Discussion Paper Series

INTERNATIONAL LABOUR MIGRATION AND COMPETITIVENESS: EVIDENCE OF THAI CLOTHING INDUSTRY AT THE BORDER

Archanun Kohpaiboon

Discussion Paper No. 0018 July 15, 2009



Faculty of economic Thammasat University ertc@econ.tu.ac.th

INTERNATIONAL LABOUR MIGRATION AND COMPETITIVENESS: EVIDENCE OF THAI CLOTHING INDUSTRY AT THE BORDER

Archanun Kohpaiboon^{*}

Abstract

This paper examines the impact of international labour migration on competitiveness, using firm-level case studies of Thai clothing factories in Tak province, at the border between Thailand and Myanmar. The focus is on how firms at the border make use of the opportunity to access low-wage foreign workers to enhance their competitiveness. The key findings suggest that there are a number of export-oriented, small- and medium-sized enterprises setting up clothing factories in Tak province to access lowwage foreign workers in order to maintain their competitiveness. Postulated in the literature on labour migration is the potential adverse effect that importing low-wage foreign workers has on technological progress. This has not been found in the case of the Thai clothing industry, due to persistence of global competition. While this study's outcome cannot be treated as strong evidence in favour of widely opening the door to foreign workers, our findings argue for less concern about its adverse effect on technological progress. Firms, regardless their workers' nationality (local versus foreign), must stay alert to any activities that will improve productivity in order to survive amidst intense competition. In addition, as there are a number of Japanese SMEs searching for business partners abroad, firms at the border have the same potential as firms located elsewhere in Thailand. With their limited experience in participating directly with foreign buyers, there is room for both Thai and Japanese governments to realize this business potential.

Key words: Thailand, International Labour Migration, Garment Industries

JEL: F16, F22, O15, and O53

^{*}This paper is based on the author's work submitted to Bangkok Research Center, IDE-JETRO Bangkok Thailand. I am grateful to Professor Prema-chandra Athukorala, Arndt-Corden Division of Economics, Research School of Pacific and Asian Studies, Australian National University (ANU) for introducing me to International Labour Migration research area as well as a number of useful references. I thank Mr. Sontaya Sudsiri, Head of Factory Department, and Ms. Kanokpon Junthaosod, Head of Industrial Promotion of Tak province in sharing with me their knowledge about the province's industrial development. I also benefit from interview with four anonymous garment firms in Tak province.

1. ISSUES

International labour mobility has been an increasingly important feature of the economic landscape in East Asia over the past three decades. From the late 1980s, there was an increasing volume of foreign workers hired in East Asia economies. It began with high-performing economies in the region (i.e. Japan, Korea and Taiwan), which have been absorbing an increasing volume of foreign workers from lower-income neighbouring countries. In the 1990s, Thailand and Malaysia followed suit, although they used to be significant labour exporters in the 1970s. Interestingly, despite various degrees of foreign worker dependence, a common pattern shared among these countries is that most of their foreign workers are unskilled or semi-skilled, with a motivation to cope with tightening labour markets and the rising real wages (Manning, 2002; Athukorala, 2006). As a consequence, it is widely recognized that international labour migration was the third, but largely neglected dimension of globalisation and structural change in East Asia over the past three decades, following the earlier transformation of trade and intensification of capital flows (OECD, 1992; Salt, 1992; Athukorala and Manning, 1999).

Despite being neglected in multilateral agreements (Athukorala, 2006), the movement of unskilled/semi-skilled workers across borders is one of the contemporary policy debates in both labour-importing and exporting countries. On the one hand, there were recurrent demands by employers in these countries for a more liberal and transparent approach towards the entry of foreign workers. The availability of foreign labour generally contributes to economic dynamism and flexibility of structural adjustment. The demand for opening the door to foreign labour wider was particularly strong among small- and medium-scale industries, as they did not have the option of exporting capital to cope with tightening labour markets.

On the other hand, there is an economic argument pointing out the possibility of an adverse effect on technological progress by importing low-wage foreign workers. High dependence on cheap foreign labour tends to slow economic restructuring and productivity improvement in the labour importing country. Once the process has started, entrepreneurs soon become accustomed to the steady availability of unskilled workers, and they soon incorporate the phenomenon into business planning. Investment and other decisions are made on the premise that labour costs would continue to be held down by migration. In addition, the growing presence of foreign workers has sparked a continuing debate in labour importing countries on the social and economic consequences of labour inflows.¹ This becomes even more serious in the era of global economic recession and the rising threat of nationalism.

