

Discussion Papers are preliminary materials circulated
to stimulate discussions and critical comments

DISCUSSION PAPER No. 101

Prospects for Development of the Garment Industry in Developing Countries: What Has Happened Since the MFA Phase-Out?

Tatsufumi Yamagata

April 2007

Abstract

On January 1, 2005, the controlled trade regime on textiles and clothing which was based on the Multi-Fiber Arrangement (MFA) made in 1974 was abolished. This institutional change wrought great impacts on the world market for textiles and clothing. This paper reviews the impacts of the changes on the main markets and examines the prospects for the markets and the source countries. The main conclusions are as follows: (1) after the renewal of quantitative restrictions on Chinese garment exports were agreed with the US and the EU, the post-MFA surge in Chinese garment exports was significantly attenuated; (2) instead, the growth in garment exports from other Asian low-income countries to the two markets was revived in 2006; (3) the Japanese market has been kept almost intact from the impact of the regime shift; (4) some developing countries, such as Bangladesh and Cambodia, not only survived the liberalization but also have steadily expanded their garment exports throughout the transition; and (5) an indicative fact is that the profitability of the garment industry in Bangladesh and Cambodia was high on average according to surveys conducted in 2003, which might have bolstered the steady growth of garment exports in the past, and possibly future growth, too.

Keywords: Garment; MFA phase-out; China; Bangladesh, Cambodia

JEL classification: L67, O53

The Institute of Developing Economies (IDE) is a semigovernmental, nonpartisan, nonprofit research institute, founded in 1958. The Institute merged with the Japan External Trade Organization (JETRO) on July 1, 1998. The Institute conducts basic and comprehensive studies on economic and related affairs in all developing countries and regions, including Asia, the Middle East, Africa, Latin America, Oceania, and Eastern Europe.

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute of Developing Economies of any of the views expressed.

INSTITUTE OF DEVELOPING ECONOMIES (IDE), JETRO
3-2-2, WAKABA, MIHAMA-KU, CHIBA-SHI
CHIBA 261-8545, JAPAN

©2007 by Institute of Developing Economies, JETRO

Prospects for Development of the Garment Industry in Developing Countries: What Has Happened Since the MFA Phase-Out?*

Tatsufumi YAMAGATA[†]

Institute of Developing Economies
Japan External Trade Organization

April 2007

Abstract

On January 1, 2005, the controlled trade regime on textiles and clothing which was based on the Multi-Fiber Arrangement (MFA) made in 1974 was abolished. This institutional change wrought great impacts on the world market for textiles and clothing. This paper reviews the impacts of the changes on the main markets and examines the prospects for the markets and the source countries. The main conclusions are as follows: (1) after the renewal of quantitative restrictions on Chinese garment exports were agreed with the US and the EU, the post-MFA surge in Chinese garment exports was significantly attenuated; (2) instead, the growth in garment exports from other Asian low-income countries to the two markets was revived in 2006; (3) the Japanese market has been kept almost intact from the impact of the regime shift; (4) some developing countries, such as Bangladesh and Cambodia, not only survived the liberalization but also have steadily expanded their garment exports throughout the transition; and (5) an indicative fact is that the profitability of the garment industry in Bangladesh and Cambodia was high on average according to surveys conducted in 2003, which might have bolstered the steady growth of garment exports in the past, and possibly future growth, too.

Keywords: Garment; MFA phase-out; China; Bangladesh, Cambodia

* This paper was prepared for the seminar entitled “Asia’s Clothing Industry at a Crossroads Amid Intensified Global Competition,” held by the Institute of Developing Economies (IDE) at the Japan External Trade Organization (JETRO) in Tokyo on March 13, 2007.

[†] E-mail: tatsufumi_yamagata@ide.go.jp.

Introduction

Textiles and clothing will always be essential goods for human beings. Spinning and weaving were the main activities that drove the Industrial Revolution in the 18th century. Since then the textile industry has been a leading industry in the initial phase of industrialization in many countries in different periods of time in the world.

This leading role of the textile industry in industrialization was also significant in high- and middle-income countries in Asia, too. The silk and cotton textile industries initiated Japan's industrialization in the Meiji era in the late 1800s (Ito, 1992; Murayama, 2005; Yamazawa, 1988). The cotton textile industry played the same role in South Korea's and Taiwan's industrialization (Amsden, 1989; Wade, 1990). Wearing apparel took over the role for the original ASEAN member countries in the 1970s and 80s¹ (Amjad ed., 1981; Pang ed., 1988).

It is noticeable that textiles and clothing are susceptible to trade restrictions caused by trade friction. In the process of recovery from the devastation due to World War II, Japan expanded its export of textiles again. Then, the rapid expansion frustrated the textile industry in the United States so that Japan was strongly encouraged to exercise voluntary restraint on cotton textile exports to the United States in 1957 (Yamazawa, 1988). Since then controlled trade has been the norm rather than temporary regulation of the trade in textiles and clothing. The import restrictions by the United States, Canada and the European countries were first

¹ At the time, dominant technologies for spinning and weaving became more capital-intensive than before so that they were no longer competitive industries in labor-abundant countries.

incorporated as a short-term arrangement regarding international trade in textiles in 1961, which was followed by a similar long-term arrangement regarding international trade in cotton textiles between 1962 and 1974. In the sequel, a restricted trade regime was perpetuated through the Multi-Fiber Arrangement (MFA) on international trade in textiles, which came into effect in 1974. When the World Trade Organization (WTO) was launched in 1995, it was assumed that the MFA system of controlled trade would be phased out by January 1, 2005, because such a controlled trade regime is against the *raison d'être* of the WTO (Gereffi and Memedovic, 2003).

Complete liberalization of the trade in textiles and clothing was once achieved at the beginning of 2005. However, it was short-lived as far as the trade between China and the two greatest clothing markets in the world, *i.e.* the United States and the European Union, was concerned. The EU concluded an agreement with China in June 2005 which set ceilings on growth rates of exports of the main categories of clothing, and the United States followed in November 2005, both of which stay in effect until 2008. Thus, the controlled trade regime partially survives even today.

What are the impacts of the MFA phase-out completed in the beginning of 2005 on the world clothing trade? Were there structural changes among source countries due to the liberalization? Did small exporters all collapse as was indicated by a WTO discussion paper (Nordås, 2004) and as widely believed right before the MFA phase-out? Which countries survived the liberalization, and what features did they have for survival? Those are the questions addressed in this paper.

