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Ineffective Protection, Weak Linkage and Poor Performance: The Philippine and Thai Textile Industries*

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1. INTRODUCTION

When a country initiated industrial development, regardless of its location, one of the leading industries was the textile industry.¹ First of all, the industrial revolution in England in the 18th century was concurrent with developments in the cotton and woolen textile industry (Toynbee [1956], chapter 4, among others). The cotton and silk textile industry led Japan's industrial development from the 19th century as well (Abe [1990], Fujio et al. [1979]). Moreover, Asian NIEs, in particular South Korea and Taiwan, also started industrial development with the textile industry.² In Taiwan, textiles constituted the largest industry in terms of production in 1954 as well as food processing, 18.4% of total industrial production, and the second largest (20.8%) in 1971, following chemicals (Ranis [1979], Table 3.1). In terms of exports, textiles had the largest share since 1965 when it surpassed sugar, until electrical machinery and apparatus replaced it in 1984 (Yamagata [1993], Figure 4-1). Textiles were also one of the largest commodities in terms of exports during the

1960s in South Korea (Amsden [1989], Table 3.4). And, as is shown below in this chapter, the textile industry as well as the apparel industry has been a main industry in Southeast Asian countries.

A reason why the textile industry developed in the early stages of industrialization in various countries is that clothing is a daily necessity for everyone. But, another reason, which is especially valid for Asian economies, is that the textile industry is to a great extent a labor intensive industry. Upstream textile sub-sectors like synthetic fiber, spinning and even weaving are nowadays very much capital intensive, if one uses advanced technology. However, the textile industry sector that uses natural fibers has been historically labor intensive, relative to other manufacturing industries. Most present developing economies as well as Japan in the first half of this century, had a comparative advantage in the production of textiles.

The development of the textile industry in East Asian economies,³ to a certain extent, was affected by foreign direct investment (FDI) from Japan. Two Japanese synthetic fiber producing companies, Teijin and Toray, established many subsidiary companies during the 1960s and 1970s, and engaged not only in production of synthetic fibers but also textiles and apparel. Furthermore, the Teijin and Toray affiliated companies inspired development of the textile industry in East Asia (Tran Van Tho [1988, 1992], Suehiro [1982]). Indeed, the share of textiles in total Japanese FDI during the 1960s and 1970s was very large in Southeast Asian countries, as we will see later.

Therefore, the textile industry is an appropriate industry to analyze in order to investigate industrial development and the role of FDI in East Asia. Among the East Asian economies which successfully developed a textile industry, the Philippines forms an exception. Although the Philippine apparel industry has been internationally competitive, material for Philippine apparel production is mostly imported, based on consignment contract by orders from abroad (see Tecson and Nohara [1987]). That is to say, the development of the apparel industry did not inspire that of the textile industry. The stagnation of the Philippine textile industry is conspicuous among East Asian economies, whose textile industries are, more or less, internationally competitive and were regarded as a strategic industry for their economies to obtain foreign exchange.⁴

Therefore, the stagnation of the Philippine textile industry is analyzed in this chapter in relation to FDI, mainly from Japan. The Thai textile industry is compared with the Philippines' in order to elicit what charac-

terized differences in the Philippines from other economies. In the literature of economic development, Thailand has often been used as a counterpart in comparative studies of the Philippines,⁵ because the area, climate, location and population are similar.

This chapter will be organized as follows. Firstly, the stagnation of the Philippine textile industry in comparison with the Thai textile industry is shown. The weak backward linkage from the Philippine apparel industry to the textile industry is described in section 3. The import dependency of the Philippine economy as a whole is also examined. In section 4, the relation between industrial policy and FDI as it effects the textile industry in the Philippines is analyzed. A case of international division of labor by Teijin is depicted, in particular. This case study suggests that the Philippine government's promotion policies for FDI to synthetic fiber producing companies was less favorable than those of the Thai government, and that this difference in promotion policy might be crucial for later development of the textile industry in both countries. The final section provides concluding remarks.

2. STAGNATION OF THE PHILIPPINE TEXTILE INDUSTRY

Modern textile manufacturing started earlier in the Philippines than neighboring countries. Philippine Cotton Mills was established in 1906 and operated by a British firm, which once employed 300 workers, 7,420 spindles and 320 looms (Stifel [1963]: 31-45). Secondly, a public holding company which administered government investments, the National Development Company, constructed a spinning and weaving mill in Manila in 1939. Here, 10,000 spindles and 104 mechanical looms were installed.

By contrast, a modern textile industry was set up relatively late in Thailand. The army established a modern spinning and weaving mill for army use in the 1920-30s (Ingram [1971]: 121-123, and Suphachalasai [1994]: 19-20). Not until 1950 did any private textile manufacturing start operations.

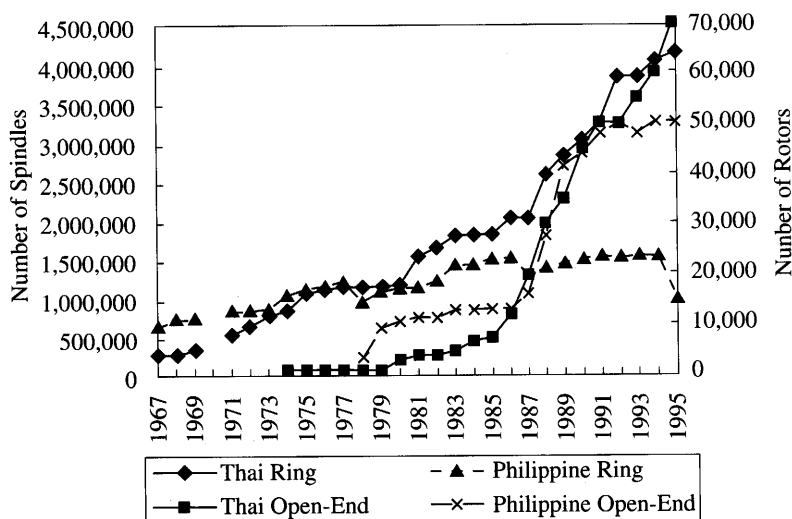
However, the Philippines' early start in the development of a textile industry did not result in rapid expansion. And, although Thailand initiated modern textile manufacturing later than the Philippines, the Thai textile industry grew faster than the Philippines'.

2.1. Capital Accumulation

The difference in the speed of capital accumulation for spinning between the Philippines and Thailand is apparent in Figure 2.1 (Figure 2.1 depicts the trends in installation of ring spinning machines and open-end spinning machines in both countries). The quality of machines is not adjusted at all in the series, and each figure was not based on comprehensive surveys using a sophisticated method. Nevertheless, it shows the difference in growth performance of the spinning industry between the Philippines and Thailand. Even in the late 1960s, the number of spindles of ring spinning in the Philippines was greater than that in Thailand. Since the beginning of the 1980s, however, the trend in the number of spindles in the Philippines and Thailand have been distinct. Philippine spindles have grown very little during the 1970-90s.

