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Dynamics of the Textiles & Apparel Industries in Southeast Asia — A Preliminary Analysis —

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Abstract

The apparel industry is a representative case of a buyer-driven global value chain, as suggested by Gary Gereffi. We examine this hypothesis by focusing on the textile and apparel industries in Southeast Asian countries, especially the Philippines, Malaysia, and Thailand. We found that there are two different kinds of value chains in these industries. In one, the lead firms are engaged in chemical fiber production, and, in the other, the lead firms are engaged in fast fashion retailing. The former is a producer-driven chain and the latter is a buyer-driven chain. In Southeast Asian countries today, we find these two different chains. Japanese chemical fiber producers during the 1960s and 1970s represented the former case, and today this type is found among Indian chemical fiber producers such as Reliance Industries, the Indorama group, and the Aditya Birla group. On the other hand, US and Western European fashion retailers represent the latter case; this is especially so among Hong Kong Chinese entrepreneurs. In future, even firms in the small countries of Southeast Asia can upgrade and be fashion retailers without having fiber and textile production bases if they can develop their own designs and brands, and develop merchandizing, marketing and coordinating capabilities and skills.

Keywords: buyer-driven global value chain, textile & apparel industry, Southeast Asia

JEL Classification: L67, N15, O14

Introduction

Almost three decades have passed since "the Dynamic Asian Economic Zone" arose as a center of the world economy with Japan its core country. However, from the 1990s onwards China has emerged as another core country that drives the Asian economy together with or even more than Japan. On top of this, India, which has long been neglected as an outsider to the zone, has also begun to become deeply engaged. The Dynamic Asian Economic Zone has therefore been developing both in scope and depth.

This study is a part of "Rivalries, cooperation, and inter-dependence in the Dynamic Asian

Economic Zone." We focus on the textile and apparel industry in Southeast Asia, and ask how and to what extent Japanese, Chinese, and Indian firms are engaged in this industry.

1. Why the Textile & Apparel Industry?

"*The Japanese Textile Industry: Why Did It Become So Weak?* (in Japanese)" is the title of a popular book in Japan by Itami and his associates (2001). This book clarified the causes of the weakened international competitiveness of the Japanese textile industry from a historical perspective. As this research indicates, the Japanese textile and apparel industry is a good example of how a once leading industry declines to become one that is now in a process of decay. Today the textile and apparel industries in Japan are forgotten industries, so few scholars pay attention to them.

However, if we visit Southeast Asian countries, we can see some Japanese textile and apparel companies are still active. A prominent case is Fast Retailing Company, owner of the well-known Uniqlo brand. As of 31 March 2013, there were 446 Uniqlo shops overseas, of which 424 (more than 95%) are located in Asia: China 225, Korea 105, Taiwan 37, Hong Kong 18, Singapore 12, Malaysia and Thailand 10 each, the Philippines 6, and Indonesia 1.[1] On the other hand, Toray and Teijin, two giant synthetic fiber producers in Japan still manufacture fibers in China, Korea, Thailand, Malaysia, and Indonesia. Japanese textile and apparel companies are deploying various survival strategies in Asia.

On the other hand, textile and apparel industries are still two of the most important industries for most Asian countries, including China and India, in terms of generating employment and earning foreign exchange. Not only are many indigenous companies burgeoning but some are expanding their activities overseas. Competition in the textile and apparel industry is intensifying day by day.

Figure 1 shows the total supply chain of these complex and immense industries.

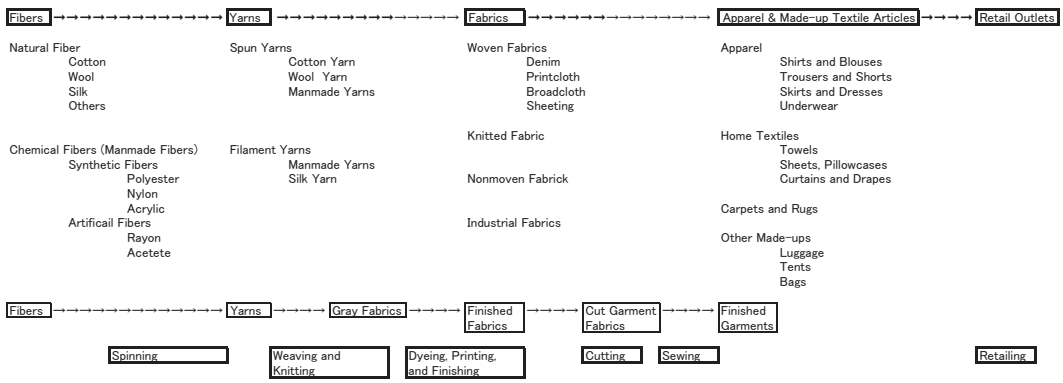

Figure 1 Supply Chains of Textile & Apparel Industries

Source: USITC (2004): pp.1-2, 1-15.

2. Apparel Industry as a Global Industry: GVC Approach

The apparel industry is a typical industry that reflects the globalization of the economy. Focusing on this point, Gary Gereffi proposed a Global Value Chain (GVC) approach to analyze this industry.

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[1] Fast Retailing Co. Ltd (http://www.fastretailing.com). The total number of shops was 1299, of which 853 in Japan, and 446 overseas.

He classified GVC into two prototypes: producer-driven GVC (PGVC) and buyer-driven GVC (BGVC). According to Gereffi, PGVC is a type where large MNCs play central roles in coordinating production networks; these are represented by capital- and technology-intensive industries such as automobiles, aircraft, computers, semiconductors, and heavy machinery. On the other hand, in a BGVC, large retailers, branded marketers or branded manufacturers play pivotal roles in coordinating decentralized production networks. This "trade-led industrialization" type is prevalent in labor-intensive, consumer goods industries, such as garments, footwear, toys, consumer electronics, and a variety of handicrafts. Here, production is conducted by "tiered networks" of contractors in the Third World who produce final goods to foreign buyers' specifications (Gereffi 1999).

PGVC is a traditional type of GVC. It provided a core example for MNC theory or FDI theory. The novelty of Gereffi's argument is to turn our attention from production-centered research to market-centered research. The comparative advantages of BGVC lie not in the technological ability of the leading manufacturing firms but in the design, marketing, merchandising, and branding abilities or global sourcing strategy of these lead firms. In this sense, he focused on the apparel industry as a representative example of BGVC. According to traditional MNC theory, for industrial developed countries, the textile and apparel industries are nothing but declining or decaying industries under increasing pressure from the standardization of technology and rising wage costs in developed countries. Gereffi's approach makes an explosive case for overturning such a traditional approach.

The retail revolution that happened in the US made possible Gereffi's BGVC study. The main driving force of the retail revolution was the revolution in information technology. The apparel industry in the US was transformed from being a producer-driven type to being a buyer-driven type. The revolution in information technology made "lean retailing" possible. This new institutional setting, which enabled "stitch in time," became a new source of competitive power for US retailers to counter the apparel producers of the developing countries who depended on their low wage costs (Abernathy, Dunlop, Hammond, and Weil 1999)[2].

As Gereffi clarified, the world's textile and apparel industries have undergone several changes in production sites since the end of WW2. The first shift was from North America and Europe to Japan in the 1950s and early 60s. The second shift was from Japan to "the Asian Big Three", i.e., Hong Kong, Taiwan, and South Korea, in the 1970s and early 1980s. In the 1980s, production sites moved principally to China, but also to several Southeast Asian countries such as Indonesia, Thailand, Malaysia, the Philippines and Sri Lanka. From the 1990s onwards, new suppliers included South Asian apparel exporters such as India, Bangladesh, and ASEAN latecomers such as Vietnam, Cambodia, Laos, and finally Myanmar.

Regarding these shifts, Gereffi paid special attention to the Asian Big Three as "the prototypes of an industrial upgrade." He conceptualized the process of functional upgrades, as shown in Table 1 (Gereffi and Frederick 2010).

The first stage is CMT (cut, make, and trim), a kind of sub-contracting. This is the stage where producers/suppliers only stitch imported materials according to foreign buyers' specifications. Usually, these companies are located in export processing zones.

The second stage is OEM (original equipment manufacturing). Suppliers cover not only stitching but also the procurement of raw materials, finishing, and packaging. However, the designs and brands belong to the buyers. In most cases, buyers give directions regarding production materials.

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[2] The elements of lean retailing are: (1) bar codes and uniform product codes, (2) electronic data exchange and data processing, (3) modern distribution centers, and (4) standards across firms (Abernathy, Dunlop, Hammond, and Weil 1999: Chapter 4).

Table 1 Functional Upgrading in Apparel Industry

Functional Capabilities	Governance Structure	Weakness and Upgrading	Skills Acquired	Supplier Tier	Country Examples
Cut, Make, Trim (CMT): The focus of the suppliers assemble imported inputs, following buyers' specification.	Captive or Market	Lack capital, expertise, direct access to buyers, local inputs Process or products upgarding	Local firms learn foreign buyers' preferences, including international standards for price, quality and delivery.	Marginal Supplier	Cambodia Sub Sahara African Caribbean Vietnam
OEM (Package Contractor): The supplier takes on a broader range of tangible, manufacturing-related functions, such as sourcing inputs and inbound logistics in addition to production.	Captive or Market	Lack design capabilities and strong managerial and technical skills	Production expertise increases over time and spreads across different activities. Suppliers learn the up and	Preferred Supplier	Bangladesh Indonesia
If the ability to codify transactions increases and supplier competences remain high, degree of explicit coordination decreases.	Modular	Functional upgrading to logistics and coordination	downstream segment of the chain from buyers. Can lead to substantial backward linkages in the domestic economy	Niche Supplier	Sri Lanka Mexico
ODM (Full Package Provider): Supplier carries out part of the pre-production processes including design or R&D		Lack direct access to foreign consumers and marketing skills	Innovative skills related to new product development.	Strategic Supplier	Turky EU India
If in collaboration with buyer	Relational	Functional and product upgrading			China
If buyer atatches its brand to a product designed by the supplier	Captive or Modular				
OBM (Service Providers): Supplier acquires post-production capabilities and is able to fully develop products under its own brand names.		Knowledge upgrading	Innovative skills related to marketing and consumer research.	Coordination and Foreign Investors	Hong Kong South Korea Taiwan Singapore Malaysia
If maintains relationship with and develops brands with buyer	Relational	Functional upgrading			
If no longer relies on buyer for any functions and establishes own distribution channels	Lead Firm	Channel and functional upgrading			

Source: Gereffi and Frederick 2010: Table 7, Table A-5..

