

BIBLIOGRAPHIC INFORMATION

Title	AFTA and the Competitiveness of Malaysian Manufacturing
Source	http://phuakl.tripod.com/pssm/conference/day35.doc
Author 1	Tham, Siew-Yean
Author 2	NA
Author 3	NA
Publication/Conference	4th International Malaysian Studies Conference; 3-5 August 2004, Universiti Kebangsaan Malaysia, Bangi
Edition	NA
Document Type	Article
CPI Primary Subject	Foreign Relations and Treaties
CPI Secondary Subject	AFTA; ;
Geographic Terms	Malaysia; ASEAN
Abstract	Market liberalization under AFTA is intended to rationalize regional production in ASEAN by forcing inefficient firms in member countries to exit while efficient ones garner economies of scale by producing for the ASEAN market instead of just their home market. Are Malaysian manufacturers equipped to face the increase in competitive pressures with the market liberalization measures under AFTA? It is the main objective of this chapter to ascertain the competitiveness of Malaysian manufacturers and their capacity to meet with the challenges of AFTA.

Centre for Policy Initiatives (CPI)

Pusat Iniatif Polisi

政策倡议中心

<http://www.cpiasia.org>

AFTA and the Competitiveness of Malaysian Manufacturing

Tham Siew- Yean*

IKMAS Panel on Regionalism and Multilateralism (5th August, Session 1)

*Institute of Malaysian and International Studies (IKMAS)
Universiti Kebangsaan Malaysia
43600 Bangi, Selangor
Malaysia
E-mail: tham@pkriscc.cc.ukm.my

20 July 2004

Paper prepared for presentation at:
The 4th International Malaysian Studies Conference (MSC4)
3-5 August 2004
Universiti Kebangsaan Malaysia

Brief Biodata

Tham Siew Yean obtained her PhD from the University of Rochester, USA, specializing in international trade. She is currently a Professor in International Trade at the Institute of Malaysian and International Studies (or IKMAS). She has written and published extensively on issues pertaining to foreign direct investment, productivity, trade competitiveness, regional trade and regional groupings. Her latest publication, "Foreign Direct Investment in Malaysia", is published as a chapter in the book, *Managing FDI in a Globalizing Economy: Asian Experiences* (edited by Douglas H. Brooks and Hal Hill) by Palgrave/MacMillan, July 2004.

In line with her research interests, she has also served as a consultant for international and domestic agencies such as ESCAP in the United Nations, the Asian Development Bank and the National Productivity Corporation. She was also a member of the Joint Study Team for the ASEAN-China Free Trade Area and the Malaysia-Japan Closer Economic Partnership. She is currently a member of the "Technical Resource Group on External Trade" in MITI for the Third Industrial Master Plan.

AFTA and the Competitiveness of Malaysian Manufacturing

Tham Siew- Yean

Introduction

In January 1992, ASEAN economic cooperation took a significant step forward as the ASEAN heads of government signed the Framework Agreement on Enhancing ASEAN Economic Cooperation, which provided the basis for the establishment of the ASEAN Free Trade Area (AFTA). The AFTA Agreement is to phase down intra-regional tariffs to 0-5 per cent, initially over a period of 15 years starting 1st January 1993. However, AFTA was not launched on the original date of 1st January 1993 because administratively the members were not ready. It was thus 're-launched' on 1st January 1994.

From the outset, AFTA is not just about tariff liberalization alone (Soesastro, 2002: 66). It is instead a training ground, an intermediate phase in the efforts of ASEAN members to integrate themselves into the world economy. Lee (2003: 194), for example, noted that internal liberalization within ASEAN was seen as necessary for sustaining the economic competitiveness of the ASEAN economies in third-country markets. This in turn was deemed essential for sustaining the rapid economic growth that was experienced in these economies in the late 1980s. AFTA is then about global competitiveness. Market liberalization under AFTA is intended to rationalize regional production in ASEAN by forcing inefficient firms in member countries to exit while efficient ones garner economies of scale by producing for the ASEAN market instead of just their home market. Are Malaysian manufacturers equipped to face the increase in competitive pressures with the market liberalization measures under AFTA? It is the main objective of this chapter to ascertain the competitiveness of Malaysian manufacturers and their capacity to meet with the challenges of AFTA.

After the introduction, a brief overview of AFTA is presented before the analytical framework for assessing the competitiveness of Malaysian manufacturers is discussed. The impact of AFTA on the Malaysian manufacturing sector is then

assessed in the subsequent section by considering the overall progress of tariff reduction in Malaysia under AFTA before examining it for two specific sub-sectors, that is the electrical and electronics and automotive sub-sectors. These two sub-sectors are chosen for further analysis as they represent polar extremes in their tariff structures. The conclusion of this chapter summarizes the main findings in this chapter and some policy implications for Malaysia.

Overview of AFTA

Tariff liberalization under AFTA is to be implemented through progressive tariff cuts via the Common Effective Preferential Tariff (CEPT) scheme. Under the CEPT, member countries would set out comprehensive timetables for the phased reduction of intra-ASEAN tariffs on nominated goods. Tariffs on all manufactured and processed agricultural products are to be brought down to 0-5 per cent, initially over a period of 15 years starting 1st January 1993. Under the CEPT, there is reciprocity in that once a good is accepted under the CEPT scheme, all member countries must give the preferential tariff. The CEPT scheme also includes an ASEAN content requirement of 40 per cent.

CEPT goods can be placed on the 'fast track' or 'normal track' timetables for tariff reductions. Under the 'fast track', tariff rates above 20 per cent are scheduled to be reduced to 0-5 per cent by 1st January 2003 while tariff rates below 20 per cent are scheduled to be reduced to 0-5 per cent by 1st January 2000. Originally 15 product groups accounting for almost 40 per cent of ASEAN trade were chosen for the fast track reductions but this has expanded over time. The 'normal track' also has 2 parts: tariff rates above 20 per cent are scheduled to be reduced to 20 per cent by 1st January 2001 and will subsequently be reduced to 0-5 per cent by 2008, according to an agreed schedule. Tariff rates below 20 per cent will be reduced to 0-5 per cent by 1st January 2003. When Vietnam, Lao PDR, and Myanmar joined ASEAN, separate CEPT datelines were set for them in view of their economic structures (Table 1). However in the wake of the Asian financial crisis in 1997, the original 6 signators agreed to advance the implementation of the AFTA schedule by one year from 2003 to 2002. Furthermore, a zero tariff target for AFTA was endorsed in 1999. Hence, tariffs will ultimately be completely abolished by 2010

for the original ASEAN-6 and by 2015 for the newer members with flexibility on some sensitive products until 2018.