The Philippines was also ahead of Thailand in the installation of more advanced open-end spinning machines. The vertical axis on the right-

Figure 2.1: Number of Spindles and Rotors



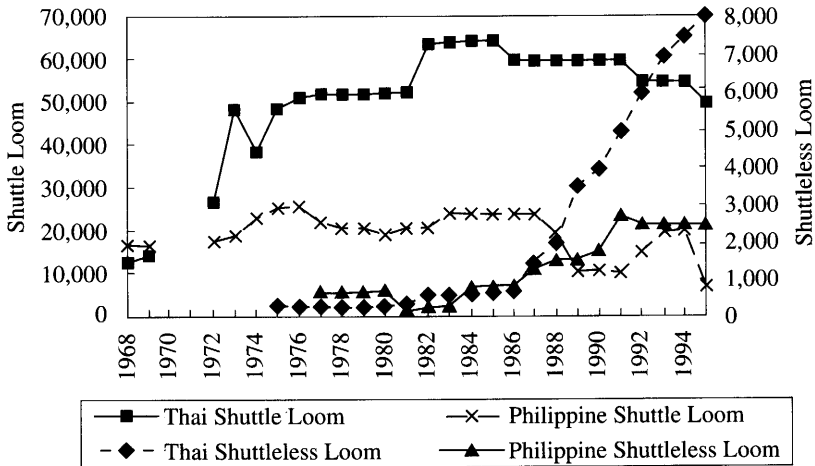
Note: The International Textile Manufacturers Federation estimates some figures.

Source: International Textile Manufacturers Federation. "Sekai Boshoku Setsubi Tokei" (World Spinning and Weaving Equipment Statistics). *Nihon Boseki Geppo* (Monthly Report of Japan Spinners' Association). Various issues.

hand side of Figure 2.1 exhibits the number of rotors of open-end spinning machines. The number of rotors in the Philippines exceeded that in Thailand during the first half of the 1980s. However, Thailand caught up in the middle of the decade, and surpassed the Philippines at the beginning of the 1990s. The installation of open-end machines in the Philippines has stagnated since the beginning of the 1990s.

In weaving, too, the Philippines was ahead of Thailand in the installation of capital equipment at first, but was later overtaken. The number of looms, with and without shuttles, in the Philippines and Thailand since the late 1960s is shown in Figure 2.2. This data, again, should be examined with caution as the quality of machines are not adjusted in this figure. There are various machines for weaving, for example the water-jet loom, air-jet loom, rapier, etc., and each has advantages and disadvantages over the other. This data neglects such details. Nevertheless, the difference in the performance of capital accumulation for weaving between the Philippines and Thailand is evident in Figure 2.2. In both countries, the installation of shuttle looms seems not to grow rapidly in the long run. The shuttleless loom is replacing the shuttle loom, and that appears to be the reason why the number of shuttle looms are in decline

Figure 2.2: Number of Automated Looms



Note: Only looms for yarn of staple fibers are counted. The International Textile Manufacturers Federation estimates some figures.

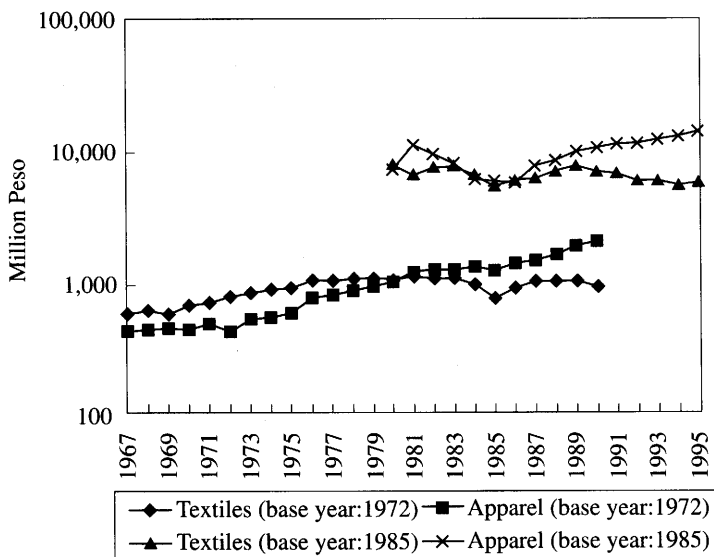
Source: Same as Figure 2.1.

in both countries. Here again, the performance of capital accumulation is distinct between the Philippines and Thailand. First of all, the growth rate of the installation of shuttle looms in Thailand was obviously higher than that in the Philippines during the 1970s. Moreover, the number of shuttleless looms in Thailand grew much faster than in the Philippines since the late 1980s. In the installation of both shuttle and shuttleless looms, the Philippines took the lead at first. Nevertheless, Thailand later overtook the Philippines in both cases.

2.2. Production and Export

The slow capital accumulation in the Philippine textile industry shown in the previous sub-section corresponds to the low growth rate of production of the industry. The growth performance of the textile and apparel industries in the Philippines is seen in Figure 2.3. The vertical axis in

Figure 2.3: Gross Real Value Added of Textiles and Apparel: the Philippines



Note: Apparel includes footwear.

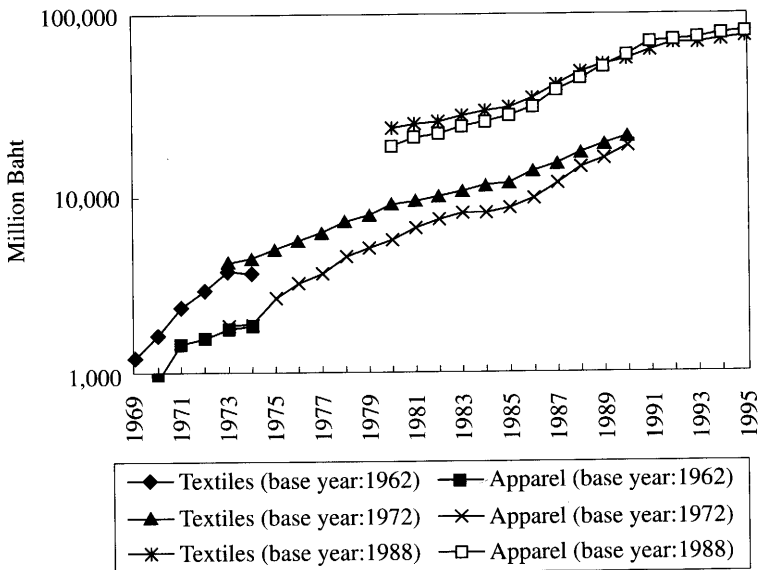
Source: National Economic and Development Authority (or National Statistical Coordination Board, later). *Philippine Statistical Yearbook*. Various issues.

Figure 2.3 is measured by logarithm, so that the slope of a series indicates the growth rate of the series. There are two value-added series for textiles and apparel, respectively, because of different base years.

