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The Proposal and Implementation of the Brand to Brand Complementation Scheme —Intra-ASEAN Economic Cooperation, 1987-1995 ; An Analysis of Relations between Foreign Direct Investment, Multinationals and Intra-Economic Cooperation—

Kazushi SHIMIZU

This paper will analyze the proposal and implementation of the Brand to Brand Complementation (BBC) Scheme, which was the complementation scheme of auto parts from brand to brand. This paper will then evaluate the new intra-ASEAN economic cooperation strategy from 1987 — ASEAN's strategy for Collective FDI-dependent and Export-oriented Industrialization (ASEAN's strategy for CFEI) —. This analysis also clarifies the rationality of Intra-ASEAN economic cooperation in terms of ASEAN automotive industries.

1. Introduction

The Association of Southeast Asian Nations (ASEAN) is one of the models of Intra-Economic Cooperation or Economic Integration among developing countries. In the latter half of the 1980s, ASEAN went through a major change in terms of intra- economic cooperation strategy in order to adapt to various circumstances both within and outside ASEAN countries, especially to adopt the structural changes in the world economy. At the "Manila Declaration" at the 3rd ASEAN Summit in December 1987, the strategy of intra-economic cooperation switched from ASEAN's strategy for Collective Import Substituting Industrialization for Heavy and Chemical Industries (ASEAN's strategy for CISI) to a new strategy. This new strategy was ASEAN's strategy for Collective FDI-dependent and Export-oriented Industrialization (ASEAN's strategy for CFEI)[1]. The former strategy, which was introduced in 1976, was a strategy to promote ASEAN countries' import substituting industrializa-

1 Shimizu, K.(1993), "The Strategy and Its Results of Intra-ASEAN Economic Cooperation, 1976–87", *Monthly Journal of Institute of Developing Economies (IDE)*, Vol. 34, No. 8, (in Japanese), Shimizu, K. (1998a), *Political Economy of Intra-ASEAN Economic Cooperation*, Mineruva Shobo, Kyoto, (in Japanese), Chap.1–3., Shimizu, K. (1998b), "Intra-ASEAN Economic Cooperation, 1976–87—Setbacks and Changes in ASEAN's Strategy for Collective Import Substituting Industrialization for Heavy and Chemical Industries—," *Economic Journal of Hokkaido University (Hokkaido University)*, Vol. 27, 1998.

tion collectively, mainly by jointly allocating and implementing ASEAN projects. The latter strategy was a new model strategy for intra-economic cooperation or economic integration among developing countries, which was the strategy to support ASEAN countries' FDI-dependent and Export-oriented Industrialization collectively, in the latter half of the 1980s. Specifically, this ASEAN's strategy for CFEI has been trying to 1) invite foreign capital (especially, foreign direct investment : FDI) as a whole, instead of on an individual national basis, 2) support economic activities from foreign capital, 3) form an integrated intra-regional market, and 4) create exportable industries. An extension of this strategy is the formation of the ASEAN Free Trade Area (AFTA) which has been a major concern for ASEAN (also ASEAN Industrial Cooperation : AICO and ASEAN Investment Area : AIA).

The purpose of this paper is to analyze the process of this new intra-ASEAN economic strategy, and clarify its characteristics and the future direction for intra-economic cooperation. First of all, serious attention should be given to the fact that among new ASEAN programs, only the Brand to Brand Complementation (BBC) Scheme, which was the Complementation Scheme of auto parts from brand to brand, was steadily implemented. Equally important is the fact that the switch in intra-ASEAN economic cooperation of the "Manila Declaration" was facilitated by the BBC scheme. For this reason, this paper will analyze the proposal and implementation of the BBC scheme, and evaluate the new intra-ASEAN economic cooperation strategy from 1987.

At the same time, these analyses will clarify the rationality of intra-ASEAN economic cooperation in terms of ASEAN automotive industries. Furthermore this analysis of the rationality will also bring us closer to such modern issues as the relationship between FDI, multinational corporations (MNCs) and intra-economic cooperation.

There have been few studies which clarify the BBC scheme, neither the particulars of the scheme, nor the existing conditions of auto parts complementation have been reported. Thus, mainly based on interviews with Japanese automotive MNCs and these joint ventures in the ASEAN region, this paper will examine the proposal and its implementation of the BBC scheme. In particular, this paper will focus on Mitsubishi Motors Corporation (MMC)'s proposal of this scheme to ASEAN as well as auto parts production and intra-regional complementation by Japanese automotive MNCs.

First, Section 2 will clarify how the BBC scheme was introduced and subsequently adopted. Next, Section 3 will examine centralized auto parts productions and the complementation in the ASEAN region by Japanese automotive MNCs based on the BBC scheme. The Conclusion section will examine the BBC scheme and intra-ASEAN economic cooperation and further explain the future of intra-ASEAN economic cooperation.

2. The BBC Scheme Proposal and Contents

2.1 The BBC Scheme Proposal

The predecessor of the BBC scheme was the ASEAN Industrial Complementation (AIC). The AIC, an automobile-related intra-ASEAN economic cooperation program, was one of the three programs that made up ASEAN's strategy for CISI. The basic AIC agreements were signed at the 14th ASEAN Ministerial Meeting (AMM) in June 1981. The AIC was based on the concept that ASEAN would allocate various auto parts production to individual ASEAN countries and together make an ASEAN Car.

However, each country regarded the auto industry as a strategic industry and they began to produce their own automobiles on a national basis by tying up with foreign automotive MNCs (mostly Japanese), thus the AIC was rarely implemented[2]. On the other hand, the AIC was not an acceptable concept for foreign automotive MNCs to accept, because they had already invested in assembly plants in individual ASEAN countries.

In this situation, MMC submitted the BBC scheme proposal, in which the intra-ASEAN auto parts complementation would be guaranteed on a corporate brand basis, to the Committee on Industry, Minerals and Energy (COIME) in 1982[3]. ASEAN discussed the BBC scheme at COIME, which was followed by an expert conference among COIME, the ASEAN Automobile Federation (AAF) and major automotive MNCs in November 1983[4].

There was no immediate progress following that, but in 1987 there was a change. This was a change in the foundation of intra-ASEAN economic cooperation. Specifically it turned out to be the decision to adopt ASEAN's strategy for CFEI at the 3rd ASEAN Summit in December 1987. The starting point of this new strategy was the BBC scheme proposal.

In March 1987, the MMC side (Philippine Automotive Manufacturing Corporation: PAMCOR) was required to implement the BBC scheme by the Philippines Minister of Trade and Industry, Mr. Concepcion, providing the scheme with new possibilities[5]. Meanwhile, after observing the independent plans of production in respective ASEAN countries and the reactions from automotive MNCs, COIME found the AIC concept too difficult to implement, and required automotive MNCs including MMC to submit a proposal for the BBC scheme. While other corporations were

2 For more information on the AIC and the three programs making up the Strategy of Collective Import Substituting Heavy and Chemical Industrialization, refer to footnote 1.

3 The following descriptions regarding MMC and the BBC scheme proposal were compiled from interviews at MMC and by examining on its BBC scheme records.

4 ASEAN Secretariat, *Annual Report of the ASEAN Standing Committee 1983–84, 1984–85.*

5 MMC answered to the Minister, "Though we cannot make new investment, we would like to start the complementation with something exchangeable now."

somewhat negative toward the scheme, MMC examined it positively, and introduced its own version of the BBC scheme at the ASEAN Industrial Vice Ministers Meeting in Malaysia on September 24, 1987.