Interestingly, international labour migrants are one of the potential areas for regional cooperation in the region, and the Greater Mekong Region in particular. Geographically, income per capita dispersion in GMR countries is wide and so are labour costs. All GMR countries other than Thailand are marked by low levels of per capita income and have a high share of GDP and employment in the low productivity agricultural sector. Moreover, exporting labour has been used as an important aspect of labour and employment policy to mitigate unemployment and/or underemployment, reduce poverty and to earn foreign exchange for several labour exporting countries (Athukorala, 2006). In contrast, despite exhibiting a slowing trend after the financial crisis of 1997/98, real wages in Thailand increased continuously (Figure 1). In other words, it seems that Thailand is reaching the so called 'Lewisian Turning Point, in which the excess supply of labour observed in the 1970s is running out. Despite the continued resistance from local conservative groups, the door to foreign workers has been significantly opened since 2001 (Martin, 2004:23).

Against this backdrop, this paper aims to provide firm-level case studies of the Thai clothing industry located at the border, with a view to facilitating prudent policy on opening the door to foreign workers. The main emphasis is on how Thai firms make use of the opportunity to access low-wage foreign workers to enhance their competitiveness. This cannot be achieved by a questionnaire survey that uses a variety of sample characteristics to draw quantitative inferences. Instead, a flexible interview approach was employed, requesting respondents to relate their experience in their own words and in their own sequence. The main advantage of this approach is that it minimizes the likelihood of missing important facets of the story. Hence, this study

¹ The debate is reminiscent of the debate on guest-worker Migration in some European countries during the 1960s (Kindleberger 1967, Lewis 1979).



Note: Real wage is the ratio between (real) employment compensation and employed workers, converted to a 1990 index (1990=100).

Sources: Employment compensation is compiled from the National Income Account, National Economic and Social Development Board (NESDB), and for employed workers from Key Indicators for Asia and the Pacific 2008, Asian Development Bank (ADB).

uses a 'purposive', rather than sampling technique, in which samples are purposively chosen from information-rich cases for in-depth analysis related to the central issues under study, (Patton, 1990). Firms included must employ foreign workers and have been exposed to international competition to a certain extent. Three garment firms and two high-profile civil servants were interviewed during January-February 2009. The interview period averaged one hour, and was conducted by the author. There are few samples covered in this study, due to time and resource constraints, so our findings should be regarded as useful inputs for future research in this area.

The clothing factory at Tak province was selected for this study for four reasons. First, for the past decade there have been a number of clothing factories relocating their manufacturing to border areas, such as Tak province and other northeastern provinces, in order to gain access to foreign workers and to enhance their international competitiveness. Second, the clothing industry is most labour intensive among manufacturing activities and has a limited degree of substitution between capital and labour so that it is unlikely for firms to opt for a capital deepening option to enhance their international competitiveness. Third, there are a number of small- and mediumsized enterprises (SMEs) working in the industry partly because of its relatively low entry barriers. These enterprises have difficulty getting access to credit for investment, so exporting capital to mitigate losses from international competitiveness as a result of rising wages and labour scarcity is not available. Fourth, Tak province is the western edge of Thailand, with a 600-700 kms long boundary with Kayin State of Myanmar, and there is convincing evidence that clothing factories there employ foreign workers.

This paper begins with the analytical framework of international labour migration (Section 2). The development path of the Thai clothing industry is discussed in Section 3, focusing in turn on policy environment, performance and the pattern of MNE involvement, followed by the interview results in Section 4, and the conclusions and policy inferences in Section 5.

2. ANALYTICAL FRAMEWORK

This paper's analytical framework is based on the open-economy version of the Lewis model (Lewis, 1954, 1958) developed in Athukorala and Manning (1999). In the original model, a labour-surplus economy consists of two sectors, namely the 'modern' sector and the 'subsistence' sector (i.e. dual economy).² The production process in the modern sector makes use of capital and labour, while there are three primary inputs used in the subsistence sector, namely capital, labour and land. Note that the subsistence sector covers not only agriculture, but also handicraft workers, petty traders, domestic servants as well as farmers.

