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## Chapter 1

# **Introduction**<sup>†</sup>

Takahiro Fukunishi<sup>a</sup>

#### Abstract

The contribution of the garment industry to economy and employment opportunity is considerable particularly in low-income countries, but it has not been appreciated well as firms are considered to have little capacity of technological upgrading. Despite the critical views, the industry found to be capable to continue growth without degradation of working conditions after the trade liberalization in the apparel market. However, success of garment exports is neither uniform nor shared by all low-income countries. Experiences in Asia and Africa show that a development pattern has been affected by international politics through the market access as well as the country specific factors such as labor market conditions. This project aims at demonstrating heterogeneity of the development path in low-income countries through seven country studies.

Keywords: exports, garment, low-income country

### 1. Motivation: Trap, Detour, or Trigger?

People have two contrasting images for apparel products: they are fascinated in retail shops while they concern that poor people are squeezed in sweatshops. In development studies, the garment industry is occasionally criticized as yielding little value added, and having low technological sophistication and little learning opportunity. Technological

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<sup>&</sup>lt;sup>a</sup> Institute of Developing Economies, fukunis@ide.go.jp

simplicity allows easy entry to the assembly process in developing countries, while the retail market in developed countries is dominated by a small number of retailers due to the high cost to establish brands and marketing channels. This creates considerable asymmetry in negotiation power, or governance, between assemblers and retailers, where the latter drives the market (Gereffi 1999). It is argued that industrialization in the most populous countries, namely China and India, has accelerated competition among assemblers in developing countries, resulting in the decline in output prices and wages or the degradation of working conditions (Kaplinsky 2000). The garment industry has been regarded as a trap or, at best, meaningless for economic growth, and its growth is occasionally considered as a "race to the bottom" or "immiserising growth". Since the rise of China was accompanied by the liberalization of the apparel market through termination of the Multifibre Arrangement (MFA), pessimistic views prevailed in developing countries in the early 2000s.<sup>1</sup>

However, recent studies demonstrate the capacity of garment firms in low-income countries to cope with the increased competition. After the liberalization, export prices decreased as expected, but the export volume grew in many exporting countries. According to Asuyama et al. (2011), the Cambodian garment industry achieved productivity growth through firm turnover, which is the replacement of unproductive firms by productive entrants, as well as firm-level productivity growth. They also suggested that productivity growth enables firms to maintain wages and profits under intensified competition. Acevedo and Robertson (2011, Chapters 4 and 6) indicated that the wage premium of the garment industry relative to other industries increased after the MFA phase-out in Bangladesh, Vietnam, Pakistan, India and Cambodia. The decline in output prices leads to a decrease in wages assuming constant productivity and competitive market.<sup>2</sup> Therefore, these results suggest the possibility that garment firms in low-income countries are able to deal with competition through technological progress and firm turnover rather than simply cutting wages.<sup>3</sup>

Table 1 shows the top 15 countries exporting garments to the US market since 1970. Top exporters shifted from high-income countries to low-income countries (evaluated at present), and it clearly shows that garment exports grew in the early stage

<sup>&</sup>lt;sup>1</sup> Studies simulating the apparel trade after the MFA phase-out also predicted the loss of small exporters. See for example, Nordås 2004.

<sup>&</sup>lt;sup>2</sup> According to the Stolper-Samuelson Theorem.

<sup>&</sup>lt;sup>3</sup> More general evidence on industry-level productivity growth is provided in literature on firm dynamics in the manufacturing sector including the garment industry (for example, Pavcnik 2002 for the Chilean industry).

of industrialization in each country. Although no robust causation is presented yet, the surge of garment exports preceded industrialization in a substantial number of developing countries.<sup>4</sup> One possible channel from garment exports to industrialization is the increase in number of local manufacturers. The most significant case is Bangladesh, where local assemblers comprise more than 90% of the firms in the industry.<sup>5</sup> It is reported that local firms have a considerable share in Sri Lanka, Mauritius, Vietnam, Pakistan, Madagascar, and others (Ashukolala and Rajapatirana 2000; Bowman 1991; Goto 2012 [Chapter 2 in this report]; Fukunishi and Ramiarison 2011). Their survival in the liberalized market suggests that local firms accumulate capital and knowledge of export markets. This will directly and indirectly encourage the start of new industries, and in some low-income countries, such as Vietnam and Bangladesh, new export-oriented industries have already started growing after the success of garment exports.

