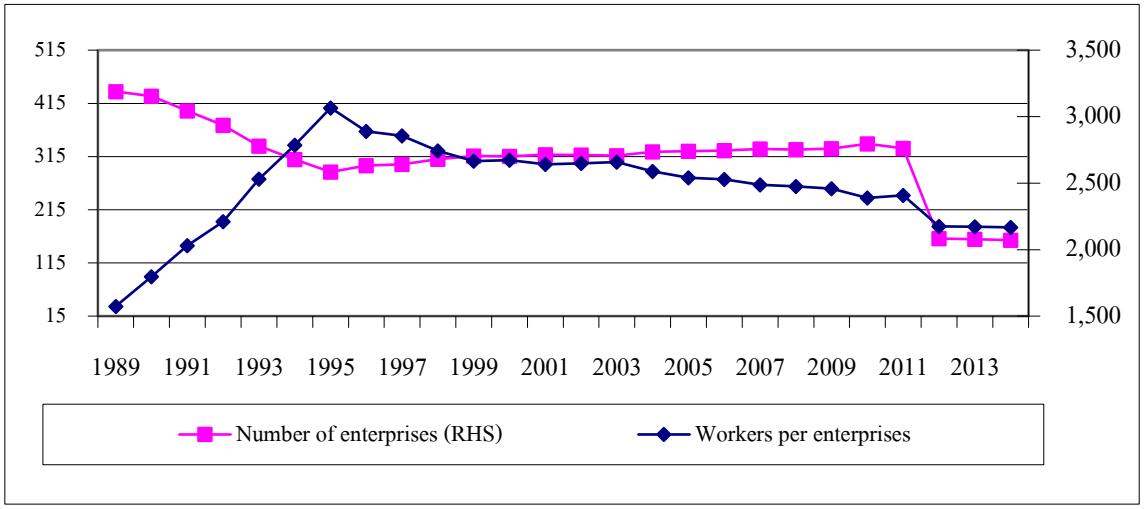


Note: clothing includes HS 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211 and 6212 product codes.
Source: Author's compilation from the UN Comtrade Database.

The clothing industry is labour-intensive and the barriers to entry are relatively low compared to some other industries. In addition, it is one of the most highly protected industries in the Thai manufacturing sector. Hence, at the early stage of industrialisation in Thailand, many firms entered the garment industry, a large number of which were small and medium-sized enterprises. The number of enterprises increased significantly during the export boom, from

1,574 in 1989 to 3,066 in 1995. The increasing number of enterprises was associated with a decline in average employment per enterprise from nearly 450 workers in 1989 to 300 workers by 1996, suggesting the new entrants were relatively small firms (Figure 5.2).

Figure 5.2: Number of Enterprises, and Workers per Enterprise, 1989–2014



Source: Thai Textile Development Institute.

With the limited size of the domestic market, firms tended to compete. This caused domestic prices to fall and made clothing tariffs unlikely to be binding. In the meantime, wage rates continued to rise because of the countrywide economic boom, but the international competitiveness of the Thai clothing industry was eroded. The Uruguay Round of the General Agreement on Tariffs and Trade concluded with a clear signal that the global trade in clothing was underway and subject to almost the same rules as other manufactured goods in the World Trade Organization's system. The enhanced competition, wage rate rises, and globalisation of the industry all became major push factors in the structural adjustment process. Since 1995, the number of clothing manufacturing firms has been dropping gradually. During 1996–2011, an average of 40 firms exited the clothing industry each year. The floods of 2011 – the worst

Thailand had experienced in a century – accelerated the adjustment process, with the number of enterprises dropping sharply by 234 from 2,409 in 2011 to 2,175 in 2012. Thereafter, the number of firms remained roughly constant.

The garment industry played an important role in absorbing labour into the manufacturing sector until 2011. The number of workers increased considerably from 688,000 in 1989 to 862,000 in 1996, representing 22.4% of total employment in the manufacturing sector during that period.[6] Despite experiencing steady export growth, the industry's employment level remained at about 800,000 workers during 1997–2011, with a slight downward trend.

The severe flooding in 2011 adversely affected factory operations in many areas including the north, central, and greater Bangkok regions. The closure of many garment firms sharply reduced the number of workers in the industry to 350,000 by 2012. Hence, the relative importance of the garment industry declined sharply from about 15% of total manufacturing employment before 2011 to 5% in 2012–2014. Interestingly, the scale of employment contraction in the garment industry was larger than that of enterprise numbers. By 2012–2014, the number of employees per enterprise had dropped sharply to just half that seen in 2011. Given that the figures include only Thai workers, this suggests an increasing role of foreign workers entering the garment industry.

5. Results

Since 2010, the trend and pattern of firms employing foreign workers have changed noticeably. The overall perception from the survey is that employing foreign workers has become the general practice for garment firms in Thailand. Our survey found that firms of every size employed foreign workers. Of the 25 firms studied, 16 (64%) employed foreign

[6] Note that the reported figure includes only native workers.

workers, all of them from Myanmar. Three of the eight small firms sampled (38%) employed foreign workers, as did six of eight medium-sized enterprises (75%) and seven of nine large firms (78%) (Table 5.5).

Table 5.5: Summary of the Interviewed Firms

Characteristics	Small	Medium	Large	All
Total	**8**	**8**	**9**	**25**
Exports (number of observations)	5	6	8	19
(% of total sales)	20	55	79	52
Has more than one factory in Thailand	0	2	7	9
Has investment abroad	0	0	7	7
Employs foreign workers	3	6	7	16
Performs product design	5	4	3	12
Can procure inputs directly	8	7	8	23
Has own brand	5	3	2	10

Note: Small = firm with less than 100 workers; medium = firm with between 100–1,000 workers; and large = firms with more than 1,000 workers.
Source: Compiled from the survey in this study.

5.1 Who employs unskilled foreign workers?

Firms that employ foreign workers tend to be medium-sized or large export-oriented firms that have more than one factory. Many of them have established affiliates abroad. On average, such firms employ 2,741 foreign workers. By comparison, firms that do not employ foreign workers have an average of only 874 workers. The (unweighted) average export output ratio of these firms is 71%, whereas the corresponding figure for all firms is 52%. The output-weighted average ratio for the former is close to 100%.

In contrast, Kohpaiboon, Kulthanavit, and Jongwanich (2012) found that medium-sized firms are more likely to employ foreign workers.[7] Changes in the labour market since 2010, including a more severe labour shortage in Thailand, mean this is no longer true. Interviews

[7] The interview period was November 2009–February 2010.

with firms' owners by Kohpaiboon, Kulthanavit, and Jongwanich in 2010–2012, and by this study, show that the tendency to hire foreign labour is largely driven by the tighter labour market. The labour shortage is more acute for traditional labour-intensive industries, such as garment manufacturing, because jobs in such industries are often considered 3D jobs by native youths. This argument is consistent with our survey, which found that native workers are generally older than foreign workers. It also accords with the main findings of Chawanote, Phumma, and Fakthong (2015), who directly surveyed workers about their job preference. The global commodity price boom during 2006–2010 exacerbated the problem (Powell, 2015). The prices of several commodities reached century-high levels, and as Thailand is one of the major producers and exporters of commodities such as rice and natural rubber, this enticed many factory workers in the greater Bangkok area to return to their hometown and start their own plantations. As garment factory workers left their jobs, some retiring early, the firms experienced severe labour shortages.

Two factors added pressure to this adjustment. The first was the B300 minimum wage policy introduced by Prime Minister Yingluck (2013–2015). While the introduction of a minimum wage could worsen the problem, many firms surveyed argued that it was the tip of the iceberg. The second and more decisive factor was the severe flooding in 2011 that affected factories in the greater Bangkok area. Amidst the firms' consolidation process, many garment factories closed and the workers left, many returning to the provinces to establish their own plantations, rather than work in another garment factory. The statistics on the number of workers and firms in the garment industry during 2011–2012 reflect this pattern.

5.2 Importing foreign workers versus other alternatives

The shrinking pool of labour for the garment industry forced all firms, regardless of their size, to adjust, by selecting from the four options discussed (productivity improvement, labour

importing, deepening of capital, and exporting of capital). Each option incurs different costs and affects firms differently, and therefore firms react differently.

Contrary to what many believe, our interviews suggested that employing foreign workers is not the first option that firms took. All firms agreed in the interviews that they opted to employ foreign workers to keep their operations running smoothly, although this option incurs costs and uncertainty. Interestingly, firms employing foreign workers also used the other options among the four to cope with labour shortages, indicating that they are not mutually exclusive and firms can use any or all of them to maintain performance.

Currently, capital deepening is still not feasible for garment manufacturing. Nonetheless, technological advances in robotics and information technology are making capital deepening by the garment industry more viable, even though this not yet evident in the developing countries (Ford, 2015; Clifford, 2013; MIT News, 2016). This is consistent with our survey findings that some firms pay full attention to production line automation.

The need for productivity improvement is widely recognised and upgrading has become routine because of increasing global competition, regardless the labour supply situation. Our survey shows that some enterprises have achieved substantial productivity improvements. Of 25 firms, 14 stated they were confident about productivity improvement. Firms successfully experiencing productivity improvements tend to be larger (Table 5.6). Few small and medium-sized enterprises experienced productivity improvement, and many medium-sized firms do not even measure this attribute. They have not introduced the modern management techniques that are critical to improving productivity, nor have they recognised the importance of long-term productivity improvement. It is therefore very difficult to measure the productivity performance of small and medium-sized enterprises.

Table 5.6: Changes in Labour Productivity at the Firms Interviewed

Change	Small	Medium	Large
Increased	3	2	9
Decrease	1	1	0
Unchanged	1	0	0
Unknown	3	5	0

Source: Compiled from the survey in this study.

The survey asked a series of questions related to productivity improvement, such as changes in the defect rate, the increase in product variety, changes in lead time, changes in unit price, authority to source inputs (and fabric in particular), and creating original designs, as a robust check on whether they had experienced productivity improvement. As revealed in Table 5.7, the main findings are consistent with the earlier responses on productivity. The larger enterprises had improved their productivity. As seen below, successful productivity improvement is a key factor in the ability of firms to compete for workers, including foreign ones.

Table 5.7: Productivity Improvement Activities

	Small firms		Medium-sized firms		Large firms	
Indicator	No.	No reply	No.	No reply	No.	No reply
Average Defect Rate	5%–10%	4*	0	7*	<1%	0
Product variety	Hard to find the appropriate answers as it takes place in several ways					
Decrease in lead time	2	1 **	0	4 **	6	0
Increase in unit price	2	1 **	1	7	8	0

Note: * Not measured systematically; ** Not sure,
Source: Compiled from the survey in this study.

Some indicators of productivity improvement, such as authority to source inputs, changes in lead time, and increased product variety, have become invalid because they became general practice after the abolition of export quotas in 2004. Buyers, or customers, focus on their core

competency, and outsource other tasks to suppliers, including the sourcing of qualified inputs. This began with export-oriented firms and has since been adopted increasingly by domestic-oriented firms that operate a production network of locally owned brands, such as Jaspal and Flynow, as well as multinational wholesalers, such as Tesco. Therefore, such indicators no longer only measure a firm's performance, they have become prerequisites for firms to remain in business.

The last option is exporting capital. Clearly, this is more viable for larger enterprises, as it incurs huge fixed and sunk costs during the initial years of operation. As of 2014, 20–29 Thai garment firms had invested in neighbouring countries. Viet Nam is the largest host country for direct outward investment by Thai garment firms, followed by Cambodia and Myanmar (Daily News, 2014).

In line with their vision of the garment industry, eight firms surveyed had expanded their production capacity by setting up factories in provinces outside greater Bangkok on the expectation of labour availability in those areas. It seemed inevitable that garment firms, especially those located in greater Bangkok, would experience a labour shortage because of the ageing population and/or the local workers' aversion to 3D jobs. Hence, these firms took the first-mover advantage to secure production capacity by setting up factories in other provinces to attract rural workers.

Nonetheless, establishing factories in other provinces is not a perfect substitute for investment abroad, as these firms also have factories abroad. Firms with additional factories in rural areas are more likely to invest abroad to access adequate labour resources and gain preferential market access in the main export destinations that receive products made abroad. Two preferential market access schemes mentioned in the survey are the Generalised System of Preferences granted to low-income countries by major developed countries, and the

preferential tariffs offered in free trade agreements that the host countries sign with the major export destinations.

Overall, the survey results suggest that employing foreign workers does not preclude the use of the other two available options – capital deepening and exporting capital. Rather, the four options are tools that firms can use in different combinations, according to their business constraints and goals, to ensure international competitiveness.

5.3 Productivity of foreign workers and the extent to which firms rely on them

Among the firms employing foreign workers, the extent to which they rely on such workers varies. In some firms, foreign workers account for more than half the workforce, whereas other firms employ on fewer foreign workers. This largely depends on their performance. Arguably, other factors play a role (e.g. implementing capital deepening, non-economic concerns regarding foreign workers, and speed of wage convergence in the region), and these vary from firm to firm sampled.

As Kohpaiboon, Kulthanavit, and Jongwanich (2012) found, before 2010, larger firms were in a better position to attract native workers because successful upgrading meant they could offer higher wages and better working conditions. Hence, it was the medium-sized firms that employed the foreign workers, who were less productive than native workers but willing to accept lower wages.

As argued earlier, the labour market in Thailand is changing. The country's five leading garment exporters expressed a need to hire foreign workers, at least on a temporary basis (Kohpaiboon and Kuthanavit, 2011).[8] The wage difference is no longer large, as remuneration

[8] While the study's focus is on firms' adjustment in the post-Multi Fibre Arrangement era, the issue of migration was also examined during the interviews. An additional 20 firms were interviewed during August–November 2010.

is mostly driven by the higher cost of living in Thailand, and in Bangkok in particular, as well as the tighter labour market.[9] In addition, all the sampled firms agreed that foreign workers perform relatively well after few weeks of training, and they tend to work harder than native ones, especially Thai youths. All garment firms, regardless of size, face a severe labour shortage. Few new native workers are willing to work in a garment factory and most of the remaining workers have been with their firm for years, are relatively old, and are unwilling to change jobs due to family constraints. The survey of foreign and native workers supports this argument (Tables 8 and 9).

Table 5.8: Work Perceptions of Foreign Workers

Item	Average	Maximum	Minimum	SD	Observations
Pride with the current job	1.73	5	1	1.0	119
Loyalty to the current job	1.87	4	1	0.9	119
Attachment to the current job	1.94	4	1	1.0	119
Plan to quit the job	4.28	5	2	0.7	99
Difficulty to find a new job in Thailand	3.15	5	1	1.0	119
Possible to change manager	1.39	3	1	0.7	119
Return home	1.64	3	1	0.6	119
When to return home	4.53	8	1	2.5	47
Try to improve productivity	1.81	5	1	1.1	119
Try to work more than expected by the manager	2.25	5	1	1.3	119
Suggest ideas to improve productivity	2.69	5	1	1.4	117
Want to develop job skills to reduce defects	1.85	5	1	1.0	119
Want to develop job skills for more difficult jobs	1.96	5	1	1.3	119
Want to develop job skills for more product variety	2.74	5	1	1.6	118
Communication	1.93	3	1	0.6	90
Difficulty to understand Thai supervisors	3.98	5	1	1.2	96
Mistakes due to communication error	3.88	5	2	0.9	99
Work with Thai colleagues	1.04	2	1	0.2	99
Difficulty to work with Thai colleagues	3.67	5	1	1.4	99

SD = standard deviation.
Source: Compiled from the survey in this study.

[9] To a large extent, this is equivalent to '*cliff*' in the original Lewis model.

Table 5.9: Work Perceptions of Thai Workers

Item	Average	Maximum	Minimum	SD
Fairness of wage received	2.9	6	1	0.9
Work harder to get better payment	2.3	5	1	1.4
Fairness of performance assessment	2.5	6	1	1.6
Fairness of job promotion	2	5	1	1.3
Fair treatment between Thai and foreign workers	2	5	1	1.1
Fair payment between Thai and foreign workers	2.9	3	1	0.6
Satisfy with foreign co-workers	2	4	1	0.7
Closeness to foreign workers	2.3	5	1	1.5
Plan to quit job	3.3	5	1	1.1
Why to quit the job	2.5	5	1	1.0
Difficult to find a new job	2.8	5	1	1.2
Difficulty to work with foreign workers	2.6	5	1	1.3

SD = standard deviation.
Note: The sample size is 120 workers.
Source: Compiled from the survey in this study.

Consequently, large firms now compete with medium-sized firms for foreign workers. Given their superior performance, large firms are much more attractive places to work from a foreign worker's viewpoint. For example, better-performing firms tend to run overtime production regularly, which substantially increases workers' total compensation and reduces income uncertainty. This is consistent with the findings of the foreign workers' survey.

Changes in the rules and regulations for employing foreign workers in Thailand been advantageous for large firms. Firms must express their intention to employ foreign workers and must specify the number of workers accordingly. When firms no longer need these workers, they may (i) send the workers home or terminate their contract, or (ii) sign a document confirming their willingness to allow these workers to work elsewhere. Firms have a certain amount of bargaining power over foreign workers who want to continue working in Thailand. If they refuse to sign the document, that worker must return home. Arguably, foreign workers face greater risks at smaller firms because the firms' owners can easily abuse power in terminating the contract and in signing a document to allow these workers to work elsewhere.

Hence, the labour shortage faced by medium-sized enterprises became even more severe as these workers began to move.

Among medium-sized enterprises, those that perform relatively well, as measured by payment reliability and regular availability of overtime, are attractive to foreign workers. Competitive medium-sized firms that can maintain or increase their sales volumes can therefore compete for these workers to some extent, whereas firms that struggle to maintain business are be less likely to be able to retain their foreign workers. Many enterprises have decided to downsize, and now target specific niche markets according to the number of workers employed. The number of workers employed at one sample firm had decreased from 400 to 100. Downsizing associated with productivity improvement is measured in terms of delivery reliability, the defect rate, and the increase in unit value. Many firms in this category were considering exiting the industry.

Regardless of their performance, medium-sized enterprises are experiencing high worker turnover. This affects their long-term productivity negatively, as high turnover rates interrupt the learning process, which is crucial for long-term productivity improvement.

The business performance of large enterprises tends to be better than that of other firms (Table 5.10). In the previous 5 years, large firms are likely to have experienced an increase in employment, sales revenue, labour productivity, and export earnings. This is associated with the increasing role of foreign workers within the total workforce.

