

# DRIVING REGIONAL INTEGRATION: JAPANESE FIRMS AND THE DEVELOPMENT OF THE ASEAN AUTOMOBILE INDUSTRY

*Jochen LEGEWIE*

## 1 INTRODUCTION

‘Size does matter.’ In the summer of 1998, this slogan was used as the main catch-phrase to advertise the US movie *Godzilla* in Japan. Despite its size of 70 meters however, the Hollywood remake of the original Japanese monster failed to impress the audience in Japan due to its total obsession with destruction. By not allowing for some of the more redeeming characteristics of its Japanese predecessor, in particular helping and protecting mankind, the US *Godzilla* failed to fulfill the role attributed to it and thus to live up to the expectations of the Japanese audience. Here we see as a case in point that size alone does not necessarily matter.

Looking at the automobile industry in the countries of the Association of Southeast Asian Nations (ASEAN), maybe its most striking feature is the dominant position of Japanese car manufacturers. Japanese companies have been holding market shares of about 80–90% for both sales and production, within this region, since the start of the Southeast Asian automobile industry in the late 1960s. Here again we face the question of size and whether it matters. Has Japanese dominance helped or hindered the development of the Southeast Asian automobile industry until now, and how will this dominance affect its further development? Attempts to find an answer to this question directly lead to the problem of regional integration and disintegration that have been at the core of the development of the ASEAN automobile industry since its start.

Hence, this paper focuses on regional integration attempts and achievements within the Southeast Asian automobile industry in the past and present. It describes and analyzes various industrial cooperation schemes and the reasons for the partial or total failure of their implementation. It identifies ASEAN governments and Japanese automakers as the two important players within the regional integration process and it shows that the latter ones have become the decisive actors over time by partly taking over the formulation of industrial policies at the ASEAN level.

With regard to this dual role of Japanese companies, this paper complements two kinds of scholarly works. The first group is comprised by those that have analyzed the development of the ASEAN automobile industry by merely pointing to the dominance of Japanese companies without sufficient attention given to the delicate power play in industrial policy formulation and implementation (see *e.g.* EIU 1985; Payne 1993; Funke 1997; Fujita and Hill 1997). The other group of articles and books has analyzed the general political economy of economic integration within ASEAN with too much emphasis on ASEAN governments as the main actors within this process (see *e.g.* UNIDO 1986; Chatterjee 1990; Rieger 1991; ASEAN-Secretariat 1997).

This paper closer follows the work of Doner (1987, 1991) whose analysis on the automobile industrialization of Southeast Asia and the political bargaining process between ASEAN governments on the one hand and Japanese firms on the other presents the most encompassing approach of developments until the late 1980s. This paper enlarges Doner's work by including an analysis of the development in the 1990s and showing why Japanese companies have become the driving force in shaping and utilizing regional cooperation schemes as well as in building up a region-wide industrial structure including supporting industries. By examining the position of Japanese automakers in contrast to their Western competitors and simultaneously highlighting the obstacles within and between single ASEAN countries toward a deeper industrial integration, this paper argues that there has been no viable alternative to this Japanese led approach toward regional integration and the development of the Southeast Asian automobile industry and that there will be none in the near future.<sup>1</sup>

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<sup>1</sup> Thus this paper concentrates on the role of Japanese companies within the important integration process of the ASEAN automobile industry. By contrast, it does not attempt to answer the more general question whether the regional dominance of Japanese manufacturers over Western companies has been advantageous or disadvantageous for the development of the local industry in terms of technology transfer or the nurturing of local companies.

However, the author strongly opposes the often heard and negatively connoted argument that Japanese dominance has come with a lack of competition. Undoubtedly there has been and there continues to be fierce competition between single Japanese manufacturers in ASEAN. The very existence of Proton, the Malaysian national car manufacturer, is the best proof for this view as Proton could be only established in 1983 by the help of Mitsubishi Motors. While no Western company was willing to engage itself in the Malaysian national car project at that time, Mitsubishi did so out of the motivation to gain a stronger foothold in Southeast Asia and thus a leading edge over its Japanese competitors.

## 2 CHARACTERIZATION OF THE ASEAN AUTOMOBILE INDUSTRY: THE PROBLEM OF FRAGMENTATION AND MISSING ECONOMIES OF SCALE

Although the volume of automobile production in ASEAN has risen enormously until recently (Table 1), the industry in general is still characterized by a high degree of production fragmentation. This fragmentation separates the four most important markets of Thailand, Malaysia, Indonesia and the Philippines from each other and thus limits the size of their automobile industries mainly to their respective domestic markets. This is the direct outcome of the import substitution strategies that have been pursued by these four countries since the 1970s. Even today import tariffs, local content regulations and other trade and investment barriers continue to dominate automobile industrial policies separating Southeast Asian markets from each other and preventing car manufacturers from enjoying the benefits afforded by regional production specialization and economies of scale.

*Table 1: Automobile production figures (including knock-down) in ASEAN countries 1970–1998*

	Thailand	Indonesia	Malaysia	Philippines	ASEAN 4	Japanese Share <sup>1</sup>
1970	22,000	10,000	28,000	19,000	79,000	90%–95%
1980	72,000	174,000	101,000	93,000	440,000	90%–95%
1985	82,000	139,000	124,000	20,000	365,000	90%–95%
1990	305,000	272,000	205,000	40,000	822,000	79.2% (92.3%)
1995	483,000	388,000	308,000	123,000	1,302,000	80.3% (95.3%)
1996	559,000	325,000	396,000	137,000	1,417,000	74.0% (91.6%)
1997	360,000	389,000	457,000	111,000	1,317,000	67.6% (91.0%)
1998	169,000	58,000	164,000	47,000	438,000	n.a. (91.4%)

1) The figures in brackets indicate the share of Japanese manufacturers including the production of the Proton and Perodua in Malaysia in which Mitsubishi and Daihatsu are highly involved.

Source: Nikkan Jidōsha Shinbunsha (1996), Fourin (1998a), Fourin (1999)

Even worse, the problem of small-scale production does not end here as there is a second layer of fragmentation at each national level where the limited production has to be divided among a large number of automakers.<sup>2</sup> In each of the four countries, 15 to 20 assemblers (of which at least 10

<sup>2</sup> For a detailed description and explanation of the failure of ASEAN governments to effectively limit the number of assemblers in their respective countries, see Doner (1991, 96–218).

involve Japanese manufacturers) plus numerous original equipment manufacturers compete against each other reducing the output of single factories to below 10,000 vehicles in most cases. In addition, most companies split these low numbers not only between passenger cars and commercial vehicles but also among a wide range of different models further reducing the potential for any scale economies. Even among the bigger Japanese manufacturers, the average plant output per year did not exceed 20,000 in 1996 with 32 out of 54 plants producing less than 10,000 vehicles (IRC 1997). The only company that stood out with a per year production of more than 100,000 is Proton in Malaysia, but even Proton could not reach the production level of 200,000 units which is regarded as the minimum number required for mass production (Ishizaki 1994, 18; Fourin 1998a).

As a result of this production fragmentation at the regional and national level, the ASEAN automobile industries have mainly remained at the knock-down assembly stage so far, unable to move on to the next stage of automobile industrialization – mass production. Thus, the problem of small-scale production lies at the heart of the problem of the development of the Southeast Asian automobile industry. This holds especially true as this problem affects the equally important supporting industries (material and parts suppliers) in the same way. It restricts all efforts to improve international competitiveness by reducing costs or raising quality without stronger cooperation between companies in different countries of this region. The first successful steps toward such a regional integration have been taken by Japanese companies in recent years as we will see below; though, the extent has been quite limited so far.