The other important implication of the garment industry is employment creation. Given the high intensity of low-skilled labor, the industry employs a large number of uneducated female workers.<sup>6</sup> In some countries, employed workers exceed a million. Many are migrant workers from rural areas, whose alternative employment is in the informal sector or subsistent agriculture.<sup>7</sup> Studies demonstrate that wages in the garment sector are higher than those in the informal or agricultural sector (Acevedo and Robertson 2011), and their earnings are sometimes the main source of income for the household (Murayama 2008). Working conditions are frequently criticized for long working hours, delayed or no payment, unstable work contracts, and child labor. While there are both supporting and counter arguments on this issue, working conditions are generally improving due to the buyers' increased awareness of labor compliance. In Cambodia, compliance with labor laws is promoted by international organizations, and underpins the increase in real wages in the liberalization (Asuyama et al. 2011).

While the garment industry is growing in many low-income countries, growth is neither uniform nor shared by all low-income countries. Despite the high concentration of low-income countries, the export-oriented garment industry has not

<sup>&</sup>lt;sup>4</sup> The series of studies on the transition of comparative advantage by Hausmann and Klinger may demonstrate the industrialization process in developing countries.

<sup>&</sup>lt;sup>5</sup> See Chapter 6 in this report.

<sup>&</sup>lt;sup>6</sup> The exception is Pakistan, where most garment workers are male. This is discussed in Chapter 4.

<sup>&</sup>lt;sup>7</sup> However, garment workers do not necessarily belong to the most disadvantaged group in society (Murayama 2008)

prospered in sub-Saharan Africa except in a few cases, and in some Asian countries, e.g., Myanmar and Laos, the garment industry has not been successful. Table 2 compares the growth rate of garment exports among the low-income countries. It shows that among those that are growing, the growth rate differs; for example, growth in Vietnam is far higher than Pakistan, and Madagascar recently suffered from a considerable reduction. Moreover, the source of growth differs by country. According to the studies by some of the authors of this report, the Bangladeshi industry gained competitiveness mainly by reducing profits, whereas the Cambodian industry enhanced productivity while maintaining profits and wages (Fukunishi et al. 2010). Upgrading of product quality is another way to deal with intensified competition, and in this regard, we see significant differences in export prices. Table 2 in Chapter 4 shows that the average export price from Bangladesh and Pakistan tends to be lower than that in other countries.

Given the considerable presence of the garment industry, such heterogeneity in the growth pattern must have an effect on the economy and poverty. In fact, there is a stark contrast in economic growth and poverty reduction between the countries successful in garment exports and those not. Among low-income countries, Bangladesh, for instance, has achieved steady economic growth and reduction of poverty rate for the last decade. Even among the growing exporters, the outcome may differ. For instance, an industry with little productivity growth is more susceptible to future market shocks because of high costs or less potential for technological upgrading. As for poverty reduction, the difference in export price across countries may yield an international wage gap through the value of the marginal products of labor. If those price gaps represent a difference in product quality, it may affect the skill intensity in employment and the skill premium in wages. Therefore, investigation of the garment industry is indispensable for evaluating prospective economic growth and poverty reduction in low-income countries, but few studies explicitly approach this from comparative perspectives. This project aims at filling this important gap through comparative country studies in low-income countries in Asia and Africa.

#### 2. Approach in this Project

There are two main types of literature on the garment industry in developing countries. The cross-country studies analyze the change in export value and prices after the MFA termination based on trade data (Whally 2006; Kowalski and Molnar 2009;

Harrigan and Barrows 2009). While their findings on the trend of product specialization, differentiation and quality changes are informative for understanding a garment firm's strategy for coping with the liberalization, they neither focus on low-income countries nor investigate the difference in strategy among countries. The other line is country-specific studies. Although there are a number of country studies in low-income countries, few studies provide a detailed analysis on firms or workers after the trade liberalization.<sup>8</sup> They depict the changes in the industry or workers under the increased competition, but a comparative perspective is lacking or weak.