The products covered under the CEPT are divided into four categories: Inclusion List (IL), Temporary Exclusion List (TEL), Sensitive List (SL) and a General Exception List (GEL). At the point of entry, all TEL products are temporarily excluded and are therefore not subjected to any tariff reduction. TEL products are to be transferred to the IL in 5 equal instalments within a period of 5 years. The datelines for the ASEAN-6, Vietnam, Lao PDR, Myanmar and Cambodia are 2000, 2003, 2005 and 2007. The products in the SL are mainly unprocessed agricultural products such as rice, sugar, tobacco and meat products. Products in the SL are to be phased into the CEPT scheme by the years 2010 for the original ASEAN-6, 2013 for Vietnam, 2015 for Lao PDR and Myanmar and 2017 for Cambodia. Products in the GEL are excluded mainly on grounds of national security. It should be noted there are allowances made for member countries to provisionally suspend the CEPT preferences in cases when an import surge causes damage to a domestic industry.

By 1st January 2003, the 6 original signators have reduced the tariffs on 99.55 per cent of the products in the 2003 Inclusion List (IL) to 0-5 per cent so that AFTA is by now virtually realized. The products in their IL that still have tariffs above 5 per cent are those that have been transferred from the Sensitive List (SL) and General Exception List (GE) in 2003. The average tariff for the ASEAN-6 under the CEPT scheme is 2.39 per cent as compared to the 12.76 per cent in 1993. Overall in 2003, 87.85 per cent of all products in the IL of the ten member countries have tariffs between 0-5 per cent and about 10.68 per cent of these products have tariffs of above 5 per cent. Products with tariff rates between 0-5 per cent are textiles and textile products (97.6 per cent), chemicals and allied products (96.8 per cent), machinery and electrical equipment (92.2 per cent), agricultural products (85.1 per cent), basic metals (82.2 per cent) and plastics and rubber products (82.2 per cent) (Table 2).

Analytical Framework

One of the main difficulties encountered in analyzing the whole issue of competitiveness is that there is no agreement on how to define it. In this study, the definition proposed by the Secretariat for the OECD project on “Framework Conditions for Industrial Competitiveness”, as cited in Hatzichronoglou (1996) will be used. Competitiveness is thus taken to mean “..... the ability of companies, industries, regions, nations or supranationals to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment on a sustainable basis.”

In order to operationalise this definition, competitiveness has to be quantifiable. In this regard, the quantification of competitiveness can take several approaches. First, there is the “engineering” approach whereby the capacity of the firm to compete is essentially based on its ability to adopt or shape the technical and organizational “best practices” in their activities. Second, the “environmental/systemic” approach views competitiveness in terms of optimizing the environment for the firm. Here, the firm’s competitive strength is not perceived to be due to internal efficiency. Rather, the competitiveness of a firm is deemed to lie in its ability to harness the firms’ environment (such as the incentives of a competitive market, the resources provided by capital and labor markets, the quality of inputs, infrastructure, etc) in order to secure the highest return on capital. Third, in the “capital development” approach, competitiveness depends on the economy’s capacity to accumulate technological, human and physical capital. Finally, the “eclectic/academic” approach addresses various aspects of competitiveness in a selective, eclectic and inquiring manner.

Given the focus of this paper lies in analyzing competitiveness at the industry level, the last two approach will be used as the first two approaches are more appropriate for firm-level studies while the third approach is more suitable for inter-country studies. In the eclectic approach, comparative advantage is an indicator that is frequently used to assess export competitiveness. Thus indices on the revealed comparative advantage (RCA) are usually utilized as proxies since it is assumed that the comparative advantage of a country is reflected or revealed in its trade pattern when autarky prices are unknown. Based on UNIDO (1982), the net

export to total trade ratio (NX_{ij}) was used to assess the comparative advantage of the different sub-sectors, whereby:

$$NX_{ij} = (X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$$

where X_{ij} (M_{ij}) : value of country i's export (import) of commodity j

This indicator's value ranges from -1 to +1 with the latter value denoting no imports are associated with exports. However, both export subsidies and import barriers can affect this measure. Unfortunately information on both the extent and magnitude of export subsidies in Malaysia is lacking while the latest study on the effective rate of protection in Malaysian manufacturing by Rokiah (1996) provides data up to 1987 alone. Nevertheless this is still a useful indicator as it indicates the import dependence of exports.

Alternatively, the world export ratio (WES) can also be used whereby:

$$WES_{ij} = (X_{ij}/X_i) / (X_{wj}/X_w)$$

where X_{ij} : value of country i's export of commodity j,

X_i : value of country i's total exports,

X_{wj} : value of world exports of commodity j,

X_w : value of world exports.

The value for the WES index can be any positive value. For example, a ratio of two indicates that the share of that commodity in a country's exports is twice the world average. Therefore the larger the value, the greater the comparative advantage and the more competitive for the industry concerned.

Empirical Evidence

Tariff Reduction under the CEPT

Progressive tariff reduction under AFTA over the last ten years has led to an average CEPT tariff rate of 2.39 per cent for the ASEAN-6 in 2003 as compared to the 11.44 per cent in 1993 (Table 3). For the CLMV countries (Cambodia, Laos,

Myanmar and Vietnam), their average CEPT tariff rate is higher at 6.22 per cent in 2003 due to their late entry into ASEAN.

It should be noted that Malaysia's average CEPT rate in 2003 is only 2.17 per cent, which is the third lowest among the older ASEAN-6. However, this average is misleading as the range in Malaysia's CEPT tariff rates are considerable due to the exclusion of 218 tariff lines in the CEPT product list (Table 4). All the 218 tariff lines belong to the automotive sector that has delayed its liberalization to 2005 due in part to the negative impact of the economic recession on this sub-sector in 1998.

Table 5 shows that Malaysia has the highest import duties among the ASEAN-4 for passenger and commercial completely-built-up vehicles, based on the reduced tariff rates that were announced recently on 1st January 2004. Further it should be noted that the reduction in tariff rates to a range of 40-190 per cent was accompanied by increases in excise taxes both in the case of CBUs and completely-knocked-down (CKDs) vehicles so that the reduction in tariff barriers are off-set by the increases in excise taxes. More importantly, national cars are reported to be still given a concession of 50 per cent of the new excise taxes compared to the non-national cars.

In contrast, tariffs for the electronics sub-sector have fallen progressively from 3.3 per cent to 2.3 per cent between 1997-2001 for products under the HS code 84 and from 6.4 per cent to 3.6 per cent for products under the HS code 85 (WTO 2001 (Table AIII.2: 118). Moreover, as noted in the ASEAN Secretariat (www.asean.or.id/10588.htm Accessed 26/04/04), since electronics products are among the top five sectors in terms of intra-ASEAN trade value, the average ASEAN CEPT rates were already within the 0-5 per cent range by the year 2000. More importantly, tariffs have a minimal effect on the imports of these goods since most of the electronic components enter for further processing in the export industry and therefore enjoy duty-free access (WTO, 2001: 78). Thus, the pattern of tariff reduction in the manufacturing sector thus reveals that the two sub-sectors that exhibit polar extremes in their CEPT tariff reductions are the automotive and electronics sub-sectors in Malaysia.

Relative importance of the electronics and automotive sub-sectors in Malaysian Manufacturing

Table 6 shows the relative importance of the electronics and automotive sub-sectors in Malaysian manufacturing. The electronics sub-sector is the largest sub-sector in the manufacturing sector, contributing 23 per cent of the value added in total manufacturing in 1995. It's share peaked at 30 per cent in 2000 before falling to 27 per cent in 2003 and this is expected to be maintained for the year 2005. Nevertheless, it remains the largest sub-sector in Malaysian manufacturing in 2003.