### 3 DEVELOPMENT UNTIL THE LATE 1980s: JAPANESE DOMINANCE AND THE FAILURE OF REGIONAL INTEGRATION EFFORTS

Japanese manufacturers have dominated automobile production in Southeast Asia since its start in the late 1960s as they had dominated the import markets of the same countries before. After the introduction of import substitution policies had forced foreign companies to tie up in terms of capital or technology with local companies to replace imports by local assembly, Japanese manufacturers showed much more enthusiasm and commitment to follow this path than did their European or US competitors. This strong interest of Japanese automobile companies in the ASEAN markets in the 1970s and 1980s can be explained by a number of factors (Doner 1991, 76–8):

- 1) geographical – and partially cultural – proximity;
- 2) product compatibility between the market needs in Southeast Asia and the focus of production on commercial vehicles and small, durable passenger cars in Japan in the 1960s and 1970s;
- 3) the importance of ASEAN countries as an export destination for Japanese car producers (switching from the export of complete vehicles to the export of knock-down parts for local assembly);
- 4) the fear that the Japanese market itself would be endangered if European and US automakers gained a strong foothold in neighboring Asian markets.<sup>3</sup>

Beside this strong interest, Japan's dominance of the ASEAN automobile industries during these years has equally been a function of Japanese companies' specific advantages over its Western competitors in the region. The reasons are threefold: Firstly, Japanese business strategies were not based only on a long term perspective as opposed to the more short term cost-benefit oriented approach of their Western counterparts. They also included the ability to adapt flexibly to local needs like equity restrictions in joint ventures or the extensive use of informal networks including the sometimes extra-legal accommodation of the interests of key persons within the host countries. Secondly, the excellent financial health of Japanese companies throughout the 1970s helped expansion in Southeast Asia especially during the initial market penetration phase that offered only low profits. The financial strength of the Japanese assemblers may have been even more important during the 1980s when it facilitated the expansion of Japanese material and parts suppliers in Southeast Asia – a point we will refer to in more detail later. Finally, the well known ability of Japanese firms to efficiently manufacture small numbers of different vehicles and models has greatly supported their move into the small and fragmented markets in the ASEAN region and helped their success over other foreign companies there (EIU 1985, 7–16; Doner 1991, 79–83).

Despite this 'Japanese success story' the subsequent move of all 11 Japanese assemblers into ASEAN auto production simultaneously contributed to the fragmentation of the single national markets and the entire region as described above. This problem of an uneconomic fragmentation of manufacturing activities was foreseen from the start of ASEAN auto-

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<sup>3</sup> As a fifth factor that raised Japanese interest in achieving a strong position in Southeast Asia, some authors mention geopolitical interests like securing raw material supplies for Japan (EIU 1985; Doner 1991; Hatch and Yamamura 1996). However, as related to corporate strategies, this argument holds true only for a company like Mitsubishi Motors with the interests of the broader Mitsubishi Group encouraging aggressive strategies by its automobile arm.

mobile industrialization as shown by the early proposal for regional automotive complementation by a United Nations Report on ASEAN in 1969 (Solidum and Meow 1987, 1). For the following 20 years, different concepts and schemes of regional complementation within the ASEAN automobile industry were to be pursued by the Southeast Asian countries generating, however, only negligible success. A closer examination of the main actors and approaches within this phase of regional integration efforts will help to identify the main problems and reasons for that failure and to understand why Japanese companies were later given the power to become the leading force within the integration process (see also Legewie 1998, 223–30).

Subsequent to the UN report, the first regional meeting of private ASEAN automotive representatives took place in Bangkok in 1971. It ended in a joint call for a region-wide complementation program to be supported by the ASEAN governments that were requested to provide special tariffs and local content privileges. In 1976, the private automotive business formally organized the *ASEAN Automotive Federation* (AAF) which immediately set up the concept of *ASEAN Automotive Complementation*. This concept was presented to the ASEAN governments and eventually became the basis for the *ASEAN Industrial Complementation* (AIC) scheme adopted in 1981. This scheme aimed at facilitation of regional production specialization by offering local content accreditation and tariff privileges to certain part productions in different countries. The allocation of these selected part productions was to be decided jointly among the ASEAN governments and supposed to be based on reciprocity. Thus the AIC scheme required one big package deal with a ‘fair’ and reciprocal allocation of benefits among the participating ASEAN countries (UNIDO 1986, 29–33; Solidum and Meow 1987, 1–5; Kamo 1997, 66–8).

The need for such a consensus among the ASEAN countries however proved to be an insuperable obstacle for the successful implementation of the AIC scheme. Although all countries acknowledged the need for production rationalization and specialization on a regional scale, they simultaneously tried to pursue their national strategies of establishing their own integrated automobile industries. This held true despite the official pledge of aiming at the production of an *ASEAN car*<sup>4</sup>. Thus, all attempts at allocating the production of a specific component to one country faced stiff opposition by other countries fearing to lose out in that specific production area.

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<sup>4</sup> This vague idea that had been formulated for the first time at the Bangkok meeting in 1971 resembles the concept of the Airbus production in Europe.

This coordination problem had already become visible during earlier discussions within the AAF between 1976 and 1978. Within the subsequent negotiation process at the ASEAN government level, the number of items for possible industrial complementation under the AIC scheme was reduced from 121 to 17 at which point the first AIC package was finally approved in 1981, followed by a second (and last) package of just 5 more items in 1983 (see Table 2). As a result, the overall impact on regional complementation with these agreements was only minimal, covering less than 1% of the total intra-ASEAN trade (UNIDO 1986, 32–3; EIU 1985, 66–7).<sup>5</sup>

*Table 2: AIC packages for preferential trade treatment 1981 and 1983*

<b>First Package 1981</b>	
Indonesia:	diesel engines, axes (motorcycles), wheel rims
Malaysia:	spokes/nipples, drive chains, timing chains, crown wheels and pinions, seat belts
Philippines:	body panels (pass. cars), transmissions, rear axes (light comm. vehicles)
Thailand:	body panels (commercial vehicles), brake drums, shock absorbers
Singapore:	universal joints, oil seals, V-belts

  

<b>Second Package 1983</b>	
Indonesia:	steering systems
Malaysia:	headlights
Philippines:	heavy duty rear axles
Thailand:	carburetors
Singapore:	fuel injection pumps

Source: EIU (1985, 66)

The rivalry between the single states competing for the same industry has already been given as the main reason for the failure of this government-led attempt at industrial integration in ASEAN. Other factors contributed as well to the failure of the AIC scheme. Among them was the absence of common objectives with ASEAN countries simultaneously aiming at industrial integration, the creation of employment, export promotion, the facilitation of technology transfer and the earning of foreign exchanges. In

<sup>5</sup> In other industries, the ASEAN countries even failed to finalize any AIC package despite wide interest and some 30 proposals ranging from industries like iron & steel and textiles to chemicals, electronics and food processing (UNIDO 1986, 29–34).

addition, the insistence on reciprocity in every single preferential agreement necessitated long negotiations at the bilateral and multilateral levels further restricting the opportunities for production rationalization.<sup>6</sup> In 1982 the announcement of the Malaysian national car project finally destroyed all plans of a regional car project and the probability of enforcing part-to-part complementation as called for in the AIC (Meow 1987, 81–3; Shimizu 1994, 53).

Within this discussion of the reasons for the failure of the AIC scheme, we still have not referred to the attitude of foreign companies toward complementation schemes, especially that of the Japanese automakers. Doner describes their behavior through the mid 1980s as that of ‘reluctant multinationals’ and correctly identifies their reservations as being less against regional complementation schemes in particular but more against a change of the status quo that would require new big investments in the ASEAN region in general (1991, 83). This reluctance can be attributed to three characteristics of the Japanese automakers and distinctive features of their production system, (1) a capital-intensive production; (2) tight links to supplier firms; and (3) a strong interfirm rivalry. The rapidly falling labor intensity in the automobile industry since the 1970s reduced the attractiveness of cheap labor and thus that of developing countries as production sites for all automakers. For Japanese manufacturers this held true even more so than for their Western competitors due to the highly capital-intensive character of the Japanese production system. In addition, their strong reliance on parts suppliers in terms of quality, cost and delivery (just-in-time) further complicated a production process that went beyond the mere assembly of knock-down parts in ASEAN countries characterized by a weak supplier base. Both factors were exacerbated by the strong interfirm rivalry of Japanese companies that impeded cooperative production arrangements required to achieve the necessary economies of scale.