OEM is sometimes called FOB (free on board). OEM suppliers are full package contractors.

The third stage is ODM (original design manufacturers). At this stage, suppliers not only design but also engage in processes prior to production, including R&D. However, the brands belong to the buyers.

The fourth stage is OBM (original brand manufacturing). Here, suppliers focus on their own branding activity rather than production or design.

Gereffi regarded Asian NIEs highly as a successful example of functional upgrading from CMT, to OEM, to ODM, and finally to OBM, and he discovered the main factor behind their success to be "triangle manufacturing."

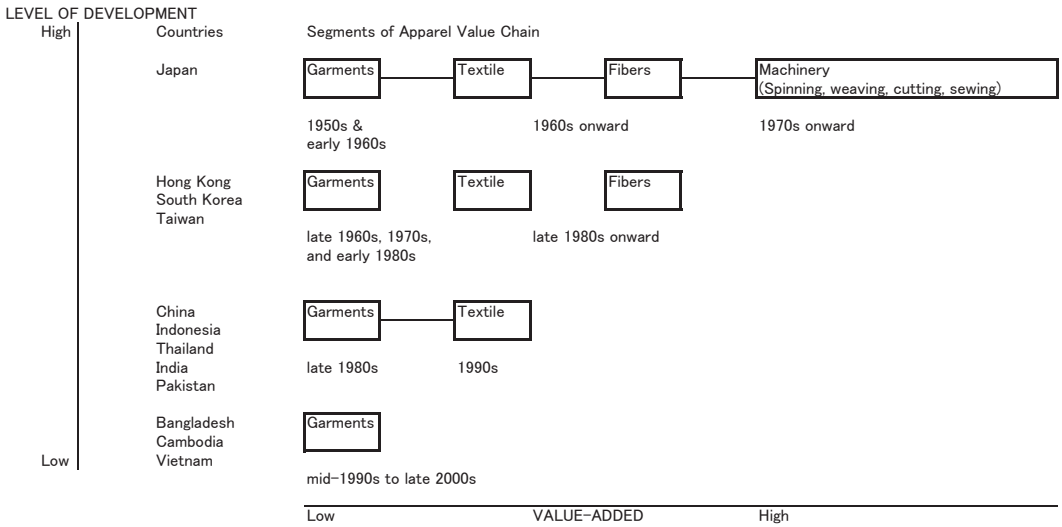

Figure 2 Industrial Upgrading by Asian Economies in the Apparel Value Chain

Source: Gereffi and Frederick 2010: Figure A-3.

Triangle manufacturing started in the 1970's and early 1980s. The US buyers, who used to procure final goods from the East Asian manufacturers, started to use them as coordinator. The East Asian manufacturers handed on their accepted orders partly or totally to offshore associated factories in cheaper wage countries such as China, Indonesia, or Vietnam, and the final products were directly shipped to the US buyers under the quota system of the MFA (Multi Fiber Arrangement). Under the MFA, East Asian NIEs established their position as "intermediaries" in the BGVC. The Asian Big Three companies who had upgraded their ability as intermediaries soon succeeded in integrating their manufacturing ability with their own designs and brands. The MFA contributed much to upgrading Asian NIE's companies. This is Gereffi's story.

Gereffi further expanded this stage theory (we call it the Scheme 1 of Gereffi), that is from CMT to OBM, and presented the Scheme 2 as shown in Figure 2.

According to this Scheme 2, Japan, the most developed country in the Asian region, is a case of upgrading from (1) apparel to textiles, (2) textiles to fibers, and (3) from fibers to textile machinery. The next developed countries, following Japan, were Hong Kong, South Korea, and Taiwan, which are cases of upgrades from (1) apparel to textiles, and (2) textiles to fibers. Following these countries come China, Indonesia, Thailand, India, and Pakistan. These countries upgraded from apparel to textiles. Finally the least developed countries, such as Bangladesh, Cambodia, or Vietnam, are categorized as apparel stage countries. He explains that such an industrial order arises from the fact that the apparel industry is the most labor-intensive and the textile machinery industry is the most capital-intensive (Gereffi and Frederick 2010).

Gereffi's hypothesis involves historical stage theories. Two kinds of stage theories, Scheme 1 and Scheme 2, seem not to provide a good fit for the facts in some cases. In this paper we re-examine his stage theories.

3. Textile & Apparel Industries in Three Southeast Asian Countries: The Philippines, Malaysia and Thailand

3-1 Textile & Apparel Trade in Asian Countries: A Brief Overview

Table 2 shows the trends in trade (exports and imports) of textiles in major Asian countries from 2006 to 2011. China accounts for 32.2% (US$94.4 billion) in textile exports as of 2011. It is followed by India (US$15 billion), South Korea (US$12.4 billion), Hong Kong (US$11.3billin), Taiwan (US$11billion), Pakistan (US$9billion), and Japan (US$8billion).

From 2006 to 2011, in terms of growth rate, Vietnam was the fastest growing country. It grew 3.5 times from US$1.1billion to US$3.8billion, and was followed by China and India.

In terms of textile imports, here, too, China was the largest importer, followed by Hong Kong, Japan, and Vietnam. In terms of the rate of growth in textile imports, Indonesia was highest: from US$0.7billion to US$5.7billion (8.1 times). It was followed by Bangladesh, Vietnam, and Cambodia.

Table 3 shows the trends in trade of apparel products (clothes, accessories, and other secondary products) in major Asian countries.

Here again, China is the overwhelming exporter. Exports from China in 2011 were US$15.4billion, which accounted for 37.3% of the total exports of the world. China was followed by Hong Kong (US$24.5billion), Bangladesh (US$19.9billion), India (US$14.4billion), Vietnam (US$13.2billion), and Indonesia (US$8billion). Hong Kong is an exception. Most of her exports are re-exports. In terms of growth rates between 2006 and 2011, Bangladesh was the highest exporter, followed by Vietnam, China, Cambodia, India, and Indonesia. In contrast, the exports of South Korea, the Philippines and Singapore declined in absolute value. On the other hand, in terms of imports, Japan is the biggest importer, followed by Hong Kong and South Korea.

Table 4 shows the trade in textiles and apparel in major Asian countries in 2006 and 2011. We can classify this into four types, using 2011 figures: (1) countries that have a trade surplus in both

Table 2　Exports and Imports of Textile Products in Major Asian Countries

(US$ 100 million)

	2006	2007	2008	2009	2010	2011
Exports						
World Total	220,367	241,335	248,407	209,820	250,652	293,552
Japan	6,934	7,102	7,340	6,109	7,086	8,035
South Korea	10,110	10,373	10,371	9,155	10,968	12,369
Taiwan	9,780	9,732	9,253	7,891	9,753	11,016
China	48,678	56,025	65,367	59,824	76,900	94,411
Hong Kong	13,910	13,417	12,256	9,976	11,307	11,283
Indonesia	3,614	3,829	3,675	3,208	4,150	4,791
Malaysia	1,437	1,470	1,549	1,359	1,671	2,036
Thailand	2,873	3,114	3,211	3,002	3,761	4,072
Vietnam	1,058	1,321	1,563	2,009	2,660	3,772
India	8,909	9,812	10,372	9,111	12,872	15,016
Pakistan	7,469	7,371	7,186	6,510	7,848	9,082
Bangladesh	1,494	884	1,090	886	1,263	1,590
Imports						
World Total	220,367	241,335	248,407	209,820	250,652	293,552
Japan	6,176	6,297	6,925	6,742	7,196	9,195
South Korea	3,909	4,140	4,112	3,536	4,833	5,658
China	16,358	16,645	16,289	14,945	17,667	18,901
Hong Kong	13,975	13,559	12,313	9,964	11,265	11,049
Indonesia	730	785	3,262	2,802	4,236	5,654
Thailand	2,059	2,160	2,444	1,913	2,672	2,982
Vietnam	3,988	5,139	5,703	5,469	5,992	8,674
Cambodia	1,202	1,350	1,472	1,293	1,808	2,444
India	1,972	2,247	2,386	2,262	2,693	3,395
Bangladesh	1,538	1,206	1,546	3,639	5,009	5,562
Sri Lanka	1,540	1,607	1,694	1,438	1,723	2,230

Source: Nippon Kagaku Sen'i Kyokai 2013, p. 196, Nippon Kagaku Sen'i Kyokai 2014, p.196.