At a glance, the slow growth of textile production is apparent. The average growth rate of real value-added of the textile industry during 1967-90, whose base year is 1972, is only 1.8%.⁶ The growth rate during 1980-95, with 1985 as the price base, turns out to be negative, -1.7%. This is contrasted with the moderately high growth rates of real value-added of the apparel industry, which are 7.0% during 1972-90 and 3.6% during 1980-95, respectively. The expansion of the apparel industry was not accompanied by growth in textile production in the Philippines because most textile materials for apparel production were imported, as shown in the next section.

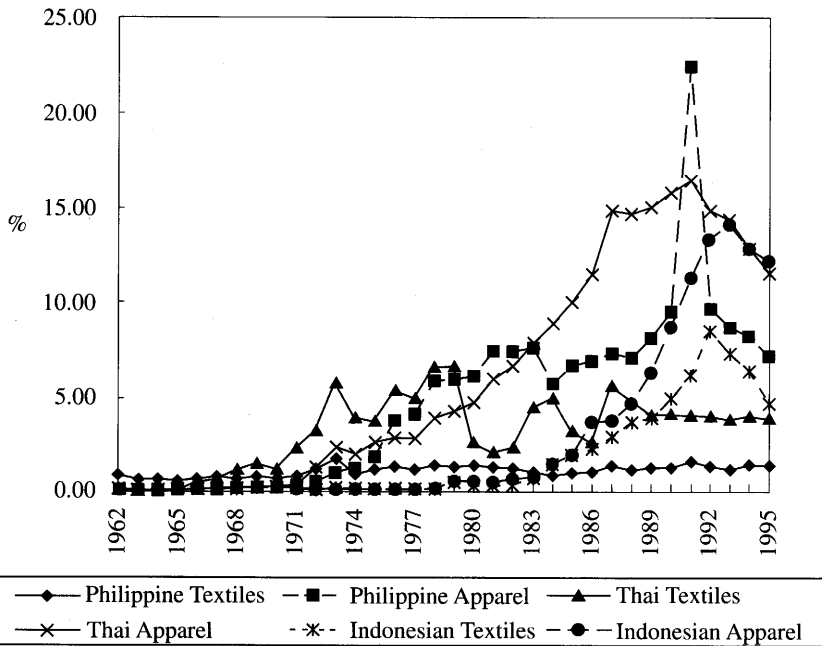
On the contrary, Thai textile and apparel production working hand-in-

Figure 2.4: Gross Real Value Added of Textiles and Apparel: Thailand



Note: Apparel does not include footwear. The figures of apparel production in 1969 and 1970 are hidden under the horizontal line. Those are 838 and 905, respectively.

Source: Office of the National Economic and Social Development Board. *National Income of Thailand*. Various issues.

Figure 2.5: Share of Textiles and Apparel in Total Exports

Sources: UN data in exception with the following combination of countries and periods;
 The Philippines in 1995: National Statistics Office, *1995 Foreign Trade Statistics of the Philippines, Volume 2-Exports*, Manila, NSO, 1996.
 Thailand in 1994 and 1995: Ministry of Commerce, Department of Business Economics, *Trade Statistics and Economic Indicators of Thailand 1995, 1996*.
 Indonesia in 1995: Bureau of Trade and Service Statistics, *Indonesia Foreign Trade Statistics, 1995, Vol.1*, Jakarta, Central Bureau of Statistics.

hand has grown rapidly. Three series of real value-added of both the textile and apparel industries with different base years, are shown in Figure 2.4. The average growth rates of both textile and apparel production during 1969-74 were pronounced, 23.0% and 17.7%, respectively. Even after that, the growth performance of both industries in Thailand was good. The average growth rates of real value-added of the textile industry were 8.9% during 1973-90, and 8.6% during 1980-95. While the real growth rates of the apparel industry were 12.3% during 1973-90, and 10.7% during 1980-95. It is impressive that both textile and apparel production increased steadily even during the period from the late 1970s to

the middle of 1980s, while the Thai economy and neighboring economies were severely damaged by the second oil price hike, low prices for primary products, and recession in developed countries.

In terms of exports, the performance of the Philippine textile industry was not satisfactory, either. Figure 2.5 demonstrates relative international competitiveness of textiles and apparel⁷ to the other commodities of the Philippines, Thailand and Indonesia. It is shown that apparel turned out to be a major export commodity for all three countries in the 1990s, comprising more than 10% of total exports. In the case of Thailand, the share of textiles in total exports increased in the 1970s. Then, apparel caught up with textiles in the early 1980s, and increased its share constantly during the decade. Indonesia also experienced the surge in textile exports during the late 1980s and early 1990s. By contrast, textiles have never been a major export commodity in the Philippines. The share in total exports has not exceeded 2%. Textile exports have grown as fast as total exports with an average annual growth rate of around 9.9% in nominal term during 1971-93, and the share of textile exports in total Philippine exports was kept low. During the same period, both Thai total exports and textile exports grew annually by 15.5% on average, while Indonesian textile exports increased by 37.3%.

Summing up, the Philippine textile industry showed poor performance in terms of production capacity, actual production, and international competitiveness, though the apparel industry scaled up steadily with a growth rate of 23.4% annually. Backward linkage from the apparel industry to the textile industry does not seem to work in the Philippines.

3. BACKWARD LINKAGE TO THE TEXTILE INDUSTRY IN THE PHILIPPINES AND THAILAND

There are various indicators for measuring forward and backward linkage effects (see Yotopoulos and Nugent [1976], chapter 15-16, Furukawa [1986], section 2.2, among others). When you want to know not only the direct but also the indirect effect of inter-industry linkage, you have to use the inverse of the Leontief matrix, which is attached with most input output tables.

However, such sophisticated measures are not used in this section because what we are most interested in is the direct backward linkage effect from the apparel industry to the textile industry. It is easy to isolate a direct backward linkage effect from one industry to another. It is hard,

however, to isolate an indirect effect from one industry to another.

I used the non-competitive import-type input output table with which the import matrix is attached, in order to analyze the domestic and imported components of intermediate textile inputs used in the textile and apparel industries. Three non-competitive import-type input output tables for the Philippines since the 1960s and four for Thailand since the 1970s, are available. I did not use competitive import-type input output tables without the import matrix for this analysis, because we cannot separate imported components from domestic components out of total intermediate inputs with the competitive import-type table.