The answers are as follows: (1) After the MFA phase-out there were drastic changes in the composition of source countries in the United States and the European Union; (2) There was no significant impact on the Japanese market; (3) Some developing countries survived the liberalization though most small exporters suffer from a decline in the export of clothing; (4) Bangladesh and Cambodia have fared very well among the Least Developed Countries (LDCs); and (5) The average profitability of the clothing industry in the two countries was high according to the surveys conducted by the Institute of Developing Economies (IDE) in cooperation with a couple of research institutes in the two countries in 2003.

The rest of the paper is organized as follows. Section 1 summarizes the changes occurring in the three greatest markets for clothing in the world, namely the United States, the European Union and Japan, after the MFA phase-out. Section 2 focuses on the good performers from the LDCs. Based on firm-level surveys conducted in Bangladesh and Cambodia in 2003, features of the garment industry in the two countries are highlighted. Concluding remarks are given at the end.

1. What Has Happened Since the MFA Phase-out?

The first question to be addressed is about the impacts of the MFA phase-out and the renewed quantitative restrictions on China's garment exports to the US and the EU on the world clothing trade. The compositions of source countries for the US, EU and Japanese markets are investigated in order.

1.1. Garment Exports to the United States

There have been remarkable structural changes in the US market in the clothing trade since the beginning of 2005. As expected, exports from China and India jumped in the first half of the year. Since China was the greatest exporter of garments to the United States and since the growth rate in the value of exports from China was extremely high, the US government seriously considered invoking safeguards to put the brakes on garment imports from China. The EU also faced a surge in garment imports from China. As a result the EU and China reached an agreement on a three-year “transitional arrangement” on June 10, 2005 which limits the annual increase in Chinese garment imports to about 10 percent until trade is liberalized in 2008. The United States and China made a similar agreement which will set quotas covering nearly half of China’s garment imports into the United States by the end of 2008.

Table 1 exhibits detailed structural changes in the composition of source countries supplying the US market. The annual growth rate of garment exports from China to the United States was 56.77 percent in 2005, which was extremely high in comparison with the growth rate of total garment imports to the United States, which was 5.89 percent. India was the second fastest among the top ten exporters, with a growth rate of 34.31 percent.² The South Asian countries as well as Cambodia and Indonesia substantially extended garment exports to the United States. This observation is against most predictions made in 2004

² For more information on the textile and garment industry in India, see Shimane (2006) and Uchikawa (1998, 1999).

(Adiga, 2004; Buerk, 2004; de Jonquières, 2004; Nordås, 2004).³ What is particularly noteworthy are the great performances of Bangladesh and Cambodia, which are LDCs that depend too much on clothing exports, and which were considered to be the most vulnerable among the exporters. Wearing apparel makes up three quarters of the total exports from the two countries as shown later, but their garment exports grew by over 20 percent in 2005. Garment exports to the United States from the rest of the countries such as Mexico, which is a close neighbor of the United States, those in Central America and the Caribbean, and other Asian economies mostly stagnated or declined from 2004 to 2005.

³ Mayer (2004), who is an exception, gives a more optimistic view on the prospects of the garment industry in Bangladesh.

Table 1. Exports of Knit and Woven Garments to the United States

Rank	Origin	Amount (Million US\$)			Rate of Change (%)	
		2004	2005	2006	2005/04	2006/05
	World	66,875	70,811	73,393	5.89	3.65
1	China	10,723	16,810	19,868	56.77	18.19
2	Mexico	6,845	6,230	5,448	-8.99	-12.55
3	Indonesia	2,402	2,882	3,675	19.99	27.50
4	India	2,277	3,059	3,242	34.31	6.00
5	Vietnam	2,506	2,665	3,158	6.37	18.49
6	Hong Kong	3,878	3,524	2,817	-9.13	-20.08
7	Bangladesh	1,872	2,268	2,809	21.17	23.85
8	Honduras	2,742	2,685	2,518	-2.09	-6.24
9	Cambodia	1,418	1,703	2,131	20.08	25.17
10	Philippines	1,765	1,822	1,999	3.21	9.70
11	Thailand	1,823	1,833	1,859	0.60	1.39
12	Sri Lanka	1,553	1,653	1,687	6.46	2.03
13	Guatemala	1,947	1,817	1,667	-6.66	-8.28
14	Dominican Republic	2,036	1,831	1,535	-10.09	-16.14
15	Italy	1,585	1,520	1,474	-4.12	-2.98
16	Pakistan	1,147	1,273	1,427	10.99	12.11

Note: Knit and woven garments are defined as commodities with HS codes of 61 and 62.
Source of data: U.S. Dept. of Commerce, Bureau of Census by World Trade Atlas.

The whole picture visibly changed due to the restriction on Chinese exports in 2006 (Table 1). The growth in garment exports from China was attenuated, even though the growth rate was as high as 18.19 percent. India's growth rate also declined to 6.00 percent which was a little higher than the decline in the total garment imports in the United States of 3.65 percent. On the other hand, other Asian exporters kept or recovered their growth momentum. Bangladesh, Cambodia and Indonesia accelerated their growth in garment exports, while Vietnam and the Philippines considerably enhanced their growth rates in 2006. It is considered that the favorable performances of the Asian exporters are at least partially attributable to the renewed imposition of the quantitative restrictions on the main part of

garment exports from China to the United States.

Table 2. Exports of Knit and Woven Garments to the EU15

Rank	Origin	Amount (Million US\$)			Rate of Change (Jan-Oct, %)	
		2004	2005	Oct. 2006	2005/04	2006/05
	World	65,552	69,864	65,323	7.83	10.74
1	China	13,714	20,361	19,032	54.41	6.84
2	Turkey	9,348	9,776	8,365	6.94	1.40
3	Bangladesh	4,578	4,356	4,853	-5.85	33.27
4	India	3,020	3,992	4,048	33.74	17.65
5	Romania	4,572	4,287	3,495	-4.61	-3.32
6	Hong Kong	2,394	2,056	2,771	-30.67	103.91
7	Tunisia	3,215	3,059	2,527	-2.39	-2.49
8	Morocco	3,004	2,814	2,420	-5.32	2.58
9	Indonesia	1,637	1,468	1,487	-14.10	23.94
10	Bulgaria	1,300	1,331	1,226	3.74	10.49
11	Poland	1,432	1,242	1,036	-12.79	-2.97
12	Vietnam	757	820	1,021	3.02	52.61
13	Sri Lanka	1,002	986	997	-2.83	22.74
14	Pakistan	1,126	959	937	-10.87	13.98
15	Thailand	1,079	955	898	-13.37	14.78
16	Hungary	928	934	790	5.11	-0.24
17	Czech Republic	884	602	576	-27.75	13.55
18	Cambodia	643	587	566	-10.32	19.77
20	Mauritius	636	550	499	-14.88	7.73
32	Madagascar	196	222	237	15.43	28.21
34	Myanmar	457	237	222	-49.45	10.75
-	China and Hong Kong	16,108	22,417	21,802	42.06	13.72

Note: The same as Table 1.