MMC had two main reasons to support this scheme: 1) MMC already had auto-assembly and auto-parts plants in the ASEAN region, giving them extra incentive for the complementation scheme; 2); In the past, adopting the AIC concept, MMC had supplied transmissions from Asian Transmission Corporation (ATC) in the Philippines to United Development Motor Industries Co., Ltd. (UDMI, currently MMC Sittipol Co., Ltd.: MSC) in Thailand[6]. At the 3rd ASEAN Summit, ASEAN members agreed to carry out the BBC scheme. Specifically, MMC's BBC scheme would be discussed in the Expert Meeting, which would consist of representatives of ASEAN countries (the board of investment: BOI) and auto manufacturers in ASEAN countries). The Expert Meeting elaborated on the scheme by discussing the "Memorandum of Understanding (MOU)" with ASEAN countries, while MMC, at the request of the Expert Meeting, presented a list of proposals for the BBC scheme.

During the first half of 1988, MMC visited Thailand, Malaysia and Indonesia to persuade and negotiate with vice-ministers or officials of the same rank. Malaysia and Thailand then agreed to it, though Thailand expressed worries about the excess of imports over exports as a result of the BBC scheme. But Indonesia refused, citing the extensive scale of their home market, and insisted on a packaged auto production that included all parts. At the Manila Expert Meeting in August 1988, they agreed on the contents of the MOU, and confirmed to make a final decision in the ASEAN Economic Ministers Meeting (AEM) in October. Finally at the 20th AEM on October 17–18, 1988, the MOU on the BBC scheme was officially signed. Although Indonesia had no intention of participating in the scheme, all six ASEAN members signed the MOU after a new clause stating that "Initially, for the first BBC scheme, Malaysia, Philippines and Thailand are the participating countries (Section 11)" was added to the agreement[7].

In accordance with the MOU, MMC submitted a proposal list to COIME on

6 There were several possible reasons why the Philippines side brought up the BBC scheme to MMC, and why Mitsubishi agreed to it. By establishing the BBC scheme, the Philippines was aiming to promote exports, and to present an important agenda for the 3rd ASEAN Summit. MMC was trying to increase the production at ATC in the Philippines and further its exports (consequently obtaining more foreign money to import the KD parts, and maintaining the assembly production at PAMCOR in the Philippines), as well as to receive tariff reduction for MSC in Thailand. Since the COIME Secretariat was established in Manila and run by the Board of Investment (BOI) of the Philippines, it would be easy to presume that the Philippine government found the BBC scheme beneficial in many ways.

7 ASEAN Secretariat, *ASEAN Documents Series 1988–89*. Singapore and Brunei were not directly involved in the scheme since they did not have auto manufacturers.

December 29, 1988. On February 2nd the following year, the proposal list was officially approved in the COIME conference, and on the 31st of May, 1989, the ASEAN Certification of the BBC scheme was issued by the COIME chairman.

The BBC scheme was approved for two reasons. Firstly, MMC had strongly urged ASEAN to consider it. Secondly, at the request of MMC, ASEAN countries, the Philippines, Thailand and Malaysia in particular, found the scheme beneficial for their countries (at least its general outline received a unanimous vote).

2.2 BBC Scheme Contents

The official title of the MOU signed in the 20th AEM on October 18, 1988, was "Memorandum of Understanding, Brand to Brand Complementation on the Automotive Industry under the Basic Agreement on ASEAN Industrial Complementation". Some of the key sections of the MOU are listed below.

Each BBC scheme shall be an arrangement whereby specified parts / components of a specific vehicle model are traded and used by the Brand-Owners (BOs) and Brand Related Original Equipment Manufacturers (BR-OEMs) in their respective Original Equipment products (Section 1).

A participating country is an ASEAN member country which has agreed to participate in a specific BBC scheme by way of providing tariff preference as well as other privileges provided for in Section 9 hereof. There shall be two or more countries participating in respect of any specific BBC scheme (Section 2).

Participating countries shall automatically grant: a) local content accreditation if a BBC product is a component for the manufacture of any products in the participating countries which have local content programmes; b) a minimum of 50% margin of tariff preference (MOP) to BBC products already approved by COIME in accordance with the following terms (Section 9).

BBC products should: a) comply with the rules of origin as stipulated in the Agreement on the ASEAN Preferential Trading Arrangements unless the ASEAN content requirement is otherwise reduced under Article V of the "Protocol on improvements on Extension of Tariff Preferences under the ASEAN Preferential Trading Arrangements"; b) be manufactured under international quality assurance system standards; c) be competitively priced in relation to the prevailing market price. (Section 8).

On the institutional rules, a) Nomination for a BBC scheme from BOs and BR-OEMs shall be submitted to COIME, and shall specify the brand, vehicle type, model, sub-groups, components or parts and proposed participating countries. b) Countries interested in participating in the Scheme shall subsequently negotiate and agree on the respective source and buying countries for each product and submit the agreed product sourcing list to COIME for decision. Additional products in the Scheme may be approved by COIME by referendum in the absence of a COIME

Meeting. c) COIME shall issue a certificate listing the products in each BBC scheme, which shall enjoy the privileges herein provided. (Section 7)[8].

The aims of the BBC scheme were: 1) for foreign automotive MNCs, controlling the centralized auto parts production and these complementing in the ASEAN region, with the initiatives while maintaining the existing production system, 2) for ASEAN, institutionalizing the above. However, the BBC scheme did not just represent the interests of foreign automotive MNCs. In fact, ASEAN countries (with the exception of Indonesia), who were jointly working on home production of automobiles with foreign manufacturers, had great interest in the BBC scheme.

3. Implementation of the BBC Scheme —Case Studies of Mitsubishi Motors Corporation, Toyota Motor Corporation, and Nissan Motors Co., Ltd.—

The Corporations that were licensed in the BBC scheme included not only Japanese automotive MNCs — Mitsubishi Motors Corporation (MMC), Toyota Motors, and Nissan Motors (also Honda Motor Co., Ltd., in 1995) — but also Daimler-Benz and Volvo[9]. However, since the market share and the auto parts complementation amount of these three Japanese firms were incomparably large, examining the three Japanese companies was sufficient to understand the BBC scheme.

3.1 ASEAN Automotive Market and ASEAN Automotive Industry

Before analyzing the BBC scheme implementation, an outline of the ASEAN automotive market and of the ASEAN automotive industry, the premise to implement the BBC scheme, will be provided.

Against the backdrop of income growth in the ASEAN countries, ASEAN automotive production rapidly expanded from approximately 330,000 (the total number of sales) in 1987 and approximately 410,000 in 1988, to approximately 1120,000 (including 410,000 passenger cars) in 1994. The breakdown among countries shows Indonesia (330,000), Thailand (490,000), Philippines (100,000), Malaysia (200,000), and Singapore (40,000). Among them, the Thailand market greatly expanded from 1987 (100,000) and 1988 (150,000). Although the world auto market was stagnant at approximately 50 million since 1988, and its scale was not as large as the Japanese and American markets, the ASEAN auto market was among the few areas along with Korea, Taiwan and China to achieve growth.

The Japanese automotive MNCs enjoyed a predominant market share, recording

8 "Memorandum of Understanding, Brand to Brand Complementation on the Automotive Industry under the Basic Agreement on ASEAN Industrial Complementation." After COIME was reorganized into SEOM (Senior Economic Officials Meeting) in mid-1993, SEOM had accepted the BBC scheme instead.

9 ASEAN Secretariat, *"Annual Report of the ASEAN Standing Committee 1990–91."*

nearly 90% in Thailand, the largest ASEAN auto market in the 1980s and 1990s. Of the entire ASEAN market, MMC joint ventures and Toyota Motors joint ventures made up approximately 25% (including the PROTON) and approximately 28% respectively in 1993, easily more than half of the total ASEAN auto market[10].