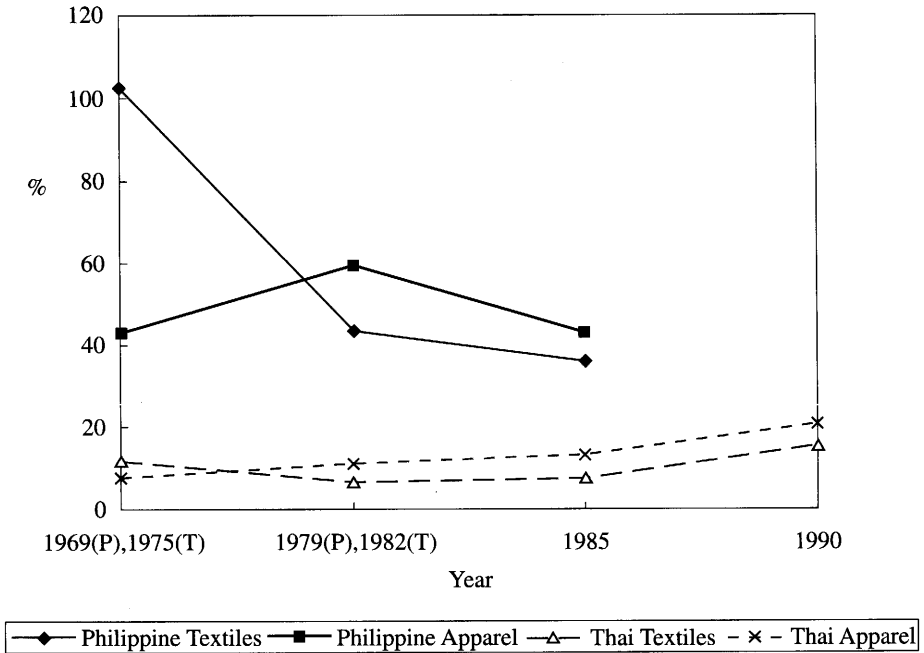
3.1. Input Structure of the Textile and Apparel Industries

In Figure 2.6-2.8, the ratios of imported components to total intermediate inputs for the textile and apparel industries are shown. Table 2.1 displays notation of components in a non-competitive import-type input output matrix, which is used hereafter.

Figure 2.6 shows the percentage of imported textile inputs to total textile inputs for the textile and apparel industries, i.e. $100 \times M_{TT} / X_{TT}$ and M_{TA} / X_{TA} , in the Philippines and Thailand. According to the non-competitive import-type input output tables used,⁸ textiles are the greatest intermediate inputs for textiles and apparel. The percentage of intermediate textile inputs in gross textile output is around 20-40% both in the Philippines and Thailand, whatever non-competitive import-type input output tables are used. The percentage of intermediate textile inputs in gross apparel output is around 20-50%. Since the percentages of total intermediate inputs in gross textile and apparel output are around 50-70%, the amount of textile inputs are more than a half of the amount of total intermediate inputs.

It is evident from Figure 2.6 that the ratio of imported intermediate textile inputs to the textile and apparel industries are higher in the Philippines than in Thailand, in general. The ratio of imported textiles to total textile inputs for the textile industry in Thailand have never exceeded 20%, and that for apparel at most 20%. By contrast, the ratio of imported textiles to total textile inputs for the Philippine textile industry was at least 35%. Although the figure for Philippine textiles in 1969 is unreasonably high, and some error is suspected, the overall tendency of high import dependency is evident. It is well-known that Philippine apparel producing companies tend to undertake production by consign-

Figure 2.6: Ratio of Imported Inputs to Total Textile Inputs: Textile and Apparel Industries



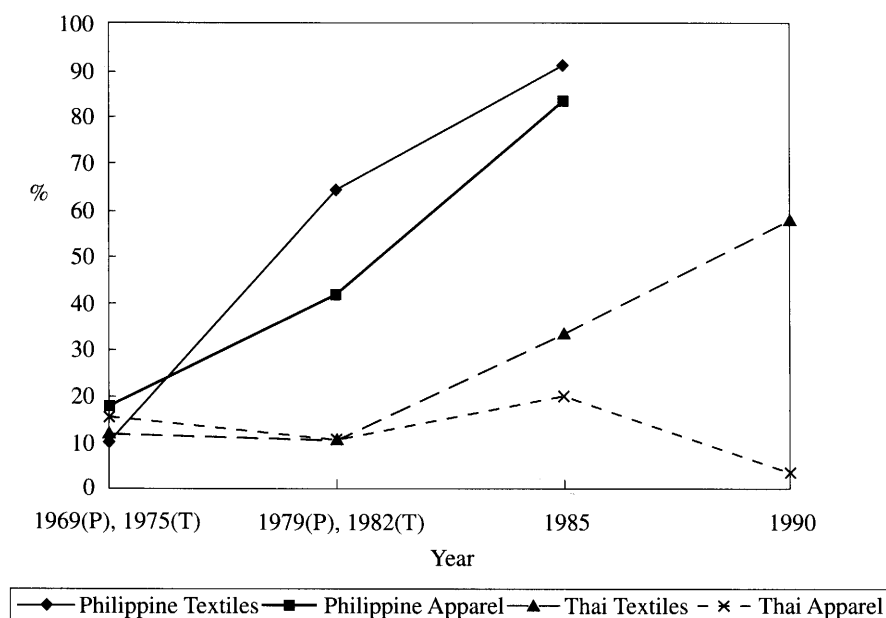
Note: The figure for the Philippines in 1969 and that for Thailand in 1975 are placed at the same place in the horizontal line. The same applies to the Philippines in 1979 and Thailand in 1982. Apparel includes footwear. It seems some errors cause the figure of Philippine textiles in 1969 to exceed 100.

Sources: National Economic and Development Authority (NEDA). *1969 Interindustry (Input-Output) Accounts of the Philippines*. Manila: unknown publication date. / NEDA. *The Interindustry Accounts of the Philippines 1979*. Manila: NEDA, unknown publication date. / National Statistics Office (NSO) and National Statistical Coordination Board (NSCB) [1991]. *1985 Input-Output Accounts of the Philippines*. Manila: NSO and NSCB. / National Economic and Social Development Board (NESDB), National Statistical Office (NSO) and Institute of Developing Economies (IDE) [1980]. *Input-Output Table of Thailand for Analytical Uses 1975*. Tokyo: IDE. / Chulalongkorn University, Social Research Institute (CUSRI) and IDE [1989]. *Input-Output Table of Thailand 1982*. Tokyo: IDE. / NESDB. *Input-Output Table of Thailand 1985*. Bangkok: NESDB, unknown publication date. / NESDB [1996]. *Input-Output Table of Thailand 1990*. Bangkok: NESDB.

ment contract with foreign traders and procure intermediate textile inputs through the foreign trader (see Tecson and Nohara [1987]). Figure 2.6 exemplifies the import dependency character of the Philippine textile and apparel industries.