Based on country studies, this project emphasizes the heterogeneity in the development of the garment industry in low-income countries. The originality of our project compared with the existing literature encompasses several aspects. The collection of country studies demonstrates the difference in the development pattern by country, which is not achieved by single-country studies, whereas individual chapters capture country-specific factors, such as market access, political conditions and labor market conditions, and link them with the development path of the garment industry. Moreover, our studies are based on firm-level or worker-level information so that we can incorporate the heterogeneity of firms or workers. As the literature argues, firms are heterogeneous in, for example, productivity, financial capacity and marketing (Metiz 2003; Foster et al. 2008), and this generates within- and across-country differences in firm performance and strategy for coping with competition. Market shocks including changes in market access are likely to cause different impacts on workers by skill and gender (Goldberg and Pavcnik 2008). A similar approach is taken by Acevedo and Robertson (2011), which focuses on employment and wages in the garment industry after the MFA phase-out, covering nine countries including two low-income countries.<sup>9</sup> We place more weight on the firm side, and cover low-income countries exclusively.

This project covers seven countries, namely Bangladesh, Cambodia, Kenya, Madagascar, Myanmar, Pakistan and Vietnam. With the exception of Kenya and Myanmar, these countries have a large export-oriented garment industry. Bangladesh, Cambodia, Pakistan, and Vietnam have been ranked in the top 10 exporters to either the US or EU market for the last several years. In Madagascar, textiles and apparel accounted for a large share of total exports before being seriously hit by political

<sup>&</sup>lt;sup>8</sup> Rahman et al. (2008) and Murayama (2008) for Bangladesh, Goto et al. (2011) for Vietnam, Economic Institute of Cambodia (2007) and Asuyama et al. (2011) for Cambodia, Kaplinsky and Morris (2006) for Africa.

<sup>&</sup>lt;sup>9</sup> It incorporates Vietnam, which is treated as a low-income country in this report.

turmoil in 2009 (Table 3). Kenya and Myanmar experienced rapid growth of garment exports around the early 2000s, but the industry declined thereafter. They are included in our scope since their experiences are important for understanding why some low-income countries have not succeeded in garment exports. Myanmar's failure is closely related with the economic sanctions imposed by the US government, which implies that politics have a strong influence on the apparel trade. As the apparel trade has been driven by political intervention through market access, the Myanmar case deserves scrutiny. Kenya's experience is typical in Africa where local garment firms lost competitiveness in domestic as well as export markets after the trade liberalization. This represents the sharp contrast in labor-intensive industrialization between Africa and other regions.

Bangladesh, Cambodia, Kenya, Madagascar and Myanmar are low-income countries according to the World Bank classification, which defined \$1,050 as the threshold in 2010 (World Bank 2012).<sup>10</sup> Although Pakistan and Vietnam are lower middle income countries, their GNI per capita is barely above the threshold at \$1,050 for Pakistan and \$1,160 for Vietnam (Table 3).

The individual chapters for each country study do not necessarily share the same approach, and hence the comparison is not based on a completely systematic methodology, but rather on the general framework of international trade and global value chains. Despite this limitation, we expect that the substantial heterogeneity in market access, political situation, resource endowment and labor market conditions among the countries will enable assessment of the relationship between those factors and the development path of the industry. Cross-country comparison of development experience will be extended in the introductory chapter and the chapter devoted to comparison of firm performance in the final version.

#### 3. Overview of the Apparel Trade

This section provides a basic overview of the apparel trade as background information to help understand the individual chapters.

The world garment trade has been driven by the markets of the developed countries that are the largest and dominant importers. The import value of the US,

<sup>&</sup>lt;sup>10</sup> World Bank's Atlas method.

European Union and Japan accounted for 71.3% of the world's total imports in 1990 and its share increased to 80.4% in 2002 (WTO 2003). Although there is trade within developed countries, in particular within the EU, most of the trade flow is from developing countries to developed countries. This fact is basically consistent with the theory of comparative advantage, given that the factor endowment pattern of developing countries is the relatively rich endowment of low-skilled labor. Further corroborating comparative advantage, garment exports have been rapidly increasing in low-income countries among developing countries. Figure 1 indicates the share of imports from low-income countries as of 1995 in US apparel import value, excluding imports from China to avoid its dominant effect on the garment trade. While it was less than 1% in 1970, the share increased rapidly during the 1990s and 2000s and finally became 27.0% in 2008. If imports from China are included, it accounts for 61.7% of the total US imports. Although only the changes after 2000 are available for the EU market, the share of imports from low-income countries is as high as in the US market. Even without China's impact, the growth and presence of garment exports from low-income countries is evident in the world garment market.