Source of data: Eurostat.

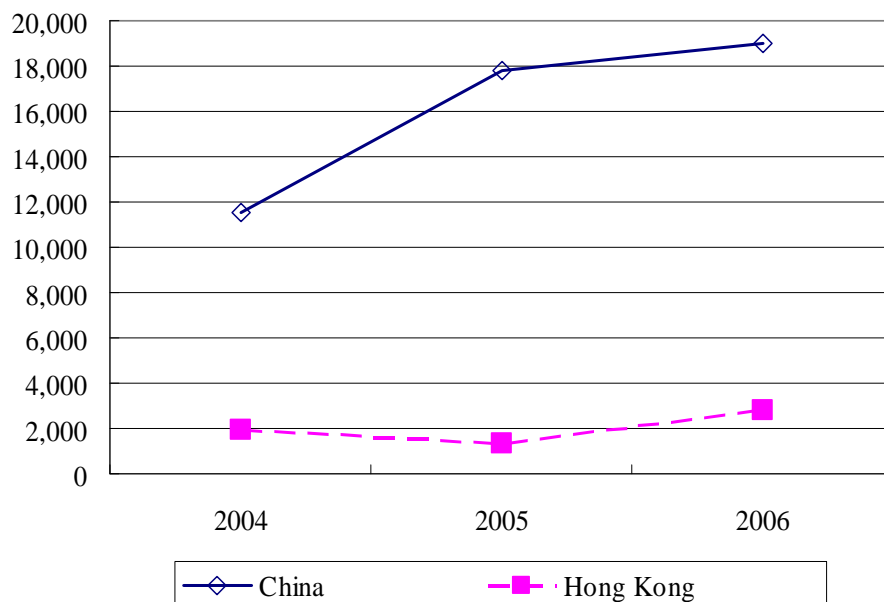
1.2. Garment Exports to the European Union

China and India also expanded garment exports to the EU in 2005. The growth rates for the two countries up to the third quarter of the year were 54.41 percent and 33.74 percent, respectively (Table 2). China's growth rate for January-October was lowered and even smaller than the world average of 10.74 percent in 2006. India's growth rate was also attenuated to

17.65 percent.

An interesting fact is that China's relatively sluggish growth for January-October 2006 was partially offset by a dramatic increase of 103.91 percent in garment exports from Hong Kong. It is possible that the garments that were crowded out due to the renewed restrictions might have found a way out through Hong Kong. The sum of exports from China and Hong Kong, however, grew by a still moderate rate of 13.72 percent. Since the value of exports from Hong Kong is far smaller than for China, such a high growth rate does not look impressive if the trends in garment exports from the two economies are juxtaposed in a diagram (Figure 1).

Figure 1. Exports of Knit and Woven Garments to the EU15 from China and Hong Kong
January-October: Million US\$



Source of data: The same as Table 2.

Another notable observation is that the low-income countries which succeeded in

expanding garment exports to the United States, such as Bangladesh, Cambodia, Indonesia and Pakistan, reduced the values of garment exports to the EU in 2005. In fact, there is good reason for LDCs to perform worse than non-LDCs. The EU had given up import quotas for LDCs even before 2005 (Bhattacharya and Rahman, 2001; p. 12 and other places). Therefore, the MFA phase-out that took place in 2005 did not provide any direct favors to the LDCs. Since the rest of the countries generally received a favorable effect from the removal of the quotas, relatively speaking, LDCs received unfavorable impacts.

In 2006, by contrast, many developing countries displayed drastic growth in garment exports to the EU. One of the most impressive source countries is Vietnam, which increased its exports by 52.61 percent. There are many Asian exporters whose growth rate was higher than the world average for January-October 2005-06, such as Bangladesh, Indonesia, Sri Lanka,⁴ Pakistan, Thailand, Cambodia and Myanmar.⁵ Madagascar, which is an LDC neighboring the African continent, recorded significant growth in garment exports to the EU in both 2005 and 2006.⁶

1.3. Garment Exports to Japan

Japan has never imposed any quotas on imports of textiles and clothing because it had been an exporting country for textiles and clothing, and had asked the United States and European countries for trade liberalization in the past. Therefore, there was no strong

⁴ See Arai (2006) and Tilakaratne (2006) on the garment industry in Sri Lanka.

⁵ For more information on the garment industry in Myanmar, see Kudo (2005a, b) and Kyaw (2001).

⁶ Concerning Madagascar's garment industry, see Razafimahefa (2006).

momentum for the kinds of structural changes that the United States and the European Union faced in the beginning of 2005. Thus, no visible change appears in the composition of garment imports by source country in Japan for 2005-2006 (Table 3).

China has been dominant in terms of its share of Japan's garment imports. China made up 82 to 84 percent of Japan's garment imports every year between 2004 and 2006. Italy was the second greatest exporter of garments to Japan for 2004-2006. However, the scale of the second greatest exporter is far smaller than that of China. The value of Italy's garment exports has gradually decreased since 2004 up to 2006, while its share of Japan's garment imports modestly declined from 4.9 percent in 2004 to 4.2 percent in 2006. Vietnam follows Italy with a share of 2.7 percent in 2004, which slightly increased to 2.8 percent in 2006. Thus, irrespective of the structural changes undergone in the other two greatest markets for garments, Japan has been isolated from it and has maintained its composition of exporters as it was before the MFA phase-out.