Foreign automotive MNCs (mostly Japanese firms) had directly invested in the ASEAN countries in the form of joint ventures. However ASEAN countries had protected the auto industry as a strategic industry to promote economic growth. Though they allowed FDI, they had also introduced various barriers such as banning the import of completed automobiles (CBU). Furthermore, through the obligation of local content, ASEAN countries had protected and fostered their own auto and auto parts industries. For example, the local content ratio in Thailand was 54% and 65% for passenger cars and commercial cars respectively. In the Philippines, foreign automotive MNCs had to earn Foreign Currency to import the Knock Down (KD)[11] Parts (50% for passenger cars), by their own export. As Indonesia, the most staunch protectionist country in the ASEAN region, stopped the ban on importing completed automobiles in June, 1993, momentum shifted to deregulation to a certain degree. Yet, there was an increase in the local content for some ASEAN countries, thus indicating little change in their steadfast policy toward protectionism and home production.

Regardless of the extent of local content, Malaysia and Thailand already began to export completed automobiles while other ASEAN countries were producing more advanced auto parts including engine parts. The auto industry had a strong influence on the ASEAN economy. First, as seen in Thailand, the expansion of the market resulted in an increase in investment. Second, there were a number of supporting industries (including joint venture with foreign firms) in the ASEAN countries, though the number was smaller than that in Japan. However, since the auto industry in each ASEAN country had been long isolated and protected by its government, the industry remained an import substituting industry.

Faced with import barriers in ASEAN countries, foreign automotive MNCs such as Japanese firms directly invested, and produced automobiles through joint ventures with local firms. While struggling with the high local content ratio, they imported their auto parts mostly from Japan. They had been trying to produce cars more efficiently by using "scale merit." Although current technological standards had the scale regulated at 150,000 to 200,000/year per model, the most appropriate scales had not been determined yet at major auto manufacturing plants[12]. The BBC

10 Toyota Motor Corp., *"Outline of the Automotive Industry,"* Toyota Motor Corp. *"Automotive Markets in Asia-Oceania."*

11 KD stands for the Knock Down production parts, and it can be further divided into the two kinds of parts: the Complete Knock Down (CKD) and Semi Knock Down (SKD). The former is more advanced in terms of disassembly.

12 From interviews with Japanese automotive MNCs.

scheme was implemented within this framework.

3.2 Case Study 1 : Mitsubishi Motors Corporation (MMC)

As mentioned in the previous section, MMC took the initiative in the BBC scheme. The MMC's joint ventures occupied a large market share in ASEAN, as high as Toyota's. MMC had two production bases in the Philippines, one each in Malaysia, Thailand and Indonesia (Table 1). MMC had an auto parts complementation network in the Asia-Pacific region, among the above mentioned companies, and joint ventures in South Korea, Taiwan and Australia. At the core of the network was the parts complementation within the ASEAN region, as well as the KD parts complementation from Japan to ASEAN countries. MMC had been exporting completed cars from Malaysia and Thailand, and mainly engines and transmission parts from Thailand to Portuguese joint ventures[13].

MMC's complementation flow in ASEAN is shown in Figure 1. MMC set a precedent by starting the three routes of parts complementation in 1987, the year the BBC scheme was first presented to ASEAN and discussed. The first route was the complementation of 10,000 passenger cars (Lancer) per year from Malaysian to

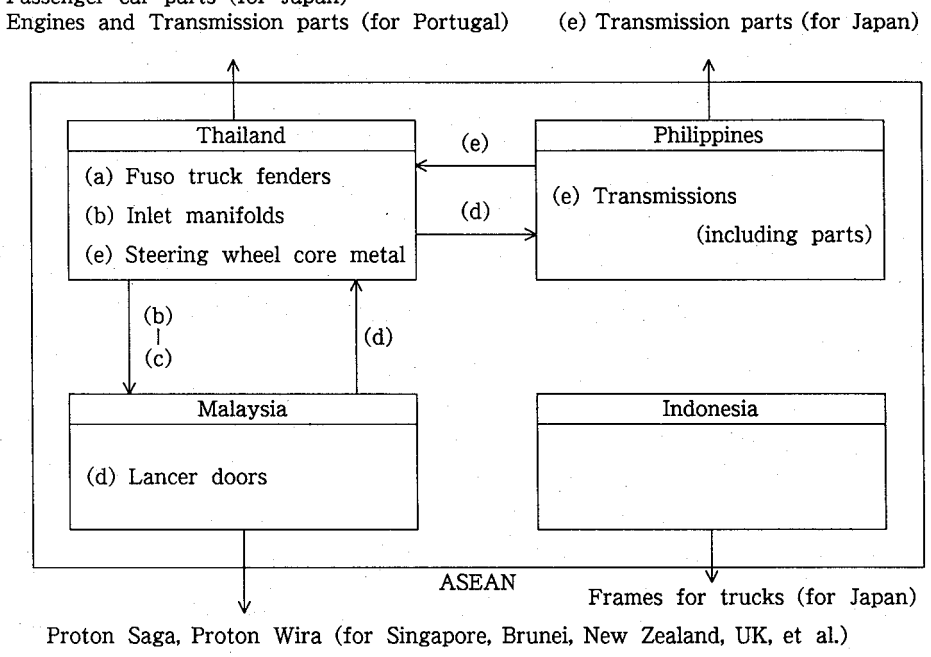
Table 1. Mitsubishi Motors Corporation (MMC) : Production Bases in ASEAN

Country	Company	MMC Investment Ratio	Start of Production	Main Products
Thailand	MMC Sittipol Co., Ltd. (MSC)	48% (Local : 52%)	1987. 1	Galant, Lancer, 1-t Pickups, Fuso Trucks, Canter, Buses, Pajero
Malaysia	Perusahaan Otomobil Nasional (PROTON)	8.7% (Mitsubishi Corp. : 8.7%)	1985. 7	Proton Saga, Proton Wira
Philippines	Philippine Automotive Manufacturing Corp. (PAMCOR)	50% (Nissho Iwai : 50%	1964. 5	Lancer, Galant, Chariot, Pajero, 1-t Pickups, Trucks, Buses
	Asian Transmission Corp. (ATC)	53% (PAMCOR : 80%, Nissho Iwai : 5.3%)	1974. 7	Transmissions, Engines
Indonesia	P. T. Mitsubishi Krama Yudha Motor and Manufacturing (MKM)	35.11% (Mitsubishi Corp. : 35.11%)	1975. 1	Stamped Parts, Engines, Steering Devices

Sources : Records and interviews at the joint ventures of Mitsubishi Motors Corporation (MMC), and interviews made at the MMC Home Office.
Note : As of October 1994

13 The information on MMC was compiled from interviews at MMC Home Office, Perusahaan Otomobil Nasional Berhad (PROTON), MMC Sittipol Co., Ltd. (MSC), Philippine Automotive Manufacturing Corporation (PAMCOR), Asian Transmission Corporation (ATC), and P. T. Mitsubishi Krama Yudha Motors and Manufacturing (MKM), as well as from records at MMC and its joint ventures.

Fig. 1 Mitsubishi Motors Corporation (MMC): Auto Parts Complemetation in ASEAN



Sources: Records and interviews at Mitsubishi Motors Corporation (MMC) and its joint ventures.
Note: As of October 1994. The arrows indicate auto parts (including the OEM parts) complementation among MMC's joint ventures.

Thailand.

The second route was the annual complementation of approximately 100 mid-size Fuso truck fenders from Thailand to the Philippines.