Figure 2.7 also implies that the Philippine textile and apparel industries became more import dependent than the Thai textile and apparel industries in terms of fabricated metal and machinery inputs. The ratio of imported fabricated metal and machinery inputs to total fabricated metal and machinery inputs, namely $100 \times M_{MT} / X_{MT}$ and M_{MA} / X_{MA} with the notation in Table 2.1, were roughly the same between the Philippine and Thai textile and apparel industries in the late 1960s and middle 1970s. However, the imported metal products and machinery dependency of the Philippine textile and apparel industries became distinguishably higher than their Thai counterparts in the late 1970s and early 1980s. Then, in 1985, though Thai import dependency in terms of fabricated metal and

Figure 2.7: Ratio of Imported Inputs to Total Fabricated Metal and Machinery Inputs: Textile and Apparel Industries



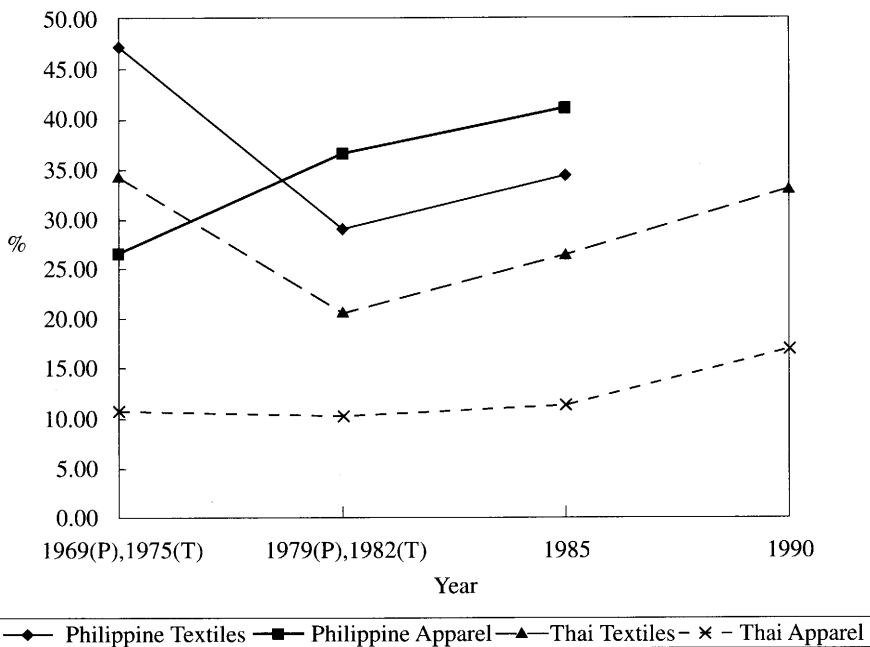
Note: Same as Figure 2.6.

Source: Same as Figure 2.6.

machinery inputs increased, corresponding Philippine import dependency of fabricated metal and machinery increased much more. It is interesting that the ratio of imported fabricated metal and machinery to total fabricated metal and machinery inputs in 1980, increased for the textile industry and decreased for the apparel industry in Thailand. It seems that fabricated metal and machinery equipment for apparel production is less advanced than that for textile production. Furthermore, the decline of import dependency in fabricated metal and machinery for the apparel industry suggests that the import substitution of machinery is advancing in Thailand.

Figure 2.8 confirms again, the import dependency of the Philippine textile and apparel industries, relative to Thai counterparts. $100 \times M_{IT} / X_{IT}$ and M_{IA} / X_{IA} with the notation of Table 2.1, are shown in Figure 2.8. It is interesting that the import dependency in total intermediate inputs of

Figure 2.8: Ratio of Imported Inputs to Total Intermediate Inputs: Textile and Apparel Industries



Note: Same as Figure 2.6.

Source: Same as Figure 2.6.

Table 2.1: Non-Competitive Import Type Input-Output Matrix**Input-Output Matrix**

	... Textiles	Apparel ...	Final Demand
Textiles	X_{TT}	X_{TA}	
Fabricated Metal and Machinery	X_{MT}	X_{MA}	
Total Intermediate Inputs	X_{IT}	X_{IA}	
Value Added			

Import Matrix

	... Textiles	Apparel ...
Textiles	M_{TT}	M_{TA}
Fabricated Metal and Machinery	M_{MT}	M_{MA}
Total Intermediate Inputs	M_{IT}	M_{IA}

both countries' textile industries follows the same pattern, i.e. import dependency declined during the 1970s, and rose in the early 1980s. On the other hand, the import dependency of both the Philippine and Thai apparel industries are constant or slightly increasing. Once more, the import dependency of the Philippine textile and apparel industries are higher than those of Thailand, respectively, from the 1970s through 1985. Thus, the Philippine textile and apparel industries are dependent on imported inputs in comparison with their Thai counterparts, with respect not only to textile inputs but also total intermediate inputs.

3.2. Input Structure of Whole Economy

Although we know that the stagnant Philippine textile industry did not enjoy strong backward linkage effects from the apparel industry and within the textile industry, it does not mean high import dependency is

necessarily harmful for a developing country. The high import dependency of the Philippine textile and apparel industries seen in the previous sub-section is unique to these industries. The import dependency of both Philippine aggregate manufacturing and the whole economy is not higher than that of neighboring East Asian countries.

First of all, according to the non-competitive import-type input output table, the ratio of imported inputs to total intermediate inputs of aggregate manufacturing of the Philippines is as high as that of Thailand from the 1970s through 1985 (see Table 2.2). In the 1980s the import dependency ratio of Thailand was certainly higher, and it is inclined to increase toward 1990.

The same features apply to the whole economy (see Table 2.3). As a whole, the ratio of imported inputs to total intermediate inputs of the Philippine economy is as high as that of Thailand during the period covered. If we take the 1980s, the ratios of Thailand are clearly higher than

**Table 2.2: Ratio of Imported Inputs to Total Intermediate Inputs
Aggregate Manufacturing**

(%)

	The Philippines	Thailand
1969	22.85	—
1975	—	21.88
1979	23.85	—
1982	—	25.04
1985	24.86	26.35
1990	—	38.44

Note: The figure for the Philippines in 1969 and that for Thailand in 1975 are placed at the same place in the horizontal line. The same applies to the Philippines in 1979 and Thailand in 1982.

Sources: National Economic and Development Authority (NEDA). *1969 Interindustry (Input-Output) Accounts of the Philippines*. Manila: NEDA, unknown publication date. / NEDA. *The Interindustry Accounts of the Philippines 1979*. Manila: NEDA, unknown publication date. / National Statistics Office (NSO) and National Statistical Coordination Board (NSCB) [1991]. *1985 Input-Output Accounts of the Philippines*. Manila: NSO and NSCB. / National Economic and Social Development Board (NESDB), National Statistical Office (NSO) and Institute of Developing Economies (IDE) [1980]. *Input-Output Table of Thailand for Analytical Uses 1975*. Tokyo: IDE. / Chulalongkorn University, Social Research Institute (CUSRI) and IDE [1989]. *Input-Output Table of Thailand 1982*. Tokyo: IDE. / NESDB. *Input-Output Table of Thailand 1985*. Bangkok: NESDB, unknown publication date. / NESDB [1996]. *Input-Output Table of Thailand 1990*. Bangkok: NESDB.

**Table 2.3: Ratio of Imported Inputs to Total Intermediate Inputs:
Whole Economy**

(%)

	The Philippines	Thailand
1969	18.65	—
1975	—	16.50
1979	19.12	—
1982	—	19.86
1985	16.92	21.45
1990	—	29.59

Note: Same as Table 2.2.

Source: Same as Table 2.2.

those of the Philippines. And, the ratio of the Thai economy increases from the 1970s through 1990.