As the modern sector begins expanding, excess supply of labour moves from the subsistence sector. Employment in the modern sector is determined by the demand for labour. Given the low opportunity cost of labour in the subsistence sector, the modern sector can hire workers at a slightly higher fixed wage to compensate for the higher

 $^{^{2}}$ We follow the terminology used in Athukorala and Manning (1999). This is different from a number of previous studies that use 'industry' and 'agriculture'. This alternative terminology simply ignores micro enterprises in non-agricultural and informal sectors that are important in developing countries. In addition, such terminology gives the wrong impression that the model is not applicable to countries like Singapore, or to Hong Kong, where there is no agricultural sector, as such.

costs of town over rural life. Capital formation and technical progress in the modern sector do not raise wages, but increase the share of profits in the national income.

When the original model is applied to an open economy, the modern sector in a given economy must be a part of the expanding modern sector of the world. For the surplus labour economy, an opening economy means greater opportunities for output expansion through the export of goods that are intensive in unskilled labour. As the world division of labour becomes more finely articulated, countries will find their own niches in the world market. In this circumstance, labour cost becomes increasingly important for a labour surplus economy in determining the international location of production gains (Krugman 1995).

Note that labour surplus depletion in the open economy model would occur at a faster rate than happening in the closed economy model. When the labour market becomes tightened, wages begin to rise above the subsistence level and international competitiveness is declining. This is the so-called 'Lewisian turning point'. When a country is reaching the 'Lewisian turning point', three options are available for maintaining its international competitiveness, namely importing cheap labour from abroad, capital exporting (relocation of production in another low wage or surplus labour country) and capital deepening.

In Option 1, business can be expected to proceed in the same manner as during the labour surplus phase of development. The only difference is that abundant supplies of labour at subsistence wages are drawn from abroad. Nonetheless, in theory importing labour could retard technological progress. Once entrepreneurs become accustomed to the steady availability of unskilled workers, this would slow down productivity improvement. Investment and other decisions are made on the premise that labour costs would continue to be held down by migration. All in all, the reliance on migrant workers is likely to postpone capital deepening and technological advances in the labour receiving country. Besides, there are always concerns of non-economic consequence of importing low-wage foreign workers, such as cultural contamination and disruption of social peace.

Option 2 is capital exporting. While in theory this option is widely open for all types of firms, in practice it is only available to large firms in tradable good sectors

operating in an oligopolistic market environment. As postulated in the literature of foreign direct investment, a firm taking this step must be able to use abroad its proprietary technology, so as to offset the potential disadvantage against the local firm possessing superior knowledge of the availability of factor inputs, business practices and/or consumer preferences in the host country (Dunning, 1993; Caves, 2007). In addition, foreign firms which have their global operation networks and more experience in doing business abroad would be in a better position to use this option, compared to indigenous firms. This is particularly true in the case of SMEs and also firms involved in diffused-technology product lines. In addition, relocating factories abroad would generally be a net loss to the given capital-exporting country (a reduction in national income).³ The exception would be the relocation of locally owned firms because these would reap the rewards of their foreign operation and would increase the national product. Nevertheless, labour's share of the national product would be hurt.

Option 3 is to adopt labour-saving technology (Kindleberger, 1967). In theory this option would naturally occur. At the beginning, the expansion of output demand at a constant real wage leads to increased profits, savings and investment, so that the country's capital-labour increases over time. The public, especially in developing countries, views this option as far superior to the other options as it is seen as the indicator of success in the country's industrialization. In practice, a smooth adjustment does not automatically occur, but depending on how well preconditions, such as skilled workers and infrastructure, have been established. More importantly, many of these preconditions are directly related to the role of government. Another impact consideration is the involvement of multinational enterprises (MNEs). If their entry is based predominantly on the relative cost competitiveness of the given country on a global scale, and they operate in their own enclaves, they always have the option of relocating to another low-wage location rather than upgrading and/or adopting production process to suit domestic market conditions.

³ Welfare improvement could result by shifting production abroad to foreign affiliates. This occurs when the entry of foreign affiliates is driven by tariff/protection motivation (Bhagwati 1973, Brecher and Diaz-Alejandro 1977, Brecher and Findlay 1983). In this circumstance, the investment-receiving countries could experience immiserizing growth induced by the entry of foreign firms so that their departure could well increase (rather than reduce) national welfare.

As argued in Athurkorala and Minning (1999), choices over these three available option, depends on both economic and non-economic factors, such as the relative importance of the non-tradable sector, industry composition, geographic factors, geopolitical factors, ethnic diversity, history and geographical factors. Hence, there is not a universal solution appropriate to all countries; rather, it varies from country to country and industry to industry.