Table 3 Exports and Imports of Apparel Products of Major Asian Countries

(US$ 100 million)

	2006	2007	2008	2009	2010	2011
Exports						
World Total	309,142	347,059	363,621	315,516	351,464	412,457
Japan	485	523	591	484	531	595
South Korea	2,183	1,914	1,741	1,396	1,610	1,840
China	95,379	115,516	120,405	107,264	129,838	153,774
Hong Kong	28,391	28,765	27,908	22,826	24,049	24,505
Indonesia	5,760	5,870	6,285	5,915	6,820	8,045
Malaysia	2,842	3,159	3,624	3,126	3,880	4,567
Philippines	2,624	2,294	1,979	1,534	1,764	1,402
Singapore	1,985	1,779	1,557	1,045	1,764	1,190
Thailand	4,247	4,073	4,241	3,724	4,300	4,561
Vietnam	5,579	7,400	8,724	8,540	10,839	13,154
Cambodia	2,517	2,851	3,014	2,441	3,041	4,051
India	9,499	9,932	10,968	12,005	11,246	14,365
Pakistan	3,907	3,806	3,906	3,357	3,930	4,550
Bangladesh	8,318	8,855	10,920	12,525	15,660	19,939
Sri Lanka	3,046	3,272	3,437	3,265	3,491	4,211
Imports						
World Total	309,142	347,059	363,621	315,516	351,464	412,457
Japan	23,831	23,997	25,793	25,552	26,867	32,934
South Korea	3,744	4,318	4,223	3,379	4,443	6,111
Taiwan	1,223	1,118	1,176	1,010	1,194	1,530
China	1,724	1,976	2,282	1,842	2,513	4,012
Hong Kong	18,852	19,149	18,546	15,508	16,645	17,248
Singapore	2,497	2,428	2,224	1,698	1,960	2,338

Source: Nippon Kagaku Sen'i Kyokai 2013, p. 197, Nippon Kagaku Sen'i Kyokai 2014, p.197.

textiles and apparel, such as China, Hong Kong, Thailand, Malaysia, India, and Pakistan, (2) countries that have a trade surplus in textiles but a trade deficit in apparel, such as South Korea and Taiwan, (3) countries that have a trade deficit in textiles but a trade surplus in apparel, such as Indonesia, Vietnam, the Philippines, Cambodia, Myanmar, Laos, Bangladesh, and Sri Lanka, (4) and countries, such as Japan and Singapore, that have a trade deficit in both textiles and apparel.

Table 4 Textile and Apparel Trade of Major Asian Countries

(US$ 100 million)

		2006			2011		
		Exports	Imports	Balance	Exports	Imports	Balance
Japan	Textile	69.3	61.8	7.6	80.4	92.0	−11.6
	Apparel	48.5	238.3	−233.5	6.0	329.3	−323.3
	Total	117.8	300.1	−225.9	86.4	421.3	−334.9
South Korea	Textile	101.1	39.1	62.0	123.7	56.6	67.1
	Apparel	21.8	37.4	−15.6	18.4	61.1	−42.7
	Total	122.9	76.5	46.4	142.1	117.7	24.4
Taiwan	Textile				115.0	18.9	96.1
	Apparel	N.A.	N.A.	N.A.	12.2	16.8	−4.6
	Total				127.2	35.7	91.5
China	Textile	486.8	163.6	323.2	944.1	189.0	925.2
	Apparel	953.8	17.2	936.6	1537.7	40.1	149.8
	Total	1440.6	180.8	1259.8	2481.8	229.1	225.3
Hong Kong	Textile	139.1	139.8	−0.7	112.8	110.5	2.3
	Apparel	283.9	188.5	95.4	245.1	172.5	72.6
	Total	423.0	328.3	94.7	357.9	283.0	74.9
Indonesia	Textile	36.1	8.1	28.0	47.9	56.5	−8.6
	Apparel	57.8	0.9	56.9	80.5	4.2	76.3
	Total	93.7	9.1	84.6	128.4	60.7	67.7
Thailand	Textile	28.7	20.6	8.1	40.7	29.8	10.9
	Apparel	42.5	2.8	39.7	45.6	6.1	39.5
	Total	71.2	23.4	47.8	86.3	36.0	50.3
Malaysia	Textile	14.4	10.6	3.8	20.4	14.7	5.7
	Apparel	28.4	3.6	24.8	45.7	6.9	38.8
	Total	42.8	14.2	28.6	66.0	21.6	44.4
Vietnam	Textile	10.8	39.9	−29.1	37.7	87.0	−49.3
	Apparel	55.8	2.7	53.1	131.5	5.3	126.2
	Total	66.4	42.6	23.8	169.2	92.3	76.9
Philippines	Textile	2.4	12.4	−10.0	1.8	8.1	−6.3
	Apparel	26.2	1.0	25.2	14.0	2.1	11.9
	Total	28.8	13.5	15.3	15.9	10.3	5.6
Singapore	Textile	9.1	11.0	−1.9	8.5	11.5	−3.0
	Apparel	19.8	25.0	−5.2	11.9	23.4	−11.5
	Total	29.0	36.0	−7.0	20.4	34.9	−14.5
Cambodia	Textile	0.3	11.3	−11.0	0.3	21.5	−21.2
	Apparel	33.2	0.9	32.3	40.0	0.9	39.1
	Total	33.6	12.2	21.4	40.2	22.4	17.8
Myanmar	Textile	0.1	3.3	−0.8	0.1	6.4	−6.3
	Apparel	4.0	0.3	3.7	9.4	0.1	9.3
	Total	4.1	3.5	0.6	8.6	6.5	2.1
Laos	Textile	0.0	0.9	−0.9			
	Apparel	2.0	0.1	1.9	N.A.	N.A.	N.A.
	Total	2.0	1.0	1.0			
India	Textile	89.1	20.1	69.0	153.4	34.0	119.4
	Apparel	94.2	0.9	93.3	146.7	3.6	143.1
	Total	183.5	21.0	162.5	300.1	37.6	262.5
Pakistan	Textile	74.7	5.5	69.2	90.8	12.5	78.3
	Apparel	39.1	0.3	38.8	45.5	0.9	44.6
	Total	113.8	5.8	108.0	136.3	13.3	123.0
Bangladesh	Textile	7.3	27.5	−20.2	15.9	55.6	−39.7
	Apparel	105.2	0.5	77.1	192.1	2.0	190.1
	Total	115.5	28.1	87.4	208.0	57.7	150.3
Sri Lanka	Textile	1.4	14.2	−12.8	2.0	22.3	−20.3
	Apparel	34.9	1.0	33.9	42.1	1.6	40.5
	Total	36.4	15.3	21.1	44.1	23.9	20.2

Source: Nippon Kagaku Sen'i Kyokai 2013, pp. 196,197,249, 259;

If we compare the figures for 2006 and 2011, only a few countries changed positions: Japan from a net exporter to a net importer of textiles, Hong Kong from a net importer to a net exporter of textiles, and Indonesia from a net exporter to a net importer of textiles. South Korea and Taiwan seem to be about to experience Japan's plight in the near future. On the other hand, Indonesia, Vietnam, the Philippines, Cambodia, Myanmar, Laos, Bangladesh, and Sri Lanka strengthened their apparel production bases, and increased their imports of yarns and fabrics and their exports of garments. Finally, in the Philippines and Singapore, both the textile and apparel trade declined in absolute terms. The Philippines' decline is particularly conspicuous. It shows that the Philippines is not only losing her international competitiveness but also that the textile and apparel industry itself is in decay. In contrast to the Philippines, both Thailand and Malaysia recorded a trade surplus in both textiles and apparel.

We focus here on three middle-income Southeast Asian countries: the Philippines, Malaysia, and Thailand, which I visited in 2013.

3-2 Textile & Apparel Industries in the Philippines

Under President Marcos, BOI introduced a foreign direct investment promotion policy in the 1970s. This was a measure to promote FDI in EPZs. Most of the investors were "quota refugees" from Japan, Taiwan, South Korea, and Hong Kong. As a result, the apparel industry of the Philippines established a position as an export earning industry during this period (Ofreneo 1994; Ofreneo 2009; Ofreneo 2012).

We summarize some characteristics of the Philippines apparel industry below.

(1) It developed under the quota system of the MFA. The Philippines could not fulfill the allotted quota. Then "quota refugees" entered the Philippines.
(2) It was supported by a multi-layered sub-contracting system. Exporters in Manila, who received orders from foreign buyers, sub-contracted to local manufacturers or agents. They again sub-contracted to small manufacturers, and finally down to rural households. The wage that rural women got was less than 1% of the selling price of the department stores in the US (Rosalinda Ofreneo 1994: p. 163). Foreign buyers were mainly retailers in the US, such as Wal-Mart, J.C. Penny, Kmart, and Sears (Fujimori 2000).
(3) The Philippines apparel industry developed with a dependence on imported machinery, equipment, raw materials, and design. Foreign capital invested in the Philippines was seeking low wages, so technological transfers did not happen.
(4) There was no link between the export-oriented apparel industry and the domestic-market-oriented apparel industry (Nohara 1989).

While the apparel industry was to be an export-oriented industry, the textile industry was positioned as an import-substitution industry. However, the textile industry of the Philippines depended on imported raw materials, machinery, parts, and chemical products, and the government did not encourage upstream industries in, for instance, cotton or synthetic fibers.

In 1968, Filipinas Synthetic Fiber Corporation (FILSYN) was set up to fill this gap, and it started polyester production in 1971. FILSYN was a joint venture company between Japan's Teijin and Philippine capital, and it enjoyed a monopoly. As a result, its prices in the domestic market were 20%-40% higher than the international price (Fujimori 2000). Teijin disinvested in 1983, and finally FILSYN became insolvent in 1989.

Today, the only surviving big textile company is Indo Phil Textile Mills, Inc. This is a joint venture company between the Aditya Birla group of India and Philippine capital.

This company is the only integrated mill company in the Philippines; it covers spinning,

weaving, dyeing, and finishing. Indo Phil Textile Mills is recognized as part of the global production network of the Aditya Birla group. It started production in 1975, and has 25,560 spindles and 1,500 employees. About 30% of their products are exported to the US, Canada, Turkey, Europe, Latin America, South Korea, Taiwan, Russia, Kenya, and Malaysia.

After the abolition of the MFA in January 2005, there have been some new developments.