The growth of low-income countries entails the exit of middle- and high-income exporters from the world market. Until the 1990s, relatively rich East and Southeast Asian countries and some Latin American countries were in the top 15, and after 2000 they gradually stepped down and were replaced by low-income countries such as Indonesia, India, Vietnam and Bangladesh (Table 1).<sup>11</sup> This indicates not only a shift in production location as labor costs rise in the original locations, but also the smooth adoption of technology in the new locations. This shift in production and transfer of technology to low-income countries was realized mainly through FDI. Direct investment in Korean, Hong Kong's and Taiwanese garment firms was most impressive in the 1990s, and in the 2000s Chinese, Indian and Southeast Asian firms joined in the investment in low-income countries. It is argued that the technology of the garment assembly process, particularly that of low-priced products, is simple and mature, and that efficient production is possible with unskilled workers and poor infrastructure if management skills are provided (Lall and Wignaraja 1994).

The shift in production sites is accelerated by the fragmentation in garment production. While the garment assembly process is labor intensive, spinning and weaving processes are more capital intensive and the designing process is knowledge

<sup>&</sup>lt;sup>11</sup> Indonesia was classified as low income until 2002, and so was India until 2006, and Vietnam until 2009.

intensive. Due to such nature, the separation of each process minimizes the cost of production, though coordination of the processes generates transaction costs particularly when they are located far apart. Recent developments in international communication and transportation have made geographical separation of each process feasible over longer distances. Buyers in developed countries create detailed specifications of products and place their orders with trading companies that are mostly located in East Asia. Trading companies assign textile firms and assembly firms from all over the world, and place their orders with them (UNCTAD 2002; Gereffi and Memedovic 2003). As communication and transportation develop, trading companies can choose from more distant locations and reduce costs further.

Although the shift in production sites to low-income countries is consistent with factor endowment, it is also driven by the market institution. Garment exports to the US and EU markets used to be under the Mutifibre Arrangement (MFA), which contained a quota on main exporting countries. The quota was increased every year, but it was smaller than the demand for products of large exporters, and garment firms were searching for countries with no quota; low-income countries were a good alternative location. Thus, the rapid development of exports from low-income countries did not always reflect their true competitiveness, and in fact, some predictions after the MFA phase-out indicated loss of low-income countries as well as significant growth of China and India (e.g., Nordås 2004).

The MFA was terminated at the end of 2004. Although a voluntary quota remained for the largest exporter, China, until 2007 in the EU market and 2008 in the US market, items under the quota were limited and significant trade liberalization was observed (Kowalski and Molnar 2009). As predicted, export prices fell in many countries; according to an estimation by Harrigan and Barrows (2009), prices fell in 12 countries out of the top 20 exporters including Bangladesh, Cambodia and Pakistan. Exports from China and India grew and African countries including Kenya experienced reductions (Table 2). However, many low-income exporters such as Vietnam, Bangladesh and Cambodia maintained as high a growth rate as before 2004. Thus, trade liberalization led to different impacts among low-income countries.

Low-income exporters were hit by the financial crisis in 2009. Except for Bangladesh, all other countries that we cover as well as China and India experienced a reduction in 2009. However, the demand shock was temporary, and exports started to recover in 2010 (Table 2).

#### 4. Concluding Remarks

The garment industry in low-income countries is more diverse, dynamic and capable than expected. In some countries, the industry is coping with the liberalization and series of demand shocks, while in the other countries, the industry failed to sustain growth. Political influence on the industry's development is evident through market access, while labor market conditions or the capacity of firms are likely to yield heterogeneous results. Through the country studies based on firm- or worker-level information, this project will investigate factors that drive industrialization in low-income countries in the final output.

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|    | 1970           | 1980              | 1990        | 2000        | 2004        | 2008        |
|----|----------------|-------------------|-------------|-------------|-------------|-------------|
| 1  | Japan          | Hong Kong         | Hong Kong   | China       | China       | China       |
| 2  | Hong Kong      | Other Asia        | China       | Mexico      | Mexico      | Vietnam     |
| 3  | Other Asia     | Korea             | Korea       | Hong Kong   | Hong Kong   | Indonesia   |
| 4  | Korea          | China             | Other Asia  | Korea       | Honduras    | Mexico      |
| 5  | Italy          | Mexico            | Philippines | Dominica    | Vietnam     | Bangladesh  |
| 6  | Philippines    | Philippines       | Italy       | Honduras    | Indonesia   | India       |
| 7  | Canada         | Japan             | Dominica    | Indonesia   | India       | Honduras    |
| 8  | United Kingdom | Italy             | Mexico      | Other Asia  | Thailand    | Cambodia    |
| 9  | Mexico         | India             | India       | Bangladesh  | Bangladesh  | Thailand    |
| 10 | Israel         | Singapore         | Indonesia   | Thailand    | Dominica    | Italy       |
| 11 | Germany        | France            | Singapore   | India       | Korea       | Pakistan    |
| 12 | France         | Macao             | Malaysia    | Philippines | Guatemala   | Hong Kong   |
| 13 | Spain          | Dominica          | Thailand    | Canada      | Philippines | Sri Lanka   |
| 14 | Austria        | Sri Lanka         | Bangladesh  | Italy       | Italy       | El Salvador |
| 15 | Singapore      | United<br>Kingdom | Sri Lanka   | El Salvador | El Salvador | Malaysia    |