The third route was the complementation of transmissions and transmission parts from the Philippines to Thailand. This route was the starting point of the BBC scheme, and the model case of MMC's complementation by BBC scheme complementation. This complementation route existed in 1982–1983 from Thailand to the Philippines, was later discontinued, only to resume in 1987. In 1988, transmissions for approximately 9,000 pickup trucks, — and some Galants and Lancers (including Lancers for Canada) — were complemented. In 1989, the figure jumped to approximately 27,000. In 1990, the complementation of transmission parts began, and since then, the annual complementation of transmission and transmission parts had reached approximately 38,000. These transmissions had been used for all Thai-made pickup trucks.

In addition, from 1993, inlet manifolds and steering wheel core metal for approximately 120,000 cars annually had been complemented from Thailand to Malaysia (V

belts had also been complemented from the local parts makers in Singapore to Malaysia).

MMC's auto parts complementation in ASEAN grew every year. It was approximately $2.2 million in 1992, and another million was added the next year, thus easily topping the $3 million mark.

To cope with the high yen rate, MMC examined the possibility of concentrated production of particular models as the second step of the ASEAN auto parts complementation. MMC also planned for future auto parts complementation in Southeast Asia. First, together with Mitsubishi Corporation (MC) and PROTON, MMC set up a joint venture for SKD production in Vietnam in April 1994. Production of mini buses (Delica) started from the spring of 1995. Second, MMC considered moving its major pickup truck production base from the Ooe Plant in Nagoya to Thailand. Other plans included exporting auto parts from the Philippines to Vietnam (PROTON does not produce Delica), exporting parts from China to Malaysia, exporting completed pickup trucks from Thailand to Japan, and exporting pickup CKD from Thailand to the Philippines. Definite expansion of auto parts production and complementation in the ASEAN region was expected.

As well as Auto parts production and complementation in greater ASEAN with Vietnam (Vietnam joined in ASEAN at July 1995), auto parts production and complementation in the region including ASEAN, Taiwan, China, South Korea and Australia was also expected.

3.3 Case Study 2 : Toyota Motor Corporation

Toyota Motor Corporation (Toyota), which enjoyed a large share of the ASEAN automotive market along with MMC, also received BBC scheme approval in November 1989, and has been complementing auto parts in the ASEAN region[14].

Toyota had four production bases in Thailand, one in Indonesia, five in Malaysia, and two in the Philippines (Table 2). Two of these, one in Malaysia and one in the Philippines, were newly established in 1990 to achieve complementation and concentrated production of auto parts. Meanwhile, in Singapore, Toyota Motors Management Services Singapore (TMSS) was founded in July 1990 in order to supervise auto parts complementation services. Following the BBC scheme, TMSS has been active in supervising concentrated auto parts production and these complementation in the ASEAN region.

Examples of this production include main auto parts and steering gears in Malaysia, transmissions in the Philippines, diesel engines in Thailand, and gasoline

14 The information on Toyota was compiled from interviews at Toyota Motor Corp., Toyota Motor Management Services Singapore (TMSS), Toyota Autoparts Philippines (TAP), as well as from records at Toyota Motor Corp. and its joint ventures.

Table 2. Toyota Motor Corporation (Toyota): Production Bases in ASEAN

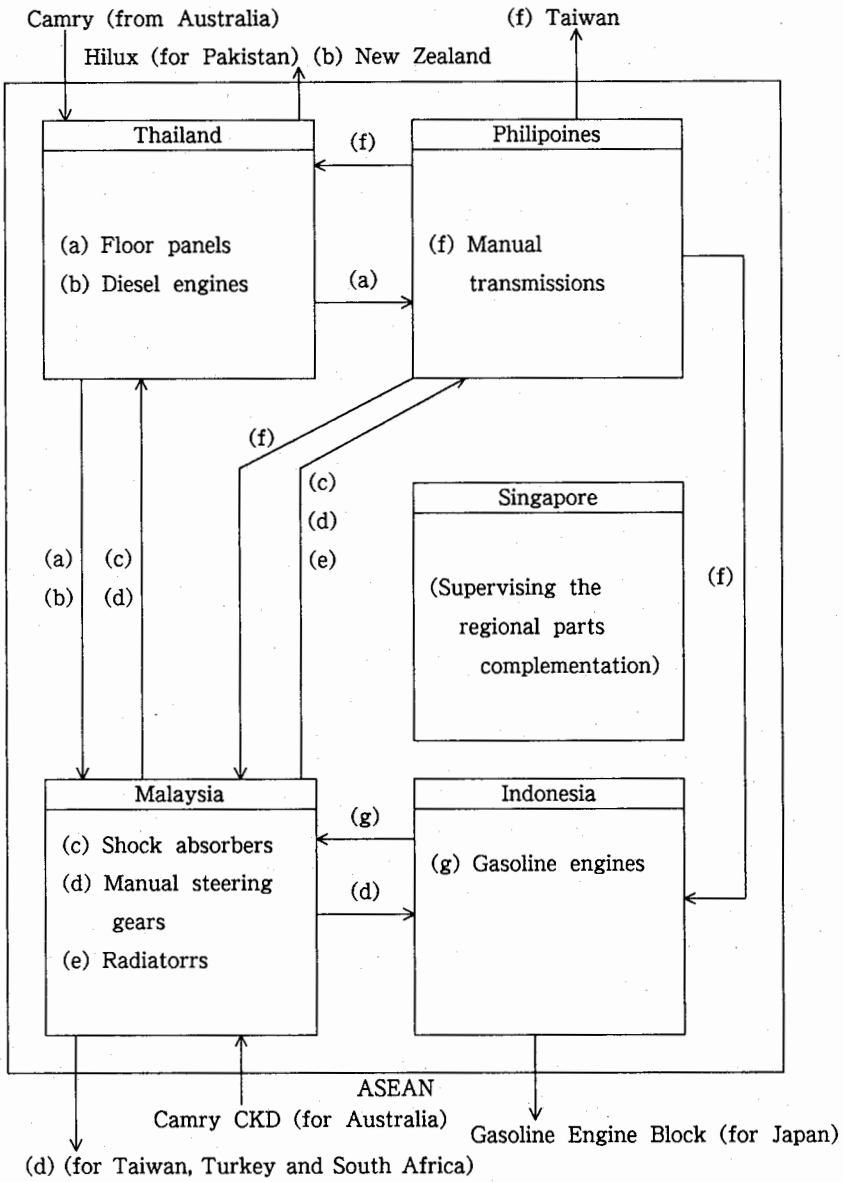
Country	Company	Toyota Investment Ratio	Date of Production	Main Products
Thailand	Toyota Motor Thailand Co., Ltd.	59.6% (Local: 40.4%)	1964. 2	Corona, Corolla, Hilux
	Thai Hino Industry Co., Ltd.	0%	1968. 11	Dyna
	Toyota Auto Body Thailand Co. Ltd.	0% (Toyota Motor Thailand 48.9%)	1979. 5	Hilux, Passenger car body parts
	Siam Toyota Manufacturing Co., Ltd.	40% (Local: 60%)	1989. 7	Engines
Malaysia	Assembly Services Sdn. Bhd.	0% (UMW Toyota: 100%)	1968. 2	Corona, Corolla, Dyna, Hiace, Liteace, Hilux, Land Cruiser
	T & K Autopart Sdn. Bhd.	50% (UMW Toyota: 10%)	1992. 7	Steering gears
Philippines	Toyota Motor Philippines Corp.	25% (Mitsui & Co.: 15%, Local: 60%)	1989. 1	Crown, Corona, Corolla, Liteace, TUV (Tamaraw)
	Toyota Autoparts Philippines Inc. (TAP)	95% (Toyota Motor Philippines : 5%)	1992. 9	Transmissions
Indonesia	P. T. Toyota-Astra Motor	49% (Local: 51%)	1970. 5 (Gaya Motor)	Crown, Corona, Corolla, Starlet, Dyna, TUV (Kijiang), Engines

Sources : Toyota Motor Corporation, *The 1994 Outlook of the Automotive Industry*, pp.60–63. and interviews at the Tokyo Home Office of Toyota Motor Corp.
Note : As of October 1994.

engines in Indonesia, and they all began to complement each other.