(1) In some part, there has been a transformation toward brand production. The most representative case in this regard is Luen Thai. Luen Thai is a Hong Kong-based foreign company. It produces or outsources casual wear, fashion apparel, sweaters, life-style apparel, and accessories from China, the Philippines, Indonesia, Cambodia, and Vietnam. Their production accounts for 20% of the total apparel production of the Philippines. In the Philippines, they have three apparel manufacturing companies (Golden Dragon Apparel Inc., L&T International Group Philippines Inc., and Yuen Thai Philippines, Inc.), two bag producing companies (D'Luxe Bags Philippines, Inc., and Desit Top Bags Philippines, Inc.), one footwear company (Boast, Inc.), one logistics company (CTSI Logistics Philippines, Inc.), and one office (Luen Thai Makati Office). The total number of employees of the Luen Thai group in 2012 was 33,000. In the Philippines, Luen Thai is the biggest apparel company in terms of the number of its employees and its production.

(2) In 1995, the government reorganized the existing EPZs and newly established PEZA (Philippine Economic Zone Authority). The number of working Economic Zones under PEZA in 2013 was 277, and the total number of apparel companies in PEZA as of 31 June, 2013, was 111. Of them, the largest number, 47, comes from South Korea, followed by 16 from Japan, 14 from Taiwan, and 4 from China. The number of Philippine companies is 22, of which the number of joint venture companies with South Korea is 4, with China 3, with Japan 1, and with China & Japan 1. As is clear from these numbers, most of the investors come from East Asia.

(3) Another notable phenomenon is the rise of the fast fashion retailers, or SPAs (specialty stores of private label apparel)[3]. Indigenous brands, such as Bench, Penshoppe, Bayo (women's wear), and Gingersnaps (children's wear), have emerged. The best known brand is Bench, which was developed by Suyen Corporation. Bench started as a retailer of men's t-shirts in 1987 in the Makati area in Manila. They not only sell their original brands but they are also a franchiser of 32 foreign brands, such as Aldo, American Eagle Outfitters, and Cotton On. They have 678 shops in the Philippines, 32 shops in China, 2 shops in the US, and 4 shops in the Middle East. Its founder Ben Chan is a Chinese Filipino. His parents migrated from Fujian Province to the Philippines in the 1940s. Along with Suyen Corporation, another notable SPA is Golden ABC, Inc. This company originated in Cebu in 1986. They have more than 600 shops in the Philippines, and they also have shops in Indonesia and the Middle East. The founder, Barnie Liu, is again a Chinese Filipino and his parents also migrated from China.

3-3 Textile & Apparel Industries in Malaysia

The textile and apparel industries of Malaysia developed as export-oriented industries between the late 1960s and 1990s using quotas under the MFA. However, since 2000, because China and low income Asian countries were catching up with Malaysia, the market share of these industries began to fall, and with the abolition of the quota system under the MFA their share fell further still.

The textile and apparel industries of Malaysia were positioned as import-substitution industries by the Malaysian government in the 1950s, but in the early 1960s, the domestic market was quickly

[3] Mr. Fisher, the President of GAP characterized his company as a "specialty store of private label apparel." In Japan the term SPA, an abbreviation of "specialty store of private label apparel", is used for fast fashion retailer. Also SPA is translated into Japanese as "manufacturing retailer".

saturated, and they stagnated. Then the Malaysian government enacted the Investment Incentive Act in 1968 to transform these industries into export-oriented industries. In 1972, Free Trade Zones were opened to promote exports.

Early export efforts were supported by Japanese textile companies such as Toray (established in 1971) and Kanebo (established in 1975). The main purpose of these companies was to export their products to third countries using the quota system.

From 1982 to 1985, the Malaysian government changed its industrial policy to promote heavy industries. However, in 1986, the government devalued the ringgit, enacted the Promotion of Investment Act, and started the First Industrial Master Plan. This was the beginning of the second wave of export-orientation of the textile and apparel industry. The appreciation of the yen and the other currencies of the Asian Tigers with the Plaza Accord in 1985 promoted massive investment from Taiwan, Hong Kong, and Singapore[4]. As a result, the share of foreign capital increased yearly (Rasiah 1993; Rasiah 2009). According to Suehiro, as of 1987, with total paid-up capital, the shares of foreign capital were 36.6% in the spinning, weaving, and dyeing sectors, and 47.6% in the apparel sector (Suehiro 1990).

In the 1990s, the Malaysian government liberalized the inflow of foreign workers to keep Malaysia's export competitiveness in its textile and apparel industries. However, in spite of the massive inflow of foreign workers from Bangladesh and Indonesia, employment in these sectors contracted. After the abolition of the MFA, Malaysian firms, as well as foreign firms in these sectors, felt obliged to transfer their production bases to countries with lower wages. The most favored country was Cambodia.

There are four main problems facing apparel industry of Malaysia today: (1) the sober living conditions of foreign workers (Crinis 2010; War on Want 2012), (2) the outflow of production bases to neighboring countries with lower wages, (3) the issue of how to introduce higher level technology, and (4) how to transfer to more value-added, higher-end products and create one's own brands. Apparel industry of Thailand faces the same problems.

In the early years, the Malaysian textile industry was developed by Japanese companies. Toray invested in Malaysia in 1971 and they held a monopolistic position for a long time. Today, however, this is not the case.

Nowadays the biggest synthetic fiber company is Recron (Malaysia) Sdn. Bhd. Recron (Malaysia) is a 100%-owned subsidiary of Reliance Industries of India. Reliance Industries, led by Mukesh D. Ambani, is the largest petro-chemical company in India and the world largest polyester maker. The production of synthetic fibers is concentrated in Recron (Malaysia), so Recron (Malaysia) is the world largest integrated polyester and textile complex. It covers spinning, weaving, knitting, dyeing, and finishing. Recron (Malaysia) was established in 2007 by buying up Hualon, a Malaysian subsidiary of a Taiwan company. Its production capacity as of 2012 is 36,000 tons of nylon, 280,000 tons of polyester filaments, and 65,000 tons of polyester staples[5]. Annual fabric production is 600 million meters. There are 7,500 employees (of whom 60-70% are foreign workers). 90% of the fibers as well as 90% of the fabrics are exported. Export destinations are the US, Canada, Latin America, the Middle East, Southeast Asia, Japan, South Korea, and China. In 2012, Reliance bought up the PTA factory of the British maker BP in Kuantan.

The largest indigenous textile maker in Malaysia is the Ramatex group. This is owned by the Ma family, who are Chinese Malaysians. Ramatex was started in 1976 as a textile manufacturer

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[4] The same phenomenon occurred in Thailand and Indonesia. Apparel makers of South Korea, Taiwan, and Hong Kong transferred their production bases to these Southeast Asian countries.

[5] The production capacity of Toray (Penfiber) is 60,200 tons (Nippon Kagaku Sen'i Kyokai 2013: p.310).

under the name of Gimmill Industrial Pte. Ltd. in Singapore. In 1982, they established Gimmill Industrial (M) Sdn. in Batu Paha in the south of Malaysia. Then the Ramatex group was born. Since then, they have promoted vertical integration. In 1989, they covered dyeing, knitting, and spinning, and in 1992, they further integrated finishing and printing. The Ramatex group includes Fulong Sdn. Bhd. (apparel), Ramatex Textiles Industrial Sdn. Bhd. (spinning, knitting, dyeing, and fabric printing), Gimmill Industrial (M) Sdn. Bhd. (apparel), Tai War Garments Industry Sdn. Bhd. (apparel), and in China Ramatex Industrial (Suzhou) Ltd. (spinning, knitting, dyeing, and fabric printing), and in Singapore Gimmill Corporation Pty. Ltd. (sales).

The core company of this group is Ramatex Textile Industrial Sdn. Bhd. It was established in 1990. There are 1,800 employees, and 95％ of the products are exported. Tai Wah Garments Industry Sdn. Bhd. is a subsidiary of Ramatex Textile. They are aggressive in terms of their foreign investment and have subsidiaries in China, Mauritius, Namibia, and South Africa. Cotton is imported from the US and China, and design is done in Singapore. Since 1991, they have operated a factory in Cambodia.

Recron (Malaysia), the Toray group (Penfiber, Penfabric), the Toyobo group, and the Ramatex group are the main textile makers. All of them are vertically integrated groups.

The characteristics of the Malaysian apparel industry are: (1) most of the main apparel companies are OEM suppliers (Smakman 2004: Chap. 7); (2) beside this, they are not OEM suppliers to mass market producers, such as Wal-Mart or Kmart, but to high-end producers such as Nike, Puma, and Adidas (Crinis 2012: 13); (3) to support this supply system, the modernization of production equipment and technology was also developed early on (Suehiro 1990); and (4) almost all the companies are run by Chinese Malaysians (Crinis 2012: 15).

Table 5 shows the major apparel companies that have more than 500 employees and are listed as MTMA (Malaysian Textile Manufacturers Association) members. This shows the foreign brands that Malaysian companies supply on an OEM base. The total number of companies is 14. Among them we can find Gimmill Industrial (M) and Tai Wah Garments Industry, who belong to the Ramatex group, Pen Apparel and Imperial Apparel of the TAL group from Hong Kong, Body Fashion, a subsidiary of Triumph (Germany), and Esquel Malaysia, a group company of Esquel, which is headquartered in Hong Kong, while Ghim Li Fashion is a Ghim Li group company, which is based in Singapore. All the other companies are Chinese Malaysian companies.

There are some SPAs too. 24 SPAs are listed as famous Malaysian brand companies in a JETRO report (JETRO 2012b). Of them, the most profitable company is Padini Holdings Berhad (JETRO 2012a: 17).