3. THAI CLOTHING INDUSTRY

3.1 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 percent. This was far higher than the average tariff rate for the manufacturing sector, which stood at around 23-30 percent during the same period. Significant tariff cuts in the clothing industry began in 1995, as a consequence of a comprehensive plan for tariff reduction that was 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, the tariff rate for clothing was 30 percent. Nevertheless, it is far higher than the average of the manufacturing sector (i.e. nearly eleven percent) (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.

	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 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.

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 exemptions/drawbacks were introduced. For example, the Board of Investment (BOI) introduced tariff 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 percent). This was supplemented by the existing two tariff exemptions: tariff exemptions (Section 19 of the Customs Laws) given by the Department of

Customs and tax rebate schemes given by the Fiscal Policy Offices (FPO).⁴ 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, tariff exemptions/drawbacks made Thailand attractive to East Asian investors as a location for export-oriented labour-intensive production bases.

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).⁵

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 has been 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

⁴ 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.

⁵ 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 exporters-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)

produce low quality clothing in order to maximize the benefits entailed from the tariff structure. Second, 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 faced by clothing exporters cannot be passed through to upstream industries. Here, it is the global competition that is the key catalyst of long-term productivity improvement.

3.2 Economics Performances

Clothing was the foremost manufacturing export of Thailand between the mid-1980s and the early 1990s (Figure 2). 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 percent in the early 1980s before surging to 12 percent 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



Figure 2 Thai Clothing Export and Its Relative Importance, 1970-2006

Note: Clothing export is defined as SITC 84. *Source*: Author's compilation from UN Comtrade Database. 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 percent of total costs (Kohpaiboon, 2008). 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 literature,⁶ the latter is measured by the average of sales value per firm accounting for 50 percent 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).⁷ Subsequently, these measures are ranked in ascending order to indicate the degree of labour intensity. The lower the industry rank, the higher the degree of labour intensity. The clothing industry was ranked ninth and fifth out of the 125 industries, in terms of the 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, which represented around 22.4 percent of total employment in the manufacturing sector during that period. Despite experiencing a steady export growth, the industry's employment level was more than 800,000 workers for the decade ending in 2006. Nevertheless, its

⁶ See, for example, Bird (1999) and Kohpaiboon & Ramstetter (2008).

⁷ The census covers 32,489 plants, belonging to 125 4-digit industries of the TSIC. The gross output and value-added reported in the census was only 76.2 and 59.2 percent 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 the 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 percent of the estimated manufacturing value added from the National Account (Kohpaiboon, 2006; 2009).

relative importance in the manufacturing sector had noticeably declined to 15 percent by 2006. 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. First, the number of enterprises in the clothing industry doubled to around 3,066 firms in 1995 from 1,574 firms in 1989. Interesting, 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. Second, the increasing number of enterprises went hand-in-hand with the declining export-output ratio of the clothing industry. In 1989, almost



Figure 3 Firm Dynamics in Thai Clothing Industry, 1989-2006

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

60 percent of domestic manufactured clothing was for export and had dropped to around

30 percent 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' option (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 made clothing tariffs 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, along with indirect export opportunities. Since 1995, therefore, the number of enterprises operating has dropped. Between 1996 and 2006, 36 enterprises exited the clothing industry every year. By 2006, there were 2,528 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 their technological capability, as well as in complying with customer demand for improvements in quality and price. Those operations that were unable to upgrade their products often exited the industry. Many of these were SMEs, as the ratio of the number of workers to that of enterprises has increased steadily since 1996. The number of workers per enterprise increased to 32.6 in 2006, from 28.6 in 1995 (Figure 4).



Figure 4 Employment in Thai Clothing Industry, 1989-2006

Sources: Employment data for 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.

Of note is the fact that the above noted exit did not have a significant impact on the number of workers employed in the industry (Figure 4). The number of workers declined slightly to 824,500 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 successfully upgraded their production to higher-value clothing. Therefore, workers which used to work in companies that shut down can be reallocated to work with larger and more exportoriented clothing firms.

3.3. 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 5 illustrates FDI inflow to the T&C industry and their percentage share of total FDI inflow into the industrial sector during the period 1970-2007. 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 2007, FDI inflow recorded an upward trend in spite of some fluctuations. FDI inflow reached \$170 million by 2007, increasing from \$116 million in 2001 (Figure 5).