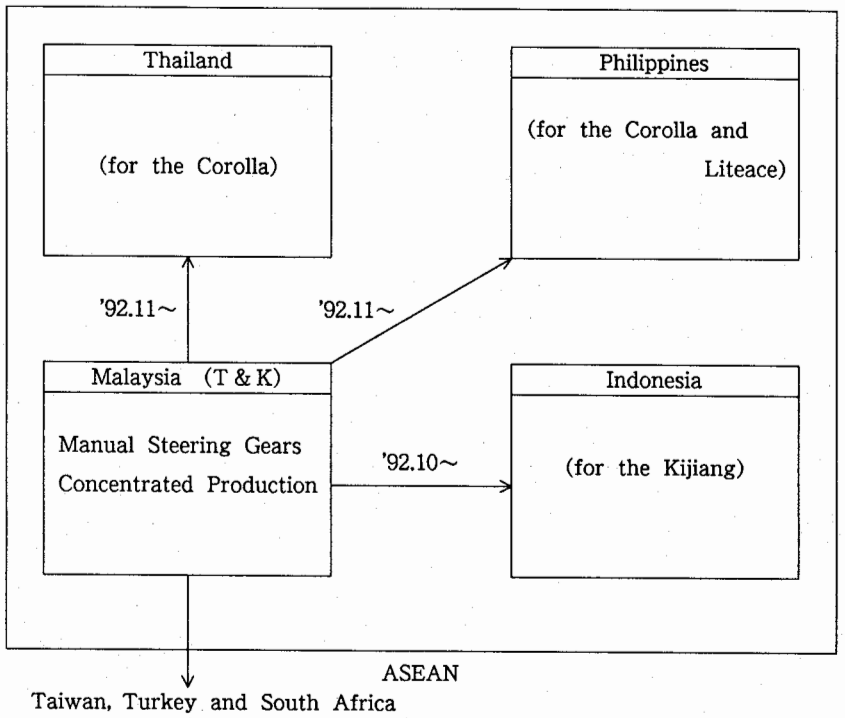
In January 1991, they began to complement shock absorbers from Malaysia to Thailand, and in April 1991 stamped parts (floor panels for the Corolla) from Thailand to the Philippines, both based on the BBC scheme (Fig. 2–4). In the autumn of 1992, T&K Autoparts in Malaysia, newly established for complementation and concentrated production within the ASEAN region, started to complement steering gears to Thailand, Philippines and Indonesia (Fig. 3). In 1993 Toyota Autoparts Philippines (TAP) began to complement transmissions to Thailand, Malaysia and Indonesia. Details of this complementation will be explained below. Other examples were stamped parts (floor panels for the Corolla) from Thailand to the Philippines, diesel engines (for Dyna) and stamped parts (floor panels) from Thailand to Malaysia, shock absorbers and radiators from Malaysia to the Philippines, and diesel engines

Fig. 2 Toyota Motor Corporation in ASEAN



Sources : Records and interviews at Toyota Motors Corporation and its joint ventures.
Note : As of October 1994. The arrows indicate auto parts (including the OEM parts) complementation among the Toyota's joint ventures.

Fig. 3. Concentrated Production of Steering Gears at Malaysia T & K Autoparts, and the Parts Complementation in ASEAN



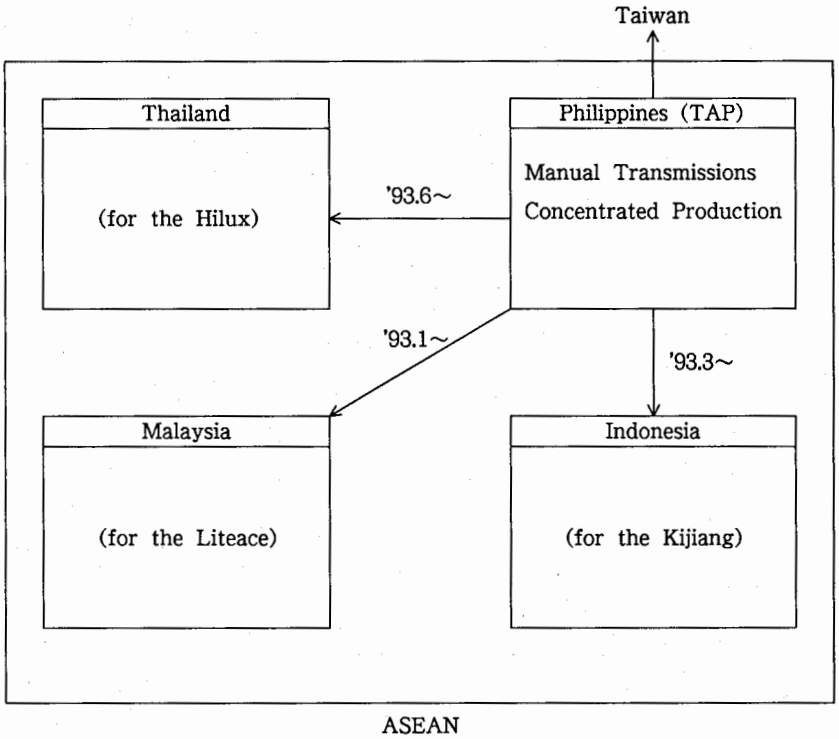
Sources : Complied from the interviews at Toyota Motors Corporation.
Note : The arrows indicate the complementation of steering gears produced by T&K Autoparts. The dates indicate the start of their steering gear complementation. ( )shows the make of the car.

from Indonesia to Malaysia. The above parts were all used for their corresponding types. This complementation among Thailand, Malaysia, and the Philippines was based on the BBC scheme.

What most characterized the international division of labor and auto parts complementation of Toyota was the establishment of new production bases for parts complementation in the ASEAN region. In 1990 a new company was established in the Philippines for concentrated auto parts production and auto parts complementation in the region. The company's name was Toyota Autoparts Philippines (TAP). It was founded in August 1990, and its production began in September 1992. The capital breakdown was Toyota Motor Corp 95%, and Toyota Motor Philippines 5%. TAP has been producing the G50-type transmission (five-speed manual) for light commercial vehicles (LCV). This transmission could be used for Hilux, Hiace, Liteace, Tamaraw (Philippines), and Kijiang (Indonesia).

TAP first produced the transmission for Hilux for the domestic Philippine market and began to complement to other ASEAN countries in September 1992. To

Fig. 4. Concentrated Production of Transmissions at Toyota Autoparts Philippines (TAP) and the Parts Complementation in ASEAN



Sources : Complied from the interviews at Toyota Motor Corporation and TAP.
Note : The arrows indicate the complementation of steering gears produced by TAP. The dates indicate the start of their transmission complementation. ( )shows the make of the car.

other ASEAN countries, the company began to export the transmission for Liteace to Malaysia in January 1993, for Kijiang to Indonesia in March the same year, and for Hilux in June of the same year (Fig. 4). In 1993, approximately ¥2.72 billion worth of TAP auto parts was complemented for Malaysia, Indonesia, and Thailand. Outside the ASEAN region, they already began to export transmissions to Taiwan and Portugal.