The Padini group was established in 1971 in Selangor under the name of Hwayo Garments Manufacturers Company. It was an apparel producer and seller. In 1986, they established the brand VINCCI for footwear, bags, and belts for women. Then they developed many apparel brands, such as MIKI, SEED, ROPE, P&C, and PADINI AUTHENTICS. In 1994, they changed their name to Padini Holdings. The number of their franchises is 330. These are found not only in Malaysia, but also in Bahrain, Brunei, Cambodia, Egypt, Indonesia, Kuwait, Morocco, Myanmar, Oman, Pakistan, the Philippines, Saudi Arabia, Syria, Thailand, and the UAE. Padini Holdings is an integrated company covering design, manufacturing, marketing, and retail. Most of their products are procured from suppliers in China, Thailand, and Vietnam (Smakman 2004: 242-244).

The case of Padini Holdings, however, is rather an exception. Most of the other brands are low price, low quality products, and they are hardly successful.

The domestic consumption market of Malaysia is dominated by international brands, such as Levi's, Zara, Nike, Gap, and so on (JETRO 2012a: 17). From Japan, First Retailing (Uniqlo) entered Malaysia in 2001, while Jaspal from Thailand entered Malaysia in 1976 (JETRO 2012a: 29-30).

Table 5 Major Apparel Companies in Malaysia

Company Name	Established Year	Number of Employee	Products	Brand	Export Ratio	Export Destination	Parent Company	Related/Subsidiary Company
1 Body Fashion (M) Sdn. Bhd.	1974		Undergarment	Trimph Amo Valisere	70-80%	USA, EU Australia, Asia	Trimph (Germany)	
2 Classita (M) Sdn. Bhd.	1990	850	Brassiers Bustier Sport Bra Panties Thong Boxers Camisoles Slips Swimwear Sleepwear	Target, Emporio Hanes, Armani Wonder Bra, Cato Daisy Fresh, CQ Bali, Catalogue Lovable, Rene Rofe Dim Playtex, Marel SSHHH Collection Secret Support Strech Essential Joie de Vivre	100%	USA Canada UK Germany Denmark Italy France Mexuco Japan Middle East	Caely Holdings Bhd. (Malaysian Chinese)	Caelygirl (M) Sdn. Bhd. Marywah Industries (M) Sdn. Bhd.
3 Esquel Malaysia Sdn. Bhd. (Old Name: The Eastern Garment Manufacturing Company Sdn. Bhd.)	1963	2574	Men's Dress Sports' Shirts Ladies' Shirts	Hugo Boss J. C. Penny Lands' End Liz Claiborne Marks & Spencer Polo Ralph Lauren Tommy Hilfiger Eddie Bauer	100%	USA Europe UK Japan	Telstar Holdings Ltd., Inc. (Esquel Group: Hong Kong)	
4 Ghim Li Fashion (M) Sdn. Bhd.	1985	992	Slim Legging Ladies Faggoting Top Crew Neck Tunic Ladies Short Sleeve Polo F/Knit Collar Cuff Men Polo Yard Dye Stripe Short Sleeve Panema EDV Stripe SS Engineered Rib Zip Polo Cap Sleeve Solid Snap Polo Short Sleeve PJ Pant Set	Alfani Aeropostale Jennifer Moore Karen Scoot Style & Co. Club Room I. N. C. Wal-Mart Dollar General	100%	USA Canada U A E	Ghim Li Global Pte. Ltd. (Ghim Li Group: Singapore)	Maxim Textile Tehnology (M) Sdn. Bhd.
5 Gimmill Industrial (M) Sdn. Bhd.	1985	3297	Long Sleeve Jacket Children Wear, Infant Wear Pants, Ladies Wear Mens Wear	Carter's, Target Oshkosh, K'smart Sear's US Under Amour	100%	USA	Ramatex Group	
6 Ginma Industries Sdn. Bhd.	1990	500	Tracksuit, T-shirts Jogging Suits, Skirts Pants, Sweatshirts Shorts Jackets	Puma, Asics American Identity Riverena, Carilway Ashworth DRI, New Balance Lee Coq Sportif			Malaysian Chinese	
7 Hytex Apparels Sdn. Bhd.		1000	Knitwear	Nice Disney Hurley	100%	Asia Pacific Europe, USA Canada Latin America	Hytex Integrated Bhd (Malaysian Chinese)	Hytex Apparels Sdn. Bhd. Hytex Garments (M) Sdn. Bhd. Hytex products (M) Sdn. Bhd. WOC Boutique Sdn. Bhd. Leading Textiles Sdn. Bhd. Hytex Integrated (SUZHOU) Co. Ltd.
8 Imperial Garments Sdn. Bhd.	1970	1202	Pants	Brooks Brothers Dockers, UPIM Nordstrom, Giordano Tommy Hilfiger Tori Richard Goldion, Jos A Bank	97.64%		TAL Apparel (S) Pte. Ltd. (TAL Group: Hong Kong)	
9 Maxlin Garments Sdn. Bhd.		1200	Pajamas New born cloth Underwear T-shirt Sportwear	Aeropposalle, Cato Green Dog Jenni, Coca-Cola Charter Club Epic Thread American Rag Karen Scott Alfani, Millwork INC, Benetton Jimmy'z, Sportif Russell, Markmax Carter's, Oshkosh Chadwick's, Shopko Goody's, Colby USG Athlet USG Legog	100%	USA Canada German	Baneng Holdings Bhd (Malaysian Chinese)	Baneng Industries Sdn. Bhd. Erise Garments Sdn. Bhd.
10 Pen Apparel Sdn. Bhd.	1982	2641	Shirts Blouses	Brooks Brothers LLBean, Staford Landsend, Gildlion Nordstrom, Texman Paul Federick Markswork Warehouse Cold Water Greek	99.98%	USA Europe Canada Far East	TAL Apparel (S) Pte. Ltd. (TAL Group: Hong Kong)	Penang Textile Sdn. Bhd. Imperial Garments Sdn. Bhd.
11 South Island Garment Sdn. Bhd.	1975	880	Outerwear	Nike Colombia Sportswear	100%	USA Canada Europe Asia Pacific	Magni-Tech Industries Bhd. (Malaysian Chinese)	
12 SP Garments Sdn. Bhd.		500	Knitwear	Giordano Walt Disney No Rule Puma Mufc Port Authority		Singapore Indonesia Thailand Myanmar Taiwan, Hong Kong USA, Canada	Malaysian Chinese	
13 Tai Wah Garments Industry Sdn Bhd.	1995	2300	Knitted Jackets Pants Pullover Polo Shirts Crew Neck Shirts Kids	Nike	100%	USA, EU, Canada Latin America Asia Pacific Australia New Zealand South East Asia	Ramatex Textile Industrial Sdn. Bhd. (Ramatex Group)	
14 United Sweethearts Garment Sdn. Bhd.	1984	1500	Jacket Pant Tracksuit	Nike Oshkosh Lacoste Timberland Brooks	100%	USA Europe Japan	MWE Holdings Bhd. (Malaysian Chinese)	

Source: MTMA 2013; Homepage of each company.

3-4 Textile & Apparel Industries in Thailand

The textile and apparel industries in Thailand were fairly developed by the mid-1980s but after that they started to decline (Suehiro 1979; Suphachalasai 1990; Doner and Ramsay 1994; Doner 2009: Chap 9).

The share of textile exports in total manufacturing exports declined from 14% in the mid-1980s to 11% in 2000-02. Also, the share of Thailand in world apparel exports declined from 3.2% in 1995 to 2% in 1998. Apparel producers depended on imported fibers and fabrics because they could not get high quality fibers and fabrics from the domestic marker. This structure continued up to the second half of the 1990s. The main reason for the decline was old-fashioned equipments, a shortage of technical personnel, and a tariff structure that blocked linkages between the textile sector and the apparel sector. The textile industry of Thailand had developed prior to and independently of the export-oriented apparel industry. Because apparel producers could get a quota for their export markets, and they could depend on imported raw materials, there was no pressure on them to form linkages between the two sectors (Doner 2009).

It is a well-known fact that Japanese companies greatly contributed to the development of the spinning and weaving industries in four Southeast Asian countries, i.e., Thailand, Malaysia, Indonesia, and the Philippines, during their import-substitution period. However, in the case of Thailand, not only in the textile industry but also in the apparel industry, many Japanese companies set up subsidiaries. According to the *Complete List of Overseas Subsidiaries of Japanese Companies 2013* by Toyo Keizai Shuppansya Press, there is not a single subsidiary in Malaysia and the Philippines in the apparel industry. In the case of the Philippines, even in the textile industry there is not a single subsidiary. On the contrary, in Thailand there are 15 subsidiaries in the textile sector and 13 subsidiaries in the apparel sector.

Table 6 shows the subsidiaries of Japanese textile and apparel companies in major Asian countries in 2013.

However, the total number of 13 subsidiaries in Thailand's apparel sector is a drop in the ocean, and it does not compare with the "overwhelming' (Suehiro 1980) role that Japanese textile companies played during their import-substitution period. Not only that. We can say that Japanese companies today do not occupy an overwhelming position, even in the textile sector.

Table 7 shows the production capacities of the major fiber manufacturers in Thailand in 2013.

As this table shows, Teijin Polyester (TPL) is the fourth biggest, and Thai Toray Synthetic (TTS) the sixth biggest company. The top company in this list is Thai Polyester (Jong Stit). This company was established in 1940 by Cheevaprawatdomrong. This company is a vertically integrated company whose business ranges from yarns (polyester yarn, acrylic yarn) to knitting, dyeing, printing, and even home textiles and apparel. When this company was established in 1940, it was a small spinning company with just a few handlooms. They imported power-looms from Japan in 1954. After that, they developed smoothly and diversified their business. In 2003, they established Thai Polyester Co. Ltd. to start polyester production, and in 2005, they established Fashinno Co. Ltd., an apparel company. Among their group companies are Jong Stit Plush Co. Ltd., Fashion Hometex Co. Ltd., New Warp Co. Ltd., Textile Mart Co. Ltd., Thai Polyester Co. Ltd., and Fashinno Co., Ltd.