Figure 5 FDI Inflows to Thai Textile and Clothing Industries, 1970-2007



Source: Bank of Thailand

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 percent of total industrial inflow (Figure 5). Its share dropped to 7.9 and 4.5 per cent in the 1980s and 1990s, respectively. Its share further declined to 2 percent during the period 2000-07. 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), which placed emphasis on the domestic market, rather than the export.

Evidence gathered from the textile industry interview in Kohpaiboon (2008) suggests that there are no foreign affiliates playing a leading role in the Thai clothing industry.⁸ 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 the clothing industry was 43.2 percent 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, such as footwear and toys, and 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, the likelihood of global market penetration in such industries is reliant on whether or not firms acquire international marketing knowledge. Consequently, the low level of foreign equity shares suggests the presence of MNE involvement through non-FDI channels.

⁸ See more details about the sampling process and interview findings, respectively, in Sections 3 and Appendix.

4. INTERNATIONAL LABOUR MIGRATION AND COMPETITIVENESS

There is convincing evidence that there were a number of SMEs setting up factories in Tak province in order to access the pool of low-wage foreign workers from neighbouring countries, and Myanmar in particular. This is due to the fact that the province is at the western edge of Thailand, with a 600-700 kms long boundary with the Kayin State of Myanmar. Factory relocation to Tak province began in 1996, prior to the crisis in 1997.

In 2008, there were about 150 clothing factories located in the province, most of which came from Bangkok, composed of 90 woven factories and 60 knitting ones. Nonetheless, the official figure tends to be underestimated as micro-enterprises (less than 20 workers) are excluded. The interview evidence suggests that there are a number of micro-enterprises in the clothing industry in Tak province. They are mostly local entrepreneurs who exhibit very high entry and exit rates.

Most of the clothing factories in Tak province are subcontractors for export. Nonetheless, they are not directly in contact with multinational buyers, such as Decaron, Nike, Adidas, Cavin Klein (henceforth referred to as the buyers). Rather they receive orders from larger firms located in Bangkok, which directly interact with the buyers. These firms have export experience, although they have not been directly in contact with MNEs.

Broadly speaking, all clothing factories in Tak province use Myanmar workers. These factories hire both foreign and local workers in a complementary rather than substitution manner. In general, local workers have better skills and more experience, they have long-relationships with the factory's owner and work as factory superviors. On the other hand, foreign workers are rather unskilled and are trained to work in the production line. The estimated ratio between foreign to total workers is around 80-90 per cent.

Thai workers seem to have higher productivity than foreign workers. Revealed in the interview, the largest productivity difference would be 3 Mynamar workers to 1 Thai worker. In addition, it is more comfortable for the factory's owners to deal with local workers who share a common culture and language. Nonetheless, it is the local worker shortage that forces firms to opt to import low-wage foreign workers. One of the sample firms revealed that most of their Thai workers wanted to continue their undergraduate study instead of enrolling in vocational programs, and that they have a difficult time finding qualified local workers. This is consistent with the findings of Kohpaiboon (2008), in which large leading clothing firms in Bangkok were experiencing the same sort of problems during the period 2005-7. In addition, firms must provide 60-90 days training to foreign workers in order for them to attain manufacturing skills. This is done without any guarantee that these trained workers will stay with them for any length of time. Revealed in the interview, the factory's owners must treat its workers well to reduce labour turnovers. Even though they are foreign, their numbers are large enough to form their own networks. They can easily move from a factory to factory in order to maximize the return on their migration and sometimes they seek better employment opportunities in the inner area of Thailand, and Bangkok in particular.

In the interview, there is no evidence that these clothing firms are insensitive to productivity improvements after getting access to low-wage foreign workers. Instead, they have to stay alert to such activities to ensure that their business survives. This is regardless of the nationality of their workers. One firm emphasised the persistence of fierce global competition from China and Vietnam, so that they must be always competitive. While it is very hard to provide quantitative measures of productivity improvement of SMEs, the interviewed firms reveal their successful performance in the past in terms of consecutive overtime operation, well handled shorter lead times (less than 45 days) and production of more complicated orders.

