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1. Issues

The growth phenomenon in East and Southeast Asian economies during the past three decades highlights the relative importance of exports as a key engine driving growth. While traditional trade theories emphasise the role of factor endowments on trade patterns, they cannot adequately explain why in a given exporting industry only some, *not* all, firms enter into and survive export markets. Until recent years, many scholars emphasised firm heterogeneity and the presence of sunk costs when entering foreign markets. ¹ In particular, firms must acquire information on different consumer preferences, distribution channels, and marketing in order to successfully penetrate the global market. Moreover, it is necessary to identify their main competitors and to learn about the foreign institutional framework. Therefore, exporting firms tend to be large and more productive. Small and medium enterprises, which usually experience difficulties accessing resources such as capital funds, technology, know-how and market information (Harvie & Lee, 2002), find it relatively more difficult to achieve global integration.

Interestingly, there are a number of successful cases of small and medium enterprises (SMEs) entering the global market. For example, a number of SMEs in the Thai processed food industry have an impressive record exporting to developed countries

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¹ See Greenaway & Kneller (2007) for a comprehensive literature review and Kohpaiboon (2006) for input on the decision to export and MNE export spillover in Thai manufacturing.

(Kohpaiboon, 2006; forthcoming). Cole (1998), Berry & Levy (1999) and Schiller & Martin-Schiller (1997) report the successful export ventures of SMEs in the Bali garment and Jepara furniture industries. Multinational enterprises (MNEs) and their involvement are highlighted as key determining factors to export success in these studies.

In general theory, there are two broad ways MNEs can involve themselves in host countries: through FDI and non-FDI channels. In view of data scarcity, research in this subject area has failed to go beyond the former in examining the impact of MNEs on the host country (Kohpaiboon, 2006). However, in reality, MNEs can substantially influence the business operations of enterprises in host countries through various non-FDI channels.² In addition, it is likely that MNEs will be involved in traditional labour intensive industries, such as clothing, through non-FDI channels.

Understanding the export behavior of SMEs has immense policy relevance as they represent the backbone of the manufacturing sector. They typically employ 60 per cent or more of a country's industrial workforce and generate up to half of the sector's output (Hill, 2001: p.158). International experience suggests that an efficient SME sector is conducive to rapid industrial growth and a flexible industrial structure. More importantly, the role of SMEs becomes even more resilient in times of economic crisis. In particular, a comparison between Taiwan and Korea was used to highlight the relative importance of SME in the process of economic development. Taiwan is often held up as an example of an economy built on the foundation of an efficient SME sector and is regarded as preferable to the 'Korean model' of large conglomerates built on equity grounds (Hill, 2001).

Against this backdrop, therefore, this paper aims to examine the export success of the Thai clothing industry with a view to formulating prudential policy for SME development. The key hypothesis concerns the contribution of MNEs. The Thai clothing industry offers an interesting case study regarding the issue at hand for two reasons. First, the clothing sector plays a very important role in the early stages of industrialization in

² See the recent survey in Kohpaiboon (2006) and works cited therein.

the developing world, including Thailand. Promoting the clothing industry generates a positive impact on economic development in several ways. For example, the industry entails a high degree of labour intensity so that its expansion is likely to have a significant effect on employment generation. In addition, barriers to entrering the sector are likely to be low so that SMEs are able to participate on an equal par with domestic concerns in production. Secondly, clothing was the top export item from Thailand during the period 1988-93 and remains the key contributor to Thai manufacturing exports. However, to the best of our knowledge so far, there has not been a comprehensive study examining its export success in conjunction with the role of MNEs.

The paper begins with the analytical framework illustrating channels of MNE involvement (Section 2). Section 3 discusses the research methodology employed in obtaining the sample. The development path of the Thai clothing industry is discussed in Section 4, focusing in turn on policy environment, performance, and the pattern of MNE involvement. The role of MNEs and global integration of the Thai clothing industry is presented in Section 5. Section 6 provides conclusions and policy inferences.

2. Analytical Framework

It has become increasingly recognised that traditional trade theories which focus on country-specific variables alone are inadequate in explaining actual trade patterns; this has led to a switch of emphasis to firm- and market-specific characteristics (Dunning *et al.* 1990; Athukorala *et al.* 1995; Greenaway & Kneller, 2007). As the argument goes, entering a foreign market does incur considerable sunk costs to firms which must be written off whether the firm decides to export or not. Firms must acquire information on different consumer preferences, distribution channels, and marketing strategies. Moreover, it is necessary to identify the main competitors and to learn about the particular foreign institutional framework. As a consequence, a range of firm-specific factors have been identified as key determinants of such behaviour.

According to the growing theoretical literature on firm heterogeneity (e.g. Clerides *et al.*, 1998; Melitz, 2003), export participation decisions are determined in

whole by a combination of sunk-costs and firm productivity. More productive firms with lower marginal costs earn higher gross profits from producing, but not all firms export. Only those with sufficiently high profits to cover the sunk cost do so. Hence, firms have to raise productivity before they can enter export markets. These predictions are supported by the evidence. In addition, in supporting empirical counterparts to this, the set of firm characteristics has been extended to include factors such as size, age, human capital, capital-intensity, ownership and so on (Wagner, 2007).

In the presence of the sunk costs, it is more difficult for SMEs themselves to successfully penetrate the global market. SMEs are unlikely to take advantage of scale economies and have difficulties in getting access to credit for investment. They also lack resources in terms of qualified human capital (Alvarez and Crespi, 2003; Yang et al., forthcoming). All of these constituents are required before exporting. Sunk costs incurred before exporting are unlikely to be written off by SMEs. This could happen when SMEs are more technically efficienct than large firms³

Linking with MNEs seems to be an achievable and sensible strategy for SMEs seeking to lower entry barrier costs and successfully penetrate global markets. MNEs have a deeper knowledge of foreign markets, together with possessing experience and expertise in the many complex facets of product development and international marketing. What is more, they are well placed to take advantage of inter-country differences in the cost of production. Moreover, foreign subsidiaries produce goods with internationally well-known brand names and trade marks. Furthermore, MNEs may be more capable of resisting protectionist pressures in their home countries in such a way as to favour imports from their affiliates (Athukorala *et al.*, 1995; Sjoholm, 1997; Borensztein *et al.*, 1998; Lipsey, 2000; Vernon, 2000).

³ There are several reasons that SMEs can be more technical efficient than large enterprises. For example, SMEs tend to have a flexible, non-hierarchical structure and are unlikely to be affected by agency problems. In addition, they are exposed to more competition than larger firms and respond quickly to outside change. Thus, SMEs act as the most competitive players in a Darwinian sense (Yang *et al.* forthcoming).