The second biggest company is Indorama Polyester, an Indian company in Thailand. The third largest company is Thai Rayon and the sixth is Thai Acrylic Fiber. Both are Aditya Birla group companies, again Indian capital. (In Thailand, they are well known as the Bharat Group.) If we aggregate the production capacity of both companies, the total increases to 305,000 tons, and they become the top group.

Table 6 Subsidiaries of Japanese Textile & Apparel Companies in Major Southeast Asian Countries (As on 2013)

	Malaysia	Thailand	Indonesia	Vietnam
Textile				
	1 TOYOBO Perak Textile Mills Sdn. 1975 spinning, weaving 2 TOYOBO Toyobo Textile (Malaysia) Sdn. Bhd. 1992 spinning, weaving 3 TOYOBO Toyobo Wool (Malaysia) Sdn. Bhd. 1989 spinning, weaving 4 TORAY Penfabric Sdn. Bhd. 1975 spinnign, weaving 5 TORAY Penfibre Sdn. Bhd. 1974 polyester staples 6 KANEMATSU SEN'I Perak Textile Mills Sdn. Bhd. 1975 spinning, weaving	1 ASAHI KASEI Thai Asahi Kasei Spandex co. Ltd. 2003 apnadex threads 2 KURABO Siam Kurabo Co. Ltd. 1996 spinning 3 KURABO spinning Thai Kurabo Co. Ltd. 1970 spinning 4 KURABO Thai Textile Developoment & Finishing Co. Ltd. 1991 dyeing and processing 5 KUREHA TECH Kureha (Thailand) Co. Ltd. 2001 non-woven fabrics 6 SHIKIBO Thai Shikibo Co. Ltd. 1989 cotton spinning 7 DAIKOKUSHIGYOU World Trade Ltd. 2001 threads 8 TEIJIN Teijin Polyester (Thailand) Ltd. 1970 polyester fibers and staples 9 TEIJIN Teijin (Thailand) Ltd. 1993 polyester fibers and staples 10 TEIJIN Thai Namusiri Intertex Co. Ltd. 1991 polyester fibers 11 TOUKAI SENKO Tokai Dyeing Co. (Thailand) Ltd. 1964 bleaching, dyeing, printing 12 TORAY Luckytex (Thailand) Public Co. Ltd. n.a. P/C, spinning, dyeing, printing of cotton 13 TORAY Thai Toray Synthetics Co. Ltd. 1992 polymerization of polyester, nylon, filaments 14 TORAY Thai Toray Textile Mills Pubic Co. Ltd. 1964 spinning, weaving, dyeing of polyester and rayon 15 NAIGAI Rondex (Thailand) Co. Ltd. 2001 spinning	1 KURABO P. T. Kurabo Manunggal Textile Industries 1976 spinning, weaving 2 GUNZE P. T. Gunze Indonesia 1991 threads for machines 3 SHIKIBO P. T. Mermaid Textile Industry Indonesia 1974 spinning, dyeing 4 TOKAI SENKO P. T. Tokai Texprint Indonesia 1964 bleaching, dyeing, printing 5 TOYOBO P. T. Toyobo Knitting Inodonesia 1996 knitting, dyeing 6 TORAY P. T. Acryl Textile Mills 1975 spinning, dyeing, and sale of acryl 7 TORAY P. T. Century Textile Ind. Tbk. 1972 spinning, weaving, dyeing of polyester 8 TORAY P. T. Easterntex 1975 spinning, weaving, dyeing of polyester and nylon 9 TORAY P. T. Indonesia Synthetic Textile Mills 1972 spinning, weaving, dyeing of polyester 10 TORAY P. T. Indonesia Toray Synthetics 1973 nylon filaments, polyester staples and filaments 11 NISSHONBO TEXTILE P. T. Malakasari Nissinbo Denim Industry 2011 denim fabrics 12 NISSHIBO HOLDINGS P. T. Nikawa Textile Industry 1995 cotton spinning 13 NISSHINBO HOLDINGS P. T. Nissinbo Indonesia 1998 dyeing of cottom fabrics 14 YUNICHIKA P. T. Unitex Tbk 1972 gingam of shirts, dyeing of fabrics	
Apparel & Related				
		1 ATUMI FASHION Bangkok Innerwear 1990 underwear for women 2 OKAMOTO Okamoto Textile (Thailand) Ltd. 1999 socks 3 GUNZE Thai Gunze Co. Ltd. 1990 innerwear 4 MIYAGI LACE/SAKAE LACE Thai Sakae Lace Co. Ltd. 2002 lace 5 SUKENO KUTSUSHITA Thai Sukeno Knit Co. ltd. 2001 socks 6 DAINICK Thai Staflex Co. Ltd. 1988 interlining cloth 7 TAKEDA LACE Thai Takeda Lace Co. Ltd. 1984 lace knitting and dyeing 8 FUJIBO APPAREL Jintana Fujibo Corp. 2001 stitcthing 9 MARUKYU Maruhisa International Co. Ltd. 1990 cut and saw for women's and chirldrens' wears 10 YAMAKI Thai Yamaki Co. ltd. 1991 cutter shirts 11 WACOAL Thai Wacoal Public. Co. Ltd. 1970 underwear for women 12 ITOKIN Thai Itokin Co. Ltd. 1982 women's wear 13 TAKAYA SHOJI Thai Takaya Co. Ltd. 1990 stitching of jeans and processing	1 KURABO P. T. Akurabenitama 1995 stitching 2 GUNZE P. T. Gunze Socks Indonesia 1995 socks 3 DAIWA BOUNOI P. T. Daiwa Garment Indonesia 2011 testing and stitching of apparel products 4 NISSHINBO HOLDINGS/NAIGAI SHIRTS P. T. Naigai Shirts indonesia 2002 shirts 5 FULEX JAPAN/KANEMATSU SEN'I P. T. Flex Indonesia 1990 dress shirts 6 WACOAL 1991 P. T. Indonesia Wacoal underwear for women 7 KURARE TRADINGS P. T. Indobell Garmentaama 1990 stitching 8 TOYOBO SPECIAL TRADINGS P. T. Shinko Toyobo Gistex Garment 1994 knitting	1 KURAUDIA Vietnam Kuraudia Co. Ltd. 2008 wedding dresses, veils 2 GUNZE Gunze (Vietnam) Co. Ltd. 1995 innerwear 3 KO-KOSUNOBUOKA/TOYOBO SPECIAL TRADINGS Hop Thinh Co. Ltd. 1997 stitching of working clothes 4 LECIAN Lecian (Vietnam) Co. Ltd.. 2004 innerwear for women 5 WACOAL Vietnam Wacoal Corp. 1997 innerwear

Source: Toyo Keizai Shinposya 2013.

Table 7 Production Capacities of Major Chemical Fiber Manufacturers in Thailand in 2013 (1000 tons/year)

Rank	Company Name	Products		Member of TSFMA	Ownership
1	Thai Polyester (Jong Stit)	Ef	118.8		Thai
		Es	86.4		(Cheevaprawatdomrog Family)
		Total	205.2		
2	Indorama Polyester	Ef	65.8	○	India
		Es	123.9		(Indorama Group)
		Total	189.7		
3	Thai Rayon	Rs	185.0	○	India
		Total	185.0		(Vikram Birla Group)
4	Teijin Polyester (TPL)	Ef	36.0	○	Japan
		Es	90.0		
		Total	126.0		
5	Kangwal Polyester	Ef	65.0	○	Thai
		Es	60.0		
		Total	125.0		
6	Thai Acrylic Fiber	Ans	120.0	○	India
		Total	120.0		(Vikram Birla Group)
7	Thai Toray Synthetic (TTS)	Nf	30.5	○	Japan
		Ef	40.8		
		Total	71.3		
8	Asia Fiber	Nf	94.2	○	Thai (Established as a joint
		Total	94.2		venture with Taiwan company)
9	Chiem Patana Synthetic Fiber	Ef	21.0	○	Thai (Established as a joint
		Es	21.9		venture with Toyoda Tsusho,
		Total	42.9		Japan in 1988)
10	Thailon Techno Fiber	Nf	18.0		Thai
		Total	18.0		
11	Star Soleil	Ef	15.0		
		Total	15.0		
11	Thai Taffeta	Nf	15.0		Thai
		Total	15.0		
13	Thai Baroda Ind.	Nf	12.0		India
		Total	12.0		(Shri Ram Group)
14	Thai Asian Fiber	Un	6.0		
		Total	6.0		
14	Thai Asahi Kasei Spandex	Un	6.0		Japan (Asahi Kasei)
		Total	6.0		
16	Thai Polymer Textile	Nf	5.0		
		Total	5.0		
	Sunflag (Thailand) Ltd.	Ef		○	India

Notes: E: Polyester、N: Nylon、U: Poliurethane、A: Acetate、f: filament、s: staple
TSFMA: Thai Synthetic Fiber Manufacturers' Association
Source: Nippon Kagaku Sen'i Kyokai 2013: pp. 309–310.

Table 8 shows the top 19 apparel companies (in terms of the number of machines that they have installed) that are listed as TGMA (Thai Garment Manufacturers Association) members. All the companies in this table are OEM or ODM suppliers for developed countries, while they also sell their products to the domestic market. This indicates that the retail market of Thailand is fairly well developed, and every company is already set up with the newest equipment.

As in the Philippines and Malaysia, in Thailand, too, fast fashion retailers (SPA) are emerging. Apparel retail markets in Thailand are quickly changing backed by increasing numbers of people in the middle-income groups. In Bangkok, foreign apparel brand products abound, but along with these foreign brands, many Thai brands products are emerging.