Table 3. Exports of Knit and Woven Garments to Japan

Rank	Origin	Amount (Million US\$)			Rate of Change (%)	
		2004	2005	2006	2005/04	2006/05
	World	20,460	21,188	22,380	3.56	5.62
1	China	16,862	17,448	18,668	3.48	6.99
2	Italy	995	965	946	-2.96	-1.95
3	Vietnam	548	588	616	7.30	4.69
4	Korea, South	265	374	302	41.11	-19.05
5	Thailand	231	237	241	2.31	1.89
6	United States	224	259	226	15.56	-12.53
7	France	221	191	171	-13.41	-10.58
8	India	107	141	171	31.63	20.94
9	Indonesia	117	115	135	-1.95	17.64
10	United Kingdom	98	85	77	-13.42	-9.69
11	Myanmar	45	53	71	17.50	35.57
22	Bangladesh	22	22	24	1.14	6.56
31	Cambodia	10	8	14	-11.99	61.53
36	Korea, North	26	14	8	-46.75	-45.18

Note: The same as Table 1.

Source of data: Japan Customs.

Finally, from the point of view of facilitation of exports from LDCs, Japan's de facto performance in opening its market to the LDCs is not impressive at all. Bangladesh and Cambodia, which are among the greatest exporters to the United States and the European Union, each make up only 0.1 percent of Japan's total garment imports. Another LDC, the only one to be exporting more garments to Japan, is Myanmar which made up 0.3 percent in 2006. Thus, whatever the systemic arrangements are, Japan is not a hospitable garment market for any LDC.

2. Two Dynamic LDCs: Bangladesh and Cambodia as Garment Exporters

2.1. Overview of Garment Exports from Bangladesh and Cambodia⁷

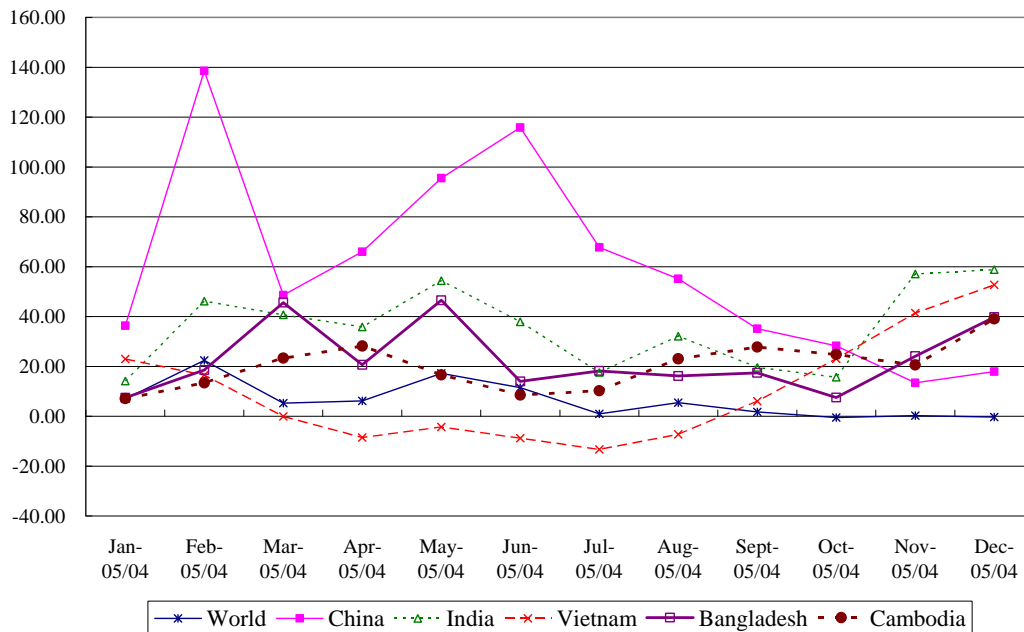
Before the MFA phase-out, most critics claimed that since multinational firms always look for the best combination of locations for their factories in order to minimize production costs, they will concentrate their production in only a few places in the world and withdraw their capital from anywhere else. Then, the garment industry in the low-income exporters would collapse because of the low level of technology incorporated into the shallow accumulation of physical and human capital, poor physical and institutional infrastructure, and distance from the main markets. Among the losing low-income countries, Bangladesh and Cambodia were considered to be the most vulnerable because they rely on clothing for as much as three quarters of the composition of all export commodities. Even inside the two countries the owners of garment factories widely publicized their distressed situation and asked their governments and international society for assistance. Most of the media in the two countries also stated that the export-oriented garment industries in the two countries were about to lose their competitiveness and decrease both exports and production. Therefore, the critics assumed that the clothing industries in Bangladesh and Cambodia were on the brink of extinction, and as a result, they rarely discussed positive factors in support of the growth of the two countries as strong garment exporters.

Contrary to the critics' predictions, and fortunately for the two countries, Bangladesh and Cambodia have fared successfully since 2005, and their good performance

⁷ Yamagata (2006a) is a review of the garment industry of the two countries from similar points of view.

does not seem to be attributed solely to the agreements made by China with the United States and the European Union because of the following observation.

Figure 2. Month-to-Month One-Year Growth Rates for Exports of Garments to the United States (%)



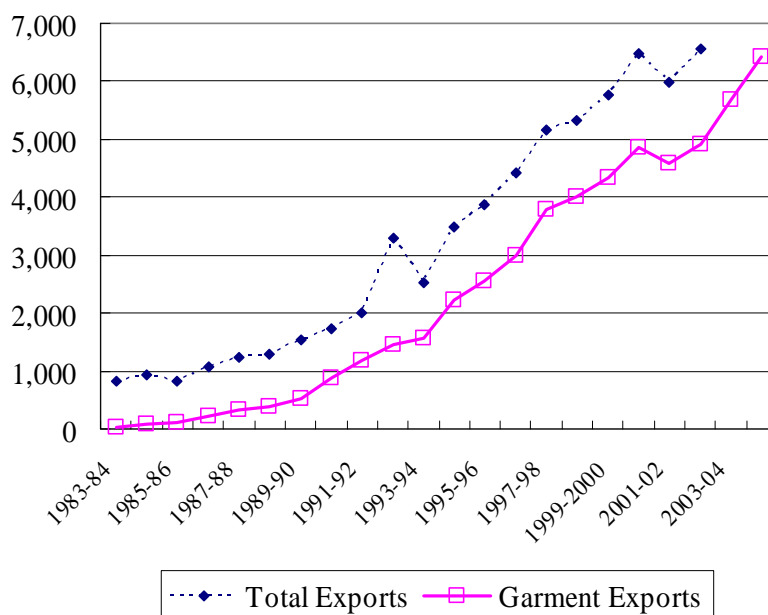
Source: The same as Table 1.