In general, there are two broad ways MNEs can involve themselves in host countries: through FDI and non-FDI channels. As a result of data scarcity, research in this subject area has failed to go beyond the former in examining the impact of MNEs on the host country (Kohpaiboon, 2006). As suggested in previous empirical studies, there are three major non-FDI channels cited, namely technology licensing, international subcontracting, and MNE buyer modes (Kohpaiboon, 2006). Firstly, technology licensing refers to the circumstance where a host country enterprise (licensee) directly contacts technology owners, who are likely to be MNEs, in order to gain right of access to one or a set of technologies, or technological know-how, in return for value. Sometimes, under the licensing contract, the licensee receives training from the technology owner. Secondly, the international subcontracting channel normally involves a 'principal' contractor based in an industrialized country ---often a MNE or trading company, occasionally an importer or wholesaler— that places orders with sub-contractors in a developing country to produce components or assemble finished products with the inputs it provides. The principal normally sells the final product, sometimes in its home market, sometimes in a third-country.⁴ Finally, MNE buyers are large trading companies (either retailing or wholesaling), and large supermarkets in developed countries, which 'travel' in search of potential suppliers in developing countries to manufacture tailor-made goods. The relationship between MNE buyers and local suppliers resembles general arm's length transactions in that these buyers and local suppliers contact each other to negotiate their commercial contracts (e.g. price, quantity, quality, delivery, payments, etc.). Indeed, their relationship goes far beyond the negotiation and fulfillment of orders. Through this mode of involvement, host country suppliers receive considerable benefits. Note that even though it seems that international subcontracting and MNE buyer channels are similar, a key difference is that the latter does not necessarily rely on explicit contract as is the case with the former.

In the context of SMEs in developing countries, MNE buyer modes are of particular interest. Empirical evidence suggests that among developing countries, there

⁴ Based on this definition, the international subcontracting channel is in line with the so called Original Equipment Manufacture (OEM) channel as proposed by Hobday (1995: p.35).

are few places successfully benefiting through the technology licensing channel. Through this channel, the licensee requires more technical capability than via other channels in order to utilise it efficiently (Hobday, 1995). While the role of the international subcontracting channel is highlighted in previous empirical studies, evidence has been drawn heavily from the successful experiences of North East Asian newly-industrialized countries (NICs), i.e. Korea, Taiwan, and Hong Kong in the electronics industry (Hobday, 1995; Nabeshima, 2004). Note that the experience of Malaysia and Thailand in the electronics industry is different from these NICs. The FDI instead of the international subcontracting channel plays a dominant role.

In the case of light-manufacturing goods, such as clothing and footwear, production technology *per se* is likely to be widely known and generally available for arm's length trade rather than being proprietary to any specific firm. It is also not subject to frequent change. Their production process needs to be involved intensively with local labour and access local raw materials. Consequently, a foreign firm is unlikely to have the technological capability to outperform local firms. Instead, in these industries, cost-related entry barriers (low absolute capital requirements, low minimum efficiency scales) are relatively low. Rather, indigenous firms, and SMEs in particular, are likely to be concentrated (Hill, 2001; p.159). Hence, there is no incentive for MNEs to establish their own affiliates.

Even though indigenous suppliers are capable in undertaking the manufacturing process, they lack international marketing knowledge, specifically in dealing with consumer preferences, marketing channels, compliance with border regulations, and the development of new products. Such knowledge is crucial in order to successfully penetrate the global market, especially in developed country markets where final goods must fulfill several quality-control criteria required by consumers. These encompass a wide range of considerations, including input specifications and quality, product design, labelling and packaging (Keesing 1983: p.339; Rhee et al. 1984: p.61). While some of these criteria may not be of interest in developing countries, consumers in developed countries are highly sensitive to them. Therefore, they are vital to achieving market success. As a consequence, the manufacturing process is more complex than a simple

manufacturing process. The final product is the result of numerous activities, comprising research and development (R&D), product design, marketing, and manufacturing.

In view of these factors, there is an incentive for both MNEs and indigenous suppliers to work together in producing final goods. MNE buyers are extensively involved in R&D activities, product design, and controlling the manufacturing process, in addition to possessing a strong marketing network. On the other hand, indigenous firms tend to concentrate largely on the manufacturing process. Interestingly, as suggested by previous studies (e.g. Richardson, 1972; Keesing, 1983; Rhee et al., 1984; Kohpaiboon, 2006), the relationship between MNEs and indigenous firms under MNE buyer modes tends to be a long-term relationship in spite of not being under the realm of any explicit contract.

Before placing orders, MNE buyers must visit local suppliers to check their production process in order to conduct their own capability assessment. After finding potential suppliers, the buyers provide technical information for improving existing facilities. Based on the Korean manufacturing experience, Rhee *et al.* (1984) illustrate a wide spectrum of the technical information provided, ranging from production techniques, product specification, product design, styling to market requirements to quality control techniques Host country suppliers receive considerable benefits from these factory visits (Keesing, 1983; Rhee et al., 1984). To become integrated into the MNEs global chain, local enterprises must comply with all requirements and apply the technical information they receive. In many cases, manufacturers are required to install additional facilities. Furthermore, buyers will continue to conduct periodic visits to local suppliers in order to check quality control and introduce the development of new products and new product varieties. This can result in the significant and successive productivity improvement of indigenous suppliers.

3. Research Methodology

This study uses 'purposive', rather than 'probability', sampling techniques (Patton, 1990). The latter refers to the method that achieves samples by random selection amongst all units of the population and permits confident generalization for a larger population. In the former method, samples are purposively chosen from information-rich cases for indepth analysis related to the central issues under study. The main objective here is to qualitatively examine the behaviour of particular groups of firms, i.e. local manufacturers interacting with MNE buyers with a great emphasis on export success. This cannot be achieved by probability sampling that uses a variety of sample characteristics to draw quantitative inferences.

Even though our main focus is on SMEs, it is difficult to restrict our sample coverage to firms which employ less than 100 workers, the widely used definition of SMEs. In such firms, their products are sold in certain niche markets locally. In the sample coverage, it would be far more beneficial to cover successful examples of firms which have a reasonably long export experience and are integrated into the global market. Interestingly, as seen in detail in Section 5, most of leading clothing companies in Thailand were originally SMEs. Hence, their experience is highly relevant for other SMEs. Consequently, there are ten samples covered in the interview. They consist of seven clothing firms (two SMEs and five large firms), a fabric wholesaler for SMEs, an apparel agent which sources local suppliers for several international brand owners, and the preeminent individual person in the Thai textile and clothing industries.

A flexible interview approach was adopted, requesting respondents to relate their experience in their own words and in their own sequence. The main advantage of this approach is that it minimises the likelihood of missing important facets of the story. The main disadvantage is that some respondents, whose experience may be limited to a particular interest, cannot always be asked all of the questions in the interview guide (Morawetz, 1981). Second-round interviews with different interviewees could mitigate this disadvantage in several cases. The interview guide begins with a general company profile, i.e. size, ownership production process, product destination, product covers, etc. A series of opening probes into the process of acquiring technological capability follows. This starts with their general perception of industry development, followed by opinions about the contributions of MNE buyers to enhancing their technological capability,

especially in terms of exports. Then questions follow concerning their sources of knowledge and the factors contributing to their export success. Finally, general questions concerning current problems, the role of government and future prospects for the industry are addressed. The final interviews were conducted from August to December 2004. They mostly took place at firms' headquarters located in Bangkok. High-level managerial staff in these Thai enterprises was interviewed. The interview period varied in length from 30 minutes to one and a half hours. All interviews were conducted by the author.

