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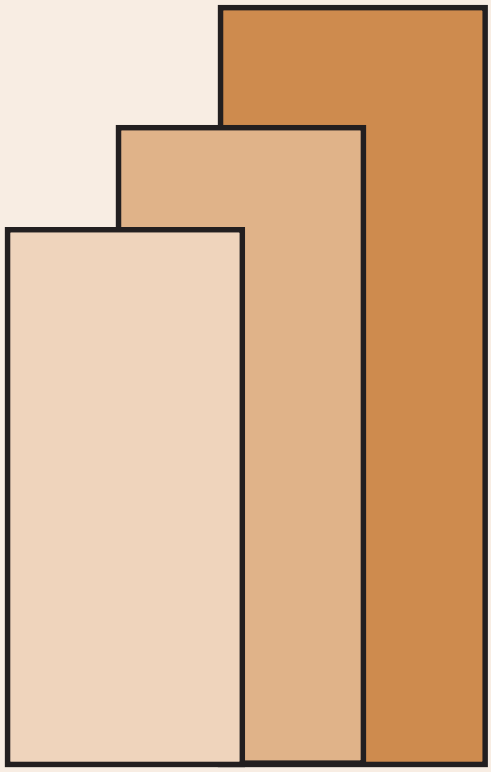
Rafaelita M. Aldaba

DISCUSSION PAPER SERIES NO. 2008-21



August 2008

For comments, suggestions or further inquiries please contact:
The Research Information Staff, Philippine Institute for Development Studies
5th Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines
Tel Nos: (63-2) 8942584 and 8935705; Fax No: (63-2) 8939589; E-mail: publications@pids.gov.ph
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Globalization and the Need for Strategic Government-Industry Cooperation in the Philippine Automotive Industry

Rafaelita M. Aldaba[1]

Abstract: The industry's lack of competitiveness, absence of economies of scale and a weak supply base are the fundamental issues that must be addressed in order to strengthen the industry and integrate it with regional production networks of foreign automakers. The entry of cheap, smuggled second-hand vehicles has put tremendous pressure on the industry. Immediate government action to address smuggling and design a coherent set of policies and a comprehensive strategy to improve industry competitiveness is urgently needed. A temporary adjustment program is necessary to help both assemblers and parts makers face competition in the future and more importantly, in preparation for the implementation of zero tariffs under the AFTA in 2010. If smuggling continues and our competitiveness remains weak, the auto industry may just be a thing of the past as auto companies shift from CKD to CBU operations. This is the reality of doing business under the globalization age.

I. Introduction

In its effort to develop the automotive industry, the Philippine government adopted local content requirement and protectionist policies for almost thirty years. Over the years, however, these policies resulted in very limited localization as the automotive assemblers encountered difficulties in achieving the local content requirements set by the government.

In the face of increasing pressures to improve competitiveness brought about by increasing globalization of the industry, reforms to liberalize and deregulate the industry were implemented. In the 1990s, the assembly sector was opened up to accommodate new players. At the same time, previous restrictions on the number of models that could be assembled were removed. The industry was also liberalized to allow the importation of all types of motor vehicles. In July 2003, the government completely abandoned its local content program.

Volume, particularly the current weak domestic demand, has remained a major internal problem in reducing firms' costs and improving their competitiveness. Another crucial element is the non-availability of the necessary raw materials domestically and the high dependence of the industry on imported raw materials which continue to add up to their rising costs of production. Although there are some domestic producers of certain raw materials, quality problems remain. Firms are aware that they need to invest in state of the art equipment and engage in innovation and product development, but unless there is an increase in production volume, they find it hard to justify the expenses involved in carrying out these activities.

The automotive industry is a highly competitive and technology intensive industry. It requires large economies of scale and high degree of specialization in parts and components manufacturing. The global operations of the automotive industry are highly complex and frequently integrated within the strategies of multinational organizations. With its globalization thrust, automotive parts and

[1] Senior Research Fellow, Philippine Institute for Development Studies.

component manufacturing has located in many countries while automotive assembly has concentrated mainly in countries that have large domestic markets and in countries that serve as platforms for regional exports. In terms of demand for its products, consumers want a large variety of models at competitive prices.

Given these international economic realities, the government has an important role to play in formulating, implementing, and coordinating a coherent set of policies for the automotive industry. Active government support will be necessary to help domestic firms adjust to the changing international and regional economic environment. The paper aims to identify general temporary industrial adjustment measures that the government, in cooperation with the private sector, may pursue to help the industry adjust efficiently and benefit from the globalization process.

The paper is outlined as follows: section II reviews the government policies and programs to promote and develop the industry. Section III presents the economic structure and performance of the Philippine automotive industry relative to Thailand. Section IV analyzes the issues and problems confronting the industry; section V identifies some general industrial adjustment measures to help the industry increase its chances of successfully integrating with the changing international economic environment. In the final section, the conclusions and recommendations of the paper are presented.