The second largest sub-sector is the transport equipment sub-sector that comprises 4 main sub-sectors, namely the manufacture/assembly of motor vehicles, including two-wheelers; manufacture of components and parts; aerospace; and ship-building and ship-repairing. Of these 4 sub-sectors, the automotive sub-sector is the largest sub-sector within this industry group, registering positive growth due to increasing domestic demand. This has contributed to the increasing share of this sub-sector to total Malaysian manufacturing value-added as shown in Table 6. Moreover, Malaysia has the largest passenger car market in the ASEAN region, holding 57 per cent of the total passenger car market in 2002. Consequently, the analysis on the impact of AFTA on Malaysian manufacturing in the following section will focus on these two contrasting sub-sectors.

Electronics

A Review of the Electronics Sub-Sector

The Malaysian electronics industry started out in 1970 with a handful of companies and less than 600 workers. However by the year 2001, it has grown to employ more than 335,200 workers with more than 900 companies (Table 7). Structurally, the composition of output in the electronics segment has shifted over the years. In the early 1970s, the electronics industry was dominated by the electronic components sector, accounting for 80-85 per cent of output. In fact up to 1984, electronic components still accounted for 85 per cent of total output while the consumer and industrial electronics sub-sectors contributed only 12 per cent and 4 per cent,

respectively (Table 8). However, by 1990, the distribution between component electronics, consumer electronics and industrial electronics was 55 per cent, 24 per cent, and 21 per cent, respectively. This shift in the production structure was continued throughout the 1990s. By 2000, the output structure for the electronics industry was 39.1 per cent for the electronic components, 12.6 per cent for consumer electronics and 38.3 per cent for industrial electronics.

The electronics industry is also the single largest manufacturing sub-sector that is contributing to total exports. In the year 2000, this sector accounted for 44.7 per cent of total exports in Malaysia, increasing from 36.5 per cent in 1997. Principal markets for Malaysia's exports of electronics are the United States, Singapore, Chinese Taipei, Japan, and Hong Kong, China. However, it should also be noted that the industry is heavily dependent on imports. In fact, Table 6 shows that high rates of growth in the exports of electronics have been matched with high import growth rates as well. Hence zero or low tariff barriers in this sector have facilitated its rapid growth as imported intermediate inputs are used for further assembly in the country before it is exported.

Given the export-orientation of the electronics industry, the above-mentioned structural changes in output clearly affected the export performance of the three main sub-sectors within electronics. Thus while exports of electronics components contributed 81.7 per cent of total electronics exports in 1986, its contribution fell to 39.1 per cent in the year 2000. At the same time, the share of industrial electronics increased from 5.6 per cent in 1986 to 48.3 per cent in 2000. The most important product that is currently exported from this sub-sector is semi-conductor devices. Malaysia is currently one of the world's leading host economy for semi-conductor assembly, testing and packaging.

Competitiveness of Electronics Exports

Earlier analysis by Tham (2001: 7), Malaysia had the highest WER for electronics telecommunication products among the ASEAN-4 (Malaysia, Philippines, Singapore and Thailand) between 1994-95 but this was subsequently overtaken by the Philippines in 1996-98. Table 9 shows that the higher WER for the Philippines continued to prevail up to 2001 before it dropped sharply in 2002 due to the sharp

contraction in its exports of this product group from US\$15.5 to US\$6.9 billion. This was contributed in part by the weak semiconductor and electronics demand. Malaysia's WER, in contrast has not changed much over the years (Table 9). Both Malaysia and Philippines share the same weakness in this sector in that net trade ratio is close to zero, revealing the import dependence of this sector in both countries (Table 10).

Post AFTA and the Future of the Electronics Sector

Apart from import dependence, Malaysia and the Philippines share another common feature in their electronics industry: it is dominated by the subsidiaries of the multinationals (MNCs) that are operating in these countries. Consequently, the future of the electronics sectors in Malaysia and for the region more likely lies in the hands of these MNCs.

However, Malaysia's relative attractiveness as a host economy since the advent of the Asian Financial Crisis (AFC) in 1997 has fallen. Inflows of FDI into Malaysia fell from US\$7.3 billion in 1996 to US\$2.7 billion in 1998 due in part to the economic crisis that emerged in that year, following the AFC (Table 11). Although inflows of FDI recovered in the subsequent year with the recovery of the economy, it was significantly smaller than the inflows achieved in 1996. The fall in global FDI from US\$1,393 billion to US\$823.8 billion in the year 2001 led to a sharp drop in the inflows of FDI into Malaysia to US\$0.6 billion, which was even less than the inflows that was attained in 1998. Although inflows of FDI have recovered sharply in 2002, it is still nevertheless substantially smaller than the pre-crisis inflows.

Tham (2004a)'s analysis of the fall in the relative attractiveness of Malaysia as a host economy shows that while Malaysia's production environment matched the demand of the MNCs in the late 1980s to the early 1990s, the increase in labor costs accompanied by falling productivity has worsened Malaysia's comparative advantage for labour-intensive production. However, the desired shift to higher value-added production with the assistance of FDI has yet to be achieved due to the mis-match between the current production environment and the needs of MNCs that are producing the higher value-added products.

At the same time, the rise of China and its increasing competitiveness in medium and high-technology products indicates that China is rapidly catching-up with Malaysia and the rest of Southeast Asia in these product groups (Tham, 2004b). While AFTA may not have affected the competitiveness of the Malaysian electronics sub-sector since it faces relatively low tariff barriers, an ASEAN integrated market may have greater bearings on the competitiveness of this sector as the combined ASEAN market offers a substantially larger market than the Malaysian market alone. Further, an integrated ASEAN market will enable the MNCs to enhance its regional production network in Southeast Asia so that it will complement its production operations in China. However, an ASEAN integrated market can only be attained if ASEAN can move forward in its regional economic cooperation efforts beyond AFTA. While the proposed ASEAN Economic Cooperation plans to do that, it remains to be seen whether it can be achieved.

Automotive Sub-Sector

A Review of the Automotive Sector

The first national car project (NCP) was launched to rationalise the local automotive industry and to foster growth in the rest of the industrial sector through technical spin-offs and linkage effects. At the same time, the NCP was targeted to assist and accelerate Bumiputeraⁱ participation in the automotive industry. Consequently, *Proton* (an acronym for Perusahaan Otomobil Nasional or the National Automobile Enterprise) was established as a joint venture agreement between Mitsubishi Motor Corporation (MMC), Mitsubishi Corporation (15 per cent equity each) and the Heavy Industries Corporation of Malaysia (HICOM: 70 per cent equity) in 1983. However, *Proton* is not the sole NCP in Malaysia. In fact in the 18 years since *Proton*, three other NCPs have been launched, each with a different technology partner. The second national car project or *Perodua* was launched in 1993 to produce mini passenger cars with Daihatsu (a subsidiary of Toyota Corporation) while there are currently two national commercial vehicles (MTB and INOKOM).ⁱⁱ Apart from the national projects, there are 8 conventional assemblers that are related

to global motor groups. These 12 automotive manufacturers/assemblers have a total installed capacity of 600,000 units.