4. Thai Clothing Industry

4.1 Policy Environment

In the Thai clothing industry, trade policy plays a pivotal role in influencing the private sector's economic performance. The tariff has been a major trade policy instrument throughout the past four decades. Non-tariff measures were used only between 1971 and 1987. Since 1974 clothing has been subject to high tariffs, compared with the average level of manufactured goods (Table 1). During the period 1974-93, tariffs on clothing exceeded 60 per cent. This was far higher than the average tariff rate for the manufacturing sector, which stood at around 23-30 per cent during the same period. Significant tariff cuts in the clothing industry began in 1995 as a consequence of a comprehensive plan for tariff reduction proposed in 1990 and implemented in 1995 and 1997. This was followed by the recent attempt at further tariff reduction commencing in June 2003. By 2007, a tariff rate for clothing was 30 per cent. Nevertheless, it is far higher than the average of the manufacturing sector (i.e. nearly eleven per cent) (Jongwanich & Kohpaiboon, 2007).

The tariff structure of the clothing industry is cascading in nature. Tariffs on fabrics and yarns are always lower than those on clothing (Table 1). The cascading tariff structure encourages local enterprises to produce finished goods, as opposed to intermediate goods. The presence of input tariffs is compensated for by tariffs on outputs at a higher level. The fact that the value of outputs is generally greater than the total value of intermediate inputs, i.e. positive value added, means that the escalating tariff

structure generates net protection greater than the level of nominal protection on outputs, i.e. the effective rate of protection is positive.

Between 1971 and 1987, spinning and weaving industries were subject to nontariff measures and controls of production capacity (Kohpaiboon, 1995). This increased the production costs of clothing manufacturers. As a result, they experienced a negative effective rate of protection (ERP) (Suphachalasai, 1992: p. 31). This means that returns to clothing manufacturers selling their product locally are lower than those exporting. Since 1988 ERP for the clothing industry has turned positive.

There has been a clear shift in overall policy emphasis from import-substituting activities to export promotion since the early 1980s. While tariff restructuring could not be implemented until the late 1980s, due mainly to the poor fiscal situation, many tariff For example, the BOI introduced tariff exemptions/drawbacks were introduced. exemptions on imported raw materials as an additional privilege for export-oriented promoted firms (i.e. for an export-sales ratio of greater than 30 per cent). This was supplemented by the existing two tariff exemptions: tariff exemptions/drawbacks (Section 19 of the Custom Laws) given by the Department of Customs and tax rebate schemes given by the Fiscal Policy Offices (FPO).⁵ This is to mitigate the effect of input tariffs on exports. The timing of such an alteration was more or less in line with changes in the global environment when many East Asian manufacturers started losing their international competitiveness in labour-intensive products. Combined with the low wage rate in Thai manufacturing, introduced tariff exemptions/drawbacks made Thailand become attractive as a location for export-oriented labour-intensive production bases with East Asian investors.

⁵ From 1990, there have been another three alternatives, i.e.(i) duty relief for goods placed under the Custom Bonded Warehouse scheme; (ii) duty exemption for goods taken into the Free zones established by Customs; (iii) duty exemption for goods taken into the Export Processing Zones (EPZ). Except for (ii) these measures are directly under the administrative responsibility of the Thai Customs Department to grant duty drawback, and duty exemption. Measure (ii) is under the control of the Industrial Estate Authority of Thailand.

Such a policy environment offers two alternatives for members of the private sector who want to enter the clothing industry. The first option is to operate under the cascading tariff structure by producing goods for the highly protected domestic market. In the second option, firms can make use of the competitive wage rate in the manufacturing sector and the yet fully utilized export quota of Thailand under the multi-fiber agreement (MFA).⁶

There are two adverse effects arising from this policy environment on the industry's development process. First, the first option dampens the technological learning activities of firms. A consensus is reached that technological learning and upgrading is a complex, difficult, and lengthy process, often marked by failure, that requires firms to undertake heavy investment in learning and upgrading (Amsden, 2003, 1987; Bell & Pavitt, 1992; Dahlman et al. 1987; Hobday, 1997; Kim, 1997; Lall, 1992; Nelson, 1996; Kim & Nelson; 2001; Wade, 1990; UNIDO 2002, all cited in Rock & Angel, 2005, p127). Under the highly protected domestic market, firms are likely to be irresponsible in improving their technological capability, as well as in addressing requests for improvements in the quality and price of the goods they offer (Bell et al. 1984; Eveson & Westphal, 1995; Moran, 2001). Rather, firms are more likely to produce low quality clothing in order to maximize the benefits entailed from the tariff structure. Secondly, there is no connection between clothing exporters and the domestic textile industry. In this scenario, clothing exporters are unlikely to source locally manufactured fabrics and yarns because of input tariffs. Rather, they source imported fabrics and yarns and apply tariff exemption/drawbacks. The global competition clothing exporters face in the market cannot pass through to upstream industries. Here it is the global competition which is the key catalyst of long-term productivity improvement.

4.2 Economics Performances

⁶ Thailand was a member of the MFA between 1975 and 2000. In the early years the MFA provided export markets for Thailand by curtailing the exports of the three major exporting countries-Hong Kong, the Republic of Korea and Taiwan. The utilization of Thai export quotas remained moderate during the early 1980s. See the utilization rate of Thai clothing exports to the United States and European Union in Tables 6.3 and 6.4 of Suphachalasai (1992: p. 58-59)

Clothing was the foremost manufacturing export of Thailand between the mid-1980s and the early 1990s (Figure 1). The surge in exports began during the mid-1980s. The dollar value of exports soared from \$ 419 million during the first half of the 1980s to almost \$2,000 million in the second half. Its share as a proportion of total exports was around five per cent in the early 1980s before surging to 12 per cent during the period 1987-93. Its share when compared to total manufacturing exports exhibited more or less a similar trend. In 1996, Thai clothing export experienced a sharp drop to \$3,000 million from \$4,800 million in 1995. This was due to the successive overvaluation of real exchange rates between 1988 and 1996 (Jongwanich, 2008). From then on, export value gradually rebounded and reached \$4,200 million by 2006. Its share of total manufacturing exports declined markedly because of the rapid growth of electronic and electrical appliance exports, as well as vehicle exports.