It becomes obvious that from the Japanese manufacturers’ perspective any expansion of auto manufacturing in ASEAN only threatened to reduce their quality, efficiency and competitiveness while raising production costs at the same time. Maintaining the status quo and sticking with the simple assembly of imported knock-down parts thus was the preferred strategy for Japanese companies through the mid 1980s and ex-

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<sup>6</sup> The notion of a 50% cut in tariff rates itself proved to be an obstacle to harmony. As each member nation used to charge different rates, it meant that the country with the highest initial rates (Thailand) had to concede more percentage points which was seen by this country as a special sacrifice (EIU 1985, 65).



plains their reluctance toward any changes including those associated with the new complementation programs.

However, by the end of 1982 their role within the integration process suddenly was set to gain in importance. Frustrated with the slow progress and the obvious failure of the AIC after the announcement of the Malaysian national car project, ASEAN officials for the first time addressed Japanese car manufacturers directly and asked them to present their ideas of a realistic development program for the automobile industry in Southeast Asia. Although their first response still reflected reluctance, Mitsubishi Motors, with some enthusiasm, took up that chance to strongly promote the old idea of brand-to-brand complementation (Shimizu 1994, 53–4).<sup>7</sup>

This concept had already been suggested by Japanese automakers in 1976, but had been strongly rejected within the AAF by the majority of non-Japanese member companies at that time (Solidum 1987, 45). Compared to the idea of part-to-part complementation that aimed at a consensual allocation of complete part productions to single ASEAN countries, the brand-to-brand concept was built on more flexibility and a stronger involvement. This was to be achieved by allowing – at least in theory – private companies to decide how and where to execute complementation within the production of their respective brands. But even after the obvious failure of the AIC scheme, the implementation of the brand-to-brand idea took another six years until 1988. Until then, several obstacles had to be overcome, especially the opposition within the region against a growing Japanese dominance, the prevailing reluctance among Japanese automakers other than Mitsubishi Motors and the economic depression of 1985/86. Then, however, the start of a new cooperation scheme was to mark a substantial shift in the sovereignty of decision-making from the ASEAN governments to multinational (Japanese) companies and to start a new phase of regional integration efforts.

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<sup>7</sup> The reason for this was the strong interest of Mitsubishi Motors in the Asian market. As it clearly lagged behind other Japanese automakers not only in Japan but also in the two important overseas markets of North America and Europe, it eagerly tried to catch up by taking a leading role in the production expansion in the ASEAN region. The same interest stood behind the decision to tie up with the company HICOM of Malaysia to establish Proton and jointly produce the Malaysian national car from 1983 onwards.

#### 4 DEVELOPMENT THROUGH 1996: FIRST SUCCESSFUL STEPS TOWARD REGIONAL INTEGRATION LED BY JAPANESE AUTOMAKERS

In October 1988, the *Brand-to-Brand Complementation* (BBC) scheme was officially approved, meaning that the failed AIC concept of part-to-part complementation was *de facto* replaced by the new concept of brand-to-brand complementation. The BBC scheme offers car manufacturers a 50% tariff reduction and a local content accreditation for the parts they exchange between their ASEAN production facilities within one brand. These privileges, however, require that these parts have a local content rate of at least 50% to sustain existing barriers versus imports from outside the region and thus to support industrialization on a regional level.

Although the BBC scheme limited possible advantages mainly to Japanese companies (for they were the only ones with an extensive production network in Southeast Asia), it was finally accepted by ASEAN because it promised to overcome the main defect of the AIC scheme, namely the interstate competition for the same industry. As BBC restricted regulations and privileges of a regional parts exchange for every application to one brand and thus only one manufacturer, it seemed to guarantee to circumvent rivalry between single countries and by this to secure an efficient regional division of labor.

It is important to note that the start of the BBC scheme and its subsequent utilization by Japanese automakers were also supported to an important degree by an increasingly positive stance of Japanese car manufacturers toward a quantitative and qualitative increase of their production in ASEAN that was due to a number of reasons:

- 1) an appreciation of the yen;
- 2) stronger local content requirements that had made it increasingly difficult to stick with pure assembly activities that relied on large imports of components from Japan since 1985;
- 3) liberalization efforts, both on a regional scale as the decision to establish the ASEAN Free Trade Area (AFTA) in 1992 and within the automobile industry like the abolition of import bans on complete vehicles and the lowering of import tariffs, encouraging Japanese companies to foster a regional production approach;
- 4) rising European and US limits on Japanese auto exports making the ASEAN markets increasingly attractive to Japanese car manufacturers;
- 5) the strong economic growth in Southeast Asia that started again to boost auto sales after 1987;

- 6) the progress in industrial upgrading of supporting industries being of utmost importance as any new Japanese investment aiming at regional production specialization and the achievement of economies of scale required strong material and parts suppliers.

*Table 3: Investment by Japanese automobile material and parts makers in ASEAN countries by investment cases per year*

	62-69	70-74	75-79	80-85	86-90	91-95	1996	1997	Total
<b>Thailand</b>	13	14	5	13	48	63	38	14	208
<b>Indonesia</b>	-	5	12	3	12	28	14	8	82
<b>Malaysia</b>	1	5	4	13	16	21	1	-	61
<b>Philippines</b>	-	4	2	-	12	22	10	4	54
<b>Singapore</b>	1	4	9	2	1	-	-	-	17
<b>ASEAN 5</b>	15	32	32	41	89	134	63	26	422

Source: Fourin (1998a)

The process of upgrading Southeast Asian supporting industries is best illustrated by the strong investment of Japanese material and parts makers in these countries since the second half of the 1980s (see Table 3). It can be concluded that a clear convergence of the general environment of ASEAN auto policies and of Japanese car manufacturers' interests provided a promising starting point for the second phase of industrial integration in the ASEAN automobile industry at the end of the 1980s.

Between 1989 and 1996, BBC applications by Volvo, DAF, Mercedes Benz as well as the four big Japanese car manufacturers (Mitsubishi Motors, Toyota, Nissan and Honda) were approved and privileges were granted to them marking the first steps toward a regional integration of ASEAN automobile industries. However, only the regional parts exchange of the Japanese companies reached a level of substantial volume by 1996 and even they had to face a large number of problems that complicated the implementation process and hindered the exercise of BBC privileges. In particular, an effective abolition of the rivalry between the single countries proved to be too difficult to be realized.

A theoretically optimal division of labor was hindered from the start because Indonesia did not join the BBC agreement before 1995. Even then Indonesia refused the local content accreditation of imported BBC parts meaning that it did not allow any effective tariff reduction.<sup>8</sup>

<sup>8</sup> In Indonesia import tariffs decreased with rising local content rates until 1999.

The need to apply for every car brand separately was further complicated by the requirement to file a new application with every model change resulting in new negotiations between the car manufacturer and the countries involved. For example, Mitsubishi Motors' production at the end of 1996 was based on 21 BBC approvals with another 8 applications pending (Yoshimi 1998, 19). The most difficult part of the negotiations was attributable to the need that the effect of every bilateral parts exchange on the trade balance of the countries involved had to be neutral. This reciprocity requirement was the legacy of the AIC scheme and forced the companies into numerous amendments of their initial production and export plans. This in turn remarkably narrowed the opportunities for an efficient use of existing capacities.

Another weak point was the provision that import tariffs were not to be initially reduced but only to be refunded later. In reality some countries actually refused these refund payments for a long time. Although this problem did not arise in the Philippines, industrial sources indicate that Thailand (and to some extent Malaysia) did not refund any import tariffs paid until 1996 (also see Shimizu 1995, 83; Ishizaki and Mori 1996, 12).<sup>9</sup>

Finally, it has to be noted that the restriction of the BBC scheme on car manufacturers excluded parts manufacturers and thus neglected the development of the supplier industry. By this, ASEAN countries removed growth incentives for the sector which forms the inevitable base for a stronger regional integration of the automobile industry and which offers local companies the best growth chances in the long run (Takayasu 1996).