Table 5.10: Business Performance in the Previous 5 Years by the Firms Interviewed

Performance	Small	Medium	Large	Total
Increases employment	2	0	6	**8**
Increased foreign workers	2	3	6	**11**
Increased sales revenue	2	3	7	**12**
Increased labour productivity	3	2	9	**14**
Increased exports	1	2	7	**10**

Source: Compiled from the survey in this study.

Nonetheless, some large enterprises decided not to rely too heavily on foreign workers. Two of nine large enterprises in the survey had decided not to employ foreign workers, and one large enterprise had just started employing foreign workers, but they made up less than 2% of the total employee numbers. In another large enterprise, foreign workers accounted for nearly 50% of employees.

The reasons why some companies chose not to rely on foreign workers varied. Some firms were concerned about the negative side effects on society overall, so they chose to use the capital-exporting and capital-deepening options. Some others have established production bases in the provinces, and were therefore less affected by the labour shortage. Interestingly, some firms considered that importing foreign workers was an unsustainable solution compared to installing automated systems in the production line. These firms were in the process of installing such systems.

5.4 Employing foreign workers and upgrading efforts

There is no evidence that employing foreign workers retards the upgrading efforts of firms. In this study, we follow the upgrading terminology used widely in the literature. There are three types: function-based, product-based, and process-based upgrading (Gereffi and Memedovic, 2003; Gereffi and Tam, 1998; Gibbon, 2003; Palpacuer, Gibbon, and Thomsen, 2005).

Function-based upgrading refers to the ability to provide a broader range of services beyond basic garment assembly, including product design, fabric sourcing, inventory management, and management of production sourcing. Product-based upgrading refers to the ability to manufacture higher-quality products for higher-priced market segments. Process-based upgrading involves the reduction of inventory and waste through the implementation of modern management techniques, such as the lean production system.

As observed by Kohpaiboon, Kulthanavit, and Jongwanich (2012), functional and product upgrading decisions are driven largely by customer demand. These factors become the requirements to remain in business. As real wages in Thailand continue to increase and suppliers from labour-abundant countries become more numerous, it is unlikely that Thai enterprises can simply undertake only the basic manufacturing processes of cutting, sewing, and packing. The orders placed with Thai enterprises have become more complex, and the workers handling them must be more skilled. As a result, handling such orders often involves installing new machinery.

The decision to perform process-based upgrading, on the other hand, depends on and must be driven by the business vision of the firm's owner. As process-based upgrading incurs sunk costs, it takes time for firms to realise the benefits, and the upgrading process must be carried out continuously, as revealed in our survey. This is different from function- and product-based upgrading, from which companies may benefit immediately. The performance of firms that are fully committed to this type of upgrading is noticeably superior to those that have paid less attention to it. Process-based upgrading plays a more pivotal role in productivity improvement and long-term competitiveness than function- and product-based upgrading. This key finding confirms that of Kohpaiboon, Kulthanavit, and Jongwanich (2012).

The chance to access unskilled foreign workers at lower wages would not significantly deter the decision to undertake process-based upgrading. The decision to employ foreign workers

depends on other factors, such as policy uncertainty and the management problems associated with employing foreign workers (such as communication and worker cohesion), compared with the benefits of maintaining the production capacity.

6. Conclusions and Policy Implications

This chapter re-examined the relationship between productivity and employing unskilled foreign workers by surveying Thai manufacturers during October–December 2015. The key reason for this re-examination is the rapid change in the economic fundamentals and the labour market in Thailand. Three separate questionnaires were employed, for firms, local workers, and foreign workers.

The key finding is that more medium-sized and large clothing manufacturing firms in Thailand are employing foreign workers. Medium-sized and large enterprises employ foreign workers to overcome the tighter labour market conditions. There is no evidence of a causal relationship to indicate that employing foreign workers retards firms' productivity improvement. Rather, we found the opposite. It is the well-performing firms that are in a better position to attract foreign workers and maintain production capacity. Struggling firms are less likely to be able to compete for, and therefore benefit from, foreign workers to enhance their capacity.

Three policy inferences can be drawn from this paper. First, there are potential mutual benefits for the countries in the region. The labour-importing countries can minimise the costs incurred during the structural adjustment process by importing labour, and the labour-exporting countries can benefit from accumulated skills in industries such as clothing when their workers return home. The movement of unskilled workers between countries is likely to continue in the countries of Indochina that share common land borders, because job opportunities differ considerably. The governance of unskilled labour mobility across these countries has only recently been incorporated into the multilateral framework. Clearly, there is

scope for international organisations to realise the potential of inter-country labour mobility more widely.

Second, using one-size-fits-all policy measures to manage the flow of unskilled foreign workers may be risky because of the significant role of industry-specific factors. For export-oriented industries such as clothing, where global trade remains under the influence of multinational firms, the insight into firms' behaviour revealed in this paper suggests that benefits from employing unskilled foreign workers are greater if the labour shortage is largely driven by native workers' preferences.

Third, attention towards policies governing the flow of foreign workers should into consider the fact that Thailand has long common borders with labour-exporting countries (Myanmar, Lao PDR, and Cambodia). Prohibition seems to be less likely to succeed, so the policy stance is shifting towards managing the flows. To do so, rules and regulations must be straight forward so that they can be implemented effectively.

References

Abernathy, F.H., A. Volpe, and D. Weil (2005), 'The Future of the Apparel and Textile Industries: Prospects and Choices for Public and Private Actors'. Boston: Harvard Center for Textile and Apparel Research.

Bair, J. and G. Gereffi (2003), 'Upgrading, Uneven Development, and Jobs in the North American Apparel Industry', *Global Networks*, 3, pp.143–69.

Berman, E. and S. Machin (2004), 'Globalization, Skill-Biased Technological Change and Labour Demand', in E. Lee and M. Vivarelli (eds.), *Globalization, Employment and Poverty Reduction.* Geneva: International Labour Organization.

Bhagwati, J. (1973), 'The Theory of Immiserizing Growth: Further Applications', in M.B. Connolly and A.K. Swoboda (eds.), *International Trade and Money.* Toronto: University of Toronto Press.

Brecher, R.A. and C.F. Diaz-Alejandro (1977), 'Tariffs, Foreign Capital and Immiserizing Growth', *Journal of International Economics*, 7(4), pp.317–22.

Brecher, R.A. and R. Findlay (1983), 'Tariff, Foreign Capital and National Welfare with Sector-Specific Factors', *Journal of International Economics*, 14(3), pp.277–88.

Caves, R.E. (2007), *Multinational Enterprise and Economic Analysis* (3rd edition). Cambridge: Cambridge University Press.

Chawanote, C., N. Phumma, and T. Fakthong (2015), Labor Shortage in Thai Manufacturing: Demand vs. Supply Side Factors, Report submitted for Thailand Research Fund (in Thai).

Clifford, S. (2013), 'US Textile Plants Return, with Floors Largely Empty of People', *New York Times*, September 12, www.nytimes.com/2013/09/20/business/us-textile-factories-return.html (accessed 15 December 2015).

Daily News (2014), Promote Thai Garments in ASEAN market and Factory Relocation, http://www.aseanthai.net/ewt_news.php?nid=2178&filename=index (accessed 15 December 2015).

Dunning, J.H. (1993), *Multinational Enterprises and the Global Economy.* Massachusetts: Addison-Wesley Publishers.

Ford, M. (2015), *The Rise of the Robots.* London: Oneworld Publication.

Gereffi, G. (1995), 'Global Production Systems and Third World Development', in B. Stallings (ed.), *Global Change, Regional Response: The New International Context of Development*. New York: Cambridge University Press.

Gereffi, G. (1999), 'International Trade and Industrial Upgrading in the Apparel Commodity Chain, *Journal of International Economics*, 48(10), pp.37–70.

Gereffi, G. (2002), 'The International Competitiveness of Asian Economies in the Apparel Commodity Chain', *ERD Working Paper Series,* No. 5, Manila: Asian Development Bank.

Gereffi, G. and O. Memedovic (2003), *The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries?* Vienna: UNIDO.

Gereffi, G. and T. Tam (1998), 'Industrial Upgrading through Organizational Chains: Dynamics of Rents, Learning-by-Doing, and Mobility in the Global Economy', Paper presented at American Sociological Association. San Francisco, http://www.ids.ca.uk/ids/global/pdfs/gereffi3.pdf (accessed 15 December 2015).

Gibbon, P. (2003), 'The Africa Growth and Opportunity Act and the Global Commodity Chain for Clothing', *World Development,* 31(11), pp.1809–27.

Global Commission on International Migration (GCIM) (2005), *Migration in an Interconnected World: New Directions for Action, Report of the Global Commission on International Migration.* Switzerland: GCIM.

Humphrey, J. and H. Schmitz (2002), 'How Does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters?' *Regional Studies*, 36(9), pp.1017–27.

International Labour Organization (ILO) (2006), *ILO Multilateral Framework on Labour Migration: Non-binding Principles and Guidelines for a Rights-based Approach to Labour Migration*. Geneva: ILO.

Jongwanich, J. (2008), 'Real Exchange Rate Overvaluation and Currency Crisis: Evidence from Thailand', *Applied Economics*, 40(3), pp.373–82.

Katz, L. and D. Autor (1999), 'Changes in the Wage Structure and Earnings Inequality', in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, 3. New York and Oxford: Elsevier.

Kessing, D.B. (1983), 'Linking Up to Distant Markets: South to North Exports of Manufactured Consumer Goods', *American Economic Review*, 73(2), pp.338–342.

Kindleberger, C.P. (1967), *Europe's Postwar Growth: The Role of Labour Supply.* Cambridge MS: Harvard University Press.

Kohpaiboon, A. (2006), *Multinational Enterprises and Industrial Transformation: Evidence from Thailand*. Cheltenham: Edward Elgar.

Kohpaiboon, A. and P. Kuthanavit (2011), 'Adjustment of Thai Clothing Firms in Quota-Free Era', Policy Report submitted to Office of Health Promotion, Prime Minister Office, Bangkok.

Kohpaiboon, A., P. Kulthanavit, and J. Jongwanich (2012) 'Structural Adjustment and International Migration: An Analysis of the Thai Clothing Industry', *Oxford Development Studies,* 40 (2), pp.231–260.

MIT News (2016), 'MIT Improving Human-Robot Collaboration', http://www.roboticstrends.com/article/mit_improving_human_robot_collaboration (accessed 15 December 2015).

Palpacuer, F, P. Gibbon, and L. Thomsen (2005), 'New Challenges for Developing Country Suppliers in Global Clothing Chains: A Comparative European Perspective', *World Development,* 33(3), pp.409–30.

Powell, Andrew (2015), 'Commodity Prices: Over 100 Years of Booms and Busts', https://blogs.iadb.org/ideasmatter/2015/05/04/commodity-prices-100-years-booms-busts (accessed 17 February 2016).

Rabellotti, R. (1997), *External Economies and Cooperation in Industrial Districts: A Comparison of Italy and Mexico*. London: MacMillan.

Rhee, Y.W., B. R. Larrson, and G. Pursell (1984), *Korea's Competitive Edge: Managing the Entry into World Markets.* Baltimore: Johns Hopkins University Press.

Salt, J. (1992), 'The Future of International Labor Migration', *International Migration Review*, 26(4), pp.1077–1111.

Schmitz, H. and K. Nadvi (1999), 'Clustering and Industrialization: Introduction', *World Development*, 27(9), pp.1503–14.

World Bank (2006), *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. Washington, DC: World Bank.

Chapter 6

Myanmar Workers' Motivation to Develop Skills, and the Perception of Teamwork with Thai Workers in Thai Garment Factories: Effects of Perception of a Firm's Human Resource Management Practices

Kenjiro Yagura

1. Introduction

The Thai garment industry has stagnated in recent years owing to the increase in the cost of labour and the rise of the garment industry in neighbouring countries with lower wage levels, such as Cambodia and Viet Nam. The garment industry is a typical labour-intensive industry and substituting capital for labour is technically difficult. Product upgrading, or producing products with higher value-added, is necessary for the Thai garment industry to survive.

One problem facing the Thai garment industry has been a shortage of workers, caused partly by Thai workers' increasing aversion to so-called '3D' (dirty, dangerous, and demeaning) jobs. To tackle this problem, many garment firms in Thailand have employed more foreign migrant workers, especially those from Myanmar, as described in Chapter 5. However, the reliance on Myanmar workers does not directly ease the labour cost as the legal minimum wage also applies to foreign workers in Thailand. Hence, upgrading continues to be crucial for the Thai garment industry's survival.

The critical question is whether the reliance on foreign migrant workers is compatible with upgrading. Product upgrading includes the production of products with higher value-added as well as high-mix, low-volume production with shorter lead times, which usually results in a

higher unit price. This kind of upgrading would require measures such as introducing high-performance equipment and better production management. In addition, a workforce with higher skill levels to handle difficult and multiple tasks, and efficient teamwork by the workers, would be required to support product upgrading. These two factors require workers with a strong motivation to develop their skills and ensure harmonious mutual relationships. In this regard, firms that rely on foreign migrant workers might find it difficult to pursue product upgrading because of problems unique to foreign migrant workers, such as the language barrier, the limited duration of work permits, and (perceived) discriminatory treatment in the workplace, which might demotivate the foreign workers. A study by Kohpaiboon, Kulthanavit, and Jongwanich (2012) also reported that some Thai garment factories stopped employing foreign workers after facing difficulties of communication and weak cohesion among the workers.

On the other hand, firms' human resource management practices (HRMP) might ease such problems. Many studies have shown that in general, employees' perceptions of HRMP influence both their motivation to develop skills and the quality and performance of teamwork by influencing the employees' work attitude. Therefore, the question we should explore is what kind of HRMP would make upgrading combined with the employment of foreign migrant workers compatible?

To the author's knowledge, there is no study on the relationship between firms' HRMP in relation to foreign migrant workers, workers' job attitude, and upgrading, even if studies from countries other than Thailand are included. Although Puangyoykeaw and Nishide (2015) studied the work attitudes of foreign migrant workers in Thailand, they did not examine the relationship between HRMP and work attitudes, the workers' motivation to develop their skills, or teamwork issues.

Based on the above points, the objectives of this chapter are twofold: firstly, to examine whether Myanmar workers differ from Thai workers in terms of their level of motivation to develop skills, and their perception of the difficulty of working in teams with Thai and Myanmar workers; and secondly, to explore the factors determining Myanmar workers' motivation to develop skills and their perception of working with Thai workers. The analysis focuses especially on the effect of workers' perception of HRMP. It would have been desirable to analyse the skill level of the workers, but we were unable to collect enough reliable survey data with which to do this.

To fulfil the above objectives, we adopted the following methods. For the first objective, Myanmar and Thai workers were compared simply in terms of their perception of HRMP and work attitude. Regression analysis was applied to examine the effect of nationality. For the second objective, regression analysis was conducted in which the Myanmar workers' desire to develop skills and their perception of the difficulty of working with Thai workers were regressed on variables representing the workers' perception of HRMP. To compliment the regression analysis, the data on Myanmar workers who had moved to a different factory in Thailand were used to examine whether a more favourable perception of HRMP at the current factory compared with the previous one was linked with a positive change in work attitude.

The empirical analyses use data collected through a questionnaire survey of Myanmar and Thai production workers in Thai garment factories. It was difficult for respondents to give their perception of 'motivation' to develop skills, so we asked them the degree to which they 'desire' to develop skills in several respects, and their responses to those questions were used as the indicators of their motivation to develop skills. Also, the Myanmar workers' perception of the 'difficulty in working with Thai workers' was used as the indicator of the conditions conducive to efficient teamwork.

This chapter is organised as follows. Section 2 presents the theoretical background and hypotheses regarding factors affecting foreign workers' motivation to develop skills and the ease of teamwork. Section 3 describes the outline of the survey and basic characteristics of Myanmar and Thai garment workers surveyed. In Section 4, Myanmar and Thai workers are compared with respect to their perception on HRMP and work attitude including their desire to develop skills and ease of teamwork. Section 5 demonstrates simple correlations between perception of HRMP and work attitude. Sections 7 and 8 respectively present the methodology and the results of econometric analysis of the determinant factors for Myanmar workers' desire to develop skills and the difficulty in working with Thai workers. Section 8 summarises the key findings of this chapter and presents implications for human resource management of firms hiring foreign migrant workers.

2. Theoretical Background

2.1. Possible negative effects from employment of foreign workers on upgrading

The number of workers from developing countries working in foreign countries, both developed and developing, is increasing. Lower wages are one of the attractions for firms employing such workers. In addition, some studies have indicated that foreign migrant workers are ‘good workers’, in the sense that they have a stronger work ethic, and greater commitment and discipline than local workers (Thompson, Newsome, and Commander, 2013). Foreign workers are also reported to have superior organisational citizenship behaviour, or work-related voluntary behaviour, which supports effective functioning of the organisation (Krjukova, Schalk, and Soeters, 2009).

Even if such positive aspects exist, employing foreign migrant workers can deter upgrading involving production workers for three reasons. Firstly, the language barrier makes it difficult for local managers to share detailed instructions and provide training to foreign workers who

have a limited grasp of the language of the host country. The language barrier might also hinder teamwork in work groups composed of local and foreign workers. Making groups of only one nationality or ethnic group, on the other hand, would reduce the flexibility of the working organisation. Secondly, most countries impose a legal limit on the duration of work permits for foreign migrant workers. This means that firms and foreign migrant workers can benefit from training for a limited period only, and the incentive to invest in training decreases accordingly.

Thirdly, foreign migrant workers might be discriminated against in terms of their working conditions, and the local supervisors and co-workers might show a discriminatory attitude towards them. If foreign workers perceive they are treated unfairly in the workplace, their work motivation might decrease and teamwork with local co-workers would deteriorate. The issue of teamwork is especially important in the case of Thai garment firms because, as the findings of our preliminary field survey of garment factories in Bangkok and the nearby areas show, it is not unusual for Myanmar and Thai workers to work in the same groups or on the same production lines.

Consistent with the argument given above, many studies have found that foreign workers feel discriminated against in the workplace (Agudelo-Suárez et al., 2009; Janta et al., 2011; Stevens, Hussein, and Manthorpe, 2012). Poor communication, restriction of employment duration, and a lack of contentment and loyalty to the company were mentioned by employers and supervisors as important problems with the employment of foreign migrant workers in the Korean construction sector (Han et al., 2008). Ang, Van Dyne, and Begley (2003) found that, among highly skilled employees working at an organisation in Singapore, the foreign migrant workers showed a lower level of perceived organisational justice, commitment, and work performance compared to local employees.

Based on the three deterrent factors mentioned above and previous studies, the following subsections present the factors that determine foreign migrant workers' motivation to develop skills and adapt to teamwork, and we present hypotheses.

