

Chapter 4

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

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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

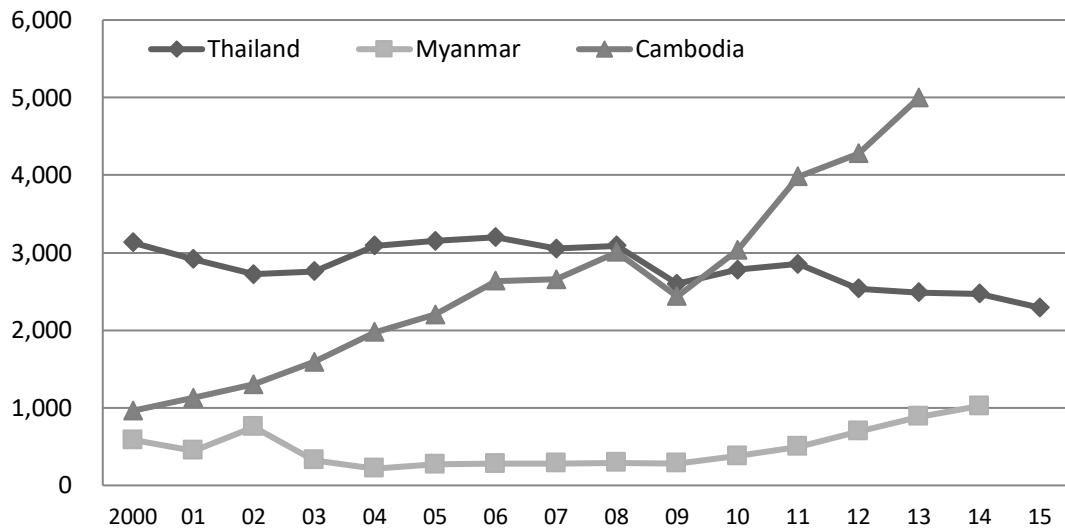
countries at different levels of development and with a variety of export roles in the region. Besides the level of development, differences in preferential tariffs from the export destination countries, such as the LDC-GSP and free trade agreements, affect the location of the production and export bases.

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 extent 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 temporarily 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.

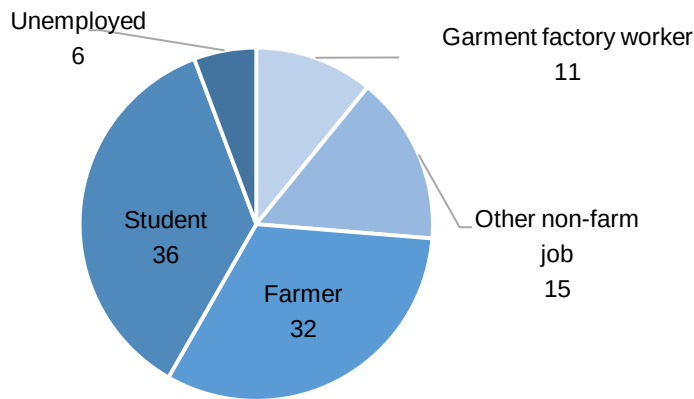
According to our interviews with 186 Myanmar workers in Thai garment factories, the average monthly wage was B11,115 (\$308). This is still more than three times that in Yangon, where the wage level for semi-skilled sewing operators was about MK100,000 (\$90) per month in 2015.³

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 (%)