Despite these limitations, the BBC scheme has been the most important and successful industrial cooperation scheme of ASEAN so far. By intentionally following the interests of Japanese companies, ASEAN governments have willingly transferred some sovereignty to them. However, at the same time they succeeded for the first time to some extent to circumvent national rivalries and to contribute to the build up of a regional division of labor within the Southeast Asian automobile industry (Fujita and Hill 1997; Funke 1997; Ueno 1997).

Taking Toyota as an example, Table 4 illustrates that there has been significant progress with the localization and regional specialization of its component production activities. Starting from nearly zero in 1992, the parts exchange of Toyota between Thailand, Malaysia, Indonesia and the Philippines – partly covered by BBC arrangements – rose to a volume of

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<sup>9</sup> The background of this refund problem in Thailand lies in internal quarrels between the Ministry of Industry and the Ministry of Finance. Put simply, the latter refused to meet commitments of the former by pointing to the negative impact of tax refunds on the current balance.

**Table 4: Extension of the production network of Toyota within ASEAN countries until 1996**

	Product	Start Production	Exports 1996	Export Destination 1996
<b>Thailand</b>	built-up vehicles	1964	1,300	Philippines, Pakistan
	floor panels	1979	100,000	Malaysia, Philippines
	diesel engines	1989	15,000	Malaysia, Indonesia, New Zealand, Portugal
	block castings	1989	640,000	Japan
<b>Malaysia</b>	built-up vehicles	1968	–	–
	steering gears	1992	110,000	Thailand, Indonesia, Philippines, Taiwan, South Africa, Turkey
	suspensions	1992	34,000	Thailand
<b>Indonesia</b>	built-up vehicles	1970	1,100	Brunei, Papua New Guinea
	engine blocks	1985	35,000	Malaysia, Japan
	gasoline engines	1991	19,000	Philippines, Taiwan, Japan
<b>Philippines</b>	built-up vehicles	1989	–	–
	transmissions	1992	120,000	Malaysia, Thailand, Taiwan, Portugal
	transmission parts	1992	56,000	Indonesia

Source: Toyota (1997)

20 billion yen in 1996 (Matsuoka 1997, 22). In addition, there has been an increased export of parts from Toyota plants in these countries to Japan and other countries (Table 4).

Although the extent of the regional division of labor and parts exchange of other Japanese manufacturers in Southeast Asia has not reached the volume of Toyota, they all have shown a similar development (Fourin 1995, 1998a). Table 5 illustrates that assemblers as well as big parts manufacturers like Denso have introduced a country-specific production concentration of parts and components. An interesting fact is the striking parallel with the allocation of certain component productions to particular countries. For example, the production of transmissions is concentrated in the Philippines, that of steering gears in Malaysia and the production and assembly of engines in Indonesia and Thailand. Thus, the evolving regional production specialization seems to be exactly the outcome that was once intended by the AIC scheme – however now decided and exercised by private companies and not by the planned allocation at the governmental level. Nevertheless, the still relatively low figures for the intra-ASEAN trade of the five companies in 1996 (see Table 5) indicate that a regional division of labor has only just started to develop.

**Table 5: Regional pattern of parts production and trade of Japanese manufacturers within ASEAN countries**

	Toyota	Mitsubishi	Honda	Nissan	Denso
<b>Thailand</b>	diesel engines stamping parts	casting parts suspensions	stamping parts	engine parts stamping parts	starters alternators
<b>Malaysia</b>	steering gear suspensions	steering gear stamping parts	plastic prod. suspensions	steering gear stamping parts	air-condition relay, flasher
<b>Indonesia</b>	gasol. engines cyl. blocks	engine parts	cylinder heads cyl. blocks	gas. engines <sup>1</sup>	compressors spark plugs
<b>Philippines</b>	transmissions transm. parts	transmissions	casting parts	transmissions stamping parts	instr. clusters
<b>Intra-ASEAN trade volume</b>					
- 1992	<2 bn yen	<0.5 bn yen	<0.5 bn yen	<0.2 bn yen	<10 mil. yen
- 1996	20 bn yen	3 bn yen	4 bn yen	1 bn yen	<0.5 bn yen
- 2000 <sup>2</sup>	90 bn yen	>20 bn yen	>20 bn yen	20 bn yen	6 bn yen

- 1) The start of operations was originally planned for after 2000 but had to be postponed.
- 2) These estimates date to mid 1997 and thus to the time before the Asian economic crisis. Accordingly, they have to be reduced significantly, e.g. Toyota scaled back expectations for the year 2000 to 60 billion yen.

Source: data of single companies

Thus, with regard to the still unsolved problems of the BBC scheme, the direct impact of the BBC scheme on the evolving regional integration process of the Southeast Asian automobile industry must not be overestimated. All industry sources stress that even without the introduction of this scheme, Japanese car manufacturers would have expanded their regional division of production within Southeast Asia as a result of the change of the regional and global environment as described above and the subsequent shift in their global strategies (Shimizu 1994, 1995; Ueno 1997). While the BBC policies definitely encouraged the first steps toward a regional division of labor by new investments and the build-up of new component factories, the benefits of the BBC scheme alone have not justified these investments so far. They were also dependent on other factors on the Japanese and global side. The same will be the case in the future as will be illustrated by the next section on the current developments within the ASEAN automobile industry.

## 5 CURRENT SITUATION: THE ASEAN AUTOMOBILE INDUSTRY AT THE CROSSROADS – REGIONAL STANDSTILL OR GLOBAL INTEGRATION

Since the summer of 1997, the ASEAN automobile industries have been strongly suffering under the effects of the Asian economic crisis. In 1998 the regional demand dropped to less than 500,000 units which is just a third of the record sales figure in 1996. Most observers agree that it will take about five years for the ASEAN demand to recover to the previous record level of 1.4 million units reached in 1996. But before we deal with the effects of the current crisis in Southeast Asia, we have to focus on current regional cooperation schemes as the topic of industrial integration continues to hold the key to the future development of the ASEAN automobile industry.

### *5.1 The AICO scheme and the integration process since 1996*

Based on the relatively successful experience with the BBC scheme and a multinational company led approach to a deeper industrial integration, the *ASEAN Industrial Cooperation (AICO)* scheme was agreed upon in 1996. It presents the so far most ambitious industrial integration effort of the ASEAN countries aiming at a deeper industrial integration by facilitating intra-regional parts exchange.

A review of the main features in Table 6 illustrates that the AICO scheme is planned to become the institutional framework for the eventual establishment of the AFTA. Under certain conditions, it already offers the same privileges to manufacturers today that will be automatically enjoyed by all companies within ASEAN from the year 2002 onwards.

A minimum of two companies in two different ASEAN countries are required to form an AICO arrangement. To form such an arrangement, the prospective companies must fulfill certain criteria that are similar to those that applied to the BBC scheme but less strict. The companies must be incorporated and operating in an ASEAN country and have a minimum of 30% national (ASEAN) equity to assure the participation of local companies.<sup>10</sup> They also have to undertake resource sharing/pooling or some

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<sup>10</sup> There was no need for this condition within the BBC scheme because all foreign car manufacturers were (and most are) operating in Southeast Asia as joint ventures with local partners keeping an equity of 30% or more. However, the exemption of Thailand, Malaysia, Indonesia and the Philippines from WTO provisions relating to TRIM (Trade Related Investment Measures) will expire in the year 2000 meaning that these countries will have to abolish this requirement then.