II. Government Policies and Programs

A. Industry Definition

The Philippine automotive industry is composed of two sectors: the automotive assembly and parts and components manufacturing. The assembly sector is grouped on the basis of vehicle type such as passenger cars, commercial vehicles (consisting of utility vehicles, pick-ups, vans, trucks, buses, and special purpose vehicles) and motorcycles.

Imported cars and car parts are classified as completely-knocked-down (CKD), semi-knocked-down (SKD), and completely-built-up (CBU) vehicles. SKDs are semi-assembled cars without tires and batteries. CKDs are completely knocked-down parts and components which may include not only parts and components but also sub-assemblies and assemblies like engine, transmission, axle assemblies, chassis, and body assemblies.

Automotive parts with counterpart local components of acceptable quality are deleted from the CKD pack before its importation. Locally-produced parts are incorporated as original equipment parts (OE) in vehicles assembled in the country.

B. Local Content Programs

In this paper, the focus of the analysis will be on the assembly of passenger cars and commercial vehicles. Under the Motor Vehicle Development Program (MVDP)[2], these two categories are defined as follows:

- Passenger cars: any four-wheeled motor vehicle, which is propelled by gasoline, diesel, electricity or any other motive power and principally designed to transport persons and not primarily to transport goods.
- Commercial vehicles: any four or more wheeled motor vehicle, which is propelled by gasoline, diesel, electricity and any other movie power and principally designed to transport persons and/or goods/cargoes, such as light commercial vehicles (LCVs), buses, trucks, and special purpose vehicles (like ambulances and fire trucks). LCVs refer to vehicles whether 4-wheeled drive or not, which may be classified under but not limited to the following: utility vehicles, sports utility vehicles, Asian utility vehicles, commuter vans, and pick-ups.

The government encouraged domestic vehicle assembly through a local content program combined with restrictive trade policy measures that protected local assemblers against imported CBUs. The BOI implemented the country's first **Progressive Car Manufacturing Program (PCMP)** in 1973.This prohibited the imports of CBU vehicles and limited the number of registered firms allowed to import CKD parts to only five (5) assemblers. It also required assemblers to increase their domestic content from 10% in 1973 to 60% at the end of 1976.

In 1987, the government replaced the PCMP with the **Car Development Program** covering the manufacture of passenger cars with engine displacement of up to 2,800 cubic centimeters. It also limited the number of program participants to three: PAMCOR, Pilipinas Nissan, and Toyota Motors. The CDP continued to ban imports of CBU vehicles competing with domestic production and required CDP participants to comply with minimum local content requirement. CDP participants were also expected to earn 50% of their foreign exchange requirements for their CKD imports through revenues derived from exports.

In 1990, the government launched the **People's Car Program** in response to the clamour for more affordable cars. The PCP covered the assembly of cars with a displacement of 1,200 cc or less and an initial BOI-imposed price ceiling of P175,000 (later raised to P220,000 in the last quarter of 1990, again to P235,400 in the first quarter of 1991 and to P300,000 during the mid-1990s). Like the main CDP participants, PCP assemblers were required to meet the minimum local content usage and must earn at least 50% of their foreign exchange requirements by exporting automotive and non-automotive products. They should also invest at least P200 million and commit to manufacture major components. Participants were allowed to import passenger cars in SKD condition for a period of six months which could be

[2] The MVDP also includes motorcycles (referring to any two or three-wheeler vehicle fitted with an auxiliary motor, with or without sidecars).

extended for another six months to enable them to operate even while their assembly facilities were being set-up.

Seven (7) participants were registered under the PCP: Italcar Pilipinas (Fiat), Honda Motors, Asian Carmakers (Daihatsu), Pilipinas Nissan, PAMCOR (Colt), Columbian Autocar (Kia), and Transfarm (Norkis Gurkel). Except perhaps for Columbian Autocars, the PCP was not a profitable undertaking for most participants, particularly for yen-dependent Japanese car assemblers. Despite its unprofitability, many of the firms entered the program in order to get into the mainstream market where demand was less elastic. People's car prices are subject to price ceilings while the main category cars are not.

In 1992, a new car category was introduced to allow new participants into the **assembly of cars** with engine displacement of 2,190 cc and above. Under the revised CDP guidelines, luxury car assemblers must invest at least P200 million in automotive parts and components for the export and domestic markets. Participants must also generate 100% of the foreign exchange needed for the importation of CKD packs from their net foreign exchange earnings generated through exports of auto parts and components. Like the PCP participants, they were allowed to import passenger cars in SKD condition for a period of six months while their CKD facilities were constructed. This expansion of the CDP allowed the entry of Volvo International of Sweden and Daimler Benz of Germany.

In 1994, the CDP was again amended to allow the entry of new assemblers under the **ASEAN Industrial Joint Venture Scheme**. Proton of Malaysia came in under this amendment through a joint venture with Filipino firm Autocorp Group. Proton assembles not only Proton Wira cars, but also European automobiles Volkswagen, Alfa Romeo, and Audi cars. Proton engaged only in SKD operations and did not build CKD facilities.