Figure 2 displays the month-to-month one-year growth rates of garment exports to the United States. The rates incorporate the growth in garments for a month in 2005 as against the same month in 2004. It is evident that China achieved extremely high rates of growth throughout 2005. Surprisingly, the value of garment exports in February 2005 was 140 percent higher than that in February 2004. The rate for June was also over 100 percent. Although the growth rate declined towards the end of 2005, it still kept only a little below 20 percent in the last two months in the year. The decline might have been affected by the

sentiment spread over the pressure to depress China’s garment exports to the United States and the EU.

It is noteworthy that even during the high time for China, when it entertained an extremely high growth in garment exports in the first half of 2005, Bangladesh and Cambodia maintained a high 20 to 30 percent level of growth in garment exports to the United States. Their growth rates were generally a little below that of India during the year. However, they are distinct from Vietnam, whose growth rates were negative during the second and third quarters of 2005 and where positive growth was recovered only after the renewal of the quantitative restriction system on China’s garment exports to the United States. In other words, the steady growth in garment exports from Bangladesh and Cambodia looks robust compared to what occurred in China.

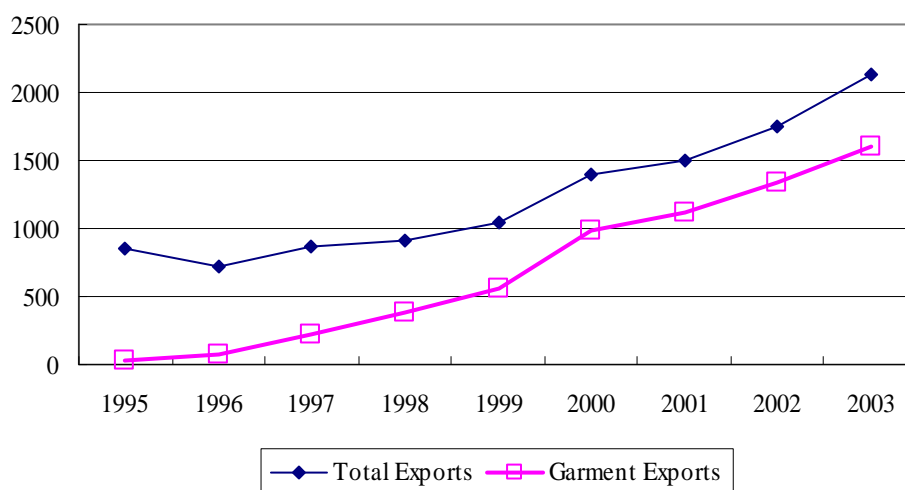
Figure 3. Garment Exports from Bangladesh (Million US Dollars)



Source: MOF (2005).

Export-oriented garment exports from Bangladesh were initiated in the beginning of the 1980s (Bhattacharya and Rahman, 2001; Hoque, Murayama and Rahman, 1995; Murayama, 2006; Rhee, 1990; Zohir and Paul-Majumder, 1996). A Korean investor was deeply involved in the inception of the business in Bangladesh. In the first half of the 1980s the number of garment exports from Bangladesh was almost nil (Figure 3). But then garment exports grew rapidly, so that in the beginning of the 1990s garments made up about a half of total exports from Bangladesh. The growth has continued almost without interruption and the value of garment exports reached three-quarters of the value of total exports at the end of the 1990s. Though a negative impact from September 11 is apparent in 2001, garment exports quickly picked up after that. Thus, the rapid growth of garment exports has continued for a quarter of a century with little disturbance.

Figure 4. Garment Exports from Cambodia (Million US Dollars)



Sources: (1995-2001) Hach and Acharya (2002), Table 3.4, p. 19; (2002-2003) Sothea and Hach (2004).

Cambodia's growth in garment exports is more impressive than that of Bangladesh

in a sense. While the average annual growth rate⁸ in the nominal value of garment exports from Bangladesh for 1983/84-2003/04 is 24.4 percent, the same growth rate for Cambodia for 1995-2003 is 48.3 percent. For less than a decade the garments became the dominant export commodity, making up three-quarters of Cambodia's total exports. This performance appears even more impressive once the serious gun battle occurring in 1997 is taken into account (Barron, 2003). Irrespective of the incident, the growth trend in garment exports was not disrupted. More astonishingly, foreign direct investment in the garment industry in Cambodia even increased in 1997 (Thoraxy, 2003, pp. 38-43; Yamagata, 2006b, pp. 90-91). This anecdote testifies how strong the growth momentum of the industry at that time was. Hach, Huot and Boreak (2001), Salinger, et al. (2005), and Vuthy & Hach (2007), also demonstrate the strengths of the garment industry in Cambodia.

2.2. Features of the Garment Industry in Bangladesh and Cambodia

There are interesting features of the garment industry in Bangladesh and Cambodia, which might be factors in determining the admirable performance in garment exports of the two countries. One feature is shared by both countries and the other two features are distinct between the two countries.

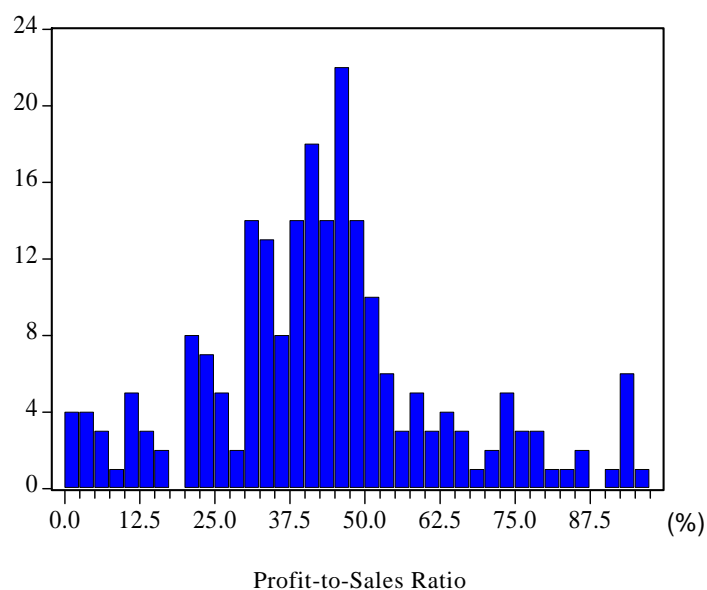
High Profitability on Average

The similarity is in the high average profitability of the export-oriented garment

⁸ The average growth rate is given by the regression of the logarithm of the nominal value of garment exports on a time trend.

business. This observation is based on two firm-level surveys conducted by the Institute of Developing Economies (IDE) in cooperation with research institutes in Bangladesh and Cambodia (Fukunishi et al., 2006; Yamagata, 2006b).