Table 6: The AICO scheme in comparison to BBC and AFTA

	BBC	AICO	AFTA
Period of validity	10/1988–10/1996 <sup>1</sup>	since 11/1996	starting 2002
Regional coverage	ASEAN 4 <sup>2</sup>	ASEAN 7	ASEAN 10
Sectoral coverage	car parts (only assemblers)	industry wide (only manufacturers)	industry wide (all companies)
Procedures	by approval	by approval	automatically
<i>Privileges:</i>			
Import tariff	refund of 50%	reduction to 0–5%	reduction to 0–5%
Local content accreditation	yes	yes	yes
<i>Conditions:</i>			
Local (ASEAN) content	50%	40%	40%
National (ASEAN) equity	–	30% <sup>3</sup>	–
Complementation	yes	yes	no
Trade balance neutrality	yes	no	no

- 1) This is the period of application, privileges may be enjoyed until model changes.
- 2) There is no car assembly in Singapore and Brunei; participation of Indonesia started in 1995.
- 3) A waiver is possible if the company meets other criteria imposed by the participating country (*e.g.* export commitment, linkages to small and medium companies, introduction of new technology). For 1999/2000, the national equity requirement is waived totally.

Source: compiled from various ASEAN publications

kind of industrial complementation, but no longer need to form trade arrangements with a neutral effect on the trade balances of the countries involved. In addition, the required local content rate of production was lowered from 50% to 40% which will also be the AFTA figure. The most important change, however, is that AICO is no longer restricted to the automobile industry but open to all manufacturing companies including parts manufacturers making it the predecessor of the planned AFTA.

Despite the clear liberalization trend that started in the early 1990s, the Southeast Asian automobile industry continues to be characterized by import barriers, small isolated markets and the resulting production fragmentation as described before. Regarding this background, it comes as no surprise that the AICO scheme with its prospects of a partial abolition of trade barriers attracted strong interest from the automobile industry, especially from those makers enjoying BBC privileges which will be phased out with the next model changes. Of the total of 58 AICO applications (as by August 1999) about 50 were filed by companies of the automobile industry. These came from local affiliates of big Japanese car manufacturers like Toyota, Honda, Nissan, Mitsubishi or Isuzu and parts makers like Denso, Sanden, TSK or Mitsubishi Electric, with only 2 cases of non-Jap-



anese companies (Volvo and Ford).<sup>11</sup> All these companies aim at raising their production efficiency by concentrating different areas of their production in different countries and connecting them by a stronger exchange of parts to allow for larger economies of scale.

However, as with the BBC scheme before, the implementation process of AICO faces a large number of obstacles that result out of the national interests of the single ASEAN countries but also out of national problems within each of these countries (for an overview see Fourin 1997, 64–9). Thus, instead of achieving a fast approval of AICO applications, a prolonged bargaining process between single companies and ASEAN governments with few concrete results has dominated in 1997 and 1998. For example, the Malaysian government regards every privilege to be enjoyed by foreign car manufacturers as a threat to Proton and Perodua, its own national makers, that do not possess extensive production networks within ASEAN. But even in countries with a more positive stance, as in countries without a national brand (Thailand, Philippines), the governments are only interested in AICO arrangements that promise a net increase of production and thus additional exports and jobs.

This attitude forces the applying companies to convince the host governments that such a net plus will materialize. This has turned out to be a long and difficult process because it does not mean only to convince one department in the associated Ministry of Industry but to deal with a large number of interest groups in each country. As all AICO agreements imply additional imports for participating countries, they do not only face strong resistance from domestic companies but also often the opposition of the Ministry of Finance that fears the outflow of foreign exchange (*AutoAsia* October 1997, 36). This problem has become even stronger since the outburst of the current crisis and strongly resembles the old problem of tariff refunds under the BBC scheme. In some cases, Japanese companies have even been asked by officials of the host country's Ministry of Industry to present figures that show a clear positive net effect of the AICO agreement only to furnish these officials with data they can use against counterparts (Ministry of Finance, national firms) within the domestic discussion.

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<sup>11</sup> All data related to AICO applications and production figures and strategies of Japanese manufacturers that are presented in this section without any source given are based on personal interviews of the author with representatives of the private sector and government officials in Japan and Southeast Asia between October 1997 and March 1999 and additional telephone interviews in November 1999.

Until the end of 1998 the requirement of a minimum national equity of 30% turned out to be the biggest single barrier for AICO approvals.<sup>12</sup> Although most applying companies fulfill this criteria, some of their local suppliers whose parts are included in the AICO packages to be traded between the single countries do not. These suppliers with a national equity below 30% (sometimes even 0%) usually are Japanese parts manufacturers which account for 40–70% of the local suppliers of Japanese automakers in ASEAN (Ueno 1997, 27–38). Although this large number is explained by Japanese companies stressing their demanding exigencies regarding quality, cost and delivery, ASEAN governments fear that their domestic supplier industries will be placed at a disadvantage in the long run. Regarding the close relationship between Japanese assemblers and parts manufacturers, such as between Toyota, Denso and their Japanese suppliers, ASEAN governments even argue sometimes that Japanese companies transfer their closed system of vertical *keiretsu* relations from Japan to Southeast Asia (also see Aoki 1992, 82; Hatch and Yamamura 1996, 158–71, 1997, 12–7).<sup>13</sup>

Among multinational companies Japanese manufacturers have pressed the most for further liberalization efforts within ASEAN reflecting their currently overwhelming production dominance in Southeast Asia. One expression of these integration efforts is the resurrection of the ASEAN Automotive Federation (AAF) in July 1996 which had been dissolved in the 1980s. This resurrection was carried out mainly by Japanese companies, from which chief executives of Toyota Thailand and Mitsubishi Indonesia became the first two presidents of the new AAF. By this, Japanese car manufacturers also dominate the work of the AAF which is the only officially accepted lobbying group within the ASEAN automobile industry.

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<sup>12</sup> For 1999 and 2000 this requirement has been waived for all applications.

<sup>13</sup> Recently this criticism has nearly disappeared as Japanese manufacturer-supplier relations have turned out to be one of the few remaining strengths that help to keep the ASEAN automobile industry alive (see the next section for a more detailed description). Regarding the more general criticism of insufficient technology transfer and restricted spill-over effects for local suppliers as a result of the so-called closed Japanese system, the reader is referred to general works on this topic (see e.g. Jeremy 1992; Simon 1997; Buckley *et al.* 1997; Kumar 1998 and Yamashita in this volume). With respect to the topic of this article 'regional industrial integration' it can be obviously concluded that the close relations between Japanese manufacturers and suppliers contribute to the implementation of the AICO scheme and thus to the integration process of the automobile industry in ASEAN.

But also in bilateral negotiations with ASEAN governments, the large market share of Japanese companies strongly supports their positions. This holds true especially in the present situation that is characterized by an economic downturn and sharply reduced sales figures. However, even for Japanese companies, the chances to play single governments against each other for the sake of short term profits are limited. The large investment volume for component factories like transmissions or engines requires a long term strategy with a high degree of capacity utilization. The originally planned engine factory of Nissan in Indonesia, for example, was expected to cost about 10 billion yen which is ten times the value of all parts traded by Nissan within ASEAN in 1996. This comparison clearly illustrates that only a strategy which encompasses the whole region promises the necessary exploitation of the economies of scale.

But exactly this challenge – to encompass all ASEAN countries at the same time – has limited the success of most AICO applications so far. Until August 1999, only 7 automobile companies had successfully gone through the whole process of approval including the issue of the official Certificate of Eligibility. These are: Volvo (Thailand-Malaysia); Sanden (Thailand-Singapore); Toyota (Thailand-Malaysia, Thailand-Philippines, Thailand-Indonesia, Malaysia-Philippines); Honda (Thailand-Malaysia, Thailand-Philippines, Malaysia-Philippines, Malaysia-Indonesia, Indonesia-Philippines), Isuzu (Thailand-Malaysia), Denso (Thailand-Malaysia, Thailand-Philippines, Thailand-Indonesia) and TSK/Armstrong Cycle (Thailand-Malaysia).