There are complaints about current policy in Thailand that pose obstacles to firms' ability to harness the benefits of importing low-wage foreign workers. In general, the Thai government allows firms at the border to hire foreign workers, but movement from border provinces to other places (e.g. Tak province to Bangkok) is subject to the approval of the provincial governor. At the outset, foreign workers have to prove their nationality and then apply for a work permit that lasts for 2 years, with a one time renewal. Hence, the maximum period of legally staying and working in Thailand is 4

years. After 4 years, these identified foreign workers must return to their home countries and are not eligible for working in Thailand again.

As argued above, hiring foreign workers incurs fixed and hidden costs to the firm. This is a result of 60-90 days of training and the administrative costs involved in hiring foreign workers. The latter is usually paid in advance by the firm. To cover such fixed cost, the firm must extend working periods so that such fixed costs will be shared over a longer period. However, current policy has set the working period at 4 years maximum, which has increased fixed costs per year. This policy also creates incentives for foreign workers to work illegally in order to maximize their working period abroad.

Importing labour seems to be more feasible and preferable, as opposed to the other two options. Capital deepening is not feasible for the clothing industry, because of the limited degree of capital-labour substitution. Labour cost still accounts for 15-20 percent of total cost. There was evidence that several relatively large firms invested in low-wage countries, such as Vietnam and China, but failed to operate there simply because of the rapid increase in local wages.

As argued in Kohpaiboon (2008), there have been Japanese SMEs searching for small suppliers to manufacture tailor-made clothing. Given the characters of firms located at the border discussed above, they are potential candidates to become Japanese SMEs' partners. Nevetheless, a certain degree of policy intervention is needed to facilitate the potential business partnership between Thai and Japanese SMEs. This is due to the fact that in the clothing industry as well as other traditional labour intensive products (e.g. 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. Hence, the form of a foreign firm involvement tends to occur through a non-equity channel.

Under a non-equity channel, foreign and indigenous firms work together closely and develop a long-term relationship, despite not being under explicit contract. Importantly, to become integrated into the MNEs global chain, local enterprises must comply with all requirements and apply technical information. In many cases, manufacturers are required to install additional facilities. While this seems to be a usual practice under a non-equity channel, it seems to be new for Thai SMEs as they lack experience in dealing directly with foreign customers. In their view, complying with lists of requirements and installing additional facilities incurs considerable fixed costs. They are reluctant to follow any suggestion if foreign firms fail to signal to them a certain degree of business certainty. Even though such transactions could be purely private activities, there is still a room for government agencies from both Thailand and Japan to facilitate such business partnerships.

5. CONCLUSION AND POLICY INFERENCES

This paper examines the international labour migration–competitivness nexus, using firm-level case studies of Thai clothing factories in Tak province, at the border between Thailand and Myanmar. The core methodology is interviews conducted during January-February 2009.

The key findings suggest that there are a number of export-oriented Thai clothing enterprises setting up factories in Tak province to gain access to low-wage foreign workers, and to maintain their competitiveness. While in theory, importing low-wage foreign workers can somehow retard the technological progress of firms, such an adverse effect on technological progress has not been found. This is due to the persistence of global competition. It is especially true in a quota-free global trading environment. We realize that the study's outcome cannot be treated as strong evidence in favour of opening the door widely to foreign workers. Opening the door to foreign workers is related to other aspects, including its social and political consequences. Instead our findings suggest far less concern about the adverse effect on technological progress, as firms must stay alert to any kind of productivity improvement to survive in the more intense competition, regardless where their workers come from.

In addition, as there are a number of Japanese SMEs searching for business partners abroad, firms at the border have the same potential as others located elsewhere in Thailand. To realize the potential of these firms, certain forms of government assistance is needed.