The introduction of the NCPs changed the structure of the domestic automotive industry tremendously. Prior to the NCPs, assembly activities were fragmented and inefficient with 13 assembly plants producing a large number of makes and models for the domestic market. With the arrival of the NCPs, Malaysian manufacturers came on-stream and the assemblers that used to dominate this sector became increasingly marginalized in terms of production and sales, leaving them to either focus on the upper segment of the market or to shift to component manufacturing.

Protection and subsidies are used to enable both national passenger cars to capture the domestic market. Alavi (1996) estimated that the effective rate of protection of the transport and equipment sub-sector was as high as 252 per cent in 1987. In contrast, *Proton* was given a preferential import duty rate of 13 per cent on CKD parts and a 50 per cent exemption from excise duty (Tham 2004c). In the case of *Perodua*, no import duty was provided and a partial exemption was given for the excise duties of certain models. The Ministry of International Trade and Industry (MITI) further regulated the selling price of each model as its approval was required for price-setting. At the same time, the establishments of direct marketing outlets enhanced the development of the NCPs by addressing their distribution needs. Not surprisingly, the market share of the NCPs increased steadily from 64 per cent in 1991 to 93 per cent in 2000. *Proton* has also failed to penetrate the export market as exports are quite small.

Under the highly protected environment and rapid growth in domestic demand, the automobile industry grew at an average growth rate of 10 per cent between 1991-2000 (Koo 2001). Auto parts manufacturing also grew to serve the NCPs and assemblers, with a total of approximately 200 Malaysian controlled local companies and 50 licensees and joint ventures of multinational auto part manufacturers by 2001. However many of these local manufacturers are small and medium-sized operations with only 32 Tier-1 manufacturers that are supplying mainly to *Proton*.ⁱⁱⁱ More importantly, 25 per cent of these Tier 1 manufacturers are majority foreign-owned companies.

Competitiveness of the automotive sector

Trade competitiveness in terms of the net trade ratio for the ASEAN-4 reveals that all the ASEAN-4 are net importers of passenger cars and goods/service vehicles for all the years shown with the exception of Thailand (Table 12). The positive net trade ratio obtained for the case of goods/service vehicles from 1997-2001 reflect the dominance of commercial vehicles in terms of both production and sales in the Thai automotive sector. This is not surprising given that Thailand is the export base of General Motors, Ford, Mazda and Mitsubishi for pick-up trucks, especially the one-ton pick-up trucks (Mori 2002).

However, in the case of motor vehicle parts and accessories, Philippines is the only country among the ASEAN-4 that has experienced positive net trade ratios between 1997-2001 (Table 12). Nevertheless, Philippines has been reported to be a net component exporter since the 1990s and hence there has not been much change since the implementation of AFTA (PECC 2002). Parts exporters are also reported to be limited to a few components that were mostly developed in response to the MNCs global and regional strategies (Ofreneo 2003).

The data for the world export ratio confirms the picture painted by the net trade ratio. In the case of automobiles, Thailand is the only country among the ASEAN-4 that have attained a WER that is greater than 1 since 1998 (Table 13). Even then, this is obtained only in the case of goods/service vehicles as none of the ASEAN-4 have a WER value that is greater than 1 for passenger vehicles. Moreover, Thailand is the only ASEAN country that has been listed as among the top 15 leading exporter of automotive products in 2001, with a 0.5 per cent share in world exports (WTO 2002). Automotive exports contribute toward 4.1 per cent of Thailand's total merchandise exports in 2001. In the case of automotive parts, despite the positive net trade ratio obtained for the Philippines, the country is an insignificant exporter in the world market as its WER for this category is less than 1 for all the years shown. Moreover, these exports constitute a mere 2 per cent of Philippines total merchandise exports.

Post-AFTA and the Future of the Automotive Sector in the ASEAN-4

Can Malaysia compete in the post-AFTA environment? The international competitiveness indicators reveal that it is only Thailand that has managed to penetrate the global market in the niche area of one-ton pick-up trucks. These exports are very much dependent on three MNCs that are operating in Thailand in this sector as according to Mori (2002), Mitsubishi Motors, General Motors (GM) and Auto Alliance Thailand (a Ford-Mazda joint venture) account for 85.6 per cent of total automobile exports. It clearly reflects that the competitiveness of Thailand is attributed to the MNCs that are operating in this sector and it is very much the MNC's production strategies that will determine the future of this sector in Thailand. Since Japanese vehicle assemblers are centralising their production of one-ton pick-up trucks in Thailand, it is likely that Thailand will become a world production and export base for this type of vehicle.

In the case of passenger vehicles, Thailand and Malaysia have the highest WER (Table 13). However, Thailand has the advantage of liberalising earlier than Malaysia in its AFTA and TRIMs commitments, and hence it has a first mover advantage in capturing the AFTA market, excluding Malaysia. Mori (2002) reported that Toyota has made Thailand its core production base for the new *Corolla*, which it began to produce for ASEAN-4 in 2001. Thailand is also currently supplying CKD parts for the vehicle to other countries in the region. A similar concept will also be used for the new *Camry* that was introduced in 2002. Similarly, Mitsubishi Motors is also positioning its production of its new *Lancer* in Thailand to the rest of the region. Since individual markets are small, it is therefore more economical to centralise and produce models that are geared for the regional market in one country. Nevertheless, it will be difficult for Thailand to move beyond assembly-type operations as well as to develop more advanced production systems since both Japanese as well as non-Japanese car manufacturers view that Thailand may not have the requisite human resources for it to do so (Mori, 2003 and Flynn et al. 1999).

Proton, on the other hand, is disadvantaged by the size of the Malaysian market and the size of its installed capacity. Proton has two production plants that are producing 230,000 cars per annum. The new Tanjong Malim plant is reported to

have a capacity of 150,000 cars per annum and it is scheduled for completion by 2004 (The Star, 14th June, 2002). This will yield a total national capacity of approximately 750,000. In contrast, the Korean automotive *Kia*, reportedly has a yearly production capacity of 1.15 million units (The Star, 24th November, 2003). The Hwasung plant alone produces 600,000 vehicles annually.

Thus while global competitors can spread the high cost of development and expensive toolings over larger production units and world-wide sales, *Proton* has to amortize the same expenses over much smaller numbers and mainly for the Malaysian market alone. Hence, it inevitably faces higher production cost per unit. It is also disadvantaged by its shorter history and limited distribution network outside Malaysia and the United Kingdom (Koo, 2001: 10). Further it is competing against global brand names that are operating in the other ASEAN countries. Thus the prospects of *Proton* capturing a significant size of the AFTA market is quite dim. Indeed, its market share has reportedly fallen from 63.9 per cent in 2001 to 59.6 per cent in 2002 and it fell further to 49.0 per cent in 2003 (The Star 24th April 2004). The fall was attributed to the entry of cheaper South Korean CBU units in the Malaysian market in the last three years. Moreover, car buyers were reported to delay their car purchases in 2003 due to the anticipated tariff reductions and its implied fall in car prices. However, *Proton* has reportedly invested heavily in R&D for the development of new car models and engine design.^{iv} Hence, a strategic alliance with one of the leading auto companies will enable it to improve its cost and branding problems.