At first sight, this recent development might look as substantial progress in regional industrial cooperation lowering trade barriers and enforcing regional production specialization. However, the absence of Indonesia in AICO approvals other than of Toyota, Honda and Denso indicates the ongoing negative stance of this country toward the abolition of trade restrictions in the automobile industry. Thus – as with the development under the BBC scheme – the reluctance of Indonesia to join any AICO agreement continues to hinder the evolution of an optimal regional division of labor encompassing all important ASEAN countries. The same conclusion has to be drawn from the fact that there have been so far only approvals on a bilateral basis between two countries. In addition, industry sources indicate that even successful AICO applications have been substantially compromised by demands for amendments by national governments during the approval process. Such amendments are in most cases the result of domestic pressure groups successfully lobbying for a reduction of products to be covered by an AICO agreement.

Thus the integration process keeps on being characterized by its slow pace and step-by-step liberalization progress exercised by single compa-

nies' efforts to rationalize their production on a regional scale. Regarding the national origin of companies applying for and obtaining AICO privileges the dominance of Japanese manufacturers is striking. Undoubtedly they will continue to lead the integration process and thus to determine the further development of the ASEAN automobile industry. The current economic crisis – while threatening the whole industry itself – even tends to strengthen this predominant role of Japanese companies. But it will also change the character of the integration process as will be illustrated in the next chapter.

### *5.2 The role of Japanese companies within the current crisis of the ASEAN automobile industry*

Undoubtedly, the current economic crisis poses a severe threat not only to the further integration process of the ASEAN automobile industry facing rising protectionist demands in several countries but also to the whole industry itself. The enormous fall in the regional demand for automobiles has resulted in a sharply reduced output of vehicles that will remain low for some years to come. This will strongly affect the performance of all assemblers. In the case of affiliates and subsidiaries of multinational companies, however, a long term commitment to the region has already generated substantial financial backing by the home companies allowing them to stay in business (Fourin 1998b, 32–3). In Thailand, Toyota, Honda and Mitsubishi Motors have even injected additional capital into their local joint ventures boosting their respective shares to more than 80% in each case.

In contrast, many local suppliers lack such financial strength and it is feared that they will be forced out of business within the near future. These suppliers do not only suffer from a sudden decrease in orders for their products but also from a weak capital basis that is further eroded by the enormous rise of capital costs in Southeast Asia. Thus, a widespread bankruptcy of automotive suppliers in Southeast Asia has become the biggest and most urgent threat for the whole ASEAN automobile industry because the supporting industries embody the backbone of the whole industry.

Within this general bleak outlook, the strong Japanese presence within the ASEAN automobile industry, that surpasses the assembly stage and extends far into the supporting industries, offers some hope against a total collapse of the parts industry. The strong investment of Japanese material and parts makers in ASEAN countries in the 1990s has raised the number of Japanese joint ventures and subsidiaries in the region to more than 400 by 1997 (see Table 3). These companies strongly dominate the automobile

**Table 7: Structure of the automobile parts industry in ASEAN countries by origin of capital 1998**

	Total Number of Parts Manufacturers	Japanese Affiliates or Subsidiaries		US and European Affiliates or Subsidiaries	
		Absolute	Share	Absolute	Share
<b>Thailand</b>	750–800	209	27.0%	21	2.7%
<b>Indonesia</b>	150–200	82	46.9%	7	4.0%
<b>Malaysia</b>	200–250	61	27.1%	19	8.4%
<b>Philippines</b>	150–200	54	30.9%	5	2.9%
<b>Singapore</b>	about 50	17	34.0%	4	8.0%
<b>ASEAN 5</b>	1300–1500	423	30.2%	56	4.0%

Source: Fourin (1998a)

parts industry in ASEAN by comprising more than 30% of all parts manufacturers as illustrated by Table 7. In addition, more than 120 local companies are affiliated with Japanese manufacturers by technology tie ups without any capital holding by the Japanese company (Fourin 1995, 1998a).

This overwhelming presence of Japanese companies within the supplier industries of ASEAN countries has already proved to function as a counterbalancing power against the negative effects of the current crisis and can be expected to do so in the future too. In many cases, Japanese parts makers have followed the strategy of Toyota and Honda in Thailand and raised their shares in ASEAN joint ventures often turning affiliates into subsidiaries (Inoue 1998, 19; Fourin 1998d, 8–13). More than 80 Japanese material and parts makers injected additional capital into their local affiliates in Thailand only in 1998. Almost always, this injection of urgently needed capital took place on request of the local partner (*Nikkei Weekly* 15 June 1998, 20). In other cases, a close relationship with Japanese assemblers has helped suppliers to receive advanced payment for parts deliveries and other forms of support easing capital bottlenecks and thus securing their ability to procure materials and parts. Japanese companies like Toyota have even provided direct support in the area of cash flow by shouldering the cost of purchasing raw materials and offering letters of credit to its troubled suppliers (*Nikkei Weekly* 19 Oct. 1998, 18; Mori 1999).

Hence, the often criticized close relationship between Japanese assemblers (or first-tier suppliers) and their suppliers helps to keep in business at least the core suppliers of Japanese companies. These parts makers normally work under the direct supervision and guidance of a Japanese car manufacturer partly resembling the vertical *keiretsu* system in Japan (Ue-

no 1997; Hatch and Yamamura 1997). This relationship is based on mutual dependence and strongly encourages support by the car manufacturer for troubled suppliers as these usually represent a long term investment and thus an important company-specific asset within their production system. To keep this existing comparative advantage in Southeast Asia, also after the current recession, most Japanese automakers tend to assist their main suppliers out of a well defined self-interest.

A similar observation can be made in the area of employment relations, where we can see another unique characteristic of Japanese companies. Anxious to keep their well trained workers, most Japanese car manufacturers try hard to stick with a 'no layoff policy' for their core workers. Beside pursuing direct support measures for employees (including paid leave), they focus strongly on training programs in and outside of ASEAN. Financially supported by the official development assistance plan AOTS (Association for Overseas Technical Scholarship) of the Japanese government, all large assemblers have increased the number of employees from their ASEAN plants to be trained in Japan. A case in point is Toyota where the number of trainees for 1998 was increased from 250 to 500 while the length of their stay was extended from three to six months (Fourin 1998). By this, Japanese automakers do not only try to keep their valuable human resources but also contribute to a better education level of workers within the region in the long run.

Beside short term capital and employment support measures and with regard to the bleak sales perspectives within Southeast Asia, efforts to increase exports have gained rapidly in importance. This strategy is especially pursued by firms affiliated with foreign companies that offer access to global markets outside of ASEAN. Once again, Japanese manufacturers play a predominant role. In some cases, Japanese companies like Toyota, Honda or Aisin Seiki have strongly raised their imports to Japan from their Southeast Asian affiliates to help them through the crisis (Fourin 1998c, 6; *Nikkei Weekly* 19 Oct. 1998, 18). Toyota for example decided to raise parts imports from its ASEAN affiliates from 2.5 billion yen in 1997 to more than 14 billion yen in 2000. However, the viability of such a strategy on a wider scale requires an overall improvement in export competitiveness. Such an improvement, however, can be only achieved on the basis of an industrial structure that exploits economies of scale and advantages of regional specialization which leads us directly back to the topic of production fragmentation and the need for deeper industrial integration. Still the problem of high production costs resulting from a limited output per single plant stands against a rapid rise in vehicle or parts exports from ASEAN countries.

Only in the case of Mitsubishi's production of the *Strada*, a 1 ton pick-up, in Thailand we can see such an export already taking place to a substantial degree. In 1998, 59,000 Mitsubishi pick-ups were exported from Thailand and this figure is expected to reach 100,000 by the year 2000 through raising the number of export countries from the current figure of 40 to about 100 (*Nihon Keizai Shinbun* 7 Feb. 1998; Fourin 1998b, 33). But despite this export success story, it is interesting to note that Mitsubishi still refrains from exporting the Thai *Strada* to the US market. One main reason is the fear over eventual product liability claims. This implies the existence of unsolved quality problems that add to higher per unit costs. It underlines the fact that the export plans of other makers face similar limits reducing the hope for a quick export-led regeneration of the ASEAN automobile industry.