Table 1. Top 15 Garment exporters to US market

Source: UN Comtrade

Note: Low-income countries in 1995 were highlighted.

|            | 2001 | 2002  | 2003 | 2004  | 2005  | 2006 | 2007  | 2008 | 2009  | 2010  | average<br>annual<br>growth |
|------------|------|-------|------|-------|-------|------|-------|------|-------|-------|-----------------------------|
| World      | -0.4 | 2.6   | 12.0 | 10.9  | 7.3   | 8.1  | 7.8   | 3.6  | -10.6 | 7.9   | 4.7                         |
| Bangladesh | 2.0  | -3.1  | 19.0 | 23.1  | 2.8   | 28.7 | 4.6   | 13.9 | 0.8   | 10.0  | 9.7                         |
| Myanmar    | 10.4 | -19.7 | -6.3 | -21.5 | -48.3 | 9.8  | -16.9 | -1.6 | -16.6 | -1.7  | -13.0                       |
| Cambodia   | 19.7 | 13.0  | 17.9 | 21.1  | 11.2  | 23.1 | 10.8  | 1.2  | -18.7 | 13.6  | 10.6                        |
| Vietnam    | -2.3 | 117.2 | 91.4 | 13.1  | 6.5   | 25.6 | 30.8  | 19.3 | -5.0  | 14.2  | 26.4                        |
| Kenya      | 46.2 | 92.5  | 49.2 | 47.1  | -3.2  | -3.4 | -6.4  | -0.6 | -21.4 | 4.3   | 16.0                        |
| Madagascar | 20.0 | -46.5 | 56.0 | 52.1  | -4.5  | 4.9  | 18.9  | -4.9 | -18.0 | -38.5 | -1.4                        |
| Pakistan   | 1.9  | 1.1   | 18.9 | 15.3  | -1.4  | 13.1 | 7.5   | 3.9  | -10.3 | 9.3   | 5.6                         |
| China      | 4.2  | 12.1  | 23.4 | 22.6  | 45.0  | 13.9 | 20.9  | 12.2 | -3.3  | 10.9  | 15.6                        |
| India      | 0.4  | 7.0   | 12.5 | 12.2  | 29.2  | 12.2 | 5.6   | 5.7  | -3.4  | 1.5   | 8.0                         |

Table 2. Growth rate of export value (%)

Source: UN Comtrade (US and EU report of import value)

|            | Export value<br>to US and EU<br>(million \$) | Share of textile<br>and apparel in<br>total exports<br>(%) | GNI per capita<br>(\$) | Population<br>(million) |
|------------|--|--|------------------------|-------------------------|
| Bangladesh | 11,791                                       | 71.5 (2007)  | 700                    | 148.7                   |
| Cambodia   | 3,069  | 54.4   | 750                    | 14.1                    |
| Kenya      | 213  | 3.8  | 790                    | 40.5                    |
| Madagascar | 311<br>617 (2008)                            | 28.0<br>53.1(2008)   | 430                    | 20.7                    |
| Myanmar    | 177  | -  | -                      | -                       |
| Pakistan   | 3,315  | 18.4   | 1,050                  | 173.6                   |
| Vietnam    | 8,090  | 15.0 (2009)  | 1,130                  | 86.9                    |

Table 3. Statistics of the countries (2010)

Source: UN Comtrade, EU and US reports (export value), UN Comtrade, each country's report (share of textile and apparel), World Development Indicators, website (GNI and population)

Figure 1. Share of low-income countries in US/EU apparel imports



Note: The countries defined as low-income in 1995 by World Bank except China. Source: Calculation by author using UN Comtrade