The clothing industry is labour intensive and its barriers to entry are relatively low as opposed to some other industries. The share of labour costs accounted for 15-20 per cent of total costs (Samples No. 3, 4, 6 and 9). In addition, to provide an inter-industry comparison on the factor intensity nature of the clothing industry, two measures are used, namely the capital-labour ratio and the minimum efficient scale. Following general practice in industrial organization literature⁷, the latter is measured by the average of sales value per firm accounting for 50 per cent of the industry's sales, expressed in terms of the percentage share of market size. The 1997 industrial census, the most comprehensive source available to date, is employed to construct these two measures (Ramstetter, 2006: p. 117).⁸ Subsequently, these measures are ranked in ascending order to indicate the degree of labour intensity. The lower the industry rank, the higher

⁷ See, for example, Bird (1999) and Kohpaiboon and Ramstetter (2008).

⁸ The census covers 32,489 plants, belonging to 125 4-digit industries of TSIC. After cleaned up the census, the gross output and value added reported in the census was only 76.2 and 59.2 per cent of their corresponding estimates in national accounts reported by National Economics and Social Development Board (NESDB). Even though there are alternative datasets available (e.g. industrial surveys in 1998 and 2000 by National Statistics Office (NSO) and those in 2001-04 by Office of Industrial Economics (OIE), their coverage is far shorter than that in the 1997 census. For example, the 2001-04 industrial survey by OIE covered 3,000 plants, accounting around 35 per cent of the estimated manufacturing value added from National Account (TDRI, 2006).

the degree of labour intensity. The clothing industry was on ninth and fifth out of the 125 industries in terms of capital-labour ratio and minimum efficient scale, respectively. All other things being equal, enterprises are more likely to enter the clothing industry than others in the manufacturing sector.

As a result, Thais employed in the clothing industry accounted for a considerable section of the total workforce in the manufacturing sector. The number of workers increased considerably from 688,000 in 1989 to 862,000 in 1996. It represented around 22.4 per cent of total employment in the manufacturing sector between 1989 and 1996. Despite experiencing a steady export growth, the industry's employment level was more than 800,000 workers for a decade ending in 2005. Nevertheless, its relative importance in the manufacturing sector noticeably declined to 15 per cent by 2005. This is a reflection of the growing importance of other labour intensive industries, such as the assembly of electrical appliances and electronics.

To illustrate the dynamics of clothing firms, three indicators are presented in Figure 3, namely the number of enterprises, firm size measured by the ratio of the number of workers to that of enterprises and the industry's export-output ratio. Two inferences can be drawn from Figure 3. Firstly, the number of enterprises in the clothing industry doubled to around 3,066 firms in 1995 from 1,574 firms in 1989. Interestingly, the new entrants seem to be SMEs as the firm size becomes smaller. The ratio of the number of workers to that of enterprises dropped from 43.7 workers a firm in 1989 to 29.8 workers a firm in 1996. Secondly, the increasing number of enterprises went hand-in-hand with the declining export-output ratio of the clothing industry. In 1989, almost 60% of domestic manufactured clothing was for export. It had dropped to around 30 per cent by 1995.

Patterns of firm size and the export-output ration during the period 1989-95 suggest that the private sector and SMEs in particular prefer the 'first policy' option (the policy-induced incentive offered by the cascading tariff structure) to the 'second' one (the tariff exemptions/drawbacks). When non-tariff protection on fabrics and yarns was lifted

in 1987, ERP turned out to be positive and enterprises entered the sector to benefit from the highly protected domestic market. Many of these entrants were SMEs as the average firm size was shrinking.

In addition, during the late 1980s, wage rates in Thai manufacturing remained reasonably low enabling companies to manufacture low-quality clothing at a very competitive price. Hence, there was an abundance of foreign retailers, especially those from the Middle East, shopping for export goods. Many of these export activities were not reported in the nation's export figures as these retailers tend to take the goods back to sell in their domestic markets. Consequently, the industry's export-output ratio declined noticeably.

Due to the low entry barriers, a number of firms jumped in. With the limited size of the domestic market, firms tended to compete with each other. This led the domestic price to fall and clothing tariffs were unlikely to be binding. In the meantime, while wage rates continued to grow as a consequence of the countrywide economic boom, the international competitiveness of the Thai clothing industry eroded. So did indirect export opportunities. Since 1995, therefore, the number of enterprises operating has dropped. Between 1996 and 2006, there were 50 enterprises exiting the clothing industry every year. By 2005, there were 2,541 enterprises in the clothing industry.

As the international competitiveness of the Thai clothing industry was faltering, the industry was forced to upgrade its production to higher value products where wage rates are not the key factor in determining international competitiveness. However, technological learning and upgrading is a complex, difficult, and lengthy process that must be undergone before being able to reap the economic and environmental gains associated with shifts to more efficient technologies. Thus, firms must commit substantial resources to a long-term incremental and cumulative effort to expand their technological capability. Under the highly protected domestic market, firms are likely to be irresponsible in improving technological capability as well as complying with requests for improvements in quality and price from demanding customers.. Those operations which were unable to upgrade their products often exited the industry. Many of these were SMEs as the ratio of a number of workers to that of enterprises has increased steadily since 1996. The number of workers per enterprise increased to 32 in 2006, from 28 in 1995 (Figure 3).

Of note is the fact that the above exit did not have a significant impact on the number of workers employed in the industry. The number of workers declined slightly to 825,700 workers in 2005, from its peak of 870,000 workers in 1995 so that the rate of employment per enterprise increased. Combined with the upward trend in the export-output ratio observed during the same period, the mild decline in employment within the industry suggests that exporting firms have successfully upgraded their production to higher-value clothing. Therefore, labour which used to work in shutting down can be reallocated to work with larger and more export-oriented clothing firms.

4.3. Presence of MNEs

A direct measure of FDI inflow into the clothing industry is not available. The best available data is on FDI inflow to both the textile and clothing (T&C) industries together, as reported by the Bank of Thailand. Figure 4 illustrates FDI inflow to the T&C industry and their percentage share of total FDI inflow into the industrial sector during the period 1970-2006. As can be seen, FDI inflow to the T&C industry grew steadily. Annual flow increased from \$11.3 million in the 1970s to \$27.2 and \$61.4 million in the 1980s and 1990s, respectively. Between 2001 and 2006, the FDI inflow recorded an upward trend in spite of experiencing some fluctuations. FDI inflow reached \$228.9 million by 2006, increasing from \$116 million in 2001 (Figure 4).

The growth rate in FDI inflow was relatively low when compared to other industries, especially electronics, electrical appliances and automotives. Thus, the share of FDI inflow to the T&C industry in relation to total industrial inflow dropped significantly. During the 1970s, FDI inflow to the T&C industry accounted for 32 per cent of total industrial inflow (Figure 4). Its share dropped to 7.9 and 4.5 per cent in the 1980s and 1990s, respectively. Its share further declined to 2.2 per cent during the period

2000-06. During the 1970s, the inflow was largely due to the entry of Japanese MNEs in upstream industries (e.g. Thai Toray Textile Mills and Toray Nylon Thai in 1963 and Teijin Polyester in 1967) who placed emphasis on the domestic market, rather than the export.