Nevertheless, the case of the Mitsubishi *Strada* provides a good example for a relatively efficient production based on regional specialization as it strongly relies on parts that are sourced under BBC agreements from Malaysia (doors, steering gears) and the Philippines (transmissions). The same idea of multiple-parts sourcing underlies, in principle, the production of the so-called *Asia-cars* by Honda (*City*) and Toyota (*Soluna*) and their AICO applications enabling them to achieve local (= ASEAN) content rates of 70% or higher. However, the prevailing problems with the AICO scheme and the general resistance toward further liberalization steps among ASEAN members as described above cast doubts on the possibility of a fast implementation of production plans based on regional specialization and a free flow of parts among the ASEAN countries. These problems also prevent a stronger integration of production sites in Southeast Asia into the global production networks of multinational companies as they hinder the exercise of scale economies to a large extent including the important nurturing of supporting industries.

Obviously, the ASEAN automobile industry stands at the crossroads where its future development will be decided. Regional standstill or global integration seem to be the only two options for the evolvement of a competitive automobile industry. The complete integration within different nations or even at the regional level does not seem feasible any more in Southeast Asia (and one may doubt if it ever did). As the current trend towards mega-mergers in the world automobile industry indicates, the need for consolidation clearly exists on a global scale. To overcome the core problem of Southeast Asia – the problem of production fragmentation – only a stronger integration of ASEAN production sites into the global networks of multinational companies promises to be a successful strategy. At the moment, Japanese automakers are the only companies in Southeast Asia that possess such production networks that enable an ef-

ficient integration of ASEAN production sites into the greater Asian or world market and thus an eventual revival of the regional automobile industry.<sup>14</sup> But even such a positive scenario undoubtedly means that a country like the Philippines might end up to be the Asian supply center for one or two key components like transmissions. Thailand, in contrast, might become a leading assembly and export base for vehicles, however, without having an integrated supplier industry of its own.

## 6 CONCLUSION

ASEAN industrial policies for the automobile sector have traditionally shown a strong tendency toward industrial protectionism shying away from full-scale liberalization. This has hindered the enforced regional division of labor and exploitation of scale economies and restricted the international competitiveness of this industry thus far. Despite numerous liberalization efforts since the 1970s, it took until this decade for the first substantial progress in regional industrial integration to take place. This change was marked by a shift in ASEAN industrial policies away from failed approaches toward consensus-seeking integration efforts at the governmental level to a policy of gradually transferring sovereignty in decision-making to multinational companies, most being Japanese.

By relying on the natural interest of multinational companies in the regional rationalization of their production activities in different Southeast Asian countries, ASEAN governments have since started to achieve their first success in circumventing national rivalries and thus to lay the basis for a deeper regional integration of their automotive industries. But so far the success of this approach – formed in the application-approval concept of the BBC and AICO schemes – has been strongly limited by the provision of reserving national rights for disapproval and thus rejection of single companies' integration plans.

The current economic crisis in Southeast Asia is undoubtedly threatening the ASEAN automobile industry, especially at the level of supporting industries. The high commitment of Japanese companies to the region, however, has generated various support measures so far and thus helped to keep wide parts of the industry alive. Even accounting for the prolonged economic crisis in Japan, this role of Japanese companies will not change in the near future. The recent development under the AICO

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<sup>14</sup> These vast production networks within the ASEAN region also set Japanese automakers apart from their US competitors Ford and General Motors that recently built up large though isolated production capacities in Thailand.



scheme identifies Japanese companies to be by far the most important actors among all multinational players. Japanese manufacturers do not only work toward a deeper industrial integration by being the most powerful pressure group for liberalization but also by leading the build-up of regional production networks. The crisis of the Japanese economy will even raise the interest and pressure of Japanese automakers for faster industrial integration within ASEAN. This is due to at least two factors: First, production bases in Southeast Asia constitute an important part of their global production networks that lack – by contrast to US and European companies – other cheap production sites outside of Asia. Thus, most Japanese manufacturers cannot afford to abandon this region but instead will display the utmost interest in rationalizing their production activities there. Second, the announcement of the Japanese US\$ 30 billion initiative for Indonesia, Malaysia, Thailand, the Philippines and South Korea has strongly underlined the importance applied to this region by Tokyo. By tying most of the money to projects involving Japanese companies the Japanese rescue package is not only designed to assist Asian neighbors but also to revive the Japanese economy including its automobile industry that have become heavily dependent on trade with and investment in East Asia in the 1990s.

The limited integration success of all cooperation schemes so far has raised the hopes for the final implementation of the AFTA after 2002. The establishment of this free trade area is expected to mark a much more important turn in ASEAN trade liberalization than the shift from the AIC to the BBC scheme in 1988 as it will offer an automatic and irreversible removal of regional tariff trade barriers. However, the assessment of the eventual outcome of the AFTA must not be overly optimistic for the short and medium term. With regard to ongoing national rivalries and the rising opposition to liberalization efforts within single countries, there is a strong possibility that non-tariff trade barriers will grow in importance and continue to hinder the free flow of goods and thus a deeper integration of the automobile industry. The existence of an exclusion list even provides a loophole within the AFTA framework. It enables ASEAN governments to temporarily exclude certain products from trade liberalization if they fear a substantial threat to their domestic industries. And the automobile industry must be regarded as a strong candidate to be found on the exclusion list of some countries (especially Malaysia) even after 2002.

Thus, a mere – though accelerated – continuation of the step-by-step progress that could be observed all throughout the 1990s appears to be a more realistic assessment for the prospects of a deeper integration of the ASEAN automobile industry after 2002. Although the start of the AFTA

will promote regional integration to a certain extent, it will not mean the removal of all trade and investment obstacles. Thus it will fail to create a really equal playing ground for all players in the region, old and new. Instead, companies that are already strong will benefit most from such a gradual liberalization process. Consequently, Japanese manufacturers are those to profit the most from such a limited liberalization process as it allows them to keep their current advantages over eventual emerging competitors from the USA and Europe or from within the region itself.

The probability of such an outcome with its implicit strengthening of the position of Japanese companies within the ASEAN region has even increased with the *de facto* failure of regional trade liberalization efforts at the APEC level. The Japanese refusal of *early voluntary sectoral liberalization* (EVSL) in two of the proposed sectors, namely forestry and fishery products, at the APEC summit in Kuala Lumpur in November 1998 has shed grave doubts on the prospects of future liberalization progress under the APEC approach in other sectors, including the automobile industry, as well. The blunt refusal by Tokyo despite strong criticism by the USA and other countries did not only illustrate a general reluctance in Japan toward the realization of far-reaching liberalization. The same attitude could also be observed in many Southeast Asian countries. They silently supported the Japanese adverse position against a US driven liberalization movement regarded as pressure for the too fast opening of many of their sectors including the automobile industry.

Thus ASEAN and AFTA will continue to form the main framework for the regional integration of the automobile industry in Southeast Asia. Simultaneously, Japanese companies will stay at the forefront of the multinational companies engaged in this process backed by a strong interest coalition existing between them and the ASEAN governments. Obviously, their size will continue to matter for the further development of the Southeast Asian automobile industry as it undoubtedly did in the past. However, it remains to be seen whether – in contrast to the US movie *Godzilla* – the future development will end happily for both the Japanese firms and the ASEAN countries.

#### REFERENCES

- Aoki, Takeshi (1992): Foreign Investment and Network Formation, in Tokunaga, Shōjirō (ed.): *Japan's Foreign Investment and Asian Economic Interdependence*. Tōkyō: University of Tokyo Press.
- ASEAN-Secretariat (1997): *ASEAN Economic Co-operation: Transition & Transformation*. Singapore: Institute of Southeast Asian Studies.