2.2. Motivation to develop skills

2.2.1. Return on investment in skill development

According to the theory of human capital investment advocated by Becker (1962), workers' motivation to develop their skills depends on the cost and benefit of receiving training, and when such cost was incurred and benefit obtained. This indicates that when foreign workers' employment duration is legally restricted in the host country, they can only receive benefit from training for a shorter period, and hence their motivation to develop skills would be lower than when there is no limit to the duration of employment. For the same reason, firms also have less incentive to invest in training of foreign workers in such cases.

In the case of foreign (Myanmar) workers in Thailand, the duration of the work permit is limited legally to 4 years (a 2-year contract and extension for another 2 years).[1] However, in reality many Myanmar workers continue to work in Thailand for longer periods of time,[2] hence the legal restriction might not bind such workers' (and firms') training decisions. Nevertheless, even if the legal restriction were not binding, employees' incentive to develop skills would be reduced if the firm makes no effort to retain employees and dismisses them easily. On the other hand, employees would have a stronger motivation to develop skills if they perceived that the firm wanted them to continue to work for it for as long as possible, by, for example, providing a seniority bonus.

[1] This rule is applied to Myanmar migrant workers that fall under the memorandum of understanding between the two countries. After finishing the 4-year contract, workers are required to return to Myanmar and they can return to work in Thailand only after 3 years.

[2] The authors found such cases in our survey of Myanmar workers in Thailand in 2014 and 2015.

Another issue specific to foreign migrant workers relates to returning to their home country after quitting their job in the destination country. A large-scale survey of Myanmar workers in Thailand found that most of them think of returning to Myanmar at some time in the future (IOM and ARCM, 2013). Those who plan to return in the near future and are not considering working at a garment factory in Myanmar would not have a strong motivation to develop their skills of garment production for the reason given above.[3] Therefore, consideration should also be given to workers' plans to return home.

From the discussion above, we derive the following hypotheses:

H1-1: Myanmar workers' motivation to develop skills is higher when they perceive the firm wants them to continue to work for it for as long as possible.

H1-2: Myanmar workers' motivation to develop skills is lower when they plan to return to Myanmar in the near future.

2.2.2. Pay system

The pay system also matters. In general, workers' motivation to develop their skills increases when skill development is linked strongly with a monetary reward. This argument leads us to predict that performance-based pay increases workers' motivation to develop skills, as long as such skill development improves work performance, and is the basis on which the pay increases are calculated.

The hypothesis related to the pay system is as follows:

[3] The survey of Myanmar workers found that farming and running small business are the preferred occupations upon returning to Myanmar (IOM and ARCM, 2013).

H1-3: Myanmar workers' motivation to develop skills is higher when they perceive that higher performance has a monetary reward.

2.2.3. Perceived organisational justice and organisational commitment

'Perceived organisational justice' (POJ) in a firm refers to the employees' perception of the extent to which they are treated fairly by the firm, management, and the supervisors. Foreign workers' perception that they are discriminated against by a firm can be expressed as a low level of POJ.

Based on the social exchange theory and equity theory, employees perceiving fair treatment by the firm or supervisors are considered to reciprocate by increasing discretionary effort in their work. This indicates that employees with a higher level of POJ are expected to have a stronger motivation to develop their skills, as higher skills benefit the firm. Previous studies also found a positive correlation between POJ and the motivation to participate in training (Dae-seok, 2007), or motivation to learn (Liao and Tai, 2006). By the same reasoning, a higher POJ is expected to lead to employees' stronger commitment to the firm ('organisational commitment'). Organisational commitment for employees refers to their psychological attachment to the firm. Most studies considered three dimensions of organisational commitment: 'affective commitment' (emotional attachment to the organisation), 'continuance commitment' (the need to remain in the organisation based on the cost–benefit calculation), and 'normative commitment' (the obligation to remain in the organisation) (Meyer and Allen, 1991). Many empirical studies have found a positive relationship between POJ and organisational commitment in the sense of employees' psychological attachment to the firm (as shown in the meta-analysis by Cohen-Charash and Spector, 2001).

An aspect of POJ considered important by foreign workers was discriminatory treatment in the workplace. Several studies of foreign workers have found a negative relationship between the

perception of discrimination in the workplace and organisational commitment or loyalty to the employer (Ensher, Grant-Vallone, and Donaldson, 2001; Sanchez and Brock, 1996; Triana, Garcia, and Colella, 2010; Stainback and Irvin, 2012). Employees with a strong commitment to the firm, especially commitment in the form of loyalty, show a desire to achieve the organisational goals. This indicates that they are ready to devote themselves to improve their skills when the firm needs them to develop such skills. This kind of positive relationship between the employees' organisational commitment and training motivation was found by several studies (Carlson, et al., 2000; Facteau, et al., 1995).

Commitment in the opposite direction, a firm's 'organisational commitment to employees' (OCE), refers to the firm's caring about the employees' well-being, including the firm's investment in the employees (Miller and Lee, 2001). Firms' efforts to retain employees as mentioned above can be regarded as an aspect of OCE.

As is the case with POJ, employees who perceive a high level of OCE would respond accordingly with a stronger commitment to the firm or by making efforts to develop their skills. The positive relationship between OCE and organisational commitment was found in previous studies too (Benson, 2006; Chambel and Sobral, 2011; Lee and Bruvold, 2003; Tsui, et al., 1997). A firm's commitment to the employees, especially investment in training, was more likely to increase the employees' motivation to develop skills if the employees' commitment to the firm is stronger, as mentioned in the above discussion.

Based on this, the hypotheses associated with POJ, organisational commitment, and OCE are as follows:

H1-4: Myanmar workers' motivation to develop skills is higher when their POJ is high, which is represented by the perception of less discriminatory treatment in the workplace.

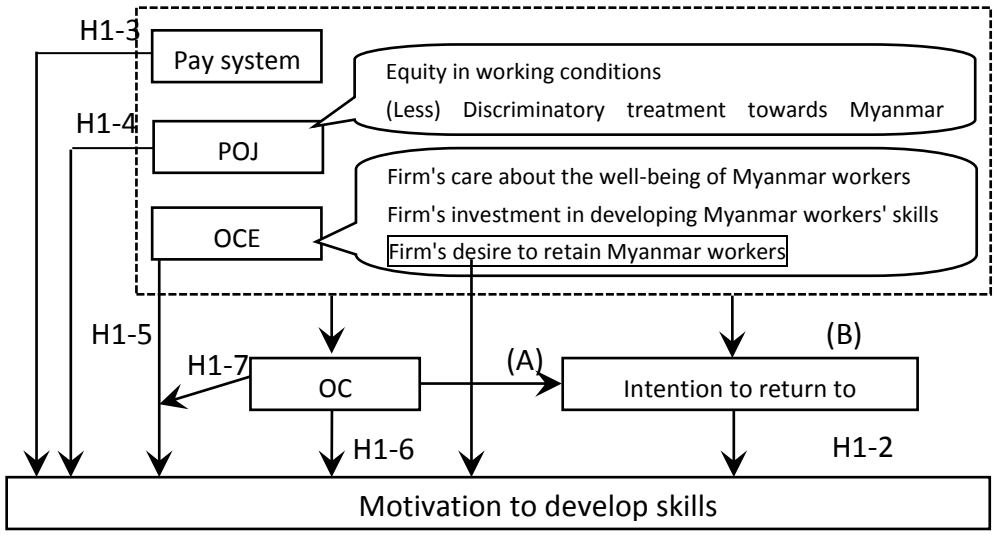
H1-5: Myanmar workers' motivation to develop skills is higher when they perceive that the OCE is higher.

H1-6: Myanmar workers' motivation to develop skills is higher when their organisational commitment is stronger, which is associated with higher POJ and OCE.

H1-7: The positive effect of OCE in the form of investment in training is larger when organisational commitment is higher.

These hypothesised relationships between the key factors are depicted in Figure 6.1. Arrows with a hypothesis code (e.g. H1-1) indicate the relationship expressed in the relevant hypotheses. Factors inside the dotted square are the workers' perception of HRMP. Arrows (A) and (B) are added to indicate the expected effect of the workers' perception of HRMP and organisational commitment regarding the 'Intention to return to Myanmar.'

Figure 6.1: Hypothesised Factors Affecting Motivation to Develop Skills



H1 = hypothesis, OC = organisational commitment, OCE = organisational commitment to employees, POJ = perceived organisational justice.
Source: Prepared by the author.

2.3. Teamwork by Myanmar and Thai workers

2.3.1 Friendship

Friendship was identified as one of the factors supporting teamwork. For example, Jehn and Shah (1997) showed through experiments that groups consisting of friends achieved a higher performance in group work than groups of acquaintances did. Friendship ties also increase the performance of work groups in firms (Kratzer, Leenders, and Van Engelen, 2005).

Friendship is considered to improve the quality and performance of teamwork by enhancing information sharing, morale-building communication, planning, commitment, monitoring, and cooperation (Jehn and Shah, 1997). Using data on firms' employees, Kiffin-Petersen and Cordery (2003) found that mutual trust between team members, enriched by friendship ties, facilitates teamwork.

On the other hand, friendship ties in the workplace can have a negative effect on teamwork. For example, favouritism, closeness (Morrison and Nolan, 2007), and emotional exhaustion (resulting from caring for friends while working) (Methot et al., 2015) originating from friendship ties can decrease the productivity and creativity of work groups.

These arguments lead to the following hypothesis:

H2-1: Myanmar workers with more friendship ties with Thai workers in the workplace are less likely to perceive difficulty in working with Thai workers.

2.3.2 Language skill

If verbal communication is indispensable for good teamwork, the language barrier would thwart teamwork by foreign (Myanmar) and local (Thai) workers. In other words, the language skill of the foreign workers could affect the quality and performance of teamwork.

In addition, skills in the language of the host country seem to facilitate the development of friendships between immigrants and the people in the host country. Although they did not study workplace friendship, Martinovic, van Tubergen, and Maas (2011) found that proficiency in the host country's language had a positive effect on acquisition of cross-ethnic friends for immigrants to Canada. It is worth noting that the 2011 study used longitudinal data of immigrants, and hence successfully extracted the net effect of language skill in relation to friendship development by removing the potentially positive effect of cross-ethnic friendship ties on immigrants' language skills. In this respect, migrant workers' skill in the host country's language can have a positive effect on teamwork via its effect on the development of friendships between foreign and local workers in the workplace.

The hypothesis derived from this argument is as follows:

H2-2: Myanmar workers with higher Thai language skill are less likely to perceive a difficulty in working with Thai workers. Thai language skill is positively correlated with the friendship ties with Thai workers.

2.3.3 Perceived organisational justice

Previous studies found that POJ increased the quality of teamwork, as represented by coordination, balance of members' contribution, communication, mutual support, effort, and cohesion (Dayan and Di Benedetto, 2008). The positive effect of POJ on teamwork was considered to be mediated by its positive effect on the trust by co-workers, as demonstrated by Forret and Love (2008). As a reason why employees with high POJ have a higher level of trust in co-workers, Forret and Love (2008) argued that employees who are treated fairly by the organisation believe they are not being taken advantage of unfairly and are less suspicious of their co-workers. In addition, a manager who treats employees with respect serves as a role model for the employees, which leads to the development of greater trust with co-workers

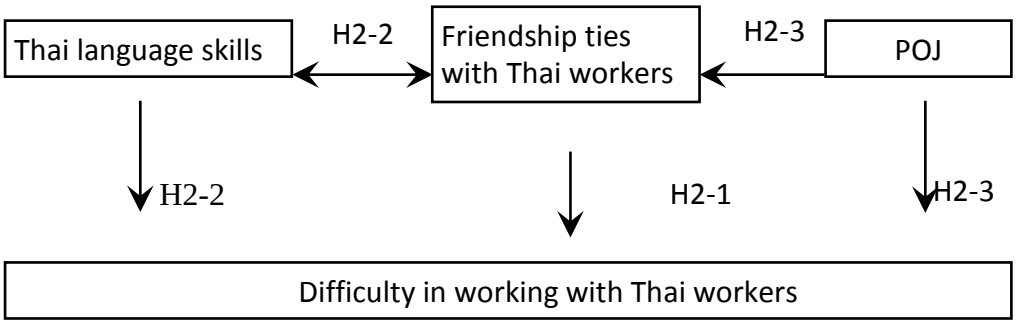
(Forret and Love, 2008). Greater trust is expected to facilitate the development of friendship ties between co-workers.

The hypothesis related to POJ is as follows:

H2-3: Myanmar workers with a higher POJ are less likely to perceive a difficulty in working with Thai workers, and POJ is positively correlated with friendship ties with Thai workers.

Figure 6.2 depicts the hypothesised relationship between friendship ties, Thai language skill, POJ, and the difficulty of working with Thai workers.

Figure 6.2: Hypothesised Factors Affecting Difficulty in Working with Thai Workers



H2 = hypothesis, POJ = perceived organisational justice.
Source: Prepared by the author.

3. Survey of Garment Factory Employees

3.1 Outline of the survey

A structured questionnaire survey was administered to Myanmar and Thai workers. A total of 186 Myanmar workers (from 10 factories) and 118 Thai workers (from 5 factories) were interviewed, using interpreters for the Myanmar workers. Interviews were conducted outside

the factories and without the presence of the factories' management, to avoid bias in the responses. Most of the respondents (162 Myanmar workers from eight factories and 70 Thai workers from five factories) were production workers in non-managerial positions (i.e. workers on the production floor, not supervisors or managers). The focus of this chapter is on these production workers, and the data used in the following sections refers them.

The survey's respondents were asked about their perception of HRMP at their factory; their work attitude; and background information, such as demographic indicators. The Myanmar workers were also asked questions related to migration to Thailand and to rate their Thai language skill.

3.2 Basic characteristics of Myanmar workers

Table 6.1 shows the mean value of the demographic variables and the employment status of Myanmar and Thai production workers. We did not conduct statistical testing of the difference between the two groups, because the workers were sampled from different factories (e.g. some Thai workers were from factories at which no Myanmar workers were sampled), hence a rigorous comparison was impossible. However, the data do indicate the general tendency.

Table 6.1: Basic Characteristics of Myanmar and Thai Production Workers

Characteristic	**Myanmar Workers** (N = 162)	**Thai Workers** (N = 70)
Age	27.7	36.4
% male	50.0	15.7
% married	50.0	65.2
Education (grade attained)[a]	7.1	8.3
Education (% higher education)	6.2	2.9
Duration of employment at the current factory (years)	2.9	7.2
% fixed term contract	21.9	8.6
Duration of working in Thailand (years)	5.7	
% who have worked at a different garment factory in Thailand	35.7	42.0

[a] Excluding higher education.

Source: Workers' survey.

Notable characteristics of Myanmar workers compared with Thai workers were as follows. Firstly, they were relatively younger, and the percentage of male workers was higher. In other words, garment factory work in Thailand has become a job for middle-aged female workers. Secondly, the average duration of employment at the current factory was shorter, and the proportion of fixed-term contract workers was higher. It is probable that a fixed term contract for Myanmar workers reduced the average working duration at the current factory.

While the average working duration of Myanmar workers in Thailand is 5.7 years, 20% of workers had worked in Thailand for 10 years or longer. This suggests that it is possible for Myanmar workers to work in Thailand for a longer period, despite the legal restriction under the formal procedure (i.e. contract based on the memorandum of understanding between the two countries). Determining how this is possible is outside of the scope of this study, but the data indicated that the control of foreign migrant workers by the Thai authorities is not so strict.

Although not shown in the table, all but one of the Myanmar workers surveyed had documents proving their eligibility to work in Thailand, such as a work permit or temporary work permit (provided by the one-stop service centre in 2014 to migrant workers from Cambodia, Lao PDR, and Myanmar). This is consistent with the policy of the eight firms (factories) from which these workers were sampled: the managers of these firms stated in the interviews that they only employ Myanmar workers with the correct documentation, such as a work permit. Furthermore, in 96% of cases, the Myanmar workers, rather than the employers, keep these documents. If correct, this suggests that Myanmar workers in the surveyed garment factories were not in a vulnerable position, as such documents allow them to move easily to a different employer.

4. Comparison of Myanmar and Thai workers

4.1 Simple comparison

Tables 2 and 3 show the mean value of the workers' perception of HRMP, job satisfaction, work attitude, and difficulty in working with foreign workers for Myanmar and Thai workers. These indicators are expressed according to the five-point Likert scale. In the survey questionnaire, a higher score indicated a negative response (e.g. for 'Wage level is appropriate', a score of 5 is 'very low' while a score of 1 is 'very high'). However, in these tables, the mean of the inverted scores (e.g. a score of 5 indicates 'very high') was shown to make them intuitively easier to understand,[4] except for 'Discriminatory attitude' and 'Difficulty in working with Thai/Myanmar workers', for which a higher score indicated a negative perception (i.e. 'more discriminatory' and 'more difficult').

Table 6.2: Myanmar and Thai Workers' Perception of Human Resource Management Practices

Practice	Myanmar Workers	Thai Workers
Pay system and appraisal		
Higher performance/effort is rewarded	3.75	3.87
Performance assessment criteria are clear	4.13	3.89
Organisational justice		
Equity between Myanmar and Thai workers		
Pay and benefits	4.29	4.00
Work content	4.56	3.71
Respect for workers[a]		
Discriminatory attitudes	2.09	
Respected by the factory's top manager	4.05	4.40
Respected by supervisors	4.27	4.32
Organisation's commitment to employees		
Wage level is appropriate	2.87	2.76
Top manager tries to improve working conditions of workers[a]	3.68	4.47
Top manager wants to retain workers[a,b]	3.96	4.37
The factory develops the workers' skills[a]	3.79	4.53

[4] The inverted scores are calculated simply by subtracting the original score from six.

Notes: Each indicator is expressed according to a five-point score with higher score indicating positive response except for 'Discriminatory attitudes', for which a higher score indicates negative perception.
[a] Refers to 'Myanmar workers' for Myanmar workers and 'Workers (in general)' for Thai workers.
[b] In the questionnaire, respondents were asked 'Do you think the current factory's top manager expects Myanmar workers to continue to work at the current factory for as long as possible?'
Source: Workers' survey.