Evidence gathered from the textile industry interview programme mentioned above suggests that there are no foreign affiliates playing a leading role in the Thai clothing industry.⁹ This would be due to the nature of the clothing industry which is labour intensive and whose entry barriers are relatively low. Even though leading technology in clothing production has become more capital intensive as micro-electronic related innovations have developed, labour costs still account for a considerable share of total costs. Hence, the degree of substitution between labour and capital is rather limited. In addition, advanced technology is generally available for arm's length purchases. Therefore, it becomes of less concern to be linked with MNEs through the FDI channel in order to access advanced production technology. Official records of export-oriented, BOI-promoted projects support the existence of the limited role of MNEs through the FDI channel. During the period 1986–98, the foreign equity share of clothing industry was 43.2 per cent for export-oriented BOI-promoted projects (Kohpaiboon, 2006: Table 4.10). This level of foreign equity share was in line with other traditional labour intensive industries like footwear and toys, slightly higher than the processed food industry. However, this level was far lower than that found in electronics, electrical appliances and machines and parts. Instead, in such industries, the likelihood of global market penetration is reliant on whether or not firms acquire international marketing knowledge. Consequently, the low level of foreign equity shares rather suggests the presence of MNE involvement through non-FDI channels.

5. Global Integration of the Thai Clothing Industry

One of the key findings from Section 4 is that exporting firms performed better than domestic market-oriented operations in terms of growth sustainability. This section aims

 $^{^{9}}$ See more details about the sampling process and interview findings, respectively, in Sections 3 and Appendix .

to illustrate how a firm can export, together with examining whether, and to what extent, MNEs both contribute to export success and address obstacles when SMEs want to be involved with MNEs.

Evidence garnered from interviews with company representatives suggests a considerable degree of MNE involvement in the realm of clothing exports. Findings elicited from all interviewed respondents support that the phenomenon that being involved with MNEs seems necessary for exporting clothing successfully, regardless of the size of a firm. If companies want to amass a sizeable export order portfolio, they need to harness consumer demand in foreign countries (i.e. types and styles of fabrics, product design, colour tone and so on). In other words, they need to know about fashion trends, which are subject to frequent changes (Sample Nos.3, 4, 5, 6 and 9). In addition, there has been the growing concern of how goods are produced (i.e. social clauses). Increasingly, consumers require final goods that have been manufactured in a proper factory environment to prevent the worst forms of worker exploitation from occurring and protecting fundamental labour rights. MNEs are in a better position than indigenous firms to acquire international marketing knowledge including intelligence on marketing channels, compliance with border regulations, and the development of new products. This is as a result of the fact that the former are involved with R&D activities, product design, and the control process, as well as possessing a strong marketing network that leads to a tendency to specialize in such related activities. It would be very costly for an individual firm, especially in the developing world, to acquire all the knowledge needed for global market penetration (Sample No. 9).

Even though there might be export opportunities for indigenous firms to produce traditional Thai clothes, such an opportunity is comparatively small and highly uncertain. The experience recorded in Sample No.1 manifested itself as a one-off event entailing a high degree of uncertainty. Hence, it is very unlikely that indigenous firms will write off sunk costs incurred from exports. This is fundamentally different from being involved in the MNE production network wherein export orders flow continuously.

A way in which indigenous firms may become involved in the MNE network is through the avenue of MNE buyers modes. There are MNEs, operating under their own brand names (e.g. Nike, Adidas, Gap, Calvin Klein) searching for potential suppliers to manufacture tailor-made clothing (Sample No. 4). With their global network, MNEs have international marketing knowledge. Nonetheless, they are unlikely to establish their own affiliates because the clothing manufacturing process needs to involve intensive local labour. In such a process, MNEs are not necessarily superior to indigenous firms. Hence, there would not be any significant benefit from establishing their affiliates abroad. On the other hand, it is of less concern for local enterprises to be linked with MNEs through the FDI channel and to share ownership and control in order to access advanced production technology. In particular, entrepreneurs need to install industrial sewing machines, the core machine of the industry's manufacturing process, which are available as an arm's length purchase.¹⁰ Even thought there have been innovations allowing automatic machines to be used in the manufacturing process, labour remains the most important primary input (Sample Nos. 4, 6 and 9).¹¹ The most crucial skill local suppliers lack is international marketing knowledge.

Under MNE buyer modes, a relationship between MNE buyers and suppliers resembles general arm's length transactions in that these buyers and suppliers contact each other to negotiate their commercial contracts (e.g. price, quantity, quality, delivery and payments). In fact, a long-term relationship exists where MNE buyers and local suppliers work together intensively. This scenario can occur through either a direct link with MNE buyers (Sample Nos. 3, 5 and 6) or an indirect link with an agent who works for MNEs (e.g. Gap, Calvin Klein etc.) (Sample Nos. 4, 6 and 7). Such a relationship is not under explicit contract (Sample Nos. 3-6).

¹⁰ For example, choices of industrial sewing machines are available on the website, www.industrialsewingmahcine.com so that the transaction cost of buying an appropriate sewing machine seems to be negligible. In Thailand, the leading brand of industrial sewing machines is Juki, whose dealers are located in the Chinatown area.

¹¹ Fabric accounted for around 60 per cent of gross output.

At the beginning, suppliers must demonstrate their ability to satisfactorily manufacture assigned orders. Before placing orders, MNE buyers request potential suppliers to produce a product sample in order to conduct their own assessment of their capability. The sample must fulfill all requirements (e.g. quality, colour and other product details) at a given price (Sample Nos. 3-7). MNEs will then place orders only to suppliers who perform competently in making the sample.

Where the manufacturing process is concerned, MNEs work together with their suppliers to ensure uniform quality of final goods which satisfy all the requirements of the importing countries (Sample Nos. 4 and 7). Even though suppliers can perform well in producing a sample product, it does not necessarily imply that they will work to such a high standard within the manufacturing process. In the case where the quality of workers varies, so does the quality of the final goods. Hence, MNE involvement is to ensure that suppliers can undertake mass production with the commensurate uniform quality (Sample No. 7).

Over and above the manufacturing process, MNEs are adamant in requesting their suppliers to comply with social clauses (e.g. factory safety, labour standards, child labour laws), which have become an increasingly important condition determining market access (Sample No..5). In particular, Sample No. 5 outlineed the case of a large clothing company, which had been unresponsive to such requests. As a consequence, MNEs stopped placing orders with them and the company was suddenly shut down in mid-2007.

The involvement of MNEs positively contributes to firms' technological learning activities. MNEs put pressure on their suppliers to keep improving their productivity. As revealed by Sample Nos. 3 and 4, suppliers must undertake a factory audit by international agencies on a regular basis (i.e. every quarter) to ensure their competitiveness and compliance with regulations requested by importing countries. Evaluation outcomes are used by MNEs to develop productivity benchmarks among their suppliers. Outperforming suppliers tend to receive a larger volume of orders in subsequent periods. Suppliers which perform below the benchmark can expect a smaller

order volume and feel pressure to improve their productivity in order to catch up with other suppliers. In addition, there is productivity spillover, in which good practices in one supplier can be adapted by other suppliers (Sample No.7).