In the case of automotive parts, the removal of local content requirements and the integration of the ASEAN market implies that the parts manufacturing sector in each country will rationalise. Since none of the ASEAN-4 have penetrated into the world export market in this sub-sector and the few that have export capabilities are mostly MNCs, it is unlikely that the small and indigenous players in each of these countries will be able to survive the forces of liberalisation. For example, according to Koo (2001), most of the Malaysian auto part manufacturers in Malaysia are very small, generating an annual revenue of below RM50 million and employing less than 300 people. Most of these companies cannot afford to establish even a basic research and development facility, let alone a credible testing laboratory.

Although the Philippines has a larger WER number for motor vehicles parts and accessories than Thailand (Table 13), it appears to be limited to a narrow range of products such as wire harnessing, batteries, gearboxes, tires, filters, silencers, aluminium wheels, plastic grills, and rubber hoses and also a small number of parts producers (Ofreneo 2003). Thailand, on the other hand, has 287 majority foreign-owned Tier 1 manufacturers that are supplying a wide range of components such as engine components, body parts, transmission parts, brake systems, steering systems and electrical/electronics components. Since automotive manufacturers and assemblers practice the “Just-in-time” component supply concept, the location of MNC producers in Thailand will also encourage the development of competitive auto parts producers near these manufacturers/assemblers. This does not bode well for the parts producers in the other ASEAN-4 as most of the global producers are planning for common models in all ASEAN countries and these common models have a common specification (Koo 2001). Cost effectiveness implies the centralisation of component production as well and Thailand is therefore strategically positioned to be the centre for ASEAN parts production.

Post AFTA and the Future of Overall Manufacturing in Malaysia

Since AFTA has reduced the tariffs that are operating in the region, the labour-intensive segments of the manufacturing sector will be most vulnerable to the import of cheaper products from the region. In general, the labour-cost and productivity in Malaysia cannot compete with the older ASEAN countries as shown below.

Labour Productivity and Value Added Per Worker

Based on Table 14, it can be seen that the labour cost per worker in manufacturing was the lowest in Indonesia between 1980-84 but it was the lowest in the Philippines for the subsequent period (1995-99). However, the value-added per worker is also the lowest in Indonesia for the first period and for the Philippines in the second period. Since the labour cost per worker in Indonesia is higher than the Philippines while its value-added per worker is lower for the period 1995-99, Indonesia is less competitive than the Philippines in manufacturing based on these two indicators.

Although Thailand's labour-cost per worker is 1.6 times higher than the Philippines, nevertheless its value-added per worker is 1.9 times higher than Philippines' value-added per worker. Malaysia's labour-cost per worker is 1.4 time higher but its value-added per worker is only 1.2 times higher than the Philippines. Hence, Thailand is relatively more competitive than the other ASEAN-4 countries in terms of labour cost per worker and value-added per worker in manufacturing.

Policy Implications for Malaysia

External: Accelerating the ASEAN Economic Community (AEC)

In November 2002, the possibility of creating an ASEAN Economic Community (AEC) was proposed at the ASEAN Heads of Government Meeting in Phnom Penh. This was subsequently endorsed at the Bali Summit in October 2003. The AEC is essentially akin to an "FTA-Plus" arrangement as it excludes a common external tariff wall and it is therefore not a customs union. It has instead some elements of a common market together with the free movement of capital and some types of labour (Hew and Soesastro, 2003: 293). The AEC is envisaged to be realised by 2020 with the following characteristics: (i) free movement of goods, services, investments and capital, including a zero-tariff AFTA and the elimination of all non-tariff barriers, (2) an attractive regional production platform for FDI, (3) free movement of skilled labour and creative talent, (4) free movement of tourists from all ASEAN countries, (5) harmonisation of customs procedures and minimisation of customs requirements, (6) harmonisation of standards which are consistent with international standards, and (7) a well-developed institutional and legal infrastructure to facilitate the economic integration of ASEAN.

At the same leaders' summit in October 2003, the pace of integration was also accelerated for 11 priority sectors with the coordination of efforts by different member countries. These are wood-based products and automotive by Indonesia, rubber-based products and textiles and apparel by Malaysia, agriculture-based products and fisheries by Myanmar, electronics by the Philippines, e-ASEAN (IT linkages and development) and health care by Singapore, and air travel and tourism by Thailand.

The AEC is important for Malaysia as it will integrate the ASEAN market and this will enable Malaysian exporters to reap the vital economies of scale that will enable it to compete with large countries like China and India that have a large internal markets. Hence Malaysia should encourage deeper economic cooperation within ASEAN by pushing for an acceleration in the datelines of the AEC.

Internal: Enhancing Domestic Competitiveness

Key policy issues that will affect the competitiveness of Malaysia are: a sustainable exchange rate policy, revitalising FDI inflows, enhancing human capital development in Malaysia and export diversification.

A sustainable exchange rate policy is of paramount importance since the ringgit peg cannot be sustained indefinitely as any significant depreciation of other regional currencies may cause the ringgit to be overvalued, thereby impinging on its export performance. However, an undervalued currency can also create adverse effects since it may attract short-term inflows, excess liquidity and increase pressures to further appreciate the ringgit. Therefore, the need to replace the peg with a more sustainable long-term exchange rate policy is of vital importance for the country's future competitiveness.

At the same time, the country also needs to review its FDI policies in order to re-attract the FDI that is required for enabling the country to move up the technology ladder. While the traditional focus on the use of incentives may have worked well in the past, building up a suitable environment for technology deepening is necessary in order to attract the MNCs to relocate their higher value-added production activities to this country. This would require Malaysia to improve the whole underlying supply structure of the country.

In particular, the stock of human capital has to be improved by enhancing the supply of trainable workers since what is demanded of the worker in new high technology revolution that is biased towards intangible (human and knowledge) capital, is no longer qualification but competency. In other words, it is no longer the ability to handle certain tasks alone that counts in the labour market but the ability to handle uncertainty and constant changes as well as to be able to solve problems.

Finally, export diversification within the manufacturing sector is necessary to enable the economy to better weather the global cycles in the electronics sector. While agricultural exports such as palm oil have contributed to cushion the downturns in the global electronics cycle, the manufacturing sector itself must diversify its concentration in the production and export of electronics goods by encouraging the production and export of resource-based products.

Conclusion

Since AFTA deals mainly with the reduction of tariff barriers for traded goods, its impact on Malaysian manufacturing in the short-run has not been unduly severe due to the fact that tariff protection in Malaysia is in general quite low. Malaysia has the lowest average CEPT tariff rates among the ASEAN-6, after Singapore and Brunei. Moreover liberalisation of the highly protected automotive sector has been delayed till 2005.