Table 6.3: Satisfaction, Work Attitudes, and Difficulty in Working with Foreign Workers

Item	Myanmar Workers	Thai Workers
Satisfied with:		
Pay and work conditions	4.10	4.13
Relationship with Thai supervisors	4.22	
Relationship with Thai or foreign co-workers	4.15	4.11
Overall	4.34	4.37
Organisational commitment		
Feel proud of working at the current factory	4.15	4.48
Feel loyalty to the current factory	4.12	4.74
Feel attached to the current factory	4.06	4.41
Workers' morale		
Make effort for higher performance	4.09	4.58
Work harder than expected	3.77	3.90
Want to suggest ideas	3.02	3.82
Desire to develop skills for:		
Speed and precision	4.06	4.62
Difficult tasks	3.66	4.30
Multiple tasks	3.01	4.41
Teamwork		
Difficulty working with Thai or Myanmar workers[a]	2.67	3.19

Notes: Each indicator is expressed according to a five-point score with higher score indicating positive response except for 'Difficulty working with Thai or Myanmar workers', for which a higher score indicates negative perception (that is, 'more difficult').
[a] Refers to 'Thai workers' for Myanmar workers and to 'Myanmar workers' for Thai workers. The data are available only for those who work with foreign workers in the same working group.
Source: Workers' survey.

The data did not allow a rigorous comparison of Myanmar and Thai workers, because most survey interviews of Myanmar workers were conducted through an interpreter, hence their understanding of each question might differ in some respects from that of the Thai workers.

With this issue in mind, the most notable differences between Myanmar and Thai workers, as shown in Tables 2 and 3, are as follows. Firstly, as Table 6.2 shows, Myanmar workers do not differ much from Thai workers in their evaluation of their working conditions, equity between Myanmar and Thai workers, and the extent to which superiors respect the workers. They even tend to perceive more equity than Thai workers. The favourable perception by Myanmar workers is consistent with the pay system at each of the eight factories from which the respondents were selected. The managers of those factories or firms stated that there is no difference in the base wage level, overtime pay, and bonuses of Myanmar and Thai workers.

Regarding discrimination against Myanmar workers in the workplace, 72% of Myanmar workers responded 'Definitely no' or 'Rather no', to the question whether they felt a discriminatory attitude by Thai co-workers or supervisors (not shown in the table). Reflecting these positive perceptions, Myanmar workers' job satisfaction levels are as high as their Thai counterparts (Table 6.3).

Secondly, on the other hand, Myanmar workers' perception of OCE is lower than that of the Thai workers, except for 'Wage level is appropriate' (Table 6.2). Thirdly, and more importantly, the work attitude, including commitment to the factory, worker morale, and the desire to develop skills, tends to be lower for Myanmar workers than for Thai workers (Table 6.3). Finally, Myanmar workers perceive less difficulty in working with Thai workers than Thai workers perceive working with Myanmar workers (Table 6.3).

Regarding the intention or plan to quit the factory (not shown in the table), only 6% (9) of the Myanmar workers planned to quit within 5 years, while 43% (22) of Thai workers had such a plan. For these nine Myanmar workers, only one respondent gave dissatisfaction with the working conditions ('low wage') as the reason; the others gave reasons such as a desire to move to a factory nearer their accommodation, or to a workplace where relatives are working.

In comparison, 6 of the 22 (27%) Thai workers who intended to quit gave working conditions as the reason.

However, we must bear in mind that the low numbers intending to quit does not necessarily translate into a low turnover rate for Myanmar workers. Although we could not collect data on the turnover rate of workers at each factory surveyed, most factory managers we interviewed felt that Myanmar workers tend to quit more easily than Thai workers when they find another factory that offers more opportunity for overtime, as they want to earn more overtime pay.

4.2 Econometric analysis

The data in Tables 6.2 and 6.3 do not measure whether the differences in responses between Myanmar and Thai workers are caused by the difference in nationality. The difference in individual characteristics, such as age and sex, might be the real causes. To determine the net effect of nationality, a regression analysis was conducted with a dummy variable of nationality as an independent variable.

Given this chapter's focus on the workers' motivation to develop skills and their perception of any difficulty in teamwork with foreign workers, the variables representing these two concepts were used as dependent variables. For the workers' motivation to develop skills, the average of the 'Desire to develop skills for difficult tasks' and 'Desire to develop skills for multiple tasks' was used as a dependent variable, because product upgrading, which the Thai garment industry needs to pursue, requires workers with the skills to perform multiple difficult tasks, as discussed above.

For simplicity, and because the purpose is to examine the effect of nationality, the control variables only included the basic characteristics of the workers, such as age, sex, education

level, and months working at the current factory. Factory dummy variables were included to correct for the effect of a factory's characteristics.

Two equations were estimated by the ordinary least squares method (Table 6.4).[5] As observed in Table 6.3, even after controlling the basic characteristics of the workers, Myanmar workers tend to have less desire to develop skills, but also tend to perceive less difficulty in working with foreign (Thai) workers.

Table 6.4: Regression Analysis Comparing Myanmar and Thai Workers

Variable	Desire to Develop Skills	Difficulty in Working with Foreign Workers
Myanmar (dummy)	–0.78***	–1.16***
	(2.66)	(3.02)
Sex (male; dummy)	0.34*	–0.07
	(1.94)	(0.32)
Age (year)	–0.01	0.01
	(0.42)	(0.45)
Married (dummy)	–0.08	–0.29
	(0.46)	(1.11)
Education (grade)	0.04	–0.07*
	(1.32)	(1.83)
Duration of constant employment at the current factory (months)	0.00	0.00
	(0.18)	(1.06)
Constant term	4.19	4.48
	(4.91)	(3.69)
Factory dummies	[yes]**	[yes]*
N	225	165
Adj. R^2	0.17	0.074

Adj. R^2 = adjusted r-squared, *N* = number of observations.
Notes:
1. The equations were estimated using the ordinary least squares method.

[5] 'Difficulty in working with foreign workers' is defined as a five-point-scale ordinal variable, and the ordered probit model is more appropriate. Because the estimation results do not differ between the ordinary least squares method and the ordered probit method in qualitative terms, only the result of ordinary least squares method is presented.

2. The figures are estimated coefficients, and those in parentheses are the absolute value of the t-statistic. Coefficients for factory dummy variables are omitted from the table. They are jointly significant in both equations.
3. *p<.10; **p<.05; ***p<.01.

Source: Prepared by the author.

These results suggest that firms pursuing product upgrading may need to make more effort to boost their Myanmar workers' motivation to develop skills. On the other hand, greater consideration for Thai workers would be necessary for effective teamwork in work groups consisting of both Thai and Myanmar workers.

5. Relationship between Perception of Human Resource Management Practices and Work Attitude

In the survey, the workers were asked if they had ever moved to another garment factory (within Thailand in the case of Myanmar workers). They were then asked to compare the previous and the current factory in terms of their perception of HRMP (especially related to POJ and OCE) and their own work attitude. They were asked to rate on the five-point Likert scale the degree to which the current factory is better or worse than the previous factory according to various aspects. Lower scores indicate that the current factory is better. Only for 'Discriminatory attitude by Thai colleagues' does a low score indicate the current factory is worse (i.e. there is more discrimination). To make interpretation easier, the following analysis used an inverted the score for 'Discriminatory' (naming it 'Less discriminatory'), whereby a lower score indicates that the current factory is better.

Assuming the five-point ordinal variables as continuous, the correlation coefficients between them were calculated. Table 6.5 shows the coefficients for Myanmar workers. The data of Thai

workers was not analysed, because the number of Thai production workers who changed factory was too small (only 11 workers) to conduct a valid quantitative analysis.

As shown in Table 6.5, work attitude variables (variables (6) to (10)) tend to be positively correlated with the HRMP perception variables ((1) to (5)), and 18 of the 30 coefficients are statistically significant. The positive correlations indicate that Myanmar workers who perceive that the current factory is better than the previous one in terms of HRMP also tend to feel that their work attitude is more positive in the current factory. This suggests that a positive perception of HRMP induces a positive work attitude. Especially noteworthy is the positive and significant correlation between 'Motivation to develop skills' and the six HRMP perception variables. This is consistent with hypotheses H1-4 and H1-5. In addition, H1-6 supports the correlation between 'Motivation to develop skills' and 'Loyalty' as significantly positive, and 'Loyalty' has a positive correlation with the HRMP perception variables.

Table 6.5: Correlation Coefficients between Relative Evaluations of the Current Factory and a Previous Factory

	Item	Mean	SD	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)	
(1)	Equity in working condition between Thai and foreign workers	2.56	1.18																				
(2)	Pay level	1.79	0.94	0.19																			
(3)	Provision of training	2.93	1.18	-0.04		0.16																	
(4)	Respect for workers	2.72	0.93	0.43	***	0.39	***	0.20															
(5)	Less discrimination	3.16	0.75	0.48	***	0.32	**	-0.20		0.27	*												
(6)	Job satisfaction	2.07	1.01	0.59	***	0.34	**	0.38	**	0.53	***	0.39	***										
(7)	Loyalty to the factory	2.23	0.92	0.53	***	0.22		0.43	***	0.52	***	0.12		0.60	***								
(8)	Attachment to the factory	2.36	0.98	0.21		-0.03		0.14		0.32	**	-0.18		0.09		0.49	***						
(9)	Enthusiasm for the work	2.58	1.07	0.38	**	0.31	**	0.26	*	0.36	**	0.06		0.25		0.44	***	0.49	***				
(10)	Motivation to develop skills	2.53	1.33	0.50	***	0.59	***	0.43	***	0.66	***	0.39	**	0.68	***	0.57	***	0.16		0.59	***		
(11)	Ease in working with Thai workers	2.77	1.21	-0.12		-0.57	***	0.04		-0.10		-0.51	***	-0.32	**	0.16		0.34	**	0.03		-0.29	*

SD = standard deviation.

Notes:

1. All variables are five-point scales, with a lower score indicating that the current factory is more favourable.
2. $N = 43$. *p<.10; **p<.05; ***p<.01.

Source: Prepared by the author.

On the other hand, the correlation between 'Ease of working with Thai workers' and the HRMP perception variables is mostly negative, with two of the five coefficients significant. This result was puzzling in the light of the theoretical argument in the previous section and is difficult to interpret. It suggests that factors other than the perception of HRMP might strongly affect the ease of teamwork by Myanmar and Thai workers.

6. Determinant Factors for the Desire to Develop Skills

6.1 Selection of variables

Regression analysis was conducted to identify the factors determining Myanmar workers' desire to develop skills and the effect of their perception of HRMP. As in the previous section, the average of 'Desire to develop skills for difficult tasks' and 'Desire to develop skills for multiple tasks' was used as the dependent variable in the regression model.

Based on the theoretical discussion and hypotheses derived from this, as shown in the previous section, the following variables were used as explanatory variables.

Expectation of long-term employment

Workers' perception of the 'Top manager wants to retain Myanmar workers' was included to test hypothesis H1-1. As discussed above, when workers perceive that a firm wants them to work for it for as long as possible, they would expect a longer term of employment at the firm, and thus can expect to benefit from investment in training for a longer period. This would increase the workers' desire to develop skills. This variable also serves as an indicator of the organisational commitment to employees (OCE), as mentioned above.

The term of the employment contract might also relate to the workers' expectations regarding the duration of employment at the current factory, but the contract term was not used as a

variable because it does not seem to affect the workers' perception. This was suggested by data showing that perception of a firm's desire to retain Myanmar workers is even higher for Myanmar workers on a fixed-term contract than those whose contract term is not fixed (4.4 vs. 3.8). This suggests that firms usually renew contracts with Myanmar workers on a fixed-term basis.

Intention to return home

Myanmar workers with plans to return to their home country soon would have less desire to develop skills, due to the same reasoning as the effect of the 'Top manager wants to retain Myanmar workers', but in the opposite direction. A dummy variable was used with a value of 1 for those who indicated a plan to return in 3 years, and a value of 0 for those with no intention of returning in 3 years. This variable tested hypothesis H1-2.

In the survey, 89 (55%) of 162 Myanmar production workers indicated their clear intention to return to their home country, and 34 workers (21% of the total) planned to return in 3 years. Notably, 40% of Myanmar production workers responded that they had no intention to return, which suggested that they thought staying and working in Thailand was preferable to returning to Myanmar, at least in the current economic and political situation in their home country.

Higher performance/effort is rewarded

This variable represented the degree to which workers perceived that effort and performance receive a monetary reward at the factory, and tests hypothesis H1-3.

Perceived organisational justice

The following five variables were used to represent workers' POJ: 'Equity in pay', 'Equity in work content' (between Myanmar and Thai workers), (Myanmar workers are) 'Respected by the top manager', (Myanmar workers are) 'Respected by Thai supervisors', and 'Thai

supervisors and co-workers show a discriminatory attitude'. Hypotheses H1-4 and H1-6 were tested by the coefficient for these variables.

Organisational commitment to employees

Workers' perception of 'Wage level is appropriate', 'Top manager tries to improve working conditions of Myanmar workers', and 'The factory develops the skills of Myanmar workers' were used as variables representing OCE (along with 'Top manager expects Myanmar workers to keep working in the factory', as mentioned above). These variables test hypotheses H1-5 and H1-6.

Organisational commitment: Loyalty to the firm

Workers' 'Loyalty to the factory' was used as the variable indicating organisational commitment. In the survey, the respondents were asked the extent to which they feel attachment to the firm and proud to work at that factory. 'Loyalty' was selected, as argued in the previous section, because loyalty to the factory was considered to induce employees' discretionary behaviour contributing to improvement of the firm's business performance and the effort to develop skills. This variable tests hypotheses H1-5 and H1-6. In addition, the interaction of 'Loyalty' and 'The factory develops the skills of Myanmar workers' tests hypothesis H1-7.

Control variables

Age, sex, and educational level of the workers were included as control variables. Dummy variables of factories were included as explanatory variables to control the effect of the attributes of factories not reflected by other explanatory variables.[6]

[6] The factory dummy variables were defined for five of the eight factories from which the Myanmar workers were sampled. The other three factories had a very small number of sample Myanmar workers, hence dummy variables were not defined (they were put together as the reference category of the factory dummy variables).

6.2 Econometric model

This study deals with psychological constructs, such as POJ, OCE, and organisational commitment. These constructs were not observable and were only detected by several observable indicators that were relatively high correlated. Hence, structural equation modelling with confirmatory factor analysis is generally applied to empirical studies of such constructs. However, structural equation modelling could not be applied to the present study because the data correlations were not sufficiently high between the indicator variables with which the unobservable constructs, such as POJ, were assumed to be derived.[7] For this reason, these observable indicators were used directly, and the regression analysis was conducted with these indicators as dependent and independent variables.

Among the explanatory variables, the 'Intention to return' and 'Loyalty to the factory' were considered endogenously determined by the HRMP perception variables and other control variables in the model. In addition, 'Loyalty' might affect the 'Intention to return'. The econometric model addressing the endogeneity of these two variables was a set of equations as follows:

$$L_i = \alpha_1 + \boldsymbol{\beta}_1' \mathbf{x}_i + \boldsymbol{\gamma}_1' \mathbf{z}_{1i} + \varepsilon_{1i} \qquad \text{(eq.1)}$$

$$R = \alpha_2 + \boldsymbol{\beta}_2' \mathbf{x}_i + \boldsymbol{\gamma}_2' \mathbf{z}_{2i} + \delta_2 L_i + \varepsilon_{2i} \qquad \text{(eq.2)}$$

$$S = \alpha_3 + \boldsymbol{\beta}_3' \mathbf{x}_i + \delta_3 L_i + \zeta R_i + \varepsilon_{3i} \qquad \text{(eq.3)}$$

Where, *L*, *R*, and *S* stand for 'Loyalty', 'Intention to return', and 'Desire to develop skills', respectively, and *i* is the identifier of the sample workers. $\mathbf{x}$, $\mathbf{z}_1$, and $\mathbf{z}_2$ are the vectors of the

[7] For example, 'Loyalty to the firm', 'Attachment to the firm', and 'Pride of working at the factory' were assumed to be observable indicators for organisational commitment, but the correlation between them was as low as 0.09, hence the constructs of organisational commitment could not be derived from these three indicators.

explanatory variables and instrumental variables α_j, $\boldsymbol{\beta}_j$ (*j*=1, 2, 3), $\boldsymbol{\gamma}_k$ (*k*=1, 2), δ_l (*l*=2, 3), and ζ are (the vectors of) associated constant terms or coefficients, and ε_j the error terms.

The set of equations was estimated with the following steps to account for the endogeneity of *L* and *R*:

Step 1: Estimate eq.1 with the Ordinary Least Squares method and derive $\hat{L}$, the predicted value of *L*, from the estimated coefficients.

Step 2: Estimate eq. 2 with the probit model, with $\hat{L}$ and the instrumental variables included in the explanatory variables, and derive hazard h_i, which is defined as:

$$h_i = \begin{cases} \phi(X_i)/\Phi(X_i) & \text{if } R_i = 1 \\ -\phi(X_i)/[1-\Phi(X_i)] & \text{if } R_i = 0 \end{cases}$$

where $X_i = \hat{\alpha}_2 + \hat{\boldsymbol{\beta}}_2'\mathbf{x}_i + \hat{\boldsymbol{\gamma}}_2'\mathbf{z}_{2i} + \hat{\delta}_2\hat{L}_i + \hat{\varepsilon}_{2i}$ (hats indicate predicted values), $\phi(\bullet)$ and $\Phi(\bullet)$ respectively denote the probability density function and the cumulative distribution function of the standard normal distribution.

Step 3: Estimate eq. 3. with $\hat{L}$, *R*, and *h* together with **x** in the righthand side of the equation by the least square.[8]

The treatment of the endogeneity of *L* in eq. 2 applies the method of Rivers and Vuong (1988), and that of *R* in eq. 3 follows Maddala (1983). Although Loyalty (*L*) was originally a five-point ordinal variable, it is regarded here as a continuous variable for the model estimation. In the estimation, observations with missing values for the dependent or independent variables were dropped.

[8] Practically, the statistical software STATA is used to estimate the model. For Step 1 'regress' command was used, and the 'etregress' command in Step 2 and Step 3 altogether.

As the instrumental variable in eq. 1 ($\mathbf{z}_1$), a dummy variable was used to represent whether a worker is a 'helper' – a position in the sewing section whose main role is to move the work in progress from one operator to another. Another instrumental variable is 'Difficulty in finding another job', which is defined as a five-point ordinal variable representing a worker's perception of the degree of difficulty in finding another job in Thailand with the same level of pay as the current job. Helpers are predicted to have less loyalty to the factory because their job is peripheral to the production process. 'Difficulty in finding another job' was predicted to have a positive effect on loyalty because it increased the importance of the current job.

The instrumental variables in eq. 2 include 'The duration of working in Thailand' and 'Number of children'.[9] The former variable was predicted to have a negative effect on *R* if those who have just started to work in Thailand felt homesickness more acutely, or if those who had stayed in Thailand for a longer period had assimilated into Thai society. A larger number of children, whether they live in Thailand or in Myanmar, encourages workers to earn more to feed their children, and hence increases the need to work in Thailand. (This would have a negative effect on *R*.)