Moreover, MNEs help suppliers to move smoothly up the quality ladder. As revealed by Sample 3, orders granted by MNEs change every year and become progressively technically more complicated. A scenario is recalled wherein a firm began with a simple type of clothing during the late 1980s and shifted continuously towards more dedicated and technically complex designs. Right now it manufactures a swimming suit for scuba diving. As wages in Thai manufacturing continue to grow, it is necessary to produce more sophisticated products, in which labour costs are not the key and sole factor in determining international competitiveness. The most difficult part of product upgrading is to understand ones market niche. Sample Nos. 4 and 5 reveal more or less the same experience in order changes. Regular performance evaluation allows MNEs have better understanding of their suppliers' competitiveness so that orders allocated tend to be in line with suppliers' competitiveness. In some products which are new to Thailand, MNEs provide suppliers advice and technical knowledge on appropriate methods of manufacturing For example, Sample No.4 argues that a laser cutting machine was introduced by MNEs to enhance the firm's ability to manufacture more complicated orders. Without this support, it would far more costly for the company to acquire such information (vis a vis by a trial and error process).

One accrued benefit from associating with MNEs, is that some Thai suppliers can attain product development capability (i.e. be able to design and develop final goods) (Sample No. 5). Consequently, these suppliers can participate on an equal par with MNEs in developing final goods. In particular, staff of an MNE's research and development department work shoulder by shoulder with their supplier counterparts to develop the final goods.

Hence, the presumption that the entry of MNEs is merely undertaken in order to access cheap labour and Thai benefits is not supported by evidence derived from the interviews conducted. In fact, numerous Thai suppliers benefit from MNEs in terms of successful access to global markets and technological upgrading. It can be argued that it is costly for MNEs to be involved with indigenous suppliers. Thus, it is possible, but not always desirable, for MNEs to frequently change their suppliers. Sample Nos. 3-7 and 9, involve a relationship with MNEs that has lasted for 15-20 years and continues to thrive.

Where market expansion is concerned, it is unlikely for a supplier to work for many MNEs. This is due to the fact that order volumes from MNEs are usually large, relative to a supplier's production capacity. One example revealed during the interviews is that orders from a given MNE might account for more than 50 per cent of the total production capacity of a large supplier (Sample No. 5). It may be far greater in cases of smaller suppliers.

In recent years, a new form of MNE involvement emerged in the Thai clothing industry which presents an alternative for SMEs to become involved with MNEs. In particular, there have been Japanese MNEs searching for small suppliers to manufacture tailor-made clothing. The major difference between traditional and new MNE involvement is that the final goods in the latter are a modification of domestic marketoriented products. Staffs from MNEs help indigenous suppliers to select potential items which are made for local markets and advise product modifications to comply with consumer preferences in the Japanese market. Nevertheless, indigenous suppliers share considerable responsibility for the product design (Sample 2). Sometimes, this new form of MNE involvement is referred to Original Design Manufacture (ODM).

Note that order volume under the ODM relationship is much smaller and less certain than would be expected under traditional conditions. ODM export success depends largely on the ability of indigenous suppliers to seek out potential items for further modification. Suppliers must be able to understand fashion trends and keep up with any changes emerging in importing countries (Japan, in particular) as well as turn the knowledge of subjective changes in fashion taste into the reality of finished clothing. Such an ability varies from supplier to supplier. As a consequence, many ODM suppliers sell their products in both foreign and local markets to minimize business risks.

Evidence from the interview programme conducted suggests that it is often a SMEs' own decision not to become involved with MNEs (Samples Nos. 1, 2 and 8). Being an MNE or OEM supplier does not allow them to attain flexibility in running their business. For example, as can be observed in Sample 1, an indigenous firm must do whatever MNEs ask them to do. In this sense they become, at best, a subcontractor. Once the wage rate in the Thai manufacturing sector is no longer attractive, MNEs simply shift their order to somewhere else where wages are cheap. It is unlikely to be a brand owner. Samples Nos. 2 and 8 revealed more or less the same perception. A phenomenon raised in Sample No. 8 during the interview is that once a supplier is involved with an MNE, the latter usually request the former to expand production capacity. Such a request may be interpreted as opportunistic behavior on the part of the MNE to enhance their bargaining power over the supplier. From the perception of SMEs, being involved with MNEs does not afford a sustainable development path. As a result, most SMEs sell their products in local markets.

Interestingly, what SMEs are doing is not likely to be sustainable (Sample Nos 5, 6, 9 and 10). This is supported by the analysis in Section 4.2 above. As wages continue to grow, international competitiveness is eroding. This could lead to severe structural adjustment as the clothing industry accounts for a considerable share of the sum total of manufacturing workers. Some SMEs have abandoned their manufacturing business and now import cheap products from China for domestic market sale (Sample Nos. 2 and 8).

6. Conclusion and Policy Inferences.

This paper aims to examine the export success of the Thai clothing industry with a view to formulating prudential policy for SME development. The key hypothesis concerns the contribution of MNEs. This study uses 'purposive' sampling techniques in which contributors are chosen from information-rich cases for in-depth analysis related to

the central issues under study. Representatives from ten samples are interviewed; seven clothing firms (two SMEs and five large firms), a fabric wholesaler for SMEs, an apparel agent and an eminent person in the Thai textile and clothing industry. The final interviews were conducted from August to December 2004 by the researcher.

The key finding is that MNEs have played a pivotal role in the export success the of Thai clothing industry through MNE buyer modes. Despite resembling general arm's length transactions, a relationship between MNE buyers and suppliers is actually more commonly a long term proposition. Indeed, they work together intensively towards export success. Nevertheless, there are a number of small and medium clothing firms, which are reluctant to become involved with MNEs. This stems from the fact that they misunderstand the role of MNEs and underestimate the corresponding benefits to be enjoyed by both parties. Based on their understanding, being involved with MNEs would make them less flexible in business operations and cause them to become essentially merely a subcontractor providing cheap labour services. Interestingly, these firms entered the clothing industry in the presence of the policy-induced incentives of the cascading tariff structure. These incentives are drying up as wage rates in Thailand continue to grow and there is the prevailing import threat of cheaper clothing from neighbours and China, in particular. This leads to the necessity of structural adjustment as a consequence of resource misallocation. It is even more severe in the clothing industry which account for a sizable share of manufacturing workers in the industrial sector.