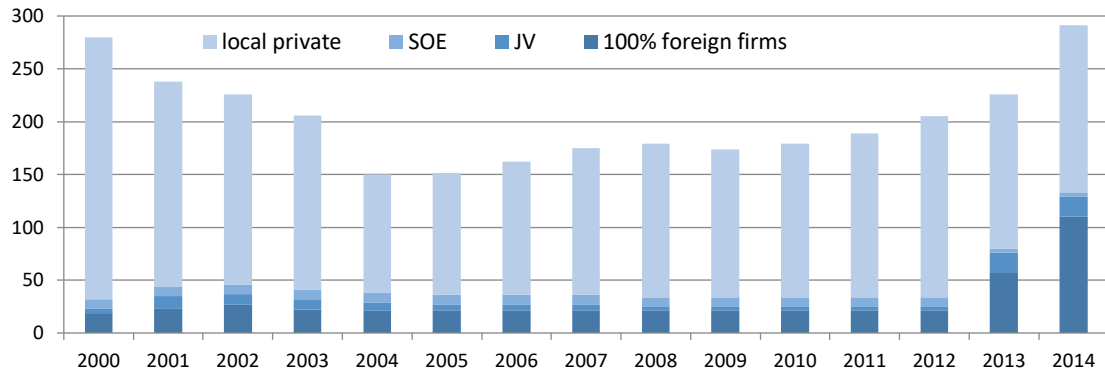


Source: Worker Survey.

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 motivated 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 Dannel, 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.

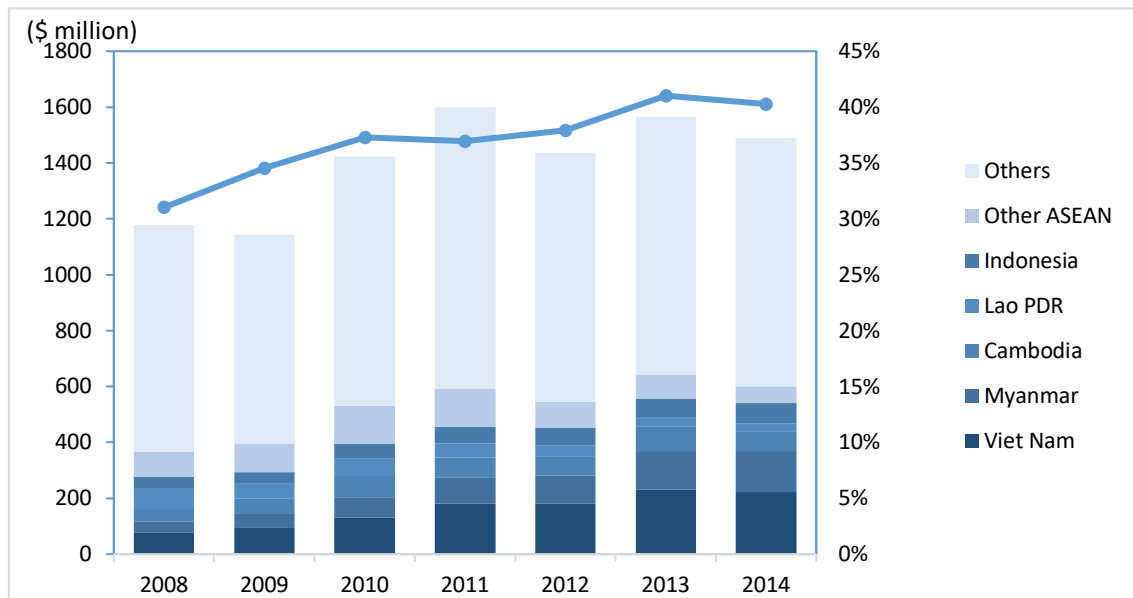
Sources: Myanmar Garment Manufacturers Association (2015); Thai Garment Manufacturers Association (2013); annual reports by company TW and press releases by their mother company W; the author's survey for TT in 2014, MS, SB, SA and MP in March 2015, GT December 2015.

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.