According to Furukawa's analysis of input output tables of East Asian economies for 1975, the ratio of imported intermediate inputs to total intermediate inputs of the Philippine economy was the second smallest, 18.6%, following Thailand, 16.7% (Furukawa [1986], pp. 42-43). The ratio for Indonesia, Malaysia and Singapore were 20.1%, 24.8% and 51.2%, respectively. As a result, it is suggested that industrialization in Thailand during the 1980s has been fueled by imported intermediate inputs, even though some imports are surely substituted.

4. INDUSTRIAL PROMOTION POLICIES FOR THE TEXTILE INDUSTRY AND FDI

Weak backward linkage for the Philippine textile industry might not be the reason why the industry was not well developed in comparison with Thailand, but a result of stagnation of the Philippine textile industry. Then, why did the textile industry stagnate in the Philippines while it developed to be an internationally competitive industry in Thailand?

A typical pattern of textile industry development in East Asian developing economies was that competitive foreign manufacturers moved with advanced technology and capital equipment to a new location, where there was no internationally competitive textiles producing firm, and these foreign manufactures became the catalyst for the development of

the textile industry. A good example are the Chinese textile capitalists who moved to Taiwan and Hong Kong. They fled mainland China, mostly from Shanghai, in 1949 for Taiwan and Hong Kong, and resumed textile production there (Wade [1990]: 79, Kuo [1995]: 92-111, Huang [1954], Liu [1975]: 201-344). They led the development of the textile industry in Taiwan and Hong Kong thereafter.

Another example were Japanese synthetic fiber producing companies during the late 1960s and 1970s. Foreign direct investment (FDI) by two Japanese synthetic fiber producing companies was very influential in the development of the textile industry in all East Asian economies.

4.1. Japanese Synthetic Fiber Producing Companies and the Development of East Asian Textile Industries

The two Japanese synthetic fiber producing companies are Toray and Teijin. The two firms were solely permitted by the Japanese government to introduce into Japan the technology for producing polyester from a British firm, ICI, in 1957. As polyester was produced the most among the three major synthetic fibers, viz. nylon, acrylic and polyester, Toray and Teijin became central figures in the synthetic fiber industry (Yoshihara [1978]: 94-100, Tran Van Tho [1992]: 20-21).

As the wage rate of Japanese workers rose in the 1960s, firms producing labor intensive apparel and textiles sought production sites in neighboring East Asian economies. At the same time, trade friction with the US became keen. In 1957, the US demanded that Japan enact voluntary restraints on its cotton exports, which had already begun to rise. Thereafter, trade friction concerning textiles continued, and voluntary export restraint was replaced by the Short-Term Arrangement regarding International Trade in Textiles (STA), the Long-Term Arrangement regarding International Trade in Textiles (LTA) and, finally, the Multi-Fibre Arrangement regarding International Trade in Textiles (MFA). Because synthetic fiber producing companies maintained close relationships with some textile and apparel producing companies through stock holding, technological cooperation, etc., synthetic fiber producing companies were not indifferent to trade friction regarding textiles. Moreover, most East Asian economies adopted the import substitution strategy, so that high tariff rates were applied not only to textiles and apparel but also synthetic fibers imported from Japan. Therefore, synthetic fiber producing companies considered FDI in East Asian economies in the middle of

the 1960s (see Yamazawa [1988]: 401-412).

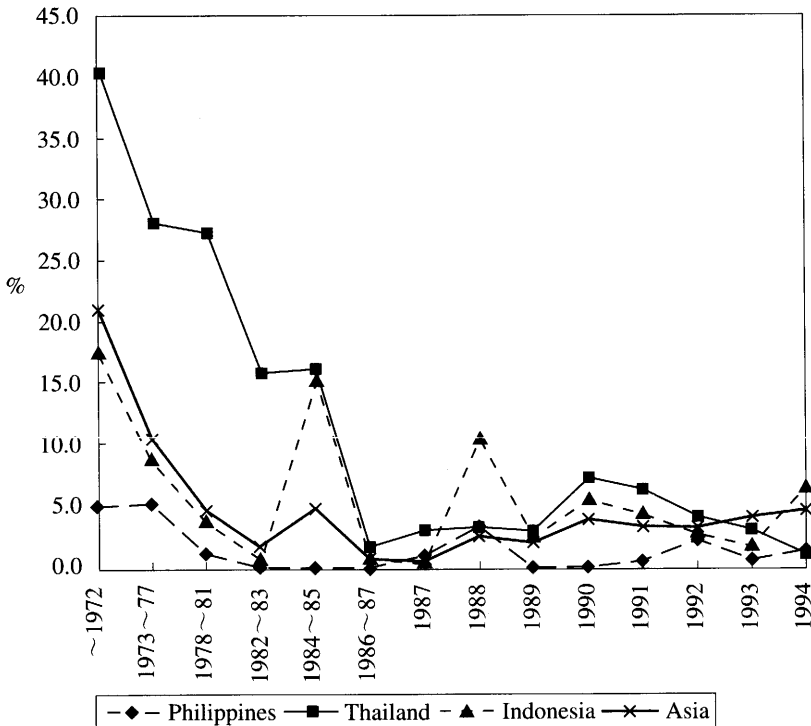
Japanese synthetic fiber producing companies, in particular Teijin and Toray, played a key role in the development of the textile industry in East Asian economies. Before they invested in these economies, there was little synthetic fiber production in South Korea and Taiwan, and no production in Southeast Asia (Suehiro [1982], Table 5.2.2). According to Yoshihara, it was estimated that the shares of Japanese affiliated companies, which were defined as companies whose Japanese equity share exceeded 20%, in terms of production in 1973, were 83.3% in the Philippines; 84.7% in Thailand; and 100% in Indonesia (Yoshihara [1978], Table 4.1).⁹ Which suggests that the share must have been much greater when the two firms invested for the first time in the late 1960s.

After Teijin and Toray invested in other East Asian economies, they not only provided synthetic fibers to the textile industry in each economy, but also established textile and apparel producing firms, which consumed their synthetic fiber products (see Suehiro [1982]: 79-93, Tran Van Tho [1992], chapter 2). In this sense, Teijin and Toray materialized forward linkage by vertical integration of firms in the production process of textiles. Sometimes Teijin or Toray affiliated synthetic fiber producing firms integrated the downstream production process, that is, engaged themselves in spinning, weaving and knitting. But, in most cases, they established a number of separate firms producing textiles and apparel.

Supporting evidence of the importance of FDI from Japan into the textile industry in East Asia, is obtained from statistics made by the Ministry of Finance, Japan. First of all, FDI to the textile industry was the dominant proportion of total FDI from Japan in several Southeast Asian countries during the 1960s and 1970s. The share of FDI for textiles¹⁰ in total FDI from Japan is seen in Figure 2.9. The share of FDI for textiles in the cumulative amount of Japanese FDI into Thailand up to 1972 was over 40% (Japan, Ministry of Finance [1973]). The share into the whole of Asia was as high as 20%. Though the share of textiles uniformly declined during the 1970s and 1980s, it was still quite high. In the case of the Philippines, because the share of the mining sector was around 60% of total cumulative FDI from Japan up to 1972, the share of textiles seemed low. However, textiles accounted for more than 30% of cumulative Japanese FDI into manufacturing. In Indonesia, the share for textiles of cumulative Japanese FDI into manufacturing up to 1972 was 63%.