6.3 Estimation results

6.3.1 Estimation issues

The test of the null hypothesis that 'Loyalty' is an exogenous variable is not rejected for eq. 2 (Wald test, $p = 0.48$), but rejected for eq. 3 (Durbin test, $p = 0.00$ and Wu–Hausman test, $p = 0.00$). The latter means that the predicted value of 'Loyalty' should be used in eq. 3, which further means that the predicted value should also be used in eq. 2, so that all explanatory variables in eq. 3 are included in eq. 2. The *p*-value is 0.102 for the test of H_0: $h = 0$ in eq. 3 for

[9] This includes children living in Thailand and Myanmar. We did not collect information on the place of residence of the respondents' children.

Model (2), indicating that it is safe to account for the endogeneity of the 'Intention to return'. In summary, both 'Loyalty' and the 'Intention to return' should be treated as endogenous variables, hence the models were estimated following the steps presented above. The estimation results are presented in Table 6.6.

Table 6.6: Regression Analysis of the Determinant Factors for Desire to Develop Skills

	Model (1)						Model (2)	
	Loyalty (eq. 1)		**Intention to Return** (eq. 2)		**Desire to Develop Skills** (eq. 3)		**Desire to Develop Skills** (eq. 3)	
Higher performance/effort is rewarded	-0.01		0.15		-0.26	***	-0.25	***
	(0.17)		(0.96)		(3.71)		(3.71)	
Equity in pay	-0.27	***	0.21		0.20	**	0.16	*
	(3.59)		(1.10)		(2.00)		(1.68)	
Equity in work content	0.37	***	-0.09		-0.53	***	-0.43	***
	(4.00)		(0.34)		(3.79)		(3.08)	
Respect by the top manager	0.23	***	-0.32		-0.39	**	-0.50	***
	(2.84)		(1.15)		(2.54)		(3.28)	
Respect by Thai supervisors	-0.25	**	0.39		0.23		0.24	
	(2.16)		(1.09)		(1.16)		(1.26)	
Discriminatory attitude	-0.02		0.21		-0.11		-0.09	
	(0.43)		(1.54)		(1.43)		(1.24)	
Wage level is appropriate	0.31	**	0.22		-0.02		-0.08	
	(2.34)		(0.59)		(0.10)		(0.43)	
Top manager wants to retain Myanmar workers	-0.04		-0.87	**	0.17	*	0.20	**
	(0.35)		(2.36)		(1.85)		(2.30)	
Top manager tries to improve working conditions for Myanmar workers	0.26	***	-0.49	**	0.28	**	0.35	***
	(3.38)		(2.07)		(2.18)		(2.80)	
The factory develops the skills of Myanmar workers	-0.23	***	0.14		0.22	**	-1.49	***
	(3.77)		(0.72)		(1.98)		(2.82)	
Sex (male)	-0.10		-0.27		0.62	***	0.55	***
	(0.74)		(0.69)		(3.16)		(2.90)	
Married	0.01		1.06	**	-0.14		-0.19	
	(0.07)		(2.52)		(0.68)		(0.97)	
Age	-0.01		0.05		0.01		0.01	
	(0.71)		(1.45)		(0.75)		(0.83)	
Education	0.04	*	-0.12	*	-0.06	**	-0.07	**

	(1.69)		(1.91)		(1.99)		(2.27)	
Number of children	0.07		-0.85	**				
	(0.65)		(2.52)					
Duration of working in Thailand (months)	0.00		-0.04	**				
	(0.80)		(2.26)					
Duration of working in Thailand ×Top manager wants to retain Myanmar workers	0.00		0.01	*				
	(0.55)		(1.67)					
Helper (dummy)	-1.05	***						
	(3.72)							
Difficulty in finding another job	0.19	***						
	(2.64)							
Loyalty (predicted value)			0.58		0.82	***	-0.75	
			(0.98)		(2.73)		(1.35)	
Loyalty (predicted value) ×The factory develops skills of Myanmar workers							0.39	***
							(3.32)	
Intention to return					-1.09	**	-1.08	**
					(2.11)		(2.18)	
Factory dummy variables	[yes]	***	[yes]		[yes]	*	[yes]	***
h					0.49		0.50	
					(1.54)		(1.63)	
Constant term	3.14		-1.64		1.49		8.41	
	(3.49)		(0.50)		(0.95)		(3.25)	

Notes:

1. The figures are estimated coefficients, and those in parentheses are the absolute value of the t-statistic.
2. For Model (2), eq. 2 is not presented in the table.
3. Coefficients for factory dummy variables are omitted from the table.
4. *N*=146. *p<.10; **p<.05; ***p<.01.

Source: Prepared by the author.

6.3.2 Determinant factors of loyalty to the factory

According to hypothesis H1-6, variables representing POJ and OCE were predicted to have a positive effect on loyalty. Supporting this hypothesis, the coefficients for 'Equity in work content', 'Respected by the factory's top manager', 'Wage level is appropriate', and 'Top manager tries to improve the working conditions of Myanmar workers' were positive and significant. But, inconsistent with the hypothesis, the coefficients for 'Respected by Thai supervisors' and 'The factory develops the skills of Myanmar workers' were significantly

negative. The latter case suggests that a firm's effort to develop the workers' skills might cause them to feel burdened. The negative coefficient for 'Respected by Thai supervisors' can be caused by a high correlation (0.54) between this variable and 'Respected by the top manager'. If the model is estimated without the latter variable, the coefficient for 'Respected by Thai supervisors' would become nil (–0.05).

6.3.3 Determinant factors of the intention to return home

Among the HRMP perception variables, 'Top manager wants to retain Myanmar workers' and 'Top manager tries to improve working conditions for Myanmar workers' have negative and significant coefficients. This implies that workers expecting longer-term employment and improvement in working conditions at the current factory are less likely to think of returning home soon.

On the other hand, the coefficients for other HRMP perception variables, especially POJ variables, were not significant. This suggests that Myanmar workers tend to think of working in Thailand for longer period, irrespective of how they are treated at the workplace, probably because they attach a higher priority to earning money.

As predicted, the coefficients for 'Duration of working in Thailand' and 'Number of children' are negative and statistically significant. In addition, the interaction term of the former with the 'Top manager wants to retain Myanmar workers' has a positive coefficient, indicating that the negative effect of a firm's commitment to retain workers is stronger for workers who started working in Thailand only recently.

Interestingly, 'Education' has a negative effect. This indicates a possibility that Myanmar workers perceive that economic returns from education are higher in Thailand, or a possibility that education would help them adapt to living in Thailand.

6.3.4 Determinant factors of the desire to develop skills

Lastly, the effect of the variables on the workers' desire to develop skills was examined. Firstly, as predicted, the coefficient for the 'Intention to return' is negative and that for the 'Top manager wants to retain Myanmar workers' positive, and both are significant. This result supports hypotheses H1-1 and H1-2, and indicates that workers are more likely to be motivated to develop their skills when they expect to get a return on the investment of working for a longer period.

Secondly, inconsistent with hypothesis H1-3, 'Higher performance/effort is rewarded' has a significantly negative coefficient. This result can be explained by goal-orientation theory, and the fact that the present study examined the effect on the desire to develop skills for difficult and multiple tasks. Goal orientation refers to a purpose for which one engages in a task, and it has two types: performance orientation and mastery orientation. Performance orientation reflects 'the desire to demonstrate competence relative to others, and the tendency to focus on other-referenced outcomes', and mastery orientation reflects 'the desire to develop and gain competence, and the tendency to focus on self-referenced outcomes' (Van Yperen, 2003: p. 230). Previous studies indicated the possibility that performance-based pay can change the employees' goal orientation from mastery to performance (Campbell, Campbell, and Ho-Beng, 1998; Van Yperen, 2003). An employee with strong performance orientation was assumed to have a stronger desire to improve performance in specific aspects that are linked with monetary rewards. Accordingly, if a firm evaluates work performance in terms of tasks already mastered, a worker would be unlikely to make the effort to develop new and more difficult skills.

Thirdly, among the POJ variables, 'Equity in pay' shows a positive and significant coefficient as predicted. However, inconsistent with hypothesis H1-4, the coefficients for 'Equity in work content' and 'Respected by the top manager' are negative and significant. Although this result

was puzzling, it at least suggests that POJ is not the major factor increasing the Myanmar workers' motivation to develop skills.

Fourthly, among the OCE variables, the 'Top manager tries to improve the working conditions of Myanmar workers' and 'The factory develops Myanmar workers' skills' show significantly positive coefficients, supporting hypothesis H1-5. This suggests that a firm's efforts to develop the workers' skills, although possibly perceived by Myanmar workers as a burden, would impress on them the importance of skill development.

Finally, as predicted, 'Loyalty' has a positive and significant coefficient, supporting hypothesis H1-6. In addition, in Model (2), its interaction with 'The factory tries to develop Myanmar workers' skills' also has a positive and significant coefficient. The marginal effect of the latter variable based on Model (2) indicates that this variable has a positive and significant marginal effect only when the value of 'Loyalty' is as high as 5, and the marginal effect becomes negative when 'Loyalty' is low (below 3). This result was partly consistent with hypothesis H1-7. More precisely, the estimation result suggests that a firm's commitment to develop its workers could lead to higher motivation of Myanmar workers only if they show a greater loyalty to the firm.

6.3.5 Total effect

Table 6.7 shows the total effect of the HRMP perception variables on the 'Desire to develop skills', which was calculated as follows (using the denotation in eqs.1 to 3 presented above):

$$T_m = \beta_{3m} + \delta_3 \beta_{1m} + \zeta \left(\frac{\partial P[R=1]}{\partial L} \beta_{1m} + \frac{\partial P[R=1]}{\partial x_m} \right)$$

where x_m signifies variable m and $P[R=1]$ denotes the probability of $R=1$. The first term is the direct effect of the variable, the second term is the indirect effect via its effect on 'Loyalty', and the third term indicates the indirect effect via its effect on the 'Intention to return'.

As seen in Table 6.7, the 'Top manager tries to improve the working conditions of Myanmar workers' has the largest positive effect owing to the large direct and indirect effect. Ranked second was the 'Top manager wants to retain Myanmar workers', with a large direct effect, and third was 'Wage level is appropriate', with a large indirect effect via 'Loyalty'. In addition, 'Discriminatory attitude' has a relatively large negative total effect, which is also consistent with hypotheses H1-4. These results suggest that some aspects of OCE and POJ promote Myanmar workers' motivation to develop skills. However, variables such as 'Higher performance/effort is rewarded', 'Equity in work content', and 'Respected by the top manager' have a large negative impact due to the large negative direct effect.

The results indicate that the effect of POJ is inconclusive, but they can at least confirm that OCE, as manifested by a firm's commitment to improving the working conditions and retaining workers, has a positive impact on the Myanmar workers' motivation to develop skills.

Table 6.7: Direct, Indirect, and Total Effect of the Human Resource Management Practices

Perception Variables

	Loyalty	**Intention to Return**			**Desire to Develop Skills**		
	Direct	Direct	Indirect	**Total**	Direct	Indirect	**Total**
Higher performance/effort is rewarded	-0.01	0.03	0.00	**0.03**	-0.26	-0.04	**-0.30**
Equity in pay	-0.27	0.04	-0.03	**0.01**	0.20	-0.23	**-0.03**
Equity in work content	0.37	-0.02	0.04	**0.02**	-0.53	0.28	**-0.25**
Respected by the top manager	0.23	-0.06	0.02	**-0.03**	-0.39	0.22	**-0.17**
Respected by Thai supervisors	-0.25	0.07	-0.03	**0.04**	0.23	-0.25	**-0.02**
Discriminatory attitude	-0.02	0.04	0.00	**0.04**	-0.11	-0.06	**-0.17**
Wage level is appropriate	0.31	0.04	0.03	**0.07**	-0.02	0.18	**0.16**
Top manager wants to retain Myanmar workers	-0.04	-0.08	0.00	**-0.08**	0.17	0.05	**0.22**
Top manager tries to improve working conditions of Myanmar workers	0.26	-0.09	0.03	**-0.06**	0.28	0.28	**0.55**
The factory develops the skills of Myanmar workers	-0.23	0.02	-0.02	**0.00**	0.22	-0.19	**0.04**

Notes: The figures are calculated with parameters obtained from the estimation of Model (1) in Table 6.6.
Source: Prepared by the author.

7. Determinant Factors for the Difficulty in Working with Thai Workers

7.1 Choice of variables and the econometric model

The 'Difficulty in working with Thai workers', defined as a five-point-scale ordinal variable, was used as the dependent variable (a higher score indicating greater difficulty) to test hypotheses H2-1, H2-2, and H2-3; 'The number of Thai friends at the workplace'; 'Thai language skills'; and variables representing POJ, especially those related to relationship with Thai co-workers, supervisors, or manager ('Less discriminatory attitude', 'Respected by top manager', 'Respected by Thai supervisors', 'Equity in pay', and 'Equity in work contents').

Regarding Thai language skill, the survey asked the Myanmar workers to self-evaluate three aspects of their skill (listening, speaking, and reading). The variable 'Thai language skill' was represented by the factor score derived from the factor analysis of these three indicators, by assuming that the actual language skill was unobservable, but was reflected by observable skills, such as the listening skill.[10]

The development of cooperative relationships would take time, hence the logarithm for 'Duration of employment at the current factory' (in months) was included. To reflect the difference due to a worker's position in the workplace, the 'helper' and 'sewing worker' dummy were included (most workers sampled were sewing workers). Furthermore, the factory dummy variables were included to correct the factory-specific effects not accounted for by other explanatory variables. In addition, age, sex, educational level, and marital status of workers were included as control variables. The interaction terms of age and the factory dummy variables were included because workers of a similar age were more likely to develop cooperative relationships in a work group, and the Thai workers' age distribution seemed to differ by factory.[11]

An issue not to be ignored in the selection of the econometric model is the relationship between 'Thai language skill' and 'The number of Thai friends'. As discussed above, Thai language skill would facilitate the development of friendships between Myanmar and Thai workers in the workplace, and friendship ties with Thai workers could also help Myanmar workers improve their Thai language skill. To account for the relationship between these two variables, three equations were estimated in which 'Thai language skill' (*H*), 'The number of Thai friends' (*F*) and 'Difficulty in teamwork' (*D*) are endogenous variables, as follows:

[10] The factor analysis was conducted using the common factor method and the factor score was estimated by the regression scoring method. Without rotation, the factor loadings for 'listening', 'speaking', and 'reading' were 0.95, 0.92, and 0.54, respectively, and scoring coefficients associated with these three indicators were 0.58, 0.37 and 0.05, respectively.

[11] The difference in the mean value of Thai workers' age among factories was statistically significant based on the MANOVA multivariate analysis of variance (p = 0.00).

$$H = \alpha_1 + \boldsymbol{\beta}_1'\mathbf{x} + \boldsymbol{\gamma}_1'\mathbf{z}_1 + \delta_1 F + \varepsilon_1 \quad \text{(eq. 4)}$$

$$F = \alpha_2 + \boldsymbol{\beta}_2'\mathbf{x} + \boldsymbol{\gamma}_2'\mathbf{z}_2 + \delta_2 H + \varepsilon_2 \quad \text{(eq. 5)}$$

$$D = \alpha_3 + \boldsymbol{\beta}_3\mathbf{x} + \zeta H + \eta F + \varepsilon_3 \quad \text{(eq. 6)}$$

Where **x** and **z** are the vector of the exogenous variables; α_j, $\boldsymbol{\beta}_j$ (*j*=1,2,3), $\boldsymbol{\gamma}_k$ (*k*=1,2), δ_l (*l*=1,2), ζ and η are (the vector of) associated constant terms or coefficients, and ε_j are error terms.

The model was estimated by the three-stage least square (3SLS) method, hence *D* and *F* regarded as continuous variables in the model, although originally ordinal variables.[12] As instrumental variables in eq. 4 and eq. 5, the logarithm for the 'Duration of staying in Thailand', 'Age at the time of migrating to Thailand', and 'Number of children' was used.

7.2 Estimation result

The estimation result is shown in Table 6.8. Consistent with H2-2, 'Thai language skill' shows a significant positive effect on 'The number of Thai friends', although the effect in the opposite direction was not significant. The effect of these variables on the 'Difficulty of working with Thai workers' was not significant. The result does not change even if either of the two variables were to be removed from eq. 6. Although the coefficient for 'The number of Thai friends' would become significantly more positive if eq. 6 were estimated without accounting for the endogeneity of the two variables that were a biased estimation.[13] These results did not support hypotheses H2-1 and H2-2, and suggest that teamwork required on the production

[12] 'The number of Thai friends' was originally defined as a five-level ordinal variable, with each level respectively indicating the number of friends as '0', '2 to 3', '4 to 6', '7 to 9', and '10 or more'.

[13] The exogeneity of *H* and *F* in eq. 6 were rejected at the 10% level based on the instrumental variable estimation of eq. 6, with the two variables as endogenous explanatory variables (Durbin test, $p = 0.07$).

line of the surveyed garment factories is relatively simple, hence language skills and friendships are not critical factors.

Table 6.8: Regression Analysis of Determinant Factors of Difficulty in Working with Thai Workers

	Thai language skills (eq. 4)		**The number of Thai friends** (eq. 5)		**Difficulty in working with Thai workers** (eq. 6)	
Equity in pay			-0.30	**	0.01	
			(2.55)		(0.04)	
Equity in work contents			0.51	***	-0.13	
			(3.67)		(0.43)	
Respected by the top manager			0.06		-0.34	**
			(0.44)		(2.02)	
Respected by Thai supervisors			-0.27	*	0.18	
			(1.82)		(0.76)	
Discriminatory attitude			-0.05		0.03	
			(0.69)		(0.33)	
Sex (male)	0.18		0.23		0.00	
	(1.33)		(1.02)		(0.00)	
Married	-0.02		0.37		-0.83	**
	(0.11)		(1.53)		(2.17)	
Age	0.05	*	0.00		1.65	**
	(1.80)		(0.01)		(2.09)	
Education	0.02		0.03		-0.10	**
	(0.71)		(0.75)		(2.16)	
Helper			-0.39		-1.29	**
			0.99		2.33	
Sewing worker			0.16		0.10	
			0.69		0.32	
Age at the time of migration	-0.05	*	0.07	*		
	(1.90)		(1.69)			
ln (duration of employment at the current factory)			1.10	**	-0.36	*
			2.38		1.94	
ln (duration of employment at the current factory) ×Age			-0.03	**		
			2.03			
The number of children	0.36	***				
	(2.70)					
ln (duration of staying in Thailand)	0.26	**				

	(2.27)				
Thai language skill		0.84	***	–0.04	
		(2.70)		(0.09)	
The number of Thai friends	0.09			0.57	
	(1.20)			(1.23)	
Factory dummy variables	[no]	[yes]	***	[yes]	***
Factory dummy variables ×Age	[no]	[no]		[yes]	***
Constant term	-1.83	-1.46		-38.01	
	(3.35)	(0.79)		(1.82)	

Notes:
1. The model was estimated by the three-stage least square (3SLS) method.
2. The figures are estimated coefficients, and those in parentheses are the absolute value of the t-statistic.
3. Coefficients for factory dummy variables are omitted from the table.
4. *N*=141. *p<.10; **p<.05; ***p<.01.