The total amount of Toyota parts complementation in the ASEAN region sky-rocketed from approximately ¥500 million in 1992 to approximately ¥4 billion in 1993. Furthermore, it jumped to approximately $7 billion in 1994 (approximately 6.4 billion through the BBC scheme). Toyota aimed to not only double production capacity in 1997, but also to start producing an Asian-car ("Soruna", production began in late 1996); thus it was expected to greatly expand its operations in the ASEAN region.

With the ASEAN region as a core, Toyota gradually widened its area for parts complementation. Specifically, it exported parts from ASEAN countries to Japan,

Taiwan, and New Zealand, as well as completed Hiluxes from Thailand to Pakistan. In August 1993, Toyota began to export completed Camry from Australia to Thailand, and in March 1994, Camry CKDs to Malaysia. In 1993, Toyota completed its plans of allocating parts operations and parts complementation in the ASEAN region, paving the way for auto parts complementation including Taiwanese and Australian operations from 1994. As Toyota became more experienced in the field of parts complementation, it intended to gradually expand its operations.

3.4 Case Study 3 : Nissan Motor Co., Ltd.

Nissan Motor Co., Ltd. (Nissan) was the third largest auto manufacturer in the ASEAN region after the above two companies. The firm received BBC scheme approval in August 1990, and began its parts complementation based on the BBC scheme in 1991[15].

Table 3. Nissan Motor Co., Ltd. (Nissan) : Production Bases in ASEAN

Country	Company	Nissan Investment Ratio	Start of Production	Main Products
Thailand	Siam Nissan Automobile Co., Ltd. (SNA)	25% (Local : 75%)	1977. 9	Datsun
	Siam Motor & Nissan Co., Ltd. (SMN)	25% (Local : 75%)	1962. 8 (Established)	Sunny, Cefiro
Malaysia	Tan Chong Motor Assemblies Sdn. Bhd.	0% (Local : 100%)	1976. 8	Sunny, Cefiro, Bluebird, Vannette, Safari, Datsun, Atlas
Philippines	Nissan Motor Philippines Inc.	25% (Marubeni : 17%, Local : 60%)	1983. 6	Sunny, Bluebird, Cefiro, Sunny Truck, Vida
	Universal Motors Corp.	0% (Local : 100%)	1972. 1 (Start of Cedric Production)	Datsun, Safari, Caravan
Indonesia	P. T. Wahana Wirawan	0% (Local : 100%)	1982. 9	Sunny, Cefiro
Taiwan	Yulon Motor Co., Ltd.	25% (Local : 75%)	1959. 3	Sunny, Primera, Atlas, Vannette, Largo, Engines

Sources : Nissan Motor Co., Ltd., *The Globalization of Nissan Motors*, and interviews at Nissan Motors Co., Ltd.
Note 1 : For referring to Fig. 5–6, Taiwan is added though it's not an ASEAN member.
Note 2 : As of October 1994
Note 3 : P. T. Wahana Wirawan is a trading firm that commissions other companies to produce automobiles.

15 The information on Nissan was compiled from interviews at Nissan Motor Co., Ltd. Home Office, Siam Nissan Automobile Co., Ltd., and Nissan Motor ASEAN Office, as well as from records at Nissan Motors.

Nissan had two production bases in both Thailand and the Philippines, and one each in Malaysia and Indonesia (Table 3). Nissan invested in Thai companies and one Philippine company. Nissan also invested in one Indonesian company in October 1995. In November 1991, Nissan invested 25% of the capital in each Thai company, thus making them the bases for both auto production and parts complementation. The investment was done not only for efficient production, sales and development, but also for establishing a parts complementation system in Asia, in which Thailand was a major player. Nissan also established an ASEAN office to research and survey regional parts complementation that included Taiwan.

As for the regional parts complementation based on the BBC scheme, in 1991 Nissan began to complement small parts for the Sunny between Thailand and Malaysia (Fig. 5–6). It complemented tool sets and trim parts from Thailand to Malaysia, and door panel molds from Malaysia to Thailand. According to Nissan, this was the first phase of their intra-ASEAN parts complementation, and the amount was roughly ¥50 million to ¥60 million a year.

The second phase began in late 1992 when panel parts (e.g. wheelhouse and front floor) for the Sunny and the Sentra among Thailand, Malaysia, and the Philippines were added to the complementation. The BBC scheme was approved for complementation of these parts in July 1992.

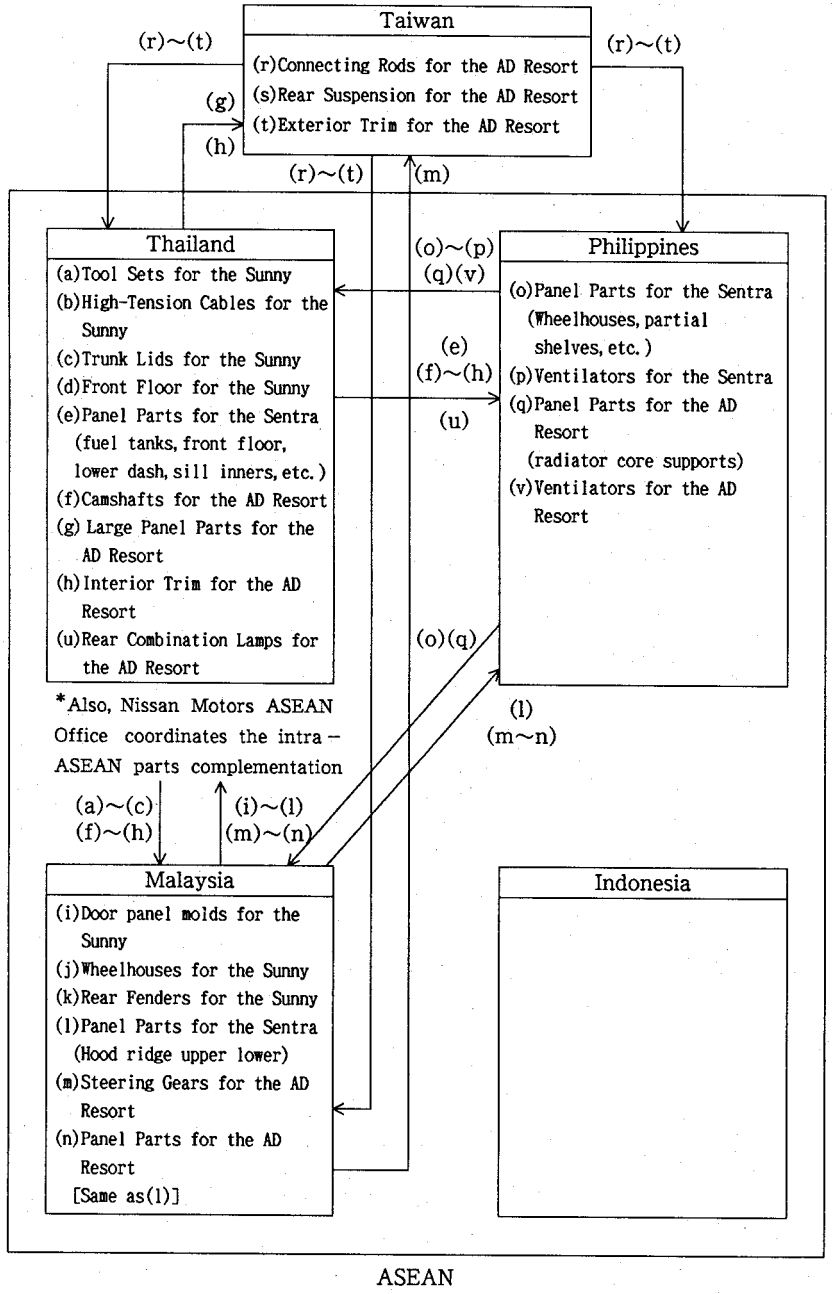
The third phase started in the summer of 1993 when panel and engine parts for the AD Resort, an Asian-car, were complemented for its new production in the ASEAN countries and Taiwan, thus greatly expanding their complementation amount (Fig. 6). Since then, Nissan's ASEAN parts complementation has included Taiwan. The BBC scheme for the operations within the ASEAN region was approved in May 1993.