Figure 5. Distribution of Firms by Profit-to-Sales Ratio: Bangladesh
No. of firms



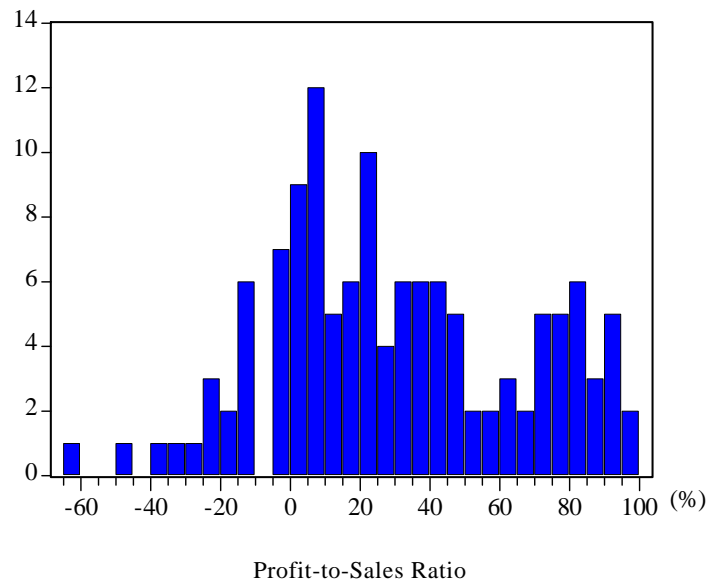
Note: The mean, median and standard deviation are 43.1, 42.5 and 20.2, respectively.
Source of data: Fukunishi et al. (2006).

Figures 5 and 6 are diagrams depicting the two data sets which are comprised of 222 sample firms for Bangladesh and 164 sample firms for Cambodia. Details on the data for Bangladesh can be found in Fukunishi et al. (2003), and for Cambodia, in Yamagata (2006b). Both diagrams are histograms of the sample firms by profit-to-sales ratio.⁹ It is evident from

⁹ The definition of profits in these papers is sales minus intermediate inputs, workers' remuneration, energy, rent for buildings and land, interests, and insurance fees. The present value of machinery is estimated for the data for Bangladesh collected in 2001, which is not referred to in this paper because of inconsistencies with the Cambodia data in terms of timing of collection. See Bakht et al. (2006) for the details on the 2001 data.

Figure 5 that there were many firms with considerably high profit-to-sales ratios in Bangladesh in 2003. Most of the sample firms exhibit profit-to-sales ratios as high as 30 to 50 percent. There happened to be no sample firms recording negative profits in this data set.

Figure 6. Distribution of Firms by Profit-to-Sales Ratio: Cambodia
No. of firms



Note: The sample size for this diagram was reduced to 127 firms due to the elimination of samples with insufficient information (18 firms) and with negative value added (19 firms). The mean and median of the profit-to-sales ratios are 30.20 percent and 24.90 percent, respectively. The standard deviation is 35.58.
Source: Yamagata [2006b], Figure 5.

The distribution of sample firms in Cambodia also shows that most of the firms exhibit positive profits (Figure 6). The mean and median of the profit-to-sales ratios are 30.20 percent and 24.90 percent, respectively. It is evident that there are quite a few firms demonstrating ratios of 70 to 100 percent, which increased the standard deviation of the ratio by as much as 35.58 percent. Thus, for many firms the export-oriented garment business is profitable in Cambodia.

Size and Number of Firms

An interesting difference between the garment industries in Bangladesh and Cambodia is that the industry in Bangladesh is comprised of many relatively small firms, while in Cambodia it is composed of a relatively small number of large firms. Table 4 is formulated with the member list of the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), which is the largest industrial association of export-oriented garment firms in Bangladesh, and the equivalent organization in Cambodia, which is the Garment Manufacturers Association in Cambodia (GMAC). As is sharply evident from Table 4, the number of firms is fifteen times greater in Bangladesh than in Cambodia, while the value of garment exports in Bangladesh was only four times greater than in Cambodia in 2003 (compare Figures 3 and 4). This contrast is more accentuated by the fact that there is another influential industrial organization of export-oriented knitwear-producing firms in Bangladesh, which has more than 600 member firms.¹⁰

Table 4. Number of Firms and Workers in Export-oriented Garment-producing Firms in Cambodia and Bangladesh in 2003

	Bangladesh	Cambodia
Number of firms	3,115	196
Average number of workers	399	903
Median of the number of workers	313	559
Standard deviation of the number of workers	373	1,098

Source: Member lists of the Garment Manufacturers Association in Cambodia (GMAC) obtained in 2003 and the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) (2003).

¹⁰ This is the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), specializing in the knitwear business. The core members started the knitwear business in a port town, Narayanganj, which is 17 km south-east of the capital city of Bangladesh, Dhaka. Some firms are members of the BGMEA and the BKMEA at the same time. The knitwear industry in Bangladesh is analyzed by Bakht et al. (2006).

Sources of Capital

This first difference in scale and number of firms between the garment industries in Bangladesh and Cambodia seems to be caused by the second difference in source of capital. The surveys conducted in 2003 are referred to again in Table 5. The table demonstrates a stark contrast between the two countries in terms of the source of capital at present. In Bangladesh the involvement of foreign capital is relatively low,¹¹ while it is actively involved in Cambodia. According to the data set, a majority of sample firms were 100 percent foreign-owned and the capital came from Hong Kong, Taiwan and China (Yamagata, 2006b, p. 92). As mentioned before, the export-oriented garment business was initiated through the deep involvement of a Korean firm in Bangladesh. At least in the initial phase, Korean investors led the development of the garment industry in the country, and they still keep a certain presence in Bangladesh. However, as local firms more rapidly increased, even in the downtown areas of big cities such as Dhaka, Chittagong and Narayanganj, the relative presence of foreign capital was lessened in Bangladesh. Amid such an emergence of small local firms, Bangladesh has maintained dramatic growth in garment exports for a quarter of a century as demonstrated in Figure 3.