Source: Prepared by the author.

On the other hand, hypothesis H2-3 is partly supported, as 'Respected by top manager' has a negative and significant coefficient. This result indicates that the top manager's commitment to fair treatment of Myanmar workers might create a cooperative atmosphere in the workplace, or that some measures might be introduced in such factories to enhance cooperation between Myanmar and Thai workers. Regarding the POJ's effect on friendship ties, only 'Equity in work content' has a positive and significant coefficient consistent with H2-3, and 'Equity in pay' and 'Respected by Thai supervisors' even showed negative coefficients.

The coefficient for 'Duration of employment at the current factory' is negative and significant at the 10% level. This suggests that cooperative relationships are fostered by a longer experience of working together on the same production line, and longer-term employment would facilitate teamwork among Myanmar and Thai workers.

The factory dummy variables and their interaction with 'Age' are respectively and jointly significant at the 1% level. However, the coefficients for the factory dummies become insignificant if the interaction terms are removed from the equation (not shown in the table).

In the latter estimation, the significance of 'Age' also disappears. This result suggests that what matters is the age distribution of Thai workers in each factory. As argued above, one possibility is that a similarity of age between Myanmar and Thai workers might facilitate cooperative relationships in work groups.

8. Concluding Remarks

For Thai garment firms to pursue upgrading involving the production floor, the skill level of the production workers and teamwork among them should be enhanced. In this respect, a concern arises as to whether and how reliance on Myanmar workers (mixed with Thai workers) could be compatible with such upgrading. To provide answers to this question, this chapter focused on the workers' motivation to develop skills and their perception of the difficulty of working in teams with foreign workers, and examines the effect of the workers' perception of a firm's human resource management practices (HRMP).

Major findings from the analysis of the data collected from Myanmar and Thai garment workers were as follows. Firstly, the Myanmar workers tend to have a weaker motivation to develop their skills than Thai workers do, while any difficulty they feel in working with Thai workers tends to be less than the difficulty perceived by Thai workers in working with Myanmar workers. Secondly, though not conclusive, there were some indications that Myanmar workers' desire to develop skills was positively affected by their perception of organisational justice (i.e. fair treatment in the factory) and the firm's commitment to workers, represented by efforts to improve working conditions, develop the workers' skills, and retain Myanmar workers. Thirdly, the degree to which Myanmar workers felt any difficulty working with Thai workers was mostly unrelated to their perception of organisational justice, except for the top manager's respectful attitude towards the Myanmar workers, but was more

affected by the workers' personal attributes, such as their age and education level, as well as the duration of employment at the factory.

These findings are far from conclusive, and further studies are needed to identify the factors that affect Myanmar workers' motivation to develop skills and good teamwork with Thai workers. Furthermore, the connection between successful upgrading and the workers' motivation, as well as the functioning of teamwork, need to be explored further.

Even with this limitation in mind, this chapter shows that a firm's HRMP matters to Myanmar workers' motivation to develop skills. The findings presented above suggest that an especially important factor is the firm's long-term commitment to the Myanmar workers, such as by making efforts to improve their working conditions, investing in training, and securing longer-term employment. This proposition, though it may seem to be a matter of course, is counter to the general assumption that foreign migrant workers under the work-permit system with a limited contract term tend to have a short-term perspective of their work in the host country and try hard to earn as much money as possible in the shortest period before returning to their home country. Under these circumstances the workers would prefer benefits given now rather than in the future, and the firm's commitment to a long-term perspective would not increase Myanmar workers' motivation to develop skills. Myanmar migrants working in garment factories in Thailand seem to have this kind of mentality, as reflected by their tendency to change factories frequently according to the availability of overtime opportunities. It is also true that many have the desire to continue working in Thailand over the long term, and they have been able to do so, as indicated by the data shown above. A firm's long-term commitment to such workers would pay off. Legal restrictions on the duration of employment of foreign migrant workers would have a negative effect in this respect.

References

Agudelo-Suárez, A., et al. (2009), 'Discrimination, Work and Health in Immigrant Populations in Spain', *Social Science and Medicine*, 68(10), pp.1866–74.

Ang, S., L. Van Dyne, and T.M. Begley (2003), 'The Employment Relationships of Foreign Workers versus Local Employees: A Field Study of Organizational Justice, Job Satisfaction, Performance, and OCB' [Organisational Citizenship Behaviour], *Journal of Organizational Behavior*, 24(5), pp.561–83.

Becker, G.S. (1962), 'Investment in Human Capital: A Theoretical Analysis', *Journal of Political Economy*, 70(5), pp.9–49.

Benson, G.S. (2006), 'Employee Development, Commitment and Intention to Turnover: A Test of "Employability" Policies in Action', *Human Resource Management Journal*, 16(2), pp173–92.

Carlson, D.S., D.P. Bozeman, K.M. Kacmar, P.M. Wright, and G.C. McMahan (2000), 'Training Motivation in Organizations: An Analysis of Individual-Level Antecedents', *Journal of Managerial Issues*, 12(3), pp.271.

Chambel, M.J. and F. Sobral (2011), 'Training Is an Investment with Return in Temporary Workers: A Social Exchange Perspective', *Career Development International,* 16(2), pp.161–77.

Campbell, D.J., K.M. Campbell, and C. Ho-Beng (1998), 'Merit Pay, Performance Appraisal, and Individual Motivation: An Analysis and Alternative', *Human Resource Management*, 37(2), pp.131–46.

Cohen-Charash, Y. and P.E. Spector (2001), 'The Role of Justice in Organizations: A Meta-Analysis', *Organizational Behavior and Human Decision Processes,* 86(2), pp.278–321.

Dae-seok, K. (2007), 'Perceived Organizational Justice as a Predictor of Employees' Motivation to Participate in Training', *Research and Practice in Human Resource Management,* 15(1), pp.89–107.

Dayan, M. and A. Di Benedetto (2008), 'Procedural and Interactional-Justice Perceptions and Teamwork Quality', *Journal of Business and Industrial Marketing,* 23(7/8), pp.566–76.

Ensher, E.A., E.J. Grant-Vallone, and S.I. Donaldson (2001), 'Effects of Perceived Discrimination on Job Satisfaction, Organizational Commitment, Organizational Citizenship Behavior, and Grievances', *Human Resource Development Quarterly,* 12(1), pp.53–72.

Facteau, J.D., G.H. Dobbins, J.E.A. Russell, R.T. Ladd, and J.D. Kudisch (1995), 'The Influence of General Perceptions of the Training Environment on Pretraining Motivation and Perceived Training Transfer', *Journal of Management*, 21(1), pp.1–25.

Forret, M. and M.S. Love (2008), 'Employee Justice Perceptions and Coworker Relationships', *Leadership and Organization Development Journal,* 29(3), pp.248–60.

Han, S., S. Park, E. Jin, H. Kim, and Y. Seong (2008), 'Critical Issues and Possible Solutions for Motivating Foreign Construction Workers', *Journal of Management in Engineering,* 24(4), pp.217–26.

International Organization for Migration (IOM) and Asian Research Center for Migration (ARCM) (2013), *Assessing Potential Changes in the Migration Patterns of Myanmar Migrants and their Impacts on Thailand*. Bangkok: International Organization for Migration.

Janta, H., A. Ladkin, L. Brown, and P. Lugosi (2011), 'Employment Experiences of Polish Migrant Workers in the UK Hospitality Sector', *Tourism Management*, 32(5), pp.1006–19.

Jehn, K.A. and P.P. Shah (1997), 'Interpersonal Relationships and Task Performance: An Examination of Mediating Processes in Friendship and Acquaintance Groups', *Journal of Personality and Social Psychology*, 72(4), pp.775–90.

Kiffin-Petersen, S. and J. Cordery (2003), 'Trust, Individualism and Job Characteristics as Predictors of Employee Preference for Teamwork', *The International Journal of Human Resource Management*, 14(1), pp.93–116.

Kohpaiboon, A., P. Kulthanavit, and J. Jongwanich (2012), 'Structural Adjustment and International Migration: An Analysis of the Thai Clothing Industry', *Oxford Development Studies*, 40(2) pp.231–60.

Kratzer, J., R.T.A.J. Leenders, and J.M.L. Van Engelen (2005), 'Informal Contacts and Performance in Innovation Teams,' *International Journal of Manpower,* 26(6), pp.513–28.

Krjukova, I., R. Schalk, and J. Soeters (2009), 'Local/Foreign Status, Cultural Background, and Organizational Citizenship Behaviour: A Study among Foreign and Local Workers in The Netherlands', *European Journal of Work and Organizational Psychology*, 18(4), pp.464–76.

Lee, C.H. and N.T. Bruvold (2003), 'Creating Value for Employees: Investment in Employee Development', *The International Journal of Human Resource Management,* 14(6), pp.981–1000.

Liao, W.C. and W.T. Tai (2006), 'Organizational Justice, Motivation to Learn, and Training Outcomes', *Social Behavior and Personality: An International Journal*, 34(5), pp.545–56.

Maddala, G.S. (1983), *Limited-Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press.

Martinovic, B., F. van Tubergen, and I. Maas (2011), 'Acquisition of Cross-Ethnic Friends by Recent Immigrants in Canada: A Longitudinal Approach', *International Migration Review*, 45(2), pp.460–88.

Methot, J.R., J.A. Lepine, N.P. Podsakoff, and J.S. Christian (2015), 'Are Workplace Friendships a Mixed Blessing? Exploring Tradeoffs of Multiplex Relationships and Their Associations with Job Performance', *Personnel Psychology*, 69(2), pp.311–55.

Meyer, J.P. and N.J. Allen (1991), 'A Three-Component Conceptualization of Organizational Commitment', *Human Resource Management Review,* 1(1), pp.61–89.

Miller, D. and J. Lee (2001), 'The People Make the Process: Commitment to Employees, Decision Making, and Performance', *Journal of Management,* 27(2), pp.163–89.

Morrison, R. and T. Nolan (2007), 'Too Much of a Good Thing? Difficulties with Workplace Friendships', *University of Auckland Business Review,* 9(2), pp.33–41.

Puangyoykeaw, K. and Y. Nishide (2015), 'Organizational Commitment and Turnover Intention in Low-Skilled Immigrant Workers in Thailand: An Empirical Assessment of Need Satisfaction, Job Satisfaction and Overall Life Satisfaction Factors', *International Journal of Business and Management,* 10(5), pp.98–112.

Rivers, D. and Q.H Vuong (1988), 'Limited Information Estimators and Exogeneity Tests for Simultaneous Probit Models', *Journal of Econometrics* 39, pp.347-366.

Sanchez, J.I. and P. Brock (1996), 'Outcomes of Perceived Discrimination among Hispanic Employees: Is Diversity Management a Luxury or a Necessity?' *Academy of Management Journal,* 39(3), pp.704–19.

Stainback, K. and M. Irvin (2012), 'Workplace Racial Composition, Perceived Discrimination, and Organizational Attachment', *Social Science Research,* 41(3), pp.657–70.

Stevens, M., S. Hussein, and J. Manthorpe (2012), 'Experiences of Racism and Discrimination among Migrant Care Workers in England: Findings from a Mixed-Methods Research Project', *Ethnic and Racial Studies,* 35(2), pp.259–80.

Thompson, P., K. Newsome, and J. Commander (2013), '"Good When They Want to Be"': Migrant Workers in the Supermarket Supply Chain', *Human Resource Management Journal,* 23(2), pp.129–43.

Triana, M.D.C., M.F. Garcia, and A. Colella (2010), 'Managing Diversity: How Organizational Efforts to Support Diversity Moderate the Effects of Perceived Racial Discrimination on Affective Commitment', *Personnel Psychology,* 63(4), pp.817–43.

Tsui, A. S., J.L. Pearce, L.W. Porter, and A.M. Tripoli (1997), 'Alternative Approaches to the Employee–Organization Relationship: Does Investment in Employees Pay Off?' *Academy of Management Journal*, 40(5), pp.1089–997.

Van Yperen, N. (2003), 'The Perceived Profile of Goal Orientation within Firms: Differences between Employees Working for Successful and Unsuccessful Firms Employing either Performance-Based Pay or Job-Based Pay', *European Journal of Work and Organizational Psychology*, 12(3), pp.229–43.

Chapter 7

Thailand's Migrant Worker Management Policy as Regional Development Strategy

Maki Aoki

Introduction

Located in the middle of mainland Southeast Asia, Thailand is one of the largest destinations for migrant workers in the region. Strong demand for workers by the labour-intensive sectors has prompted the Government of Thailand to accept large numbers of migrant workers from Cambodia, Lao PDR, and Myanmar since the early 1990s. At the same time, Thailand has also sent its own nationals to the Middle East, East Asia, and neighbouring countries such as Malaysia and Singapore. Since 1992, the Government of Thailand repeatedly regularised irregular migrants by issuing work permits to registered migrant workers. Thus, the number of registered migrants surged from 706 Burmese nationals in 1992 to a peak of 1,284,924 in 2004. In 2013, the number of registered foreign workers from these three neighbouring countries was reported as 1,082,892 (IOM, 2014) and accounted for 2.7% of Thailand's total national labour force (NSO, 2013). Today, internal and international migration plays a significant part in the social and economic development of Thailand (IOM, 2014).

However, the government has not defined clearly the role of foreign workers in the national development strategy for a long time. In 2007, the government first mentioned 'immigrant workers' (*raengan tangchart*)[1]in the Tenth National Economic Social Development Plan (2007–2011), and merely implied the necessity to develop strategies to handle in future the 'free

[1] Takeguchi (2014a) stressed that migrants from three neighbouring countries are called *khon tangdao* (alien) or *raengan tangdao* (alien workers) and distinguished from other foreigners, which are usually called *khon tangprathet* (foreign nationals). Such wording can also be observed in official documents and laws.

movement of people' from the viewpoint of internal security (NESDB, 2007: 2–4).

Recent studies have concluded that Thailand's policies for managing migrant workers have been reactive and lack a long-term national strategy (Yamada, 2012; Iwasaki, 2015). The definition 'migrant-receiving policy' in these studies was precisely focused on immigration and border-control rules and the alien workers' registration system. However, changing the scope from Asian cases to migration studies in general, we find several studies that consider migration-receiving measures in a broader context. Based on such migration studies, we may expand the scope of study by using the term 'migration management', instead of migration-receiving measures. This includes unilateral migrant-receiving policies and the international deals between the destination and origin countries regarding immigration and border controls, and aid for the origin countries to reduce migration. By employing an expanded analytical framework, this chapter sheds light on the proactive aspect of Thailand's migrant worker policy.

In this chapter, we use the Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy (ACMECS) as a case study of Thailand's comprehensive migrant management endeavours. ACMECS is also known as the Economic Cooperation Strategy (ECS) by five mainland Southeast Asian countries (Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam), but it was originally proposed as the ECS by Thailand in 2003 to control the inflow of foreign workers from three border-sharing neighbours (Cambodia, Lao PDR, and Myanmar).[2] Most studies have concluded that the early 2000s were the turning point in Thailand's migrant-receiving policy because several important new policies and initiatives, including ACMECS, were introduced during this period. This chapter establishes the hypothesis that ACMECS was part of the migrant management mechanism at the international level and examines its purpose and background in the light of the restructuring of the migrant-receiving policies.

[2] In this chapter, we refer to these three countries as the 'three neighbouring countries'.

1. Conceptual Framework

Human migration is a phenomenon that dates to prehistoric times and can be observed everywhere on earth. It was only presented as a problem after the modern nation-state system arose. This was when the meaning of 'border' changed from the 'frontier around' to the 'division between' states, and thus became a mechanism to produce a 'nation' within and 'aliens' without. Today, the problem of international migration is strongly dependent on a state's decision as to who should be allowed to cross the border and what their legal status is. In other words, immigration and border control are subject to state governance (Okabe, 2005a).

It is important to note that such immigration control is implemented not only unilaterally, but also in the form of international cooperation as a common border control. We review the manner of international common immigration and border control with reference to the studies by Hollifield (2000) and Okabe (2005a, 2005b, 2013).

Okabe (2005a) illustrates the multi-layered common mechanism for immigration and border control in Europe. European states with relatively small economic and social gaps preferred to control jointly their common border with an institutionalised cooperation mechanism under which the member states agreed to limit the full exercise of their sovereignty over border control. The Schengen Agreement, which was concluded between five western European countries in 1985, originally aimed to streamline the border-crossing procedure. It was later developed into an institution to promote the free movement of goods and people within a common outer border. It also provided joint control of the outer border. The agreement only covers part of the territory of the European Union (EU), and it aims at cooperation for internal security control amongst the countries concerned. The Schengen Agreement and its implementing conventions were legally defined as complementary institutions to the European Single Market and have bound the migration management policies of each EU and European Community member state.[3]

[3] The Amsterdam Treaty defined the Schengen Agreement and the convention implementing the

Hollifield (2000) and Okabe (2005a), on the other hand, show that the immigration and border-control mechanism amongst states with large economic disparities can often be achieved through interlinkage and bargaining on different issues. The outline of the process is shown in Figure 7.1. Assume that migrant destination country A proposes the policy to suppress the outflow of workers from origin country B. At the same time, country A also offers development or humanitarian aid to country B. These two independent negotiations can be made more acceptable to both countries by interlinking the issues with the logic of 'aid in place of migration.' The government of country A can persuade its domestic public, which is against spending money on aid, by emphasising that it prevents a migration influx. Likewise, aid proposals make it easier for country A to persuade country B to accept a proposal that could reduce remittances from overseas workers. In this way, the destination country can find a way to involve the origin country to jointly manage migration.