As Table 9, which appeared in the JETRO Report on Thailand, shows, most of these branded companies do not have their own factories for sewing. In other words, they are Uniqlo-type SPAs (JETRO 2011). Among them, the most notable company is Jaspal Company Ltd., which develops brands such as JASPAL, CC-OO, CHAPS, and CPS. Jaspal started as an importer of fashion apparel in 1972, and it soon established its own brands, becoming the top fast fashion retailer. Jaspal is a family business run by an Indian family. They opened their first shop in 1976. As of September 2013, they have 129 shops in Thailand and 3 in Malaysia.

Table 8 Major Apparel Companies of Thailand

Rank	Company Name	Number of Machines Products		Export Destination	Memo
1	PEOPLE'S GARMENT PUBLIC CO. LTD.	13000	Swimwear, Woven Shirts, T-Shirt, Polo-Shirt Knitted, Pants (Woven)	USA, EU, Japan, Domestic	OEM Supplier
2	THAI WACOAL PUBLIC CO. LTD.	4636	Underwear for Ladies, Underwear for Men, Chirldren's Wear (Woven)	USA, EU, Japan	Saha group company; JV company with Wacoal, Japan
3	THAI GARMENT EXPORT CO. LTD.	3000	Blazer, Suit, Pants, Shorts, Trousers, Boxes, Woven Shirt, Track Suit, Ties, Scarf	Asia, USA, EU, Japan, Canada	Subsidiary of TAL group (Hong Kong)
4	BODY FASHION (THAILAND) CO. LTD.	2000	Swimming Wear, Underwear for Men, Underwear for Ladies	EU, ASIA	Subsidiary of Trimph, Germany
5	HUA THAI MANUFACTURING PUBLIC CO. LTD.	1939	Blazer, Suit, Blouse, Dress, Shirt, Casual Wear, Coat, Pants, Shorts, Trousers, Boxes	USA, EU	Tristate group company (Hong Kong) OEM Supplier
6	SIAM KNITWEAR AND GARMENT CO. LTD.	1500	Casual Wear Children's Wear (knitted), Outer Wear, Night Wear, Pyjamas, Sleep Wear, Polo-Shirt, T-Shirt Knitted, Sweater, Underwear for Men	EU, USA, Japan	
7	V.T. GARMENT CO. LTD.	1200	Outerwear, Jacket, Ski Wear, Shorts, Bermadas, Pants, Jogging Suit, Training Suit, T-Shirt	USA, EU, Japan	OEM Supplier
8	NICE APPAREL CO. LTD.	900	Casual Wear, Golf Shirt, Pants, Shorts, Trousers, Boxes, Polo-Shirt, T-Shirt Knitted, Sportswear	USA, EU, Asia	Nice group company (Thai) OEM Supplier of Nike & Adidas
9	ASIAN GARMENT CO. LTD.	800	Infant Wear, Chirldren's Wear (Knitted), T-Shirt Knitted, Polo-Shirt	USA, EU	
9	ORIENTAL GARMENT CO. LTD	800	Sportswear	USA, EU, Asia, Japan, Canada	OEM Supplier
11	NORTH STAR APPAREL CO. LTD.	700	Jacket	EU, USA	
11	SUTANI CO. LTD.	700	Polo-Shirt, T-Shirt Knitted, Track Suit	EU	
13	PATTAYA MANUFACTURING CO. LTD.	681	Children's Wear (Woven & Knitted), Underwear for Ladies	USA, France, Spain, Asia, Ireland	Saha group company
14	THAI ITOKIN CO. LTD.	659	Blazer, Suit, Blouse, Dress, Skirt, Casual Wear, Pants, Shorts, Trousers, Boxes, Polo-Shirt, T-Shirt Knitted, Woven Shirt, Woven Shorts, Swimming Trunk, School Uniform, Office Uniform, Hospital/Lab Uniofom, Industrial Uniform	Japan	Saga group company; JV with Itokin, Japan
15	GOLD MINE GARMENT CO. LTD.	650	Woven Shirt, Woven Blouse	EU, USA, Japan, Canada	OEM Supplier
16	CHAMP ACE CO. LTD.	600	Golf Shirt, Jacket, Sportswear, Outerwear, Swimming Wear, Underwear for Men, Woven Shorts, Swimming Trunk	EU, Japan, Asia, Australia, USA, Canada	OEM Supplier
16	HI-TECH APPAREL CO. LTD.	600	Sportswear, Nightwear, Pyjamas, Sleepwear, Pants, Shorts, Trousers, Boxers, Polo-Shirt, T-Shirt Knitted, Underwear for Men, Underwear for Ladies	USA, EU, Asia, Canada, Japan	OEM Supplier
16	NK APPAREL CO. LTD.	600	Sportswear	USA, EU, Asia	Nice group company; OEM Supplier of Nike & Adidas
16	UNION GARMENT CO. LTD.	600	Blouse, Dress, Skirts, Casual Wear, Coat, Pants, Shorts, Trousers, Boxers, Polo-Shirt, T-Shirt Knitted, School Uniform Office Uniform Hospital/Lab Uniform, Industrial Uniform	EU, Australia	

Source: TGMA 2012; Homepage of each company.

Table 9 Major Fast Fashion Retailers of Thailand

Brand Name	Company	Retail Format			Manufacturing	
		Corner	In-shop	Independent Shop	Own Factory	OEM
AIIZ	Reno (Thailand) Co. Ltd.	○	○		○	○
BLUE CORNER	Bluepin Intertrade Co. Ltd.	○	○		○	○
CC-OO	Jaspal Co. Ltd.		○			○
CPS CHAPS	Jaspal Co. Ltd.		○			○
DAPPER	Dapper General Apparel Co. Ltd	○	○			○
FLY NOW	AT Bangkok Company Ltd.	○	○	○	○	
HAAS	Zein Fashion Co. Ltd.	○	○		○	○
JASPAL	Jaspal Co. Ltd.		○	○		○
KLOSET	Kloset Design Co. Ltd.	○	○		○	
PENA HOUSE	Pena House Co. Ltd.	○	○			○
PORTLAND	Bluepin Intertrade Co. Ltd.	○	○		○	○
X-ACT	Xact Edition Co. Ltd.	○	○			○
ZEIN	Zein Fashion Co. Ltd.	○	○		○	○

Source: JETRO 2011: p. 49.

3-5 Common Features among the Three Countries

So far, we have briefly overviewed the development of the textile and apparel industries of three Southeast Asian countries: the Philippines, Malaysia, and Thailand. Although each country has their own characteristics, there are some common features.

(1) During the early import-substitution period from the 1960s to the 1970s, Japanese fiber makers, such as Toray and Teijin, contributed much to the development of the textile industries in these countries. Their products are mainly for export, not for the domestic market. As a result, the linkages between the textile sector and the apparel sector were not sufficiently established, and the apparel industry continued to depend on imported yarns and fabrics. Also, there was a big gap between the textile sector, which was geared to the export market, and the apparel sector, which focused on the domestic market.

(2) There remain sub-contracting chains down to the level of the household, and the efforts to maintain competitiveness by depending on low wages partly continue even today.

(3) The quota system under the MFA greatly changed production and distribution structures in the Asian economic zone. The East Asian Big Three, Hong Kong, South Korea, and Taiwan, became organizers for US and European retailers. They reorganized production bases in lower wage countries such as Thailand, Malaysia, the Philippines, and Indonesia, upgraded themselves to ODM or OMB suppliers, and strengthened their international competitiveness. Apparel producers in Thailand, Malaysia, and the Philippines became CMT or OEM suppliers. In this sense, the most developed country is Thailand, and the least developed country is the Philippines (Sanchez 1990; Yamagata 1998). Malaysia's situation is very similar to that of Thailand.

(4) Even today, there are "triangle manufacturers", especially Hong Kong companies, in these three countries. Some of them, big multinational contractors from East Asian countries, grew to the point where they can compete with the big retail companies of the US. (Applebaum 2008). At the same time, because of the rapid development of ICT and the internet, many Southeast Asian apparel companies have upgraded to full-package (OEM) suppliers (Crinis 2012)。

(5) Since the 1990s, especially after the abolition of the MFA in 2005, the international competitiveness of the apparel industries of these three countries has declined. The main reason for this has been the rise of China, followed by the emergence of lower wage countries such as Bangladesh, Cambodia, Vietnam, Laos, Myanmar, Sri Lanka, and India as stitching sites for export. "The race to the bottom" has intensified. Today, for lower wage countries such as Bangladesh, Cambodia, and Myanmar, the apparel industry is a star foreign exchange earner. They import textiles from abroad, and process them into garments for export. Corresponding to these trends, the apparel makers of Thailand, Malaysia, and the Philippines have been forced to upgrade to more fashion-oriented, more value-added products.

(6) Today two different characteristics, that of being a production base and a consumption base, are mixed in these three countries. It is increasingly apparent that the transition from a production base for the apparel industry for export markets to a consumption market for a domestic apparel industry has been triggered by the increasing number of people in the middle-income groups.

(7) Based on this new trend, fast fashion retailers, such as Bench of the Philippines, Padini of Malaysia, or Jaspal of Thailand, have emerged. For the moment, the development of their retail shops is mainly limited to their domestic market and nearby countries or the Middle East.

(8) The overwhelming position that Japanese fiber companies used to occupy is today replaced by Indian fiber makers, such as the Aditya Birla and Indorama groups in the case of Thailand, the Reliance group in the case of Malaysia, and again the Aditya Birla group in the case of the Philippines[6], but there are no Chinese fiber makers who made investment in Southeast Asian countries. This is quite a contrast with the Indian fiber makers.

(9) On the contrary, in the apparel sector or the fast fashion retail sector, overseas Chinese predominate. Crinis called this phenomenon "a monopoly of the Chinese in the garment industry' (Crinis 2012).