However, the impact of AFTA may become more significant in the medium and long-run as Malaysia is losing its comparative advantage in low labour costs and the automotive sector will have to adjust to the projected liberalisation in 2005 and again when zero tariffs are imposed in 2010. Consequently in the medium-run, more and more labour-intensive industries will have to relocate to other lower labour-cost producing member countries such as Thailand among the ASEAN-6 or the CLMV countries as they improve their investment and production environment. Malaysia will therefore have to accelerate its pace of industrial upgrading in order to avoid the hollowing out of its manufacturing sector.

In the case of the electronics sub-sector, while AFTA has had a minimal impact on this sub-sector due to its relative openness, deepening economic cooperation within ASEAN by going beyond AFTA to the AEC will enhance the attractiveness of the ASEAN market for the MNCs. This is critical for industrial upgrading in Malaysia as well as the other ASEAN member countries as the electronics sub-sector is dominated by the operations of the MNCs in this region. It will also enable ASEAN to compete more effectively against emerging economic powerhouses like China and India. Most of the MNCs in the region will continue their present production in ASEAN for two main reasons; first their current

production in ASEAN can complement their production in China and secondly, their investment in ASEAN provides a buffer for their investment in China. Nevertheless, while an integrated ASEAN market will attract more FDI into the region, it will also at the same time require Malaysia to compete with fellow ASEAN members for this investment.

However in the case of the automotive sector, further liberalisation will require this sector to rationalise its operations, both in the assembly and manufacture of passenger cars as well as in the manufacture of parts and components. The future of the national cars rest in their ability to lower their cost of production and in their plans for strategic alliances with global auto-makers in order to compete against the global automotive producers that are operating in Thailand.

ⁱ Bumiputera refers to the Malays and the indigenous people in the country.

ⁱⁱ Perodua however was restructured subsequently and it is now under the control of a multinational.

ⁱⁱⁱ Tier 1 manufacturers are system integrators who have the technical expertise to design and develop components and supply these components directly to the automotive manufacturers and assemblers, to be installed in the vehicle. The rest are Tier 2 and Tier 3 manufacturers who supply to the Tier 1 manufacturers.

^{iv} In the Star, 14th June, 2002, Proton announced that it will double its R&D expenditure to RM800 million to develop three new models by 2005.

References

- Alavi, Rokiah, 1996. *Industrialisation in Malaysia: Import substitution and infant industry performance*, London: Routledge.
- Flynn, M. S., Alkire, K. F. and Senter, R. Jr., 1999. Shifting Strategies: The Big Three in ASEAN. University of Michigan Transportation Research Institute, Office for the Study of Automotive Transportation, *UMTRI* 99-25.
- Hew, D. and Soesastro, H., 2003. Realizing the ASEAN Community by 2020: ISEAS and ASEAN-ISIS Approaches. *ASEAN Economic Bulletin*, Vol. 20., No. 3: 292-96.
- Koo Sian Chu, 2001. Automobile Industry – Can Malaysia Compete in AFTA. Paper presented at the *MIER National Outlook Conference, 2002*, 6-7 November, Hotel Nikko, Kuala Lumpur.

-
- Lee Tsao, Y., 2003. The ASEAN Free Trade Area: The Search for a Common Prosperity. Chapter 43 in Siddique, S. and Kumar, S., (compilers), *The Second ASEAN Reader*. Singapore: Institute of Southeast Asian Studies.
- Mori, Minako, 2002. The New Strategies of Vehicle Assemblers in Thailand and the Response of Parts Manufacturers. *Pacific Business and Industries*, Vol. II, No.4: 27-40.
- Ofreneo, R.E., 2003. TRIMs and the Automobile Industry in Philippines. *Technology Policy Briefs*, Vol. 2, Issue 1:5-7.
- PECC, 2002. The ASEAN Automotive Industry: Challenges and Prospects. A Report prepared by a PECC research group for the APEC Automotive Dialogue, Singapore, April.
- Soesastro, Hadi, 2002. ASEAN Economic Integration: The Journey Continues. Chapter 3 in Ku, S. C.Y. (ed.), *Southeast Asia in the New Century: An Asian Perspective*. Kaohsiung: National Sun Yat-Sen University.
- Tham Siew Yean, 2001. Competitiveness of Malaysian Exports. *Journal of Malaysian Studies*, Vol. XIX, No. 1, June: 1-35.
- _____, 2004a. Foreign Direct Investment in Malaysia. Chapter ?? in Brooks, D.B. and Hill, H. (eds.), *Managing FDI in a Globalizing Economy: Asian Experiences*. London: Palgrave/MacMillan. *Forthcoming*.
- _____, 2004b. Southeast Asian Perspectives on the Economic Rise of China. Paper presented at the ISEAS-SSAAPS Winter Seminar on "Globalization and Its Counter Forces in Southeast Asia", 22-27 February, Singapore, ISEAS.
- _____, 2004c. Malaysian Policies for the Automobile Sector Focus on Technology Transfer. Chapter 4 in Busser, R. and Sadoi, Y. (eds), *Production Networks in Asia and Europe: Skill Formation and Technology Transfer in the Automobile Industry*. London: RoutledgeCurzon.
- The New Straits Times, 1st January 2003, pages 1-2.
- The Star, 14th June 2002, Business, page 3.
- The Star, 24th November 2003, Focus, page 4.
- The Star, 24th April 2004, page ??
- UNCTAD, 2003. *Foreign Direct Investment 2003*. Geneva: UNCTAD.
- World Trade Organization, 2002. *International Trade Statistics 2002*. Geneva: WTO.

Table 1. Summary of CEPT Acceleration

	The first six members		Vietnam	Laos & Myanmar	Cambodia
	Fast Track	Normal Track			
Original Plan (1992)	2003*	2008**			
AEM Meeting (1994)	2000	2003	2006	2008	
Bold Measures (1998)	2000	2002	2003	2005	2010
Zero Tariff Rate (1999)	2010		2015		

*Note: ** for tariffs over 20 percent*

Source: Revised from Nattapong et al., 1999

Table 2. CEPT Rates by Main Product Category for the Original Six Member Countries

Product Category	% of Products		
	0 %	1 – 5 %	> 5 %
Agricultural	44.7	40.4	8.7
Chemical and allied products	50.0	46.8	2.8
Basic metals	37.3	44.9	17.8
Machinery and electrical equipment	41.9	50.3	7.8
Plastics and rubber	32.3	49.9	17.6
Textiles and textile products	30.4	67.2	2.3