Since 1989, Nissan started standardizing the makes of their cars in Asia such as the Sunny, Sentra, and AD Resort. The AD Resort was an Asian-car based on the Sunny, and it came in two types : a passenger car (station wagon) and a commercial vehicle (500 kg pickup). As an Asian-car, the AD Resort came second only to TUV by Toyota (including Kijiang in Indonesia, and Tamaraw in the Philippines). By adding AD Resort parts complementation, the total parts complementation in the ASEAN region and Taiwan reached approximately ¥1.5 billion (approximately ¥420 million for the ASEAN region).

Furthermore, the complementation of combination switches from Indonesia to Thailand was added in the beginning 1996, with Indonesia joining in the BBC scheme. This complementation was approved in November 1995.

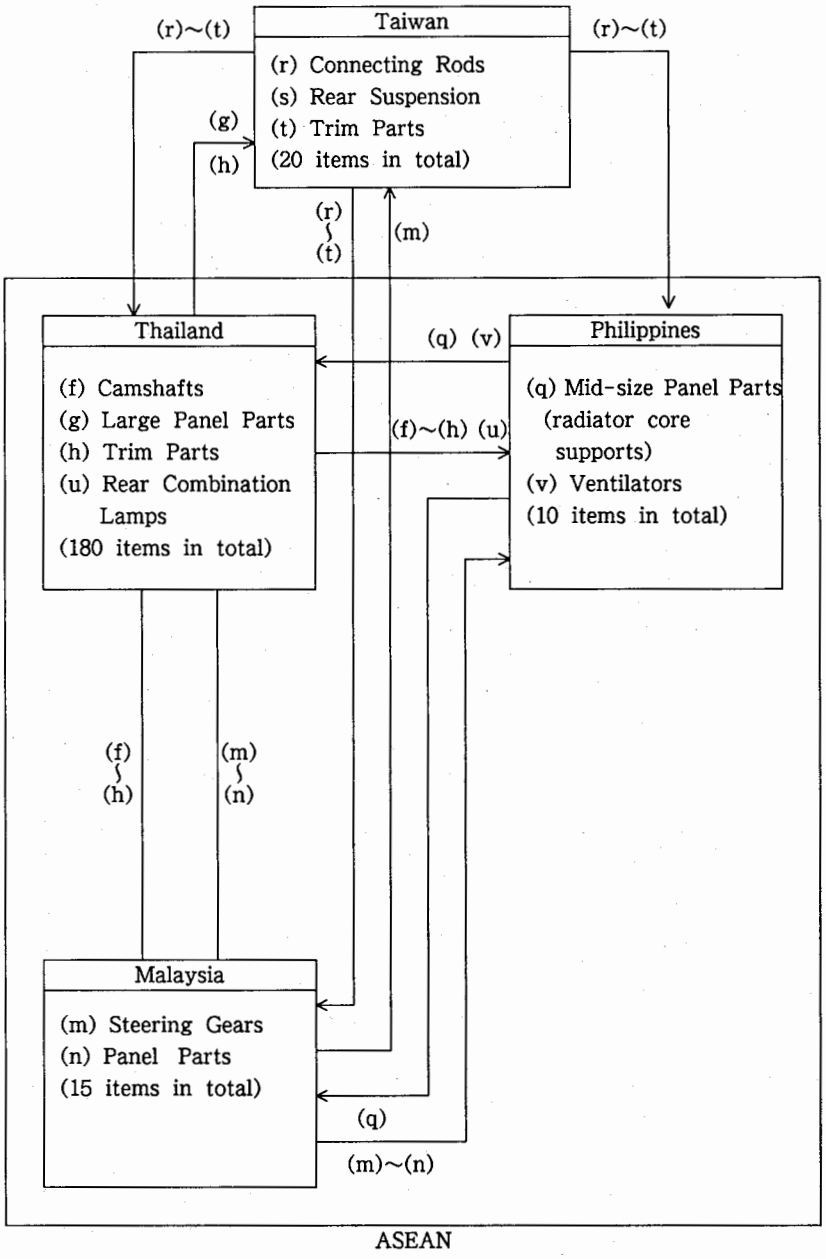
The further expansion of parts complementation was expected. Nissan was planning to complement parts in not only the ASEAN region and Taiwan but also China.

Fig. 5. Nissan Motor Co., Ltd. (Nissan): Parts Complementation in ASEAN



Sources: Compiled from company records at Nissan Motors Co., Ltd., and interviews at Nissan and its joint ventures.
Note: As of October 1994. The arrows indicate the parts (including the OEM parts) complementation among Nissan's joint ventures.

Fig. 6. Nissan Motor Co., Ltd. (Nissan):
Parts Complementation of the AD Resort (Asian-car) in ASEAN



Sources: Compiled from the company records at Nissan Motors Co., Ltd. and interviews at Nissan and its joint ventures.

Note: As of October 1994. The arrows indicate the parts (including the OEM parts) complementation among Nissan's joint ventures.

4. Conclusion—The BBC Scheme and Intra-ASEAN Economic Cooperation

The BBC scheme had been steadily implemented and expanded on the premise that the ASEAN auto market had continued to grow and ASEAN countries had protected their respective automotive industries as strategic industries.

In addition to this premise, there were other factors which led to the success of the BBC scheme. Because of these factors the scheme was beneficial for both foreign automotive MNCs and ASEAN countries,

First, owing to concentrated production, intra-regional parts complementation and the privilege of the BBC scheme, foreign automotive MNCs were able to produce cars more efficiently by avoiding overlapping investment, and by using scale merit. This was a benefit for MNCs. Second, in part due to the high yen rate, the BBC scheme made it much easier to supply inexpensive parts. This was also a benefit for MNCs. Third, because of the above two factors, ASEAN countries were able to collectively support their own automotive industries, which included the development of automotive industries into exporting industries. This was a benefit for ASEAN countries. Fourth, by transferring the portion of the parts imported from Japan, the deficit with Japan was reduced, thus improving the trade balances of ASEAN countries. This was a benefit for ASEAN countries. Fifth, foreign automotive MNCs were able to avoid the criticism of increasing the deficit with Japan. This was a benefit for MNCs.

However, there were also various problems that hindered the BBC scheme. First, the demand for automobiles, which was the prerequisite of both the BBC scheme and intra-regional parts complementation, varied by country. For instance, the top-selling cars in demand were 1-ton pickup trucks in Thailand, passenger cars in Malaysia and the Philippines, and LCVs in Indonesia. Moreover, the make of the passenger cars in high demand differed from country to country.

Second, there were various institutional problems regarding the BBC scheme system. The approval procedure for the BBC scheme was very complicated. For example, when a new model of the same car was introduced, a new application had to be submitted to COIME, and it required the approval of the COIME General Assembly. Further more, in the process examining the new BBC apply, it was required to have a trade balance among the countries, though it was not stated in the MOU.

Third, in countries such as Thailand, there was a delay in refunding an exempt tariff. Forth, due to Indonesia's decision not to participate, the BBC scheme was not supported by all ASEAN countries until 1995. As a result, foreign automotive MNCs could not fully enjoy the scale merit in automotive productions.