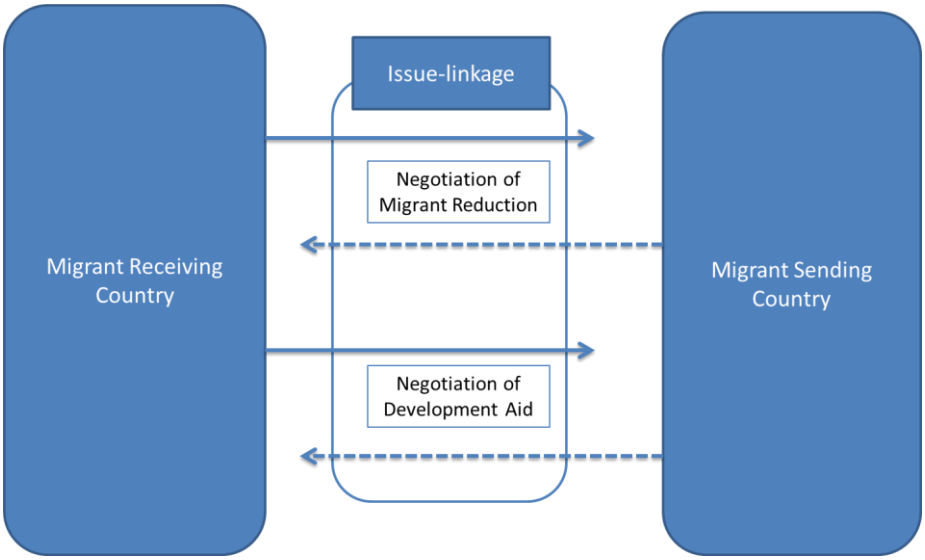
According to Okabe (2005b), such 'migration diplomacy' can be observed in the negotiations over Indochina's refugees during the Tokyo Summit in 1978. It was pointed out that the EU states had negotiated with the migrant-sending countries outside their common border (Okabe, 2005b). It is important to note that the logic of 'aid in place of migration' had a significant impact on policymaking in the migrant-receiving countries and provided a theoretical backbone to the activities of international organisations, such as the International Organization for Migration (IOM), the International Labour Organization (ILO), and the United Nations High Commission for Refugees (Okabe, 2005a).

We have outlined two migrant management mechanisms. What is important is that there is a variety of such measures (a direct approach, such as immigration and border control, and a comprehensive approach, including development or humanitarian aid), in addition to variation

Schengen Agreement and related conventions as a part of EU law in 1999. The Palma Document is a report that the Coordinator's Group on the Free Movement of Persons presented to the European Council in 1989. It pointed out the importance of legal and political measures regarding the elimination of intra-regional borders, and its proposals were incorporated in the Schengen Agreement.

in the level at which they are applied (unilateral or national, bilateral, and multilateral). With these variations in mind, the next section provides and overview of Thailand's migrant management efforts.

Figure 7.1: 'Migrant Diplomacy' for Migration Management



Source: Okabe (2005a: 74).

2. Thailand's Migrant-Receiving Policy

2.1 Migration management within member states of the Association of Southeast Asian Nations

In 2003, the Association of Southeast Asian Nations (ASEAN), declared the establishment of the ASEAN Community, which comprises three pillars: the ASEAN Political-Security Community, the ASEAN Economic Community, and the ASEAN Socio-Cultural Community (ASEAN, 2003). The movement of natural persons was discussed independently along with those three pillars. The

member states agreed a Mutual Recognition Agreement (MRA) in relation to specialists as part of service trade liberalisation (ASEAN, 2008). However, the movement of unskilled workers is still the subject of earnest debate over the protection of workers' rights（Suzuki, 2012). In the ASEAN Regional Forum Security Policy Conference, the member states signed the 2015 ASEAN Convention Against Trafficking in Persons, Especially Women and Children, as a part of anti-transnational crime cooperation (Aoki, 2016). In brief, the ASEAN members agreed only to liberalise the movement of high-level specialists, and institutionalised an agreement promoting the movement of favourable people (ASEAN, 2008; ASEAN, 2012), and regulating (combating) unfavourable movements (ACTIP, 2015). The general problem for ASEAN is the absence of a legal or conventional framework that stipulates the relationship between ASEAN documents (declarations and conventions) and domestic laws. Enforcement of ASEAN agreements is often at the discretion of each member state. Take the case of the ASEAN MRAs, which facilitate the movement of skilled labour around ASEAN. Although member states have concluded MRAs for eight service sectors since 2005, some of them have blocked the entry of foreign specialists by making new immigration regulations and domestic rules (Sukegawa, 2011).[4] In summary, ASEAN has not yet established a regional immigration and border-control mechanism like the EU's Schengen Agreement. Instead, the member states manage migrant workers by implementing unilateral national immigration-receiving policies and laws.

2.2 Thailand's migrant worker receiving measures

Thailand has accepted incoming migrant workers since the beginning of the 1990s. Recently,

[4] The ASEAN Agreement on the Movement of Natural Persons (signed in Cambodia on 19 November 2012) also stipulates that the agreement does not prevent a member state from applying measures to regulate the entry into, or temporary stay of, natural persons of another member state in its territory, including any measures necessary to protect the integrity of its territory (article 3, (d)).

sectors such as construction, agriculture, fishery, marine products processing, and household work have suffered from chronic shortage of labour (Suehiro, 1997), and the influx of migrant workers has filled the high demand. Thailand's Immigration Act 1979 stipulated that foreigners entering the country without formal procedures would be subject to deportation (Immigration Act 1979, section 12) However, the government decided to let irregular migrant workers remain by issuing work permits under Article 17 of the same law, in place of official registration.[5] Migrant worker registration was implemented about four times during 1992–2000 (Martin, 2007).

Other studies agree that the early 2000s marked a watershed in Thailand's migrant management (Huguet and Punpuing, 2005; Martin, 2007; Otomo, 2010; Yamada, 2012). This was based on two events. First, the Cabinet decision on 28 August 2001 to open every sector in the country to registered migrant workers. Second, the National Security Council (NSC) order, approved on 21 July 2003. The order mandated to issue the work permit to the irregular migrants in Thailand. At the same time, it urged the setting up a border economic zone to which the migrant workers commute from their countries using a special pass (Martin, 2007).

Pungpond (2009) emphasised that there was no legal basis or master plan for a migrant worker policy before 2001, except the Immigration Act 1979 and the Alien Working Act 1978. Most policies came from Cabinet resolutions. The Department of Employment in the Ministry of Labour and Welfare and the Provincial Office of the Ministry of Interior were the authorities directly responsible for migrant worker registration and work permit issuance. The Immigration Bureau of the Royal Thai Police oversaw the detection and deportation of irregular migrants (Pungpond, 2009). After the Thaksin Shinawatra government established the National Committee on Illegal Workers Administration (NCIWA) as the focal point for migrant worker

[5] Section17 of the Immigration Act 1979 provided that 'In certain special cases, the Minister, with Cabinet approval, may permit any alien or any group of aliens to stay in the Kingdom under certain conditions, or may alter the conditions, or may consider exemption from conformity with this Act.'

issues, Thailand's national migrant management policy was implemented along with the master plan for foreign worker management proposed by the NCIWA in 2004. The plan consisted of three main pillars (Pungpond, 2009: 9):

1. Open registration of irregular migrants from the three neighbouring countries, permitting one category eligible for employment and the other category to stay as dependants.
2. Establish a nationality verification process that allows officials from the worker-sending country to carry out such verification, in order to work towards legalising all migrants.
3. Implement a memorandum of understanding regarding legal recruitment from and repatriation of workers to the three neighbouring countries.

These measures were implemented in subsequent years. However, the NCIWA plan has not had a significant impact on reducing irregular migration. On the contrary, the studies mentioned above concluded that it created a further surge in migrants. Table 7.1 shows that the number of irregular migrant workers from the three neighbouring countries leapt after 2003. In 2007, numbers returned to levels before leaping again in 2009. We can conclude from Table 7.1 that the NCIWA plan had a significant impact on migration registration, but it had little effect on reducing the influx of migrants.[6] In 2008, the 1978 Alien Workers Act was abolished and replaced by the Alien Workers Act 2008. This act summarised and institutionalised the previous migrant-receiving measures and provided a firm legal basis for migrants' regularisation. The government appears to have shifted its emphasis from deterring incoming migrants to controlling the flow.

[6] It should be noted that the enhanced migrant worker registration system has helped the government to quantitatively measure the movement and status of migrant workers in Thailand.

Table 7.1: Number of Migrant Workers and the Migrant-Receiving Policies, 2001–2014

Yearly	Mode of Entry: Total	Legal entry: Legal entry sub- total*	Legal entry: Temporary migrant workers newly entering Thailand under the MOU	Legal entry: Temporary migrant workers receiving nationality validation under the MOU	Illegal entry: Migrant workers from three neighbouring countries (Myanmar, Laos, Cambodia)	Migrant Receiving Policy
2001	623,068	50,844			568,249	2001/8/28 Cabinet decision for six-month permits for all jobs renewable for another six months until September-October 2002. 2001/9/25 National Committee on Illegal Workers. Administration (NCIWA) was established.
2002	491,188	69,364			409,339	2002/9-/10 Cabinet decision for six-month permit renewal. 2002/10/18 Thai-Lao Bilateral MoU was concluded.
2003	384,003	79,581			288,780	2003/07/21 NSC approved resolution to legalise and control all migrant workers. 2003/05/31 Thai-Cambodia Bilateral MoU was concluded. 2003/06/21 Thai-Myanmar Bilateral MoU was concluded. Nationality validation (NV) procedure started.
2004	974,143	100,520			849,552	2004/03/02 Cabinet decision for restoration to MoU (2004 06-/07 registration). 2003/11-2004/06 six-month work permit renewal NCIWA approved National Master Plan for Illegal Migrants
2005	846,660	101,111			705,293	Employment of newly/legally entered workers (Laos/Cambodia) under the MoU started
2006	826,399	112,794			668,576	NV of Laotian and Cambodian workers started
2007	708,976	122,903	14,150	72,098	546,272	
2008	790,664	228,353	17,059	71,017	501,570	2551 Alien Workers Act approved.
2009	1,544,902	210,745	27,447	77,914	1,314,382	2009/05 Registration of undocumented migrant workers started. 2009/07 NV of Burmese workers started
2010	1,335,155	379,560	43,032	228,411	932,255	2551 Alien Work Act enacted. Employment of newly/legally entered workers (Myanmar) under the MoU started. 2010/02/28 Cabinet decision to extend the NV deadline to 2012/02/28.
2011	1,950,650	678,235	72,356	505,238	1,248,064	2011/07 Second registration of undocumented migrant workers started
2012	1,133,851	940,531	93,265	733,603	193,613	2012/02/28 Cabinet decision to extend the NV deadline to 2012/06/14. 2012/06/14 Cabinet decision to extend the NV deadline to 2012/12/14. 2012/12/14 Initial deadline for registration.
2013	1,183,835		174,042	847,130		2013/08/06 The government decided to extend the NV deadline until 2014/11/14.
2014			206,168	971,461		

Note: * Including migrants with other modes of entry.
The second column from the right, 'Migrant workers from three neighbouring countries (Myanmar, Lao PDR, Cambodia)' amongst 'Illegal entry', means migrant workers who entered Thailand illegally, but with work permits that the Cabinet permitted, especially construction and domestic workers.
Source: Bureau of Foreign Workers, Ministry of Labour, (Martin, 2007).

Yamada (2012) explained that the measures did not work well because of their complicated and costly procedure. The registration is strongly dependent on the employer, but the benefits of registration are not clear and the sanctions for violation are too low. Complicated procedures create room for intermediaries who demand high commissions. The fear of being deceived by these individuals prevented many foreign migrants from registering. For similar reasons, the immigration process under bilateral memorandums of understanding (MoUs) has achieved only limited progress (Yamada, 2012).

3. Migration Management as Development Assistance under the Economic Cooperation Strategy

As outlined so far, Thailand's migration-receiving policy has been reactive, both to the demand from employers and the migrants' inflow. Nevertheless, it does not reflect an absence of government will to define the role of migrant workers and control them.

As mentioned earlier, the government's expansion of migrant registration to all provinces and industries in 2001 was followed by the NSC resolution on tightening the regulation of illegal migrant workers in 2003. We stress that this was the turning point for migrant management, in the sense that the Government of Thailand had, for the first time, embarked on the creation of a system of international migrant control. The NSC resolution proposed six locations to develop the economy of the regions opposite the Thai border to reduce the volume of migration (Huguet and Punpuing, 2005). It should be noted that this resolution was issued straight after the Prime Minister's proposal to the heads of the three neighbouring countries for new economic cooperation and initiatives. At the emergency meeting of the ASEAN Plus China Summit on severe acute respiratory syndrome (SARS) in April 2003, Prime Minister Thaksin raised the idea of an economic cooperation strategy to address the economic disparity between Thailand and its three immediate neighbouring countries (Aoki, 2008) . On the other hand, Thaksin explained the ECS to Thai nation as the solution for incoming illegal migrant workers (Aoki, 2008)..

We must emphasise that redefining the relationship with neighbouring countries Cambodia, Lao PDR, Myanmar, and Viet Nam was a policy focus of Thaksin's policy. Under his government the quality and quantity of Thai official development assistance (ODA) developed rapidly (Aoki, 2008). Thailand's international development assistance started in 1990 as aid to these four neighbouring countries. B22 million was allocated in 1990, and this expanded to B412 million in 1997. It halved in 1998 due to the Asian financial crisis but recovered in the 2000s. At its peak in 2004 it amounted B8 billion – 0.19% of gross national income – and even surpassed the ODA of

some members of the Organisation for Economic Co-operation and Development (TICA, 2009). Aid to the neighbouring countries amounted to almost half of the total ODA. During 1997–2001, the four countries received B795.52 million in ODA, or 76.1% of the total ODA (Suehiro, 2001). Moreover, in 1996 Thailand established within the Ministry of Finance a development assistance agency specialised in helping neighbouring countries – the Neighbouring Countries Economic Development Cooperation Agency. In 2005, it became an independent agency responsible for ODA loans to the neighbouring countries, including aid through ACMECS.

Considering the changes introduced by the Thaksin administration, we propose that migration management under this administration should be examined as part of Thaksin's initiative for regional strategy with the neighbouring countries.

After the ECS was announced in April 2003, Thaksin ordered the National Economic and social Development Board to draft the plan. The report was published in July, and it was followed by the first meeting of the heads of the ECS members on 12 November of the same year. The members agreed to name the initiative ACMECS, and confirmed the main four aims were to

(i) increase competitiveness and generate greater growth along the borders;

(ii) facilitate relocation of agricultural and manufacturing industries to areas with comparative advantage;

(iii) create employment opportunities and reduce income disparity amongst the four countries; and

(iv) enhance peace, stability, and shared prosperity for all in a sustainable manner (ACMECS, 2003).

The ECS Action Plan, proposed in 2003, put forward 46 common projects and 224 bilateral projects (ACMECS, 2003). Its main focus seems to be bilateral trade and investment promotion between Thailand and the other members, as well as regional tourism cooperation (Table 7.2).

Table 7.2: Inaugural Projects of the Economic Cooperation Strategy, 2003–2012

Projects		Trade and Investment	Agriculture and Industry	Agricultural Cooperation	Industrial Promotion	Transport Linkages	Tourism Cooperation	Human Resource Development	Total
Regional		10		4	7	4	13	5	**43**
C-L		3		3	4	2	4	2	**18**
C-M	short term	3		4	1	3	6	3	**24**
	mid-long term						4		
C-T	short term	11	13			2	5	1	**63**
	mid-long term	9	14				7	1	
L-M	short term	7		5	1	2	6	1	**25**
	mid-long term						3		
L-T	short term	13		3	4	8	8	7	**43**
	mid-long term								
M-T	short term	11		9	5	5	10	2	**49**
	mid-long term					1	6		
	Total	**67**	**27**	**28**	**22**	**26**	**66**	**22**	

C = Cambodia, L = Lao PDR, M = Myanmar, T = Thailand.
Source: Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy (ACMECS) Action Plan, 2003.

However, the ECS was introduced to Thai nationals from the beginning as a framework for migrant control. The English title of the National Economic and Social Development Board report was 'Economic Cooperation Strategy', but its Thai title translates as 'Construction of the Border Economy System', which more directly expressed its purpose (NESDB, 2003). The report drew attention in its introduction to the economic potential of the Thai border areas that remained underdeveloped, and pointed to the wide economic disparity between Thailand and the three neighbouring countries. It stressed that such disparity had caused social problems, such as illegal alien workers, and warned about the possibility of a further influx of alien workers and the social disruption they may cause, such as pandemic diseases and crime.

Therefore, it proposed joint development of the border areas by relocating industry as the fundamental remedy. The lower wages and land cost might be favourable for the relocation of labour-intensive, raw-material-dependent sectors. By moving them to the neighbouring countries, the report recommended the creation of lower-value-added jobs outside the border.

However, migrant workers who were already in Thailand would be a constraint to such industrial relocation. The ECS report recommended 'swift consultation with the migrant-sending countries in order to implement swift repatriation of workers, and establish an appropriate employment system compliant with the legal system in each country', and 'to clarify the number of workers needed for which sectors.' In addition, the paper recommended to 'develop and create jobs in the border areas in order to reduce the movement of alien workers into the interior of Thailand' (NESDB, 2003: Chapter 3 Section 3, (B)). It is noteworthy that the report stressed the need to reduce the number of migrants. National Economic and Social Advisory Council (NESAC), which is the official advisory agency for the Government of Thailand, also proposed similar recommendations. NESAC studied the migrant worker issue with security and migration specialists, government officials, and economists. Their June 2002 report recommended ending the employment of irregular migrants and limiting the employment of legal migrant workers to the sectors that Thai workers avoid. It proposed measures such as full enforcement of migrant worker registration, the establishment of an effective legal system for the protection of migrants' rights, and an international legal migration mechanism with the sending countries and nationality verification[7]. The report concluded that irregular or illegal migrant workers were at the core of security, public health, and economic problems. People smuggling and labour exploitation, pandemic diseases, and the cost of social care for the migrant families were raised as the possible problems. Likewise, it was suggested that addiction to a cheap labour force might hamper technological innovation that is indispensable for economic progress. We would like to focus attention on the similarity of the logic of the NESAC and ECS reports, especially their emphasis on the strict control of irregular migrants.

In 1999, the Government of Thailand implemented large-scale deportation of irregular migrants of Burmese nationality in the border area, based on the decision of the NSC in response to the

[7] Shukan Tai Keizai, 4th November, 2002.

heightened diplomatic tension between Thailand and Myanmar[8]. Together with the occupation of the Myanmar Embassy in Bangkok by Burmese anti-government activists in October, the local media exacerbated the national mood of exasperation and hatred towards Burmese migrants. Outside such special circumstances, anti-alien sentiments are rarely seen amongst Thai people (Takeguchi, 2014b).