REFERENCES

- Athukorala, P. (2006), 'International Labour Migration in East Asia: Trends, Patterns, and Policy Issues', *Asian-Pacific Economic Literature*, 20(1): 18-39.
- Athukorala, P. and C. Manning (1999), *Structural Change and International Labour Migration and in East Asia*, Oxford University Press, Oxford.
- Bell, M., B. Ross-Larson, L.E. Westphal (1984), 'Assessing the Performance of Infant Industries', *Journal of Development Economics*, Vol.16, No.1, pp.101–128.
- Bhagwati, J. (1973), 'The Theory of Immiserizing Growth: Further Applications', in M.B. Connolly and A. K. Swoboda (eds.), *International Trade and Money*, University of Toronto Press, Toronto.
- Bird, K. (1999), 'Industrial Concentration and Competition in Indonesian Manufacturing', unpublished PhD thesis, Australian National University, Canberra.
- Brecher, R.A. and C. F. Diaz-Alejandro (1977), 'Tariffs, Foreign Capital and Immiserizing Growth', *Journal of International Economics*, Vol.7, No.4, pp.317–322.
- Brecher, R.A. and R. Findlay (1983), 'Tariff, Foreign Capital and National Welfare with Sector-Specific Factors', *Journal of International Economics*, Vol.14, No.3, pp.277–88.
- Dunning, J.H. (1993), *Multinational Enterprises and the Global Economy*, Addison-Wesley Publishers, Massachusetts.
- Caves, R.E. (2007), *Multinational Enterprise and Economic Analysis* (3rd edition), Cambridge University Press, Cambridge.
- Everson, R.E. and L.E. Westphal. (1995), 'Technological Change and Technology Strategy', in J. Behrman and T.N. Srinivasan (eds.), *Handbook of Development Economics*, Elsevier Science, Amsterdam.
- Jongwanich, J. (2008), 'Real Exchange Rate Overvaluation and Currency Crisis: Evidence from Thailand', *Applied Economics*, 40(3), 373-82
- Jongwanich, J. and A. Kohpaiboon (2007), 'Determinants of Protection in Thai Manufacturing', *Economic Papers*, 26(3), 276-94.
- Kindleberger, C. P. (1967), *Europe's Postwar Growth: The Role of Labour Supply*, Harvard University Press, Cambridge MS.

- Kohpaiboon, A. (1995), 'Policy Distortion and Competitiveness of Thai Textile Industry, Master Thesis, Faculty of Economics, Thammasat University.
- Kohpaiboon, A. (2006), *Multinational Enterprises and Industrial Transformation: Evidence from Thailand*, Edward Elgar, Cheltenham.
- Kohpaiboon, A. (2008), 'MNEs and Global Integration of Thai Clothing Industries: Policy Implication for SME Development, Report submitted to Institute of Developing Economies, Japan.
- Kohpaiboon, A. (2009), 'Vertical and Horizontal FDI Technology Spillovers: Evidence of Thai Manufacturing', *ERIA Discussion Paper (forthcoming)*, Economic Research Institute for ASEAN and East Asia (ERIA), Jakatra.
- Kohpaiboon, A. and E.D. Ramstetter (2008), *Producer Concentration and Foreign Ownership in Thai Manufacturing*, Discussion Paper, International Centre for the Study of East Asian Development (ICSEAD), Kitakyushu.
- Krugman, P. (1995), 'Growing World Trade: Causes and Consequences', *Brookings Papers on Economic Activity*, 25th Anniversary Volume, pp.327–377.
- Lewis, W. A. (1979), 'The Dual Economy Revisited', *Manchester School*, vol. 47, no. 3: 26-42.
- Lewis, W.A. (1954), 'Economic Development with Unlimited Supplies of Labour', Manchester School, 22(2): 139-91
- Lewis, W.A. (1958), 'Unlimited Labour: Further Notes', *Manchaster School*, 26(1): 1-32.
- Manning, C. (2002), 'Structural Change, Economic Crisis, and International Labour Migration in East Asia', *World Economy*, 25(3): 359-84
- Martin, P. (2004) *Thailand: Improving the Management of Foreign Workers,* International Labour Organization (ILO), Geneva.
- Moran, T.H. (2001), Parental Supervision: The New Paradigm for Foreign Direct Investment and Development, Institute for International Economics, Washington, DC.
- OECD, Trends in International Migration, OECD, Paris, 1992.
- Patton, M. Q. (1990), *Qualitative Evaluation and Research Methods* (2nd edition), Sage Publications, California.

- Ramstetter, E. (2006), 'Are Productivity Differentials Important in Thai Manufacturing' in Ramstetter, E. and F. Sjoholm (eds.), *Multinational Corporations in Indonesia and Thailand: Wages, Productivity and Exports,* New York, Palgrave Macmillan, p. 114-142.
- Rock, M. and D.P. Angel (2005), *Industrial Transformation in the Developing World*, Oxford University Press, Oxford.
- Salt, J. (1992), 'The future of international labor migration', *International Migration Review*, 26 (4): 1077-1111.
- Suphachalasai, S. (1992), 'The Structure of the Textile and Government Policy in Thailand', Paper presented for the Thailand Development Research Institute (TDRI) Year-end Conference 1992 on *Thailand's Economic Structure: Towards Balanced Development?* Thailand.