Some of the above problems have gradually been solved. First, there was the standardizing of the makes of cars, and the maturation of the market (for example,

the demand for passenger cars increased in Thailand). Second, there were reforms to the system by realistically adjusting the BBC scheme. Specifically, by switching the assigned organization from COIME to the ASEAN Senior Economic Officials Meeting (SEOM), it made it easier to apply for the BBC scheme[16]. Third, Indonesia joined in the BBC scheme in March 1995 and the BBC scheme had a wider region. As was of August 31, 1994, a tariff exemption on BBC merchandise was implemented in Thailand.

However, there remained the problems of the ASEAN countries' protection of their own strategic industries, and the conflicts of economic interests among ASEAN countries. These had been problems since ASEAN's strategy for CISI was initiated in 1976. Indonesia's reluctance to take part in the BBC scheme clearly reflected those problems. The request to maintain a certain trade balance among the ASEAN countries also exemplified these. In AFTA, they regarded the auto industry as a strategic industry, exempting cars and car parts from the Common Effective Preferential Tariff (CEPT) program, which was a program created to establish AFTA. For this reason, there had been no way to integrate the BBC scheme into AFTA[17]. Since the BBC scheme or a new program possibly threatens the local parts industry, the local parts firms will definitely resist the program. For example, complementing parts on the BBC scheme basis were the substituting parts of the parts from Japanese companies or their affiliates[18]. In other words, it is considered that the scheme was working because those complementing parts were not the substituting parts of the parts from local firms.

In the meantime, automotive MNCs had already been examining the allocated auto production in the wider region including the ASEAN region. As long as the ASEAN countries would continue to limit car imports from other countries to their countries, in other words as long as ASEAN countries would have a rigid framework of their nation-state, it would be rather natural for automotive MNCs to go beyond the ASEAN region, to achieve more efficient production utilizing scale merit. Thus MNCs would likely expand their parts complementing areas, in pursuit of efficient and rational production, thus passing over the ASEAN region.

For instance, Nissan, after the AD Resort parts complementation began in the summer of 1993, had apparently added Taiwan to their region of parts complementa-

16 Before this reform, one had to apply to make any minor modifications, which would then be discussed at a COIME General Assembly. After this reform, to make a small adjustment, one only submitted a related document for approval. During the COIME years there was sometimes no General Assembly for up to six months. After SEOM, the assembly was held once every other month (interviews from automotive MNCs).

17 According to the analysis by the automotive industry, it would be very difficult to establish AFTA. The reason is that ASEAN countries regard the auto industry as a strategic industry, and are very much against its inclusion in AFTA.

18 From interviews at automotive MNCs

tion (BBC scheme + Taiwan). The 1994 complementation amount of Nissan within the ASEAN region was approximately ¥650 million, but the amount between the ASEAN region and Taiwan reached approximately ¥1.4 billion, thus clearly indicating that Nissan pursued a greater region for complementation over and above the ASEAN region[19].

If intra-ASEAN economic cooperation has further progress, and it yields a sound foundation for the auto industry, then automotive MNCs will remain in the ASEAN region and implement parts complementation in the ASEAN region. If not, however, MNCs are more likely to adopt the wider and more efficient region, the Asia-Pacific region. From their perspective, this wider region including ASEAN, Taiwan, Indochina and Australia would make more sense. Furthermore, Japan can be included in this extended area, considering the supply of KD parts. The economic cooperation system in the Asia-Pacific region will thus be more rational for their activity. Given the influential power of MNCs in the ASEAN region, actions by MNCs will put pressure on the future intra-ASEAN economic cooperation. This issue could possibly shake the foundation of ASEAN. Thus the Asia-Pacific Economic Cooperation (APEC) and the East Asian Economic Caucus (EAEC) will have great implications for the future of intra-ASEAN economic cooperation.

Lastly, from this analysis of the BBC scheme, some implications for ASEAN's strategy for CFEI between 1987-1995 will be examined.

As the BBC scheme demonstrated, ASEAN's strategy for CFEI resulted in a certain amount of success. In particular, intra-ASEAN economic cooperation since 1987 had been solidly implemented, mostly by Japanese MNCs. Against the background of an increasing Chinese economic influence as a great area inviting FDI, the strategy had further progress, for example on AFTA. The Growth Triangle of Indonesia, Singapore and Malaysia was also the result of this strategy.

However, the main area of success was the import substituting industry, namely the automotive industry. Although some countries began to export completed cars and auto parts, the auto industry was strategically protected by strictly regulated home production. On the other hand, in the case of the electric and electronic industry, the driving force of the FDI-dependent and Export-oriented Industrialization in ASEAN countries were MNCs, especially those who took advantage of free trade zones, and these MNCs did not always need intra-ASEAN economic cooperation. They were content with preferable measures including a tariff refund by the governments of ASEAN countries. As a result, the idea of intra-regional economic cooperation did not take off for the electric / electronics industry.

As far as the BBC scheme was concerned, the new strategy featured one aspect that could be called the "Collective FDI-dependent and Import Substituting

19 Refer to footnote 15.

Industrialization." A traditonal problem emerged in the Strategy of the Collective FDI-dependent and Export-oriented Industrialization. It was a long-dormant problem that had gone unresolved since intra-ASEAN economic cooperation was first launched in 1976. Namely it was the problem of how to resolve conflicts of economic interest among ASEAN countries[20]. As the income levels of the ASEAN countries rose, so did direct investment aimed at regional demand (for example, electric and electronic products, their parts, and auto parts). Solving this problem would further determine the depth of intra-ASEAN economic cooperation.

ASEAN countries, having achieved economic growth and partial overseas investment, and having built the foundations for respective "nation-states," are faced with various questions: Are they going to further implement intra-regional market integration? Whether they maintain the current framework or disband ASEAN, will they next focus on the economic integration of the entire Asia-Pacific region ? If so, what kind of framework will they choose ? ASEAN was without a doubt approaching a crossroads in the mid-90s.

Associate Professor of Economics, Kyushu Univ.

Notes

The BBC Scheme was integrated into a new industrial cooperaion scheme, AICO, which was agreed upon at informal AEM in April 1996 and came into effect in November 1996. But no plans were approved until the beginning of 1999, because of the conflicts of economic interest among ASEAN countries. The same problems in the case of the BBC Scheme remain in AICO (also AFTA). Currently, a new BBC apply cannot be accepted, but the former BBC's privileges are in effect until the model with privileges by the BBC scheme will be changed.

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Other related articles by the auther include: Shimizu, K. (1993), "The Strategy and Its Results of Intra-ASEAN Economic Cooperation, 1976–87," *Monthly Journal of Institute of Developing Economies (IDE)*, Vol. 34, No. 8, (in Japanese). Shimizu, K. (1995), "BBC Scheme and Intra-ASEAN Economic Cooperation," *International Economy*, the Japan Society of International Economics, (in Japanese). Shimizu, K. (1998a), *Political Economy of Intra-ASEAN Economic Cooperation*, Mineruva Shobo, Kyoto, (in Japanese). Shimizu, K. (1998b), "Intra-ASEAN Economic Cooperation, 1976–87—Setbacks and Changes in ASEAN's Strategy for Collective Import Substituting Industrialization for Heavy and Chemical Industries—", *Economic Journal of Hokkaido University (Hokkaido University)*, Vol. 27, 1998. Shimizu, K. (1999), "Asian Economic Crisis and Intra-ASEAN Economic Cooperation," *Sekaikeizai Hyoron*, Sekaikeizai Kenkyu Kyokai, Vol. 43, No. 5, (in Japanese).

20 Refer to footnote 1.