¹¹ A caveat is that large firms, which are more likely to have involvement from foreign capital than small firms, might be underrepresented in the data for Bangladesh, because a large firm was more likely to decline the interview than a small firm. For details, see Fukunishi *et al.* (2006, p. 84). However, the general tendency towards the relatively low profile of foreign-owned firms and joint ventures is certain even if that under-representation is taken into account.

Table 5. Sources of Capital: From the Surveys Conducted in 2003

	Bangladesh	Cambodia
100% owned by foreigner	2	125
Joint venture with local investors	0	7
Purely local	220	14
Others or no answer	0	18
All sample firms	222	164

Source: Fukunishi et al. (2006), Yamagata (2006b).

Concluding Remarks

This paper displays the structural changes in the world garment trade which took place as post-MFA responses. There was remarkable shuffling among the source countries for garment exports towards the two greatest garment markets in the world, namely the United States and the European Union. China and India increased their garment exports to the two markets tremendously in the first half of 2005. After renewed quantitative restrictions on Chinese exports were agreed, the growth rate of China's garment exports was considerably lowered.

In the meantime, two LDCs, namely Bangladesh and Cambodia, overturned the predictions and have emerged as tough exporters of garments. The two countries maintained rapid growth even during the high time for China, when it entertained triple-digit growth, and have continued steady expansion in garment exports to the two markets so far.

Amid these structural changes Japan has been isolated from visible impacts of the MFA phase-out. The Japanese garment market looks static in the sense that the market gets along with only familiar counterparts and appears to be numb from dealing with emerging exporters.

Nobody knows for sure what will happen after 2008. However, the renewal of quotas on Chinese garment exports revealed that the non-discrimination principle which the WTO earnestly advocates is not strictly applicable to trade between big economies. Thus, there is no guarantee that the renewed quantitative restrictions will be completely lifted and the trade in textiles and clothing with China will be thoroughly liberalized by the United States and the European Union in 2008.

Meanwhile, Bangladesh, Cambodia and some other low-income countries may penetrate more into the markets of developed countries until either labor disputes, wage increases, skilled labor shortages or insufficient physical and institutional infrastructure becomes a bottleneck to further expansion of the garment industry. They have somehow dispensed with addressing those problems thoroughly so far. If they handle those issues cleverly, they would become really competitive, as commented on with reference to the garment industry in Bangladesh by US Trade Representative Rob Portman at the WTO ministerial meeting in Hong Kong in December 2005.¹²

¹² An article contributed by Associated Press correspondent Foster Klug was published in several media. The article contains the following paragraph: *“They (Bangladesh) are extremely competitive, globally competitive, and that creates an issue for us domestically that I don’t think we’ll be able to overcome in the next 24 hours,” said U.S. Trade Representative Rob Portman.* Please refer to the *Financial Express* for December 18, 2005, a newspaper published in Bangladesh, among others.

References

- Adiga, Aravind [2004], "Hanging by a Thread: Textile Factories throughout Asia Face Extinction as a Long-standing Global Trade Pact is Set to Expire," *Time*, November 1, pp. 36-38.
- Amjad, Rashid. ed. [1981], *The Development of Labour Intensive Industry in ASEAN Countries*, Bangkok: International Labour Organisation, Asian Employment Programme.
- Amsden, Alice H. [1989], *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press.
- Arai, Etsuyo [2006], "Readymade Garment workers in Sri Lanka: Strategy to Survive in Competition," in Mayumi Murayama ed., *Employment in Readymade Garment Industry in Post-MFA Era: The Case of India, Bangladesh and Sri Lanka*, Chiba: Institute of Developing Economies, pp. 31-52
(http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_140_02.pdf).
- Bakht, Zaid; Md. Salimullah; Tatsufumi Yamagata; and Mohammad Yunus [2006], "Competitiveness of a Labor-Intensive Industry in a Least Developed Country: A Case of the Knitwear Industry in Bangladesh," mimeographed, Chiba, Japan: Institute of Developing Economies.
- Bangladesh Garment Manufacturers and Exporters Association (BGMEA) [2003], *Members Directory 2002-2003*, Dhaka: BGMEA.
- Barron, Porter [2003], "New Orders: Violence Shatters the Little Stability Gained Since 1992," *Cambodia Daily*, Tenth Anniversary Supplement, August 20, pp. 14-15.
- Bhattacharya, Debapriya; and Mustafizur Rahman [2001], "Globalization and Macro Implication of the Growth of Garment Industry in Bangladesh," in Pratima Paul-Majumder and Binayak Sen, eds., *Growth of Garment Industry in Bangladesh: Economic and Social Dimensions*, Dhaka: Bangladesh Institute of Development Studies, pp. 2-26.
- Buerk, Roland [2004], "Social Upheaval Feared When End of Import Quotas Hits Bangladesh," *Financial Times*, July 24-25.
- de Jonquières, Guy [2004], "Clothes on the Line: The Garment Industry Faces a Global Shake-up as Quotas End," *Financial Times*, Monday, July 19, p. 9.
- Fukunishi, Takahiro; Mayumi Murayama; Tatsufumi Yamagata and Akio Nishiura [2006] *Industrialization and Poverty Alleviation: Pro-Poor Industrialization Strategies Revisited*, Vienna: United Nations Industrial Development Organization (UNIDO),
(<http://www.unido.org/file-storage/download/?file%5fid=59561>).
- Gereffi, Gary and Olga Memedovic [2003], *The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries*, Vienna: United Nations Industrial Development Organization (UNIDO).
- Hach, Sok; Chea Huot and Sik Boreak [2001], *Cambodia's Annual Economic Review - 2001*, Phnom Penh: Cambodia Development Resource Institute.
- Hach, Sok; and Sarthi Acharya [2002], *Cambodia's Annual Economic Review - 2002*, Phnom Penh: Cambodia Development Resource Institute.
- Hoque, Khondoker Bazlul; Mayumi Murayama and S. M. Mahfuzur Rahman [1995] *Garment Industry in Bangladesh: Its Socio-Economic Implications*, Joint Research Program Series No. 16, Tokyo: Institute of Developing Economies.