Here, the bottom line is that a large amount of Japanese FDI took

Figure 2.9: Share of FDI for Textile Industry in Total FDI from Japan



Note: The years indicated on the horizontal line represent Japanese fiscal year, which starts in April and ends in March. "Textiles" here includes artificial fibers, yarns, fabrics, apparel and accessories.

Source: Japan, Ministry of Finance. *Zaisei Kin'yu Tokei Geppo* (Ministry of Finance Statistics Monthly). Various issues (No. 258, September 1973; No.305, September 1977; No. 356, December 1987; No. 452, December 1989; No. 476, December 1985; No.428, December 1987; No. 452, December 1989; No. 476, December 1991; No. 500, December 1993; No. 524, December 1995).

place in the field of synthetic fibers, textiles and apparel in other East Asian economies, and that is partly because Japanese synthetic fiber producing companies made investments not only for synthetic fibers but also textiles and apparel.

4.2. Why Were Japanese Synthetic Fiber Producing Companies Not So Active in the Philippines?

The amount of Japanese FDI made by synthetic fiber producing companies in the Philippines has been distinctly smaller than that in Thailand and Indonesia since Japan started making FDI in these economies during the 1960s. The relative smallness of Japanese FDI for textiles in the Philippines is evident in Figure 2.9. In absolute terms, the amount of Japanese FDI for textile production in the Philippines was distinguishably smaller than that in Thailand and far smaller than that in Indonesia. The cumulative amount of Japanese FDI for textiles production as of 1972 in the Philippines was 4,314 thousand US dollars, while Thailand and Indonesia were 52,160 and 82,994 thousand US dollars, respectively (Japan, Ministry of Finance [1973]: 34).

Neither Teijin nor Toray aggressively made FDIs in the Philippines, though both established a number of affiliated firms in South Korea, Taiwan, Thailand, and Indonesia. Teijin established Filipinas Synthetic Fiber Corp. (FILSYN) in 1968, with another Japanese investor and some Filipino partners. FILSYN produced polyester staple, polyester filament and nylon. However, Teijin retreated from FILSYN in November 1984. FILSYN itself continued production after that, and was absorbed by a Taiwanese textile firm, Yuandong, later. However, it stopped operations recently. The overall performance of FILSYN was not satisfactory, in the sense that its products could not compete with imports, even when some protection measures were taken by the Philippine government.¹¹

Not until 1974, did Toray establish a synthetic fiber producing firm, Philippine Polyamide Industrial Corp. (PPIC). Toray established the first textile producing firms in Thailand in March 1963, and Toray had established a number of firms in other East Asian economies before 1974. Moreover, PPIC did not produce polyester, but nylon. Whereas, polyester is supposed to be a major commodity as a material for clothing (see Yoshihara [1978]: 98). Those facts testify Toray's indifference to its operation in the Philippines.

Why were Japanese synthetic fiber producing companies not as active in FDI in the Philippines as in Thailand? I asked this question in an interview with a person who was involved with FILSYN right after it started operation.¹² His answer was as follows:

"Although the Philippines seemed more advanced than Thailand and Indonesia, protection measures taken by the Philippine government were

not as helpful as those in Thailand. (1) First of all, the tariff rates for synthetic staple fibers and filaments were lower in the Philippines than in Thailand. (2) Secondly, the regulation on stock holding by foreigners was severer in the Philippines than in Thailand. More than 50% stock holding by Japanese was hardly permitted. As a whole, industrial promotion policies for the synthetic fiber industry were preferable in Thailand.”

Let us make sure his comments are right.

4.2.1. Tariff Escalation Regarding Textiles

Table 2.4 shows tariff rates applied to man-made fibers,¹³ yarns and fabrics in the Philippines and Thailand during the period that Teijin had considered FDI in East Asian economies, namely the late 1960s. The classifications for imposition of tariffs regarding man-made fibers and textiles were very close between the Philippines and Thailand, probably because both countries followed the international system of classification of commodities for imposition of tariff. First of all, the items whose first two digits of the heading number were 51 are commodities made from filaments. Secondly, the items whose first two digits of the heading number were 56 are commodities made from staple fibers. The items whose last two digits of the heading number were 01 and 02, correspond to fiber itself. The others are yarns, fabrics, etc. As the number of the last two digits increase, processing fibers toward final goods progresses.

At first glance, it is apparent that tariff escalation was more progressive in the Philippines than in Thailand, concerning man-made fibers and textiles. While the tariff rate for both filaments and staple fibers were lower in the Philippines than in Thailand at that time. The order is reversed for yarns and fabrics. To my knowledge, there is no consensus on which countries the degree of tariff escalation was more acute in the late 1960s, the Philippines or Thailand. However, as far as man-made fibers and textiles are concerned, the degree of tariff escalation was more pronounced in the Philippines. Moreover, the tariff rates applied to man-made fibers in absolute terms, were higher in the Philippines. Therefore, these disadvantages against FDI into the man-made fiber industry might be one of the reason why Japanese synthetic fiber producing companies preferred Thailand to the Philippines as a host country for their investments.

Table 2.4: Tariff for Man-made Fibers and Products Made of Them in the Late 1960s

Heading No.: Philippines	Heading No.: Thailand	Classification	Rate of Duty (%) Philippines	Rate of Duty (%) Thailand
51.01	51.01	Yarn of man-made fibers (continuous), not put up for retail sale	Filament tow 15 Other 30	20
51.02	51.02	Monofil, strip (artificial straw and the like) and imitation catgut, of man-made fiber materials	10	20
51.03	51.03	Yarn of man-made fiber (continuous), put up for retail sale	40	20
51.04	51.04	Woven fabrics of man-made fibers (continuous), including woven fabrics of monofil or strip of heading No. 51.01 or 51.02	Rayon in the grey 75 Other 100	60
56.01	56.01	Man-made fibers (discontinuous), not carded, combed or otherwise prepared for spinning	5	20
—	56.02	Continuous filament tow for the manufacture of man-made fibers (discontinuous)	—	20
56.02	56.03	Waste (including yarn waste and pulled or garnetted rags) of man-made fibers (continuous or discontinuous), not carded, combed or otherwise prepared for spinning	25	20
56.03	56.04	Man-made fibers (discontinuous or waste), carded, combed or otherwise prepared for spinning	25	20
56.04	56.05	Yarn of man-made fibers (discontinuous or waste), not put up for retail sale	30	20
56.05	56.06	Yarn of man-made fibers (discontinuous or waste), put up for retail sale	40	20
56.06	56.07	Woven fabrics of man-made fibers (discontinuous or waste)	Rayon in the grey 75 Other 100	60

Note: The duty *ad naturam* stipulated with those *ad valorem* is omitted in this table.