Three policy inferences can be drawn. Firstly, the government should promote better understanding with SMEs about the nature of being MNE suppliers, as well as the associated costs and benefits. In particular, they need to highlight the fact that despite it being costly, it is possible and more desirable to be integrated into the MNE production network. Being MNE suppliers significantly affects how SMEs run their businesses (e.g. formal accounting practice, input sourcing, general practices in factories, and general business operations) and incur significant costs. It is associated with benefits in terms of larger and more certain orders. Right now, in order to be integrated to MNE production

networks, SMEs can choose either traditional or ODM.modes. There are pros and cons associated with each mode. Dissemination of knowledge and experiences regarding this can be achieved by public seminars organized by government-related institutes like the Thai Textile Institute or industrial associations, such as Boe Bae Export Service Centre (i.e. SME clothing associations) or the Thai Garment Manufacturing Association (TGMA)

Secondly, the government can facilitate SMEs integration into the MNE production network. In general, when firms decide to become involved with MNEs, they must compile with certain basic requirements, such as ISO9001 and GMP. Attaining these is time consuming as they comprise complex management systems rather than more simple specific criteria. In addition, it would be useful for SMEs to make use of advanced information technology available (e.g. computers, internet and faxes) Certain forms of training are needed to make SMEs more efficient ways in these areas.

Thirdly, tax incentive schemes can be used to encourage some SMEs to play a leading role for others to follow suit. Considerable fixed costs are incurred when an SME upgrades and becomes a MNE suppliers. In addition, fixed costs are relatively large in comparison with an SMEs' working capital. A certain amount of trail and error would also be involved. The experiences of SMEs, which are successfully integrated into the MNE network would benefit others in reducing the risks and uncertainty associated with upgrading. Tax incentives would encourage some firms to take a leading role. Note that such incentive schemes should be used on a temporary basic only. As more and more successful cases are available, such schemes become less justified.

	Synthetic Fiber	Yarn	Fabric	Clothing	Manufacturing Average
1974	20	20-25	60	60	n.a.
1978	20	20-25	80	100	32.9*
1982	22	22-27.5	66	66	32.9*
1984	30	30	60	60	23.8**
1988	30	30-40	80-100	100	23.8**
1993	30	30	60-80	60-100	n.a.
1995	20	20	40	45	n.a.
1997	10	10	20	30	16.4***
1999	10	10	20	30	16.4***
2003	5.9	10	18.8	30	15.4
2007	3.3	5	5	30	9

Table 1 Tariffs in the Thai Clothing Industry, 1974-2007

Notes: *, ** and *** mean figures of 1980, 1985 and 2002, respectively. There is no significant change in tariff during the period 1997-2002. *Sources*: Author's calculation from the official database, Ministry of Finance.

Figure 1 Thai Clothing Export and Its Relative Importance, 1970-2006



Source: Author's compilation from UN Comtrade Database.



Figure 2 Employment in Thai Clothing Industry, 1989-2005

Source: Employment data of the Thai clothing industry are obtained from the official publications of the Thai Textile Institute, whereas the manufacturing employment is from Key Indicators of Pacific and Asian Economies, Asian Development Bank.

Figure 3 Export-output Ratio, Employment and Employment per Enterprise in Thai Clothing Industry, 1989-2005



Source: Author's compilation. Export data are from UN Comtrade Database whereas gross output is obtained from National Economics and Social Development Board. Employment and a number of enterprises are from Thai Textile Institute.

Figure 4

FDI Inflows to Thai Textile and Clothing Industries, 1970-2006

Sources: Bank of Thailand

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Appendix Interview Summary of Thai Clothing Industry (December, 2007)

No.	Size	Experience	MNE	Export	Key Findings
	(# of workers)	(# of years)	Suppliers	_	
1	15-20 workers plus subcontracting with micro enterprises in rural areas.	20	No	No	 The company decided not to become an MNE supplier because it wants to have a high degree of business operation flexibility. The company began with exporting niche products, Thai-style clothing during the second half of the 1980s. This is totally different from goods MNE suppliers export. This export opportunity was highly uncertain because its corresponding demand is likely to be once-and-for-all style. Hence, the company decided to shift towards home wear, cotton-made pajamas for the domestic market. There is no evidence of a direct cooperation among SMEs in this group. One possible area that SMEs can cooperate in is the purchase of intermediate goods. An individual SME's purchasing order is too small for intermediate manufacturers to serve their order at reasonable prices. Such a problem would be overcome by SME cooperation. In practice, nevertheless, fabric wholesalers facilitate such cooperation so that direct cooperation is not needed. No mention of any particular assistance from the government.
2	10-20 workers plus subcontracting with large clothing enterprises	25	No	Yes	 The company provides a similar reason as Sample 1 for not being a MNE supplier. The company's main products are baby's and women's apparel for both the domestic and foreign markets. In this product line, the company can enhance a product's value added by adding its own design. The design is mixed between fashion trends in the export destination with local initiatives. Exporting SMEs are referred to as Original Design Manufacture (ODM).

					 In addition, their order is a small lot and subject to frequent change. Despite being important, labour costs do not play a pivotal role in determining international competitiveness. The company urges that this is a niche of Thai clothing SMEs. The firm receives significant assistance from staff of MNE buyers (Retailers and/or wholesalers) in providing international marketing channels (Trends, Consumer's demand, Fashion). This becomes a crucial source of technology/innovation. Purchasing orders in this product line are far smaller than those expected from MNEs. It is also less certain. It heavily depends on the company's ability to translate consumer demand into reality. In other words, firm owners must have high entrepreneurship. To mitigate risks and uncertainty from exporting, many firms in this product line maintain their outlets in the domestic market in order. Entry and exit rates are high (dynamics). There are several forms of SME cooperation such as marketing surveys, information exchanges through the SME association (i.e. the Export Promotion Centre of Boebae Group). ODM is a reasonable alternative to becoming a MNE supplier especially for SMEs. Most of the current leading clothing exporters used to be SMEs and then firms decided either to maintain their operation as a SME or to become MNE suppliers and become integrated into the global production network
3	Less than 250 workers	20	Yes	Yes	 The initial business purpose of the company is to be a MNE supplier. Orders from MNEs are generally larger and more certain than those anticipated from selling in the domestic market. Being a MNE supplier allows the company to concentrate on the manufacturing process and leave MNEs to address international marketing, at which they are more capable. Their main product is swimsuits. The company development path began with being a second-tier supplier of a first-tier supplier during the second half of the 1980s where

					 a multi-fiber agreement was in effect. In the period where MFA was in effect (until 2005), the export quota was allocated according to historical records of export performance. Hence, any new entrants had to buy the right to export from first-tier suppliers. After being second-tier suppliers for a while, MNE buyers directly contacted the company. The link with the buyers has come into effect since then. 3. To be a MNE supplier, local suppliers must demonstrate their manufacturing ability (i.e. through producing product sample). 4. There is not a formal contract between suppliers and MNEs. Their relationship resembles arm's length purchase, but there is intensive interaction and cooperation among them. This helps the company keep improving their productivity and competitiveness. 5. The buyers keep putting pressures on the company to improve X-efficiency. The company's performance is regularly evaluated by external and international auditors (i.e. every quarter). MNEs use the evaluation report to rank suppliers in their network and allocate orders in the following periods. The better the company's performance, the larger the order the buyers will give to the company. In addition, the report is used to put pressure on suppliers which perform below the network's average. 6. Types of clothing in each order change regularly and it becomes more difficult and complicated. 7. MNEs request the company to compile with new regulations set by importing countries (i.e. labour standards, factory safety and industrial standards).
4	About 1,000 workers	25	Yes	Yes	 It was the company's intention to be a MNE supplier. The reason was similar to Sample No.3. The company's main products are alternative clothing e.g. skiwear, jumpers and sportswear. The company is linked into the global production network through a local agent, which works for worldwide brand owners. Nevertheless, information revealed by the company suggests that there is no significant