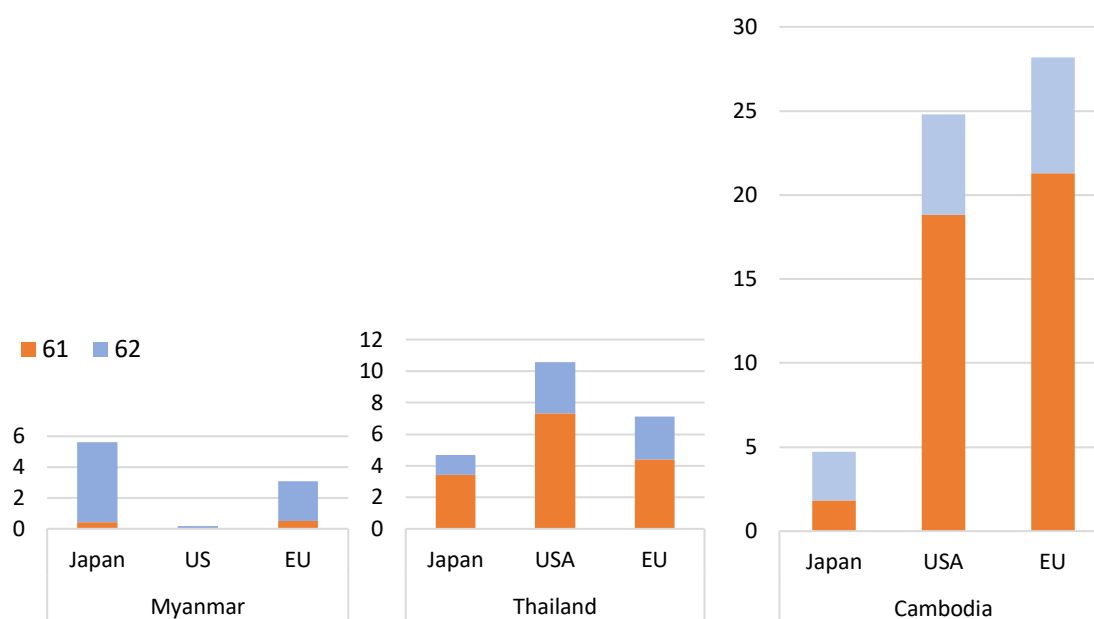
5. Production Shift and Value-Added Products

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 accessories⁸ 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

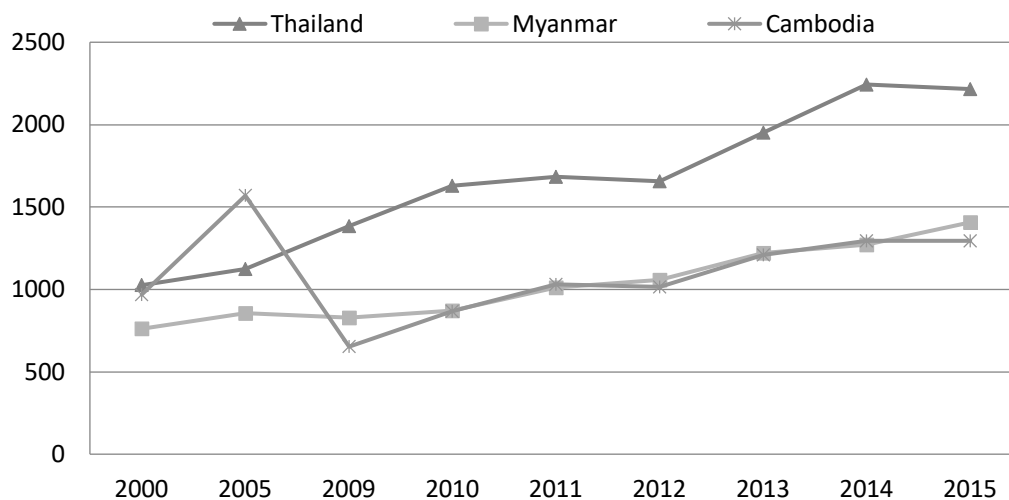
Notes: 80701: Clothing consists of HS 6201~6208, 6209.20-21, 6209.20-222, 6209.30-21, 6209.30-222, 6209.90-21, 6209.90-29, 6210~6211; 80705: Clothing, knitted or crochet consists of 61; 80703: Clothing accessories consists of 4203.21~4203.40, 6209.20-1, 6209.20-221, 6209.30-1, 6209.30-221, 6209.90-1, 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' dress⁹ 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 HS 6107~6109, 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, Thammasat 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), วารสารสถิติ จำนวนคนต่างด้าวกลุ่มประเทศอาเซียน ได้รับอนุญาตทำงาน ประจำเดือน 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).