- Buckley, Peter *et al.* (1997): *International Technology Transfer by Small and Medium-Sized Enterprises: Country Studies*. New York: St. Martin's Press.
- Chatterjee, Srikanta (1990): ASEAN Economic Cooperation in the 1980s and 1990s, in Broinowski, Alison (ed.): *ASEAN in the 1990s*. New York: St. Martin's Press, pp. 58–82.
- Doner, Richard F. (1987): *Domestic Coalitions and Japanese Auto Firms in Southeast Asia: A Comparative Bargaining Study*. Ann Arbor: UMI Dissertation Information Service.
- Doner, Richard F. (1991): *Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia*. Berkeley: University of California Press.
- EIU Economist Intelligence Unit (1985): *The ASEAN Motor Industry: Problems and Prospects* (Automotive Special Report No. 2). London: The Economist Publications.
- Fourin (1995): *1995 ASEAN jidōsha buhin sangyō* [The Automobile Parts Industry of ASEAN 1995]. Nagoya: Fourin.
- Fourin (1997): *Nihon jidōsha-buhin sangyō no sekai jigyō tenkai* [The global business development of Japanese car and parts manufacturers]. Nagoya: Fourin.
- Fourin (1998a): *Tōnan Ajia-Taiwan-Taishū no jidōsha buhin sangyō* [The Automobile Parts Industry of Southeast Asia, Taiwan and Australia]. Nagoya: Fourin.
- Fourin (1998b): *Jidōsha chōsa geppō No. 155* [Monthly Report on the Global Automotive Industry No. 155].
- Fourin (1998c): *Jidōsha chōsa geppō No. 157* [Monthly Report on the Global Automotive Industry No. 157].
- Fourin (1998d): *Jidōsha chōsa geppō No. 159* [Monthly Report on the Global Automotive Industry No. 159].
- Fourin (1999): *Jidōsha chōsa geppō No. 167* [Monthly Report on the Global Automotive Industry No. 167].
- Fujita, Kuniko and Richard Hill (1997): Auto Industrialization in Southeast Asia. National Strategies and Local Development, *ASEAN Economic Bulletin* 13, 3, pp. 312–32.
- Funke, Karin (1997): *Automobilmarkt Südostasien: Erfolgsfaktoren japanischer Unternehmen* [Automobile Market Southeast Asia: Success Factors of Japanese Companies]. Wiesbaden: Deutscher Universitätsverlag.
- Hatch, Walter and Kōzō Yamamura (1996): *Asia in Japan's Embrace: Building a Regional Production Alliance*. Cambridge: Cambridge University Press.
- Hatch, Walter and Kōzō Yamamura (1997): *A Looming Entry Barrier: Japan's Production Networks in Asia* = NBR Analysis 8, 1.
- Inoue, Tatsuya (1998): Companies struggle to recoup abroad, *Nikkei Weekly*, 11 May, pp. 1, 19.

- IRC Industrial Research Center (1997): *Nihon jidōsha mēkā no zen-sekai seisan jōkyō to keikaku* [World Production Situation and Plans of Japanese Automakers]. Nagoya: IRC.
- Ishizaki, Yukiko (1994): The Automobile Industries of ASEAN Countries: Toward Greater Regional Cooperation and Competitiveness, *RIM Pacific Businesses and Industries* 23, 1, pp. 16–32.
- Ishizaki, Yukiko and Minako Mori (1996): Present Situation and Issues Concerning the Automobile Industries in Individual Countries, *RIM Pacific Businesses and Industries* 33, 3, pp. 9–37.
- Jeremy, David (1992): *The Transfer of International Technology: Europe, Japan and the USA in the Twentieth Century*. Cheltenham: Edward Elgar.
- Kamo, Kineko (1997): ASEAN ni okeru jidōsha no ‘kokusai buhin hokan taisei’ [‘International Parts Complementation System’ for automobiles in ASEAN], *Jōhō Kagaku Kenkyū* 7, pp. 61–81.
- Kumar, Nagesh (1998): *Globalization, Foreign Direct Investment and Technology Transfers: Impacts on and Prospects for Developing Countries*. London: Routledge.
- Legewie, Jochen (1998): Wirtschaftliche Integration der ASEAN. Zur Rolle japanischer Unternehmen bei Entstehung und Umsetzung industrieller Kooperationskonzepte [Economic integration of ASEAN. The role of Japanese companies within the development and implementation of industrial cooperation schemes], *Japanstudien* 10, pp. 215–47.
- Matsuoka, Katsunori (1997): Accord drives change to Asian carmaking, *Nikkei Weekly*, 7 April, p. 22.
- Meow, Seah Chee (1987): The Thai Automotive Industry and the ASEAN Industrial Complementation Project, in Solidum, Estrella and Seah Chee Meow (ed.): *Decision-Making in an ASEAN Complementation Scheme: The Automotive Industry* (= Research Notes and Discussions Papers No. 60). Singapore: Institute of Southeast Asian Studies, ASEAN Economic Research Unit, pp. 50–113.
- Mori, Minako (1999): New Trends in ASEAN Strategies of Japanese-affiliated Automobile Parts Manufacturers, *RIM Pacific Businesses and Industries* 43, 1, pp. 12–27.
- Nikkan Jidōsha Shinbunsha (1996): *Jidōsha sangyō handobukku 1997 nenpan* [Automobile Industry handbook 1997]. Tōkyō: Nikkan Jidōsha Shinbunsha.
- Payne, Mark (1993): *The Emerging Asia-Pacific Automotive Industry: Growth and Opportunities from South Korea to Turkey*. London: Financial Times Business Information.
- Rieger, Hans Christoph (1991): *ASEAN Economic Co-operation: A Handbook/Compiler*. Singapore: Institute of Southeast Asian Studies.

- Sakurai, Masao (1997): *Kokusai keizai-hō, kokusai tōshi* [International Economic Law, International Investment]. Tōkyō: Seibundo.
- Shimizu, Kazushi (1994): ASEAN chinai keizai kyōryoku to BBC sukimu [Regional Economic Cooperation and the BBC Scheme], *Sekai keizai hyōron* 12, pp. 52–67.
- Shimizu, Kazushi (1995): ASEAN chinai keizai kyōryoku to BBC sukimu [Regional Economic Cooperation and the BBC Scheme], *Sekai keizai hyōron* 1, pp. 83–5.
- Simon, Denis F. (1997): *The Emerging Technological Trajectory of the Pacific Rim*. Armonk: M.E. Sharpe.
- Solidum, Estrella (1987): Decision-Making Process in the Philippines on the ASEAN Automotive Complementation Project, in Solidum, Estrella and Seah Chee Meow (ed.): *Decision-Making in an ASEAN Complementation Scheme: The Automotive Industry* (Research Notes and Discussions Papers No. 60). Singapore: Institute of Southeast Asian Studies, ASEAN Economic Research Unit, pp. 25–49.
- Solidum, Estrella and Seah Chee Meow (1987): *Decision-Making in an ASEAN Complementation Scheme: The Automotive Industry* (Research Notes and Discussions Papers No. 60). Singapore: Institute of Southeast Asian Studies, ASEAN Economic Research Unit.
- Takayasu, Ken'ichi (1996): The Outlook for the Automobile Industry in Southeast Asia, *RIM Pacific Businesses and Industries* 33, 3, pp. 44–8.
- Toyota (1997): *The Automobile Industry, Toyota and the World 1997*. Tōkyō: Toyota Motor Corporation.
- Uehara, Masashi (1998): ASEAN manufacturers hail low-tariff plan, *Nikkei Weekly*, 23 February, p. 22.
- Ueno, Kaori (1997): *ASEAN sangyō kyōryoku keikaku (AICO) to nikkei jidōsha mēkā no chinai senryaku* [The ASEAN Industrial Cooperation Scheme (AICO) and the Regional Strategies of Japanese Car Manufacturers]. Tōkyō: JETRO.
- UNIDO United Nations Industrial Development Organization (1986): *Regional Industrial Co-operation: Experiences and Perspective of ASEAN and the Anden Pact*. Vienna: United Nations.
- Yoshimi, Fumio (1998): *Mitsubishi Motors Operation in the ASEAN Region* (Speech presented at a meeting of ASEAN officials and industrial representatives in Kuala Lumpur on 31 July, 1998).