					difference between direct link with MNEs and an indirect link having a local agent as a middleman. 3. The company received assistance from the agent, which contributed significantly to the firm's competitiveness. In particular, the agent suggested that the company install laser cutting machines which are needed for manufacturing certain types of apparel. This enabled the company to take new and complicated orders. Without the agent's suggestion, it would be more costly for the company alone to acquire such information (trial and error process) and to install the machines. 4. A relationship between the company and the agent does not rely on explicit contracts but has lasted for more than 20 years. In particular, given intense competition in the world market, MNEs want to produce high-quality, tailor-made products in order to maintain their brand goodwill and international competitiveness. Developing a group of reliable suppliers is needed. To do so, MNEs need to work with these suppliers closely to ensure the latter can reach the product quality the former expect. In doing this they incurs considerable sunk costs. Hence, despite being feasible, changing suppliers is not desirable. 6. Quality and delivery become increasingly important in determining international competitiveness especially in the post-MFA era.
5	Greater than 1,000 workers	25	Yes	Yes	 The relationship with MNEs revealed in this sample largely supports what we found in Samples 4 and 5. The company is a principal supplier of MNEs. That is, the company's relationship with MNEs was advanced to a level that MNEs and the company develop products. This process starts from developing patterns, choosing fabric types, color, material sourcing and continues up to the manufacturing process. MNEs start to internationalize their R&D activities (R&D internationalization). An R&D team is set up in the company's staff This happened during the post MFA era.

					 3. In addition, MNEs tend to adopt modular systems. They will directly link with a limited number of suppliers (First-tier suppliers) to cut monitoring and other transaction costs. First-tier suppliers must acquire product design capability in order to work with MNEs in developing new products. Suppliers who do not have this capability will be in the lower tiers (Second/Third Tier suppliers). 4. While inter-firm cooperation is needed to enhance the ability to respond to world demand, so far there has not been any significant interfirm cooperation, especially among SMEs.
6	>1,000 workers (semi- integrated firms, i.e. knitting, finishing and clothing)	25	Yes	Yes	 General interview findings support those addressed in Samples 3-5. Interestingly, the company experienced two types of MNE links, the direct link with MNEs and the link through the Hong Kong Agent (i.e. Li & Fung). The latter is seeking a simple manufacturing service (i.e. cutting, sewing) so that benefits expected with this type of agents are lower than with the former. As an eminent person in the Thai textile and clothing industry, the company owner raises concerns of the current stage of SMEs development. SMEs need to form an inter-firm cooperation pact with each other to survive in the arena of more intense global competition (the post-MFA era). Nevertheless, many SMEs are not aware to the increased global competition. Consequently, this could lead to severe structural adjustment. More importantly, some SMEs oppose any form of inter-firm cooperation because of their belief that doing business is a zero-sum game, one gaining implies the other losing.
7	The local agent	of world brand	owners with mo	re than	1. The company acts as a middleman between Thai clothing suppliers
	10 years in busi	ness			 (ten suppliers) and their foreign clients, which are world-class brand owners. The company's responsibility includes searching for reliable suppliers, control quality of products manufactured by these suppliers, and delivering the products on time. 2. Before placing orders, the company sends staff (referred to as the QC

		team) to examine the ability of suppliers to manufacture orders. The QC team brings in the clothing design (on paper) and asks whether their suppliers can make product samples within a given period of time and certain price constraints. Sometimes, the QC team provides crucial information such as sources of imports (domestic/import) and additional machines needed to product the order. Subsequently, the team will
		examine whether the sample reaches acceptable standards. This would
		take two to three weeks
		3. Suppliers who are able to provide the sample (fulfilling both price and
		non-price requirements) are requested to submit a so-called pre-
		production sample. In the pre-production sample stage, the sample is
		from the previous stage in which product samples can be made by a
		suppliers' most capable workers. In this stage, the other team (referred
		to as the Merchandiser) will work with suppliers in every stage of the
		manufacturing process. This is to ensure the manufacturing process
		produces unique product quality.
		4. Similar to Sample 3, the performance of the agent's suppliers will be
		assessed regularly. The benchmark of production efficiency is used to
		allocate orders in subsequent periods. It is used to put pressure on
		suppliers to keep enhancing their production efficiency, especially those
		who are performing below the average standard. Best practice in one
		supplier can benefit others in the network through this regular
		assessment.
		5. Based on the company experience, fully integrated clothing firms are
8	Eabric suppliers to SMEs	1. There are many SMEs in the clothing industry most of which are
0	rable suppliers to Sivies	operating in the domestic market. It is the enterprises' decision not to
		be a MNE supplier in order to have a high degree of business operation
		flexibility.
		2. To be a MNE supplier, firms must comply with MNE requirements in

		 the production process (new equipment), production capacity requirement and factory management (labour standards, industrial standards). It is not a once-and-for-all event. Rather, it changes periodically. In addition, some SMEs worry about monopsonistic behavior problems as orders of MNEs are relatively large, compared to SMEs' production capacity. 3. Capital shortage is not the major obstacle for SMEs in becoming an SME supplier.
9	Fully integrated textile and clothing company and an eminent person of the textile and clothing industry.	 The company points to quick response as a key for firms maintaining their internationally competitiveness. To do so, inter-firm cooperation is needed. Nevertheless, inter-firm cooperation does not necessarily mean fully integrated firms. In fact, it is very difficult for clothing firms to become fully integrated because it would require considerable investment. The main obstacle of inter-firm cooperation is entrepreneur's attitudes. In particular, firms and SMEs in particular, are reluctant to share their own firm information. There are many MNE suppliers who work individually and have limited ability to source inputs. As wage rates increase and there are new entrants into the world market, like Vietnam, international competitiveness is eroding and structural adjustment seems unavoidable. The trend that MNEs adopt modular system in their outsourcing is confirmed in the company
10	An eminent person in the textile and clothing industry and a synthetic fiber manufacturer.	 SMEs are highly heterogenous Some are very competitive and forward-looking. But there are numerous SMEs that remain vulnerable in surviving in the post MFA era because of misinterpreting the global environment. The major policy challenge is that how to make the latter realize the constraints of the changing global environment. This would help them to find their niche. Even though they are experiencing a drop in their sale orders, such a drop is interpreted as a downturn in the usual business

	cycle. Information dissemination is highly needed to avoid radical
	structural adjustment.