- Ito, Takatoshi [1992], *The Japanese Economy*, Cambridge, Massachusetts and London, England: MIT Press.
- Kudo, Toshihiro [2005a], “Stunted and Distorted Industrialization in Myanmar,” Discussion Paper No. 38, Institute of Developing Economies (http://www.ide.go.jp/English/Publish/Dp/pdf/038_kudo.pdf).
- Kudo, Toshihiro [2005b], “The Impact of United States Sanctions on the Myanmar Garment Industry,” Discussion Paper No. 42, Institute of Developing Economies (http://www.ide.go.jp/English/Publish/Dp/pdf/042_kudo.pdf).
- Kyaw, Moe [2001], “Textile and Garment Industry: Emerging Export Industry,” in Toshihiro Kudo ed., *Industrial Development in Myanmar: Prospects and Challenges*, Chiba, Japan: Institute of Developing Economies, pp. 143-173.
- Ministry of Finance (MOF), Government of the People’s Republic of Bangladesh [2005] *Bangladesh Economic Review 2005*, Dhaka: MOF.
- Mayer, Jörg [2004], “Not Totally Naked: Textiles and Clothing Trade in a Quota Free Environment,” United Nations Conference on Trade and Development Discussion Paper No. 176, December.
- Murayama, Mayumi [2005], “Factory Women under Globalization: Incorporating Japanese Women into the Global Factory Debate,” in Mayumi Murayama, ed., *Gender and Development: The Japanese Experience in Comparative Perspective*, Basingstoke and New York: Palgrave Macmillan, pp. 223-256.
- Murayama, Mayumi [2006] “Globalisation and Female Employment in Bangladesh: Readymade Garment Workers in Post-MFA Era,” in Mayumi Murayama ed., *Employment in Readymade Garment Industry in Post-MFA Era: The Case of India, Bangladesh and Sri Lanka*, Chiba: Institute of Developing Economies, pp. 53-101 (http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_140_03.pdf).
- Nordås, Hildegunn Kyvik [2004], “The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing,” Discussion Paper No. 5, Geneva: World Trade Organization (http://www.wto.org/english/res_e/booksp_e/discussion_papers5_e.pdf).
- Pang Eng Fong, ed. [1988], *Labour Market Developments and Structural Change: The Experience of ASEAN and Australia*, Singapore: Singapore University Press.
- Razafimahefa, Ivohasina Fizara [2006], *Export-oriented Manufacturing Industry in Madagascar: Roles in Poverty Reduction*, Visiting Research Fellow Monograph Series No. 409, Chiba, Japan: Institute of Developing Economies (<http://www.ide.go.jp/English/Inter/Vrf/pdf/409.pdf>).
- Rhee, Yung Whee [1990] “The Catalyst Model of Development: Lessons from Bangladesh’s Success with Garment Exports,” *World Development*, Vol. 18, No. 2, February, pp. 333-346.
- Salinger, Lynn; Sok Hach; Chea Samnang; Neou Seiha; Mauro Pereira; Heinz Reich; and Jan Uurlings [2005], *Measuring Competitiveness and Labor Productivity in Cambodia’s Garment Industry*, Washington, D.C.: U.S. Agency for International Development.
- Shimane, Yoshie [2006], “Garment Industry in India: Study of Firms in Delhi Region,” in Mayumi Murayama ed., *Employment in Readymade Garment Industry in Post-MFA Era: The Case of India, Bangladesh and Sri Lanka*, Chiba: Institute of Developing Economies,

- pp. 103-122 (http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_140_04.pdf).
- Sothea, Oum; and Sok Hach [2004], *Cambodia Economic Watch*, Phnom Penh: Economic Institute of Cambodia, October.
- Thoraxy, Hing [2003], *Cambodia's Investment Potential: Challenges and Prospects*, Phnom Penh: Japan International Cooperation Agency.
- Tilakaratne, W. M. [2006], "Phasing Out of MFA and The Emerging Trends in the Ready Made Garment Industry in Sri Lanka," in Mayumi Murayama ed., *Employment in Readymade Garment Industry in Post-MFA Era: The Case of India, Bangladesh and Sri Lanka*, Chiba: Institute of Developing Economies, pp. 1-30 (http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_140_01.pdf).
- Uchikawa, Shuji [1998], *Indian Textile Industry: State Policy, Liberalization and Growth*, New Delhi: Manohar Publishers and Distributors.
- Uchikawa, Shuji [1999], "Economic Reforms and Foreign Trade Policies: Case Study of Apparel and Machine Tool Industries," *Economic and Political Weekly*, Vol. 34, No. 48, November 27, pp. M138-M148.
- Vuthy, Chan; and Sok Hach [2007], *Cambodia's Garment Industry Post ATC: Human Development Impact Assessment*, Phnom Penh: Economic Institute of Cambodia (<http://www.eicambodia.org/UNDP/index.php>).
- Wade, Robert [1990], *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*, Princeton: Princeton University Press.
- Yamagata, Tatsufumi [2006a] "Two Dynamic LDCs: Cambodia and Bangladesh as Garment Exporters," *Economic Review* (Economic Institute of Cambodia), Vol. 3, No. 3, July-September, pp. 8-12, (http://www.eicambodia.org/downloads/files/ER_Vol3_No3_Two_Dynamic_LDCs.pdf).
- Yamagata, Tatsufumi [2006b] "The Garment Industry in Cambodia: Its Role in Poverty Reduction through Export-Oriented Development," *Cambodian Economic Review*, Issue 2, December, pp. 81-136 (http://www.cea-cambodia.org/pdf/Cambodian_Economic_Review_II.pdf).
- Yamazawa, Ippei [1988], "The Textile Industry," in Ryutaro Komiya, Masahiro Okuno and Kotaro Suzumura, eds., *Industrial Policy of Japan*, Tokyo: Academic Press Japan, pp. 395-423.
- Zohir, Salma Chaudhuri and Pratima Paul-Majumder [1996] *Garment Workers in Bangladesh: Economic, Social and Health Condition*, Research Monograph 18, Dhaka: Bangladesh Institute of Development Studies.