The migrant management programme under the Thaksin government emphasised striking a balance between the needs of security and economic demands. Undocumented migrant workers (illegal aliens) were perceived as problems in terms of security and the economy. Therefore, their inflow should be prevented, or at least controlled. However, the government was fully aware that the migrants had already become indispensable to Thai industry. The solution the government offered was the relocation of lower value-added industrial sectors to the countries of origin of the migrants. The Thaksin administration expanded development assistance to the neighbouring countries to promote the relocation of the relevant industries to those countries. Registration of undocumented migrants within Thai territory and bilateral agreements on regular immigration and employment procedures were launched so the government would be able to accept irregular migrants under its control and allocate them to the sectors that needed them along and outside the border.

[8] Shukan Tai Keizai, 8th November, 1999

4. Migrant Workers in Thailand's Development Strategy

We have presented an overview of the Thaksin government's migrant worker management policy and showed that it was part of the restructuring of Thailand's economic system. However, it is necessary to look more carefully into the Thaksin government's development strategy, known as the 'dual track policy.' This idea divided the Thai economy into the 'grassroots economy' in rural areas, and the export-oriented industries and service sectors in and around the capital city. According to this idea, the government encouraged the grassroots economy by providing marketing and investment, and it supported the export-oriented industries and services through policies for export expansion, currency stabilisation, and the introduction of further foreign investment (Suehiro, 2010). Especially for the latter, Thaksin organised and chaired a policy committee that in 2002 announced the National Competitiveness Plan. The plan had three pillars: expanding exports, selecting strategic industries, and increasing productivity in these strategic industries. Five strategic industries were selected: automotive, food processing, fashion, tourism, and software. Oizumi (2013a) pointed out that the plan was based on the perception by Thaksin and his team that the Thai economy was caught between low-labour-cost countries and technologically strong countries, and that it was losing its economic competitiveness. Interestingly for this study, the plan proposed forming industry clusters and directing investment and human resources to these clusters (Suehiro, 2008, 2010). The National Economic and Social Development Board's ECS report had proposed to establish border special economic zones (SEZs) in which the migrant workers commute from their homeland daily, to attract and relocate the labour-intensive industrial sectors (NESDB, 2003). From the description in the ECS report and Thaksin's speech referring to the three neighbouring countries as suitable resources of raw materials for Thai industry, we can conclude that the border area and the three neighbouring countries were seen as material suppliers for these strategic clusters.[9]

[9] It is interesting that Thaksin talked about agricultural production in his radio speech by on 24 May 2003. He said, 'If we can import agricultural products from neighbouring countries, it will give them a steady

At that time, the development of 'economic corridors' connecting the capitals and main cities of mainland Southeast Asia was accelerated under the Asian Development Bank's Greater Mekong Subregion (GMS) Economic Cooperation Programme, and Thailand started to build connecting routes according to the GMS plan. Thailand's ODA loans through ACMECS were put forward to finance the building of connecting routes between Thailand and Lao PDR (Chiang Rai, Luang Namtha, and Nong Khai, Vientiane); Thailand and Cambodia (Trat–Koh Kong, Chong Sa Ngam, Anlong Veng, Siem Reap); and Thailand–Lao PDR–Cambodia (Mawlamyaing, Mukdahan, Savannakhet, Danan) as part of the GMS corridors (Tsuneishi, 2005).

In the early 2000s, Thailand was moving towards a regional economic system. This was to have Thailand at the centre, with upgraded, competitive, higher value-added industries. The neighbouring countries, such as Cambodia, Lao PDR, and Myanmar, were expected to play the role of suppliers of raw materials and workers to the border areas. Thailand's ODA (including to Viet Nam) was introduced to foster the movement of labour-intensive industries into the neighbouring countries, and migrant worker receiving policies were redesigned and reinforced to relocate workers to these sectors.

However, since the end of Thaksin's administration, Thailand's migrant worker management policy has been pursued independently from development assistance to the neighbouring countries and migrant worker registration and immigration control, and has lost the National Competitiveness Plan as the backbone. Although the average share of ODA to four mainland Southeast Asian countries reached 40%–80% of total development assistance during 2010–2015, ODA as a percentage of gross domestic product was lower than in the early 2000s.[10] In 2012, ODA was B1.1 billion ($37 million), or about 0.01% of gross domestic product. The largest recipient was Lao PDR, followed by Cambodia and Myanmar. In 2011, 31% of total ODA was

income and we can reduce the production cost.' (Shukan Tai Keizai, 26th May, 2003).

[10] See the statistics on TICA website "Thailand Official Development Assistance" from 2010 to 2015. http://www.tica.thaigov.net/main/en/other/3569 (accessed 4 August 2018).

used to provide financial assistance for infrastructure development. This was concentrated in transport infrastructure and was predominantly administered by the Neighbouring Countries Economic Development Cooperation Agency, but the projects were generally small and highly fragmented (Miller and Werapong, 2013).

In July 2014, the Government of Thailand proposed a new border SEZ plan to build new five SEZs along and within the Thai border areas (Figure 7.2).

Figure 7.2: Thailand's New Border Special Economic Zone Plan

Source: Board of Investment, 2018.

Table 7.3: Cross-Border Trade Volume at the Five Border Areas

	Cross-border Trade Volume (Billion B/2013)	Growth during 2009-2013 (%)
Maesot/Tak	46	15
Sadao/Songkhla	27	7
Mukdahan	30	20
Aranyaprathet	28	28
Klong yai/Trat	10	10

Sources: National Economic and Social Development Board and Department of Foreign Trade, Ministry of Commerce.

In 2015, the new Deputy Prime Minister, Somkid Jatusripitak, clearly defined the new SEZ plan as part of the new industrial cluster strategy (The Nation, 2015). The goal was set as competitiveness enhancement, increase in employment, the people's well-being, prevention of illegal migrant workers to the inner areas of the country, and prevention of illegal agricultural product smuggling from the neighbouring countries (Policy Committee for Special Economic Zone Development, 2014). Although this suggests a revival of the ECS, the biggest difference is the attitude of the neighbouring countries. Because the new SEZ plan proposed hiring commuting migrant workers from the area, it provoked concern amongst the policymakers of the neighbouring countries that the workers might be attracted to the Thai side of the border, potentially hampering the development of inland SEZs in their own countries (Nikkei Shimbun, 2015).

Recent studies show that the increase in wages in China forces Japanese manufacturers overseas to move their production network to countries with lower labour costs (Oizumi, 2013b). Thailand is seen as one of the alternatives. However, the Japan External Trade Organization (JETRO) reported that many Japanese manufacturers in Thailand regard higher wages in the country as the main stumbling block (JETRO, 2015).[11] Some corporations agree that the neighbouring countries are an attractive alternative, but they remain cautious because of problems such as

[11] According to JETRO's annual questionnaire survey of Japanese corporations in Asia-Oceania, about 60% of the 2,313 companies answered that the increase in wages is the biggest problem (JETRO, 2015).

the quality of human resources (JETRO, 2015). These reports raise the possibility of a race for cheaper migrant workers between Thailand and the neighbouring economies.

Concluding Remarks

This chapter investigated Thailand's migration-receiving measures and development assistance to the neighbouring migrant-sending countries as a comprehensive policy package for international migrant worker management. Some studies have analysed the migrant worker registration system, and others have focused on ACMECS, or the National Competitiveness Plan, but they have treated these topics independently. An examination of the ECS report and the National Competitiveness Plan reveals that the changes in Thailand's migration policy in the early 2000s were introduced, in essence, as measures to relocate migrant workers from Cambodia, Lao PDR, and Myanmar within the regional economic system. These reports and plans clearly recommended relocating regularised migrant workers to the border SEZs, and repatriating irregular migrants to their place of origin.

The objection will no doubt be raised that Thailand's migration management policies have not noticeably reduced the number of illegal or irregular migrant workers. As noted in Chapter 2, migrant worker registration and immigration procedures under bilateral MoUs were not effective because the benefits of registration were not clearly defined for the migrant workers or the employers and sanctions for violation were not seen as sufficiently costly (Yamada, 2012). In addition, despite its inaugural aim, Thailand's development assistance to the neighbouring countries in the late 2000s was pursued independently from the migrant worker problem. The ECS could have been an effective long-term strategy for regional migration management, but the idea did not last.

It should be noted that the Government of Thailand once clearly defined the role of migrant workers in its regional development strategy and inaugurated concrete measures to control such

workers that were accepted by the migrant-sending countries. As the regional economic system is developing in mainland Southeast Asia, the regional management of migrant workers is becoming a more urgent and critical issue. It is now indispensable to devise a migrant management mechanism that is acceptable to both the country of origin and destination. ACMECS and the bilateral MoUs between Thailand and its neighbouring countries could be the case for pilot study of regional migrant management system. An analysis of the negotiation process for ACMECS and the bilateral MoUs would be a necessary extension to this research.

References

(Japanese)

Aoki, M. (2008), 'Takkusin Seiken no Taigai Seisaku: Seiken no Shudo ni yoru Tai no Chusin-koku ka) in Y. Tamada and Y. Funatsu Tsuruyo (eds.), *Tai Seiji Gyosei no Henkaku 1991–2006*, Chiba: IDE, pp.315–359.

Iwasaki, K. (2015), 'ASEAN de Kappatsu-ka suru Kokusai Rodo Ido–Sono Kouka to Heigai wo Saguru', *JRI Review,* 5(24), pp.2–34.

Otomo, Y. (2010), 'Tai ni okeru Gaikokujin Rodosha Seisaku —Seisaku no Hensen to 'Butsureki 2551 nen (2008 nen) Gaikokujin Shuro-ho', *Gaikoku no Rippo*, 246, pp.125–138.

JETRO (2015), '*2015nendo Ajia Oceania Sinshutu Nikkei Kigyo Jittai Chosa'* (Survey of Japanese Corporations in Asia–Oceania, 2015), https://www.jetro.go.jp/ext_images/_Reports/01/4be53510035c0688/20150115.pdf (accessed 8th August 2018..

Oizumi, K. (2013a), 'Thailand Upholding a "Creative Economy"—Concerns that Political Instability will Be a Heavy Weight', in Japan Center for Economic Research, Asia Report, *The ASEAN Economy and the Middle-Income Trap,* pp.43–60.

https://www.jcer.or.jp/eng/pdf/2013asia_chapter4.pdf (accessed 3 February 2016).

Oizumi, K. (2013b), 'Tai Purasu wan no kanosei wo kangaeru: Higashi Ajia ni okeru Atarasii Koteikan Bungyo', *Kan taiheiyo Bijinesu Joho*, 13(51), pp.1–23.

Okabe, M. (2005a), 'Kokkyou no Kokusai Kyodo Kanri to Imin –Seijigaku teki Imin Apurochi to "Imin Kiki" no kokufuku', *Studies on International Relations*, 24, pp.59–79.

Okabe, M. (2005b), 'Hito no Ido wo meguru Kyodo kokkyo kanri taikei to EU', in Y. Kibata (ed.), *Yoroppa Togo to Kokusai kankei* (Europe Integration and International Relations), Tokyo: Nihon Keizai Hyoron sha publishing, pp.1157–72.

Okabe, M. (2013), 'Shengen kihan no Tanjo; Kokkyo kaiho wo meguru yoroppa no kokusai kankei', *Sophia Law Review*, 51(1–2), pp.41–61.

Suehiro, A. (1997), 'Tai ni okeru Rodo shijo to Jinji romu kanri no Henyo', *Shakai Kagaku Kenkyu*, 48(6), pp.59–108.

Suehiro, A. (2001), Tai ha indosina kaihatsu no chushin tarieru ka? Chachai Seiken to takusin sinseiken in SusumuYamakage eds., ASEAN togo to shin kameikoku mondai　Chikyu – sangyo Kenkyujo, pp13-38.

Suehiro, A. (2008), 'Keizai Shakai Seisaku to Yosan Seido Kaikaku—Takushin Shusho no "Tai Okoku Gendai-ka Keikaku"' in Y. Tamada and T. Funatsu (eds.), *Tai Seiji Gyosei no Henkaku 1991–2006* (Thailand in Motion: Political and Administrative Changes, 1991–2006), Chiba: IDE, pp.237–86.

Sukegawa, S. (2011), 'ASEAN Keizai kyoudoutai ni mukete; genkyo to kadai', in Ymakage, S. (ed.), *Atarashii ASEAN—Chiki kyodotai to Ajia no chushinsei wo mezashite* ―, Chiba: IDE.

Suzuki, S. (2012), 'Imin rodosha wo meguru ASEAN no Jirenma', *Ajiken Warudo Torendo*, 205, pp.39–44.

Takeguchi, M. (2014a), 'Tai no Gaikoku-jin Rodosha (1) Dare nanoka, Doko ni iru noka *Taikoku Joho*, Nihon Thai Kyokai, 48(3), pp.79–87.

Takeguchi, M. (2014b), 'Tai no Gaikoku-jin Rodosha (2) Han-seifu Shukai to Kiken na "Gaikokujin" tachi' *Taikoku Joho*, Nihon Thai Kyokai, 48(4), pp.69–76.

Yamada, M. (2012), 'Tai ni okeru imin rodosha ukeire seisaku no genjo to kadai''in M. Yamada (ed.), *Higashi Ajia ni okeru Imin Rodosha no Hoseido: Soshutsu-koku to Ukeire-koku no Kyotsu Kiban no Kochiku ni Mukete*, Chiba: IDE–JETRO, pp.141–78.

Newspapers

Shukan Tai Keizai, 8 November, 1999

Shukan Tai Keizai, 4 November, 2002.

Shukan Tai Keizai, 26th May. 2003

(English and Thai)

ACMECS (2003), Bagan Declaration of the First ACMECS Summit.

ASEAN (2003a), Declaration of ASEAN Concord II (Bali Concord II), http://www.asean.org/news/item/declaration-of-asean-concord-ii-bali-concord-ii (accessed 11 February 2016).

ASEAN (2003b), Address by His Excellency Dr. Thaksin Shinawatra Prime Minister of Thailand at the Inauguration Ceremony of the ASEAN Business and Investment Summit (ASEAN–BIS), Nusa Dua, Bali. http://www.asean.org/address-by-his-excellency-dr-thaksin-shinawatra-prime-minister-of-thailand-at-the-inauguration-ceremony-of-the-asean-business-and-investment-summit-asean-bis-nusa-dua-bali/" (accessed 2 February 2016).

ASEAN (2008), ASEAN Economic Community Blueprint, Jakarta: ASEAN Secretariat http://www.asean.org/archive/5187-10.pdf (accessed 2 February 2015).

ASEAN (2012), ASEAN Agreement on the Movement of Natural Persons http://agreement.asean.org/media/download/20140117162554.pdf (accessed 4 February 2016).

Board of Investment (2018), 'A Guide to Investment in the Special Economic Zone (SEZ)'

Government of Thailand, Immigration Bureau (1979), *Immigration Act 1979*, http://web.krisdika.go.th/data/outsitedata/outsite21/file/Immigration_Act_B.E._2522.pdf (accessed 4 August 2018).

Government of Thailand, National Statistical Office (2013), *The Labor Force Survey Whole Kingdom Quarter 4 October–December 2013*. http://web.nso.go.th/en/survey/lfs/lfs13_q4.htm (accessed 3February, 2016).

Government of Thailand, National Economic and Social Development Board (NESDB) (2003), *Kan jat rabob setakij tam neaw chaidaen* (Economic Cooperation Strategy). Bangkok: NESDB.

Government of Thailand, National Economic and Social Development Board (NESDB) (2007), *The Tenth National Economic Social Development Plan*, http://www.nesdb.go.th/nesdb_en/ewt_w3c/ewt_dl_link.php?filename=develop_issue&nid=3785 (accessed 3 August 2018).

Hollifield, J.F. (2000), 'Migration and the New International Order: The Missing Regime' in B. Ghosh (ed.), 2000. *Managing Migration: Time for a New International Regime*, Oxford: Oxford University Press, pp.75–109.

Huguet, J.W. and S. Punpuing (2005), *International Migration in Thailand*. Bangkok: IOM.

IOM (2014), *Thailand Migration Report 2014*, Bangkok: United Nations Thematic Working Group on Migration in Thailand.

Policy Committee for Special Economic Zone Development. (2014a), 'Thalaegkhao Phonkan Prachum Khanakamakan Nayobai khed Phattana Setakij Phiset, krang thi 1/2557, Wan angkhan 15 Karakadda khom 2557'. http://www.nesdb.go.th/ewt_w3c/ewt_dl_link.php?nid=2670 (accessed 2 February 2016).

Tsuneishi, Takao (2005), Tai no chiiki kaihatsu seisaku to kinrin shokoku to no Keizai kankei, in Masami Ishida eds., 2005, Mekon chiiki kaihatsu——Nokosareta higashi ajia no furontia, Tokyo: IDE-JETRO, pp. 248–280.

Tsuneishi, Takao (2014b), 'Raingan Prachum Khanakamakan Nayobai khed Phattana Setakij Phiset, krang thi 122557, Wan jan 17 Prsajika yon 2557'. http://www.jpp.moi.go.th/media/files/report.pdf (accessed 2 February 2016).

Martin, P. (2007), *The Economic Contribution of Migrant Workers to Thailand: Toward Policy Development.* Bangkok: ILO Subregional Office for East Asia.

Miller, M. and P. Werapong (2013), *Strategic Review of Thailand's International Development Cooperation Draft Report for United Nations Joint Team in International Cooperation*. Bangkok: UNDP.

National Economic and Social Development Bureau 2003, *Kanjat Rabop Sethakij Tam Neu Chaidaen (Economic Cooperation Strategy),* National Economic and Social Development Board, Regional Development Office.

Rukumnuaykit, P. (2009), *A Synthesis Report on Labour Migration Policies, Management and Immigration Pressure in Thailand*. Bangkok: ILO.

Suehiro, A. (2010), Industrial Restructuring Policies in Thailand: Japanese or American Approach. In Patrapong Intarakumnerd and Yveline Lector eds., *Sustainability of Thailand's Competitiveness: The Policy Changes*, Singapore: ISEAS, pp.129–73.

Thailand International Cooperation Agency (TICA) (2009), *Thailand Official Development Assistance Report 2007–2008*. Bangkok: TICA.

Yongyuth, C. (2004), 'Government Policies on International Migration: Illegal Workers in Thailand,' in A. Ananta and E.N. Arifin (eds.), *International Migration in Southeast Asia.* Singapore: ISEAS, pp. 352–73.