Source: Malaysia, International Trade and Industry Report 2001:59

Table 3. Average CEPT rates from 1993-2003

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Brunei	3.78	2.64	2.54	2.02	1.61	1.37	1.55	1.26	1.17	0.96	1.04
Indonesia	17.27	17.27	15.22	10.39	8.53	7.06	5.36	4.76	4.27	3.69	2.17
Malaysia	10.79	10.00	9.21	4.56	4.12	3.46	3.2	3.32	2.71	2.62	1.95
Philippines	12.45	11.37	10.65	9.55	9.22	7.72	7.34	5.18	4.48	4.13	3.82
Singapore	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thailand	19.85	19.84	18.16	14.21	12.91	10.24	9.58	6.12	5.67	4.97	4.63
ASEAN-6	11.44	10.97	10.00	7.15	6.38	5.22	4.79	3.64	3.22	2.89	2.39
Cambodia	--	--	--	--	--	--	--	10.39	10.39	8.89	7.94
Laos	--	--	--	--	--	n.a.	n.a.	7.07	7.08	6.72	5.86
Myanmar	--	--	--	--	--	n.a.	n.a.	4.43	4.57	4.72	4.61
Vietnam	--	--	--	--	--	n.a.	n.a.	7.25	6.75	6.92	6.43
CLMV	--	--	--	--	--	n.a.	n.a.	7.51	7.17	6.77	6.22
ASEAN-10	--	--	--	--	--	--	--	4.43	4.11	3.84	3.33

Source: ASEAN Secretariat

Table 4. CEPT Product List for the Year 2003* for the ASEAN- 6

Country	Inclusion List	Temporary Exclusion List	General Exclusion List	Sensitive List	Total
Brunei Darussalam	6276	-	202	14	6492
Indonesia	7206	-	68	11	7285
Malaysia	10041	218	53	83	10395
Philippines	5632	-	16	10	5658
Singapore	5859	-	-	-	5859
Thailand	9204	-	-	7	9211
ASEAN-6 Total	44218	218	339	125	44900
Percentage	98.5	0.49	0.76	0.28	100

*Note: * Data for Year 2003 taken from the data provided in Year 2002*

Source: ASEAN Secretariat

www.asean.org.id

Table 5. Import Duties in ASEAN, by vehicle segment

Country	Passenger vehicles		Commercial vehicles		Motorcycles	
	CBU	CKD	CBU	CKD	CBU	CKD
Indonesia	5-80	25-50	5-50	25	35-60	5-25
Malaysia	70-190	25	40-120	0-10	40	5-30
Philippines	20	7	20	3	20	7
Thailand	80	33	30-80	10-33	60	0

*Source: PECC, 2002:5 for Indonesia, Philippines and Thailand;
Malaysia, New Straits Times, 1st January 2004: 1-2.*

Table 6. Growth of Manufacturing Industries, 1995-2005

Industry	Value Added (RM million in 1987 prices)				Share of Value Added (%)				Average Annual Growth Rate (%)		
	1995	2000	2003	2005	1995	2000	2003	2005	1996- 2000	2001- 2003	2004- 2005
Resource-Based	21,814	28,210	30,500	35,914	48.3	41.9	43.4	44.0	6.5	2.6	8.5
Vegetables, Animal Oils & Fats	1,203	2,526	2,971	3,436	2.7	3.7	4.2	4.2	13.1	5.6	7.5
Other Food Processing, Beverages & Tobacco	3,504	4,010	4,132	4,438	7.8	6.0	5.9	5.4	6.2	1.1	3.6
Wood & Wood Products	3,030	2,934	2,558	3,028	6.7	4.4	3.7	3.7	1.1	-4.1	8.2
Paper & Paper Products	1,888	2,293	2,328	2,711	4.2	3.4	3.3	3.3	8.2	0.5	7.9
Industrial Chemical & Fertilizer	2,581	3,795	4,437	5,530	5.7	5.6	6.3	6.8	6.3	5.3	11.6
Other Chemical & Plastic Products	2,613	2,968	3,651	4,721	5.8	4.4	5.2	5.8	6.2	7.1	13.7
Petroleum Products including Crude Oil Refineries & Coal	2,477	4,521	4,742	5,598	5.5	6.7	6.8	6.9	11.4	1.6	8.7
Rubber Processing & Products	1,549	1,821	2,052	2,287	3.4	2.7	2.9	2.8	3.6	4.1	5.6
Non-Metallic Mineral Products	2,969	3,342	3,599	4,165	6.6	5.0	5.1	5.1	5.4	2.5	7.6
Non-Resource- Based	22,306	37,878	38,424	44,273	49.4	56.4	54.7	54.2	11.5	0.5	7.3
Textiles, Wearing Apparel & Leather	2,311	2,324	2,089	2,297	5.1	3.5	3.0	2.8	1.2	-3.5	4.8
Basic Metal Industry	513	594	640	690	1.1	0.9	0.9	0.8	15.4	2.5	3.8
Metal Products	1,551	2,879	2,567	2,922	3.4	4.3	3.6	3.6	15.5	-3.8	6.7
Manufacture of Machinery Except Electrical	2,675	3,063	3,671	4,478	5.9	4.6	5.2	5.5	5.1	6.2	10.5
Electronics	10,288	19,863	18,606	21,613	22.8	29.5	26.5	26.5	13.6	-2.2	7.8
Electrical Machinery	832	1,738	1,238	1,426	1.8	2.6	1.8	1.7	12.6	-10.7	7.3
Transport Equipment	4,136	7,417	9,613	10,847	9.2	11.0	13.7	13.3	12.2	9.0	6.2
Others	1,055	1,162	1,301	1,464	2.3	1.7	1.9	1.8	7.1	3.8	6.1
Total	45,175	67,250	70,225	81,651	100.0	100.0	100.0	100.0	9.1	1.5	7.8

Source: 1995: Malaysia, 2001
2000-2005: Malaysia, 2003b

Table 7. Performance of Malaysia's Electronics Industry, 1995-2001

Year	Output		Employment		Exports		Imports	
	RM (bil)	Growth %	No.	Growth %	RM (bil)	Growth %	RM (bil)	Growth %
1995	73.1	26.3	313,000	12.6	85	28.0	63.8	29.2
1996	79.2	8.3	339,000	6.7	91.7	7.9	68.0	6.6
1997	85.6	8.1	343,300	1.2	107.7	17.4	76.2	12.1
1998	103.5	20.9	320,600	-6.6	146.0	35.6	96.7	26.9
1999	126.8	22.5	361,100	12.6	179.1	22.7	108.5	12.2
2000	167.1	31.8	401,700	11.2	230.9	28.9	166.1	53.1
2001	140.9	-15.7	335,217	-16.5	199.7	-13.5	141.2	-14.9

Source: *Business Opportunities in Malaysia's Electronics Industry*, MIDA, 2002.

Table 8. Output Structure of the Electronics Industry (% of total output)

Year	Electronic Components	Consumer Electronics	Industrial Electronics
1984	84.0	12.0	4.0
1986	81.7	12.7	5.6
1988	71.9	18.3	9.8
1990	55.2	23.7	21.1
1992	43.8	26.6	29.6
1993	43.0	27.0	30.0
1994	41.0	27.0	32.0
1995	42.0	25.0	31.9
1996	43.1	21.6	35.3
1997	43.1	16.6	40.3
1998	44.6	14.1	41.3
1999	42.4	12.2	45.4
2000*	39.1	12.6	48.3

Notes: *Estimates

Source: *MIDA Industry Brief*, 2000

Table 9. World Export Ratio (WER) for electronics in the ASEAN-4, 1998-2002
(Product group: SITC 76 & 77)

	1998	1999	2000	2001	2002
Malaysia	3.2972	3.1298	2.9490	3.2130	3.3986
Philippines	4.7847	4.8137	4.2075	4.1276	1.7865
Singapore	2.6961	2.7263	2.9170	2.9488	3.2136
Thailand	1.6113	1.5841	1.6796	1.6599	n.a.