Sources: Montano A. Tejam, *Commentaries on the Tariff and customs code of the Philippines (R.A. 1937, As Amended)*, Manila, National Book Store, 1971; *Customs Tariff Proclamation*, Bangkok, Translation & Secretarial Office, unknown publication date.

4.2.2. The Regulation Concerning Stock Holding

The second hypothesis, which might explain the inactive attitude of Japanese synthetic fiber producing companies on FDI in the Philippines,

is that the share of stock holdings was strictly regulated for Japanese not to hold more than 50% stock in the 1960s, and it was not in Thailand.

In general, in the period from the late 1960s through the early 1970s, anti-Japanese movements were harshest in Southeast Asia. Therefore, the overall attitude of both the Philippine and Thai governments at that time was to restrict the Japanese share of the stock of Japanese-affiliated firms to lower than 50%. However, it is argued that the attitude of the Philippine government was severer than the Thai government (see Yoshihara [1978, 1994], Fujimori [1990]).

In the case of Thailand, the Board of Investment was set up in 1959 under Sarit's regime, and the Promotion of Industrial Investment Act was legislated in 1962, which replaced the Industrial Investment Promotion Act enacted in 1960. The 1962 Act was more comprehensive, containing exemption from import duties on inputs, right to remit invested capital and profits, etc., things that were generally adopted by other Southeast Asian countries later. However, the maximum benefit from the tax exemption was reduced in 1967, and the exemption was entirely abolished in 1969. Moreover, the Thai government promulgated that a foreign majority investment would not be permitted any longer, though full ownership by foreigners was easy until the middle of the 1960s (Yoshihara [1994]: 58).

In the Philippines, the Investment Incentives Act was legislated in 1967. According to the Act, industries were divided into three areas. One was the non-preferred area, and the others were the Preferred Area of Investment and the Pioneer Area of Investment. If a foreigner wanted to invest in an industry belonging to the Preferred Area, the share held by the foreigner must be 40% or less, unless the percentage of exports of their product was over 70%. For the Pioneer Area, full foreign ownership was approved. However, that was very difficult for Japanese and other East Asian investors (Yoshihara [1994]: 57 and Yoshihara [1978]: 87). Moreover, under the Foreign Business Regulation Act enacted in 1968, it was stipulated that FDI must be approved in advance by the Board of Investment, if the share of foreign equity exceeded 30%.

The restriction of the maximum share of stock holding did not seem to be strict in Thailand. Yoshihara wrote that:

"... in August 1969, the Thai cabinet decided that except in nationally important industries, investment projects with a foreign majority would not be approved. This principle was not strictly adhered to, but the number of Japanese investments with minority ownership sharply

increased in the 1970s." (Yoshihara [1978]: 80)

Thus, though both the Philippines and Thailand made regulations on foreign equity tighter in the late 1960s, the Thai attitude toward Japanese FDI seemed more open than that of the Philippines. While full ownership was in fact permitted in Thailand till the mid-1960s, an ad hoc nationalizing regulation was prevalent in the Philippines even before the Investment Incentives Act was made in 1967, in the field of allocation of foreign exchange (Fujimori [1987]: 201-203). According to Yoshihara, the median of equity share of Japanese for Japanese affiliated firms in the middle of the 1970s was 30% in the Philippines, and 49% in Thailand (Yoshihara [1978], Table 3.4). This fact testifies to the difficulty for Japanese to take majority equity in the Philippines.

As a result, the aforementioned interviewee's perception on the strictness of gaining majority equity as a foreigner in the Philippines seems reasonable. A more liberal policy toward FDI to the Philippines might be conducive to attracting back foreign investors who otherwise would go to Thailand, and the FDI could stimulate the development of the Philippine textile industry, as Teijin and Toray actually did in Thailand.

5. CONCLUDING REMARKS

Here is an anecdote on the Philippine and Thai textile industries, a tale of two industries. On the one hand, the Thai textile industry was prosperous as well as the apparel industry. On the other hand, the Philippine textile industry was stagnant though the apparel industry was prosperous. The main mechanism accountable for this difference is not the backward linkage effect. If anything, it was the forward linkage effect, coming from Japanese synthetic fiber producing companies downward to textile and apparel producing companies, through the supply of materials and vertical integration, and possibly with technology transfer. Of course, whether Japanese synthetic fiber producing companies invested or not, might not solely determine the process of development of the textile industries of both countries. However, it could provide a critical momentum for the industry to grow steadily thereafter. What I wanted to argue in this chapter is, that if the Philippines had been more open to FDI by Japanese synthetic fiber producing companies, they might prefer the Philippines to Thailand as a host country. And that the vertically integrated textile and apparel producing firms affiliated to the Japanese synthetic fiber producing firms might activate the Philippine textile industry. The evidence fur-

nished in this chapter is consistent with the above argument. Now that interest in the poverty trap and the big push is reviving,¹⁴ this anecdote may intrigue scholars of development economics.

Notes

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1. Textile industry in this chapter includes spinning, weaving, and knitting in most cases. As an industrial classification, bleaching, dyeing and finishing are included, depending on statistics. If synthetic fibers, apparel, or footwear are included in the category of "textiles," it will be clearly mentioned.

2. See Amsden [1989], 64-66, Yoshino [1993], Wade [1990, 79-81 and 80-91, and Yamagata [1993], for the development of the textile industry in South Korea and Taiwan.

3. Following the terminology of the World Bank [1993], "East Asia" includes East and Southeast Asian economies in this chapter.

4. IBRD [1980], de Vries and Brakel [1983], Sanchez [1990] and Yamagata [1993] examined the stagnation of the Philippine textile industry.

5. See Oshima [1987], chapter 7, and Ranis and Mahmood [1992], chapter 5.

6. The average growth rate here is calculated by regression of the logarithm of a series on a time trend.

7. "Apparel" here includes footwear.

8. Those tables are listed in a footnote of Table 2 and Figure 6.

9. The original data came from the Japan Chemical Fibers Association. Suehiro [1982] shows the same share by synthetic fiber in 1978 in Table 5.2.3. The shares of Japanese affiliated companies were still great in 1978.

10. "Textiles" here includes artificial fibers, yarns, fabrics, apparel and accessories. A year appearing on the horizontal line of Figure 9 represents the Japanese fiscal year, which starts in April and ends in March. This cumulated FDI should be regarded as a casual indicator of FDI, because it is not deflated at all when it was summed up.

11. Importation of synthetic fibers was permitted only when those produced by FILSYN were not available till the early 1980s, in order to protect the synthetic fiber industry. In addition, some lobbying activities by FILSYN are depicted in Kuo [1995], pp. 114-120.

12. The interviewee is Hiroshi Ukawa. This interview was held in October 1997.

13. "Man-made fibers" includes rayon, acetate rayon and synthetic fibers.

14. See, for example, Rodrik [1996] and Azariadis [1996]. There are the following special issues of academic journals; *Journal of Economic Theory*, Vol. 63, No. 1, June 1994 / *Journal of Development Economics*, Vol. 49, No. 1, April 1996.

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