4. The Textile and Apparel Industries

4-1 Multi-layered Structure of Apparel Production and Consumption in Southeast Asian Countries

If we pay attention to Asia, alongside the retail shops of big international SPAs, such as Zara (Inditex), Gap, and H&M, we can find many domestic SPA shops. They have established value

[6] In Indonesia too, the Aditya Birla and Indorama groups are more dominant than Japanese makers such as Toray and Teijin (Nippon Kagaku Sen'i Kyokai 2012: 310).

chains mainly for domestic consumers. The source of their strength lies in the fact that they know their consumers well and can provide their products cheaper than the international SPAs. Some of these Asian SPAs have expanded their retail business abroad. Among the apparel companies of Hong Kong, there are not only climb-the-ladder type of success stories which upgraded from CMT to OEM to ODM to OBM, but also leap-frog type of success stories. They were "trading houses" or "manufacturers" under the system of "triangle manufacturing." It is true that Giordano or the Fan Brothers are manufacturers-cum-traders, but another success, Li & Fung, does not have any manufacturing experience. From the start, it was a trading house.

A representative Japanese SPA, Uniqlo, is also a success story of the leap-frog type. They originated as a small shop for men's wear in Hiroshima prefecture. Uniqlo does not have any experience in production upgrading from CMT to OBM. We find the same story in the cases of Suyan Corporation, Golden ABC, and Gingersnaps of the Philippines, or Padini of Malaysia, and Jaspal of Thailand.

Among Asian apparel makers, including Japanese subsidiary companies, there are OEM suppliers for international brands, and at the same time OBM suppliers or fashion retailers for domestic market. Usually, they sell their own branded products for the domestic market at cheaper prices, while they sell OEM or ODM products for global companies.

We can say that the SPA business is becoming popular today in every country. In Japan, too, since the 1990s, the integrated apparel makers, such as Five Fox, Onward Kashiyama, World, Itokin, and Sanyu International, have transformed their business style and become SPAs.

The apparel industry as a global business chain, which Gereffi focused on, is understood to have the US, Europe, and Japan as its consumption base, developing countries, including Asian low wage countries, as its production base, and Asian NIES as its intermediaries. In this framework of understanding, a "born global" company, i.e., retailers without their own production base, is the ultimately developed form. Here the core of profit is transferred to the most downstream retailers. This business type originated in the US, but today this business is expanding as the dominant form, even in developing countries. .

4-2 Two Value Chains

In terms of commodity flows, it is a commonplace that the textile and apparel industries are unified as "the textile and apparel industry," but, clearly, there are two different cores or nubs in this value chain, that is to say, a fiber-centered value chain (FVC) and a retail-centered value chain (RVC). The former is a producer-driven value chain, and the latter a buyer-driven value chain. Gereffi's interpretation is based on an RVC backed by the retail revolution in the US.

"In the 1970s most people would mention DuPont as the most powerful firm in the supply chain. About 20 years ago, the most powerful firm was Levi's; nowadays this title probably goes to Nike" (Scheffer 2012: p. 14). The reason behind the power shift from fiber producers to retailers is the changing profit structure. "While wholesale gross margins were around 15-20% in 1970, they have grown to around 35-40% in 2008. And while retail margins were around 35-40% in 1970, they stand now in a range of 55-60%.…The cost of fibers, the primary materials, is now often less than 2%.…Marketing, design and branding costs can be up to 20% of the retail value" (*Ibid.*)[7].

According to Abernathy *et. al*., in 19th century America, "the retail, apparel, and textile industries were, for the most part, separated," and "there was almost no vertical integration across retail,

[7] Mr. Sakakibara, CEO of Toray Company told a Nikkei interviewer that "in the case of a 5,000 yen shirt, Toray get only 12 yen for supplying the yarn" (*Nippon Keizai Shinbun*, 11 November 2013). The cost of yarn is only 0.24% of the retail price.

apparel, and textiles." No textile producer of woven goods has been a significant apparel manufacturer." (Abernathy *et. al*. 1999: pp. 36-37). However, they "are becoming increasingly integrated through information and inventory links." At the same time, "a large and growing segment of the textile industry appears to be far less dependent on the apparel industry" (Abernathy *et. al*: p. 203). Another noticeable characteristic of the US textile industry is "in the middle stream of the textile sector there are many big companies. Such big companies integrated spinning, weaving, dyeing, and retailing" (Itami and Associates 2001: p. 107-129).

On the other hand, what supported the Japanese textile industry in its heyday during the 1960s and 1970s was a producer-driven value chain led by synthetic fiber makers. Up to the early 1970s, apparel makers were called "secondary products makers" (Kashima 2006). As this name clearly indicates, the core business of the Japanese textile industry lay in making yarn. This was especially so for the big synthetic fiber makers. Big synthetic yarn makers, such as Toray, Teijin, and Asahi Kasei, affiliated middle stream weaving and dyeing companies, and, involving apparel makers, they developed new products. They contributed a great deal to nurturing downstream apparel makers. In other words, Japanese apparel makers could not be independent and could not create brands until the early 1970s.

Although the development paths of the US and Japanese textile and apparel industries are different, in both countries the core or central nub of the value chain shifted first from fibers to textiles, and then from textiles to retail.

The synthetic fiber value chain and the retail value chain each depend on different abilities, and each sector is separate. This separation creates a new opportunity for fashion-oriented apparel. Because the two value chains are separate, there appears to be the possibility for a leapfrog pattern of development. In other words, the oft-repeated suggestion that the integration of the textile industry and the apparel industry is the only way to overcome weakness and strengthen international competitiveness may not be the only way to upgrade.

The upgrade scheme by Gereffi, from CMT to OEM, OEM to ODB, and ODM to OBM, is well suited to the case of the Asian NIEs, especially Hong Kong, but it cannot be applied to lower wage, late-late-comer countries such as Bangladesh, Cambodia, Laos, and Myanmar, where almost all the raw materials are imported, because there are no textile facilities. Even for middle-income countries, such as Thailand, Indonesia, Malaysia, and Vietnam, it is extremely difficult to integrate the textile and apparel industries. There are few possibilities for these countries to enter the chemical fiber business and compete with Chinese and Indian chemical fiber companies. For such late-comers, or late-late-comer apparel countries, the integration of the textile and apparel industries may be impossible, and it may not even be appropriate to seek such integration. A solution should be found in a different direction. Branding is not based on manufacturing ability (Klein 2010: pp.195-196). What is needed is the ability to coordinate or to read market trends. Remember that there is not a single fiber maker in Hong Kong, the apparel center of the world.

Today among the major chemical fiber companies, there is no single company from the developed countries. As Table 10 shows, most of the top ten chemical fiber companies are Indian or Chinese companies.

The US, German, and Japanese companies that used to dominate this industry have lost their competitiveness. Only Taiwanese and South Korean companies remain, but sooner or later they will disappear, too. In Thailand, Malaysia, Indonesia, and the Philippines, without exception, Indian chemical fiber companies dominate the market, surpassing Japanese companies. The situation is very similar to that of the 1960s when Japanese chemical fiber companies dominated these markets.

Table 10 Top 10 Polyester Faiber Makers in the World (as on 31 January 2010)

Company Name	Location	Filaments	Staples	Total
Reliance Industries	India, Malaysia	1,164	774	1,938
Sinopec	China	148	995	1,143
Indorama	India, Indonesia, Thailand	462	505	967
Nan Ya Plastics Corporation	Taiwan, U.S., Vietnam, China	536	420	956
Jiangsu Sanfangxian Group	China	–	840	840
Golencock	China	800	–	800
Xiangsheng Group	China	540	200	740
Zhejiang Yuandong Chemical Fiber Group	China	420	300	720
Jiangsu Hengli Chemical Co. Ltd.	China	680	–	680
Jiangsu Wujiang Shengze Shenghong Chemical Fiber Co. Ltd.	China	675	–	675

Source:http://www.jcfa.gr.jp/news/100320_850.pdf (09/01/2014 access)

Conclusion

Gerefii's proposition, a buyer-driven value chain, is a kind of stage theory. If we apply this scheme to Asian countries, Japan, alongside the US and European countries, is classified as first tier countries (i.e., consumer market), South Korea, Taiwan, Hong Kong, and Singapore are classified as second tier (i.e., OBM suppliers), Thailand, Indonesia, Malaysia, and the Philippines are classified as third tier (i.e., OEM suppliers), and Vietnam, Cambodia, Laos, and Myanmar are classified as fourth tier (i.e., CMT suppliers).

However, even in the mid-1990s, more than 60% of the domestic demand for apparel products in Japan was met by domestic suppliers in Japan (Itami and Associates 2001: p. 85). In other words, even such industrially developed countries are still not only consumers/importers but also producers of their own apparel products.

We cannot clearly classify Southeast Asian countries according to their development stages, such as OBM, ODM, OEM, and CMT. Especially in the case of Thailand, Malaysia, Indonesia, and the Philippines, to greater or lesser degrees, apparel companies that can be classified as CMT, OEM, ODM, or OBM exist side by side.

Following Gereffi's Scheme 2 in his stage theory (Figure 2), China, India, Indonesia, Thailand, Pakistan, and, to a lesser extent, Vietnam and Bangladesh are fiber-producing countries. "From apparel, to textiles, from textiles to fibers, from fibers to spinning, weaving, and stitching machines" only indicates industrial flow, not a stage of development. There is little correlation between income per capita and the existence or non-existence of a textile industry.

Although the textile and apparel industry is understood as being constituted by an upstream (fibers), midstream (textiles), and downstream (apparel), and extreme down stream (retail) in the flow of products, each sector is independent or separate. The ability to produce added value in each sector takes a completely different form. A SPA does not need to manufacture its fibers, fabrics or garments. What is necessary is the ability of designing, branding, merchandising, marketing, and coordinating.

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