Note: n.a. – Not available

Source: Computed based on data from International Trade Statistics,
<http://www.intracen.org/tradstat/welcome.htm> and
http://www.wto.org/english/res_e/statis_e/webpub_e.xls. Accessed 15/04/04

Table 10. Net Trade Ratio (NRT) for electronics in ASEAN-4, 1998-2002
(Product group: SITC 76 & 77)

	1998	1999	2000	2001	2002
Malaysia	0.0805	0.0773	0.0179	0.0558	0.0277
Philippines	0.1661	0.2578	0.2897	0.2174	-0.0307
Singapore	0.0277	0.0152	0.0411	0.0622	0.0794
Thailand	-0.0023	0.0017	-0.0024	-0.0441	n.a.

Note: n.a. – Not available

Source: Computed based on data from International Trade Statistics,
<http://www.intracen.org/tradstat/welcome.htm>. Accessed 15/04/04

Table 11. FDI Inflows, by Host Region and Economy, 1990-2002
(US\$ million)

Host region/ Economy	1990 – 1995 (Annual average)	1996	1997	1998	1999	2000	2001	2002
World	225,321	386,140	481,911	686,028	1,079,083	1,392,957	823,825	651,188
Developed economies	145,019	219,908	269,654	472,265	824,642	1,120,528	589,379	460,334
Developing Economies	74,288	152,685	193,224	191,284	229,295	246,057	209,431	162,145
China	19,360	40,180	44,237	43,751	40,319	40,772	46,846	52,700
ASEAN	16,932	29,370	30,369	18,504	19,691	11,056	13,241	13,957
Brunei	102	654	702	573	748	549	526	1,035
Darussalam								
Cambodia	80	586	168	243	230	149	148	54
Indonesia	2,135	6,194	4,678	-356	-2,745	-4,550	-3,279	-1,523
Lao	33	128	86	45	52	34	24	25
People's Democratic Republic								
Malaysia	4,655	7,296	6,324	2,714	3,895	3,788	554	3,203
Myanmar	180	310	879	684	304	208	192	129
Philippines	1,028	1,520	1,261	1,718	1,725	1,345	982	1,111
Singapore	5,782	8,608	13,533	7,594	13,245	12,464	10,949	7,655
Thailand	1,990	2,271	3,882	7,491	6,091	3,350	3,813	1,068
Vietnam	947	1,803	2,587	1,700	1,484	1,289	1,300	1,200

NOTES: * Estimates

SOURCE: UNCTAD 2003, *World Investment Report 2003: FDI Policies for Development: National and International Perspectives*, Annex Table B.I

Table 12. Net Trade Ratio for ASEAN-4, 1997-2002

Product Group	1997	1998	1999	2000	2001	2002
<i>SITC 781- Passenger Cars etc</i>						
Indonesia	-0.84	-0.54	-0.39	-0.93	-0.93	-0.67
Malaysia	-0.77	-0.40	-0.72	-0.84	-0.90	-0.84
Philippines	-0.99	-0.94	-0.99	-0.99	-0.98	-0.74
Thailand	-0.88	-0.27	-0.56	-0.13	0.56	n.a.
<i>SITC 782- Goods/Service Vehicles</i>						
Indonesia	-0.95	-0.87	-0.69	-0.81	-0.90	-0.93
Malaysia	-0.97	-0.18	-0.75	-0.90	-0.94	-0.96
Philippines	-0.99	-0.93	-0.99	-0.98	-0.99	-0.93
Thailand	0.60	0.89	0.94	0.91	0.90	n.a.
<i>SITC 783- Road Motor Vehicles Nec.</i>						
Indonesia	-0.64	-0.43	0.67	-0.74	-0.57	-0.83
Malaysia	-0.94	-0.18	-0.23	-0.73	-0.78	-0.93
Philippines	-0.98	-0.85	-0.97	-0.98	-1.00	-1.00
Thailand	-1	-0.66	-0.93	-0.97	-0.93	n.a.
<i>SITC 784- Motor Vehicles Parts/Access</i>						
Indonesia	-0.67	-0.59	-0.35	-0.66	-0.56	-0.47
Malaysia	-0.67	-0.22	-0.30	-0.38	-0.36	-0.40
Philippines	0.12	0.32	0.29	0.39	0.39	0.43
Thailand	-0.79	-0.11	-0.36	-0.48	-0.52	n.a.

Note: n.a. – not available

(Source: Computed based on data from International Trade Statistics,
<http://www.intracen.org/tradstat/welcome.htm>.

Data 1997: Accessed 14/11/03. Data 1998-2002: Accessed 15/04/04)

Table 13. WER for ASEAN-4, 1997-2002

Product Group	1997	1998	1999	2000	2001	2002
<i>SITC 781- Passenger Cars etc</i>						
Indonesia	0.009	0.007	0.003	0.003	0.002	0.007
Malaysia	0.055	0.051	0.033	0.020	0.011	0.018
Philippines	0.002	0.002	0.000	0.001	0.001	0.013
Thailand	0.012	0.026	0.042	0.069	0.210	n.a.
<i>SITC 782- Goods/Service Vehicles</i>						
Indonesia	0.016	0.036	0.098	0.033	0.026	0.016
Malaysia	0.014	0.069	0.019	0.013	0.009	0.006
Philippines	0.004	0.013	0.001	0.004	0.002	0.009
Thailand	0.964	1.235	2.124	2.341	2.126	n.a.
<i>SITC 783- Road Motor Vehicles Nec.</i>						
Indonesia	0.062	0.069	0.110	0.016	0.067	0.031
Malaysia	0.018	0.047	0.041	0.029	0.024	0.007
Philippines	0.053	0.075	0.026	0.034	0.009	0.006
Thailand	0.001	0.013	0.009	0.008	0.013	n.a.
<i>SITC 784- Motor Vehicles Parts/Access</i>						
Indonesia	0.084	0.091	0.133	0.172	0.215	0.219
Malaysia	0.045	0.046	0.057	0.066	0.070	0.069
Philippines	0.641	0.507	0.549	0.691	0.898	0.887
Thailand	0.126	0.194	0.256	0.342	0.355	n.a.

Note: n.a. – not available

(Source: Computed based on data from International Trade Statistics,
<http://www.intracen.org/tradstat/welcome.htm>.

Data 1997: Accessed 14/11/03. Data 1998-2002: Accessed 15/04/04)

Table 14. Wages and Productivity in ASEAN-4
(\$ per year)

Country	Labour cost per worker in manufacturing		Value added per worker in manufacturing	
	1980- 84	1995- 99	1980-84	1995-99
Indonesia	898	3,054	3,807	5,139
Malaysia	2,519	3,429	8,454	12,661
Philippines	1,240	2,450	5,266	10,781
Thailand	2,305	3,868	11,072	19,946

Source: Table 2.5, 2003 World Development Indicators, The World Bank