In October 1995, CB Circular 92 further liberalized the sector by removing the import restriction on cars and **allowing the importation of brand new vehicles**. In 1996, the signing of Executive Memorandum Order Number 346 in February opened up the closed car categories to new participants. Restrictions on the number of models and variants were removed, hence, new players can introduce and manufacture models in any of the existing categories. Prior to this amendment, CDP participants were required to go into the assembly of cars with engine displacement of 1200 cc or below before they could enter the medium range and luxury car categories.

Under Republic Act 8506, the importation of second-hand cars has remained prohibited[3]. **Used cars cannot be imported**, except for imports of returning residents and members of the diplomatic corps. Used trucks, buses and special-purpose vehicles are allowed but are subject to DTI- Bureau of Import Services (BIS) approval.

[3] Importation of the following automotive components and parts has also remained regulated by the DTI-BIS requiring import clearances/permits prior to importation: dashboards, doors, fenders, ext. luggage racks, grilles, hoods, luggage compartments, running boards, plate brackets, visors, radiator cowlings, trunks/trunk lids, mudguards, floor boards, floor mats (other than of textile material/rubber). The importation of bodies (including cabs and body shell) and chassis fitted with engines for vehicles weighing below 6 tons is not allowed.

This has been circumvented through free port zones which have been used as staging points to allow the duty-free entry of used vehicles in the country. Former SBMA Chairman Felicito Payumo pointed out that the country-wide ban on imported used vehicles did not apply in Subic because its "free port status allows it to be operated and managed as a separate customs territory ensuring free flow of goods and capital" (see Manuzon, 2002).

Auctioneers and dealers have located in free port zones and established conversion facilities to take advantage of the zones' duty-free privileges in importing inexpensive second-hand vehicles from countries like Korea and Japan. The Subic Bay Freeport is the largest free port area in the country where around 70 firms are engaged in second-hand vehicle importation, conversion, and trading. The converted vehicles are permitted to leave the zone area after three months of docking and upon payment of port taxes due. Once outside the freeport, the vehicles are usually auctioned in Subic, Malinta and Valenzuela (ibid).

Given the relatively cheap second-hand imported vehicles, industry sales of domestic assemblers have been negatively affected. In December 2002, the government legislated **EO 156** to prohibit the importation of all types of used motor vehicles and parts and components, inclusive of free port zones except those that may be allowed under certain conditions. In April 2005, another law was issued, EO 418, imposing a duty of P500,000 on importations of used motor vehicles.

However, EO 156 could not be enforced because of a temporary restraining order issued by the Olongapo City Regional Trial Court (RTC) on March 3, 2003, and a subsequent order from the same enforcing the injunction on August 19, 2003. In October 2002, the Court of Appeals issued a resolution preventing the Olongapo RTC from issuing another injunction against the implementation of EO 156. In February 2005, the Court of Appeals upheld the decision of the Olongapo RTC and ruled that EO 156 was unconstitutional and illegal.

In September 2006, the Supreme Court overruled the decision of the Olongapo RTC and the Court of Appeals with its decision to prohibit the import of second-hand vehicles. Subic importers, however, filed a second motion for reconsideration. Recently, the Supreme Court issued another ruling which turned down the second motion for reconsideration and confirmed that this decision is final and executory.

C. Tariffs and Liberalization Policy in the Auto Industry

With the implementation of the first Progressive Car Manufacturing Program in the early 1970s, the importation of CBU passenger cars was officially banned. Between 1973 and 1980, a tariff of 100 percent was levied on CBU vehicles. This was reduced to 70 percent in 1981 and to 50 percent in 1982. In the face of increasing pressures to improve industry competitiveness, reforms to liberalize and deregulate the industry were implemented. In the 1990s, as the assembly sector was opened up to accommodate new players, tariffs on passenger cars were reduced to 40 percent in 1993 (see Table 1). Previous restrictions on the number of models that could be assembled were also removed. The industry was liberalized to allow the importation of all types of motor vehicles. In July 2003, the government completely abandoned its

local content program. Meanwhile, tariffs on cars were further reduced to 30 percent in 2000, to five percent in 2005, and are scheduled to be completely eliminated by 2010 in line with the ASEAN Free Trade Area-Common Effective Preferential Tariff (AFTA-CEPT) scheme.

Table 1: Tariff Rates on the Automotive Assembly Sector: 1988-2004

	Most favored nation (MFN) Rates								AFTA CEPT		JPEPA**
	88-90	93	95	96	98	00	03	04	04	10	
Vehicles for 10 or more persons											
CKD buses (6-18 tonnes)	30	10	10	3	3	3	3	3	3	0	B4 Note 3
Buses											
-6-18 tonnes	30	35	25	25	20	15	15	15	5	0	S Notes 3, 10
-greater than 18 tonnes	30	55	35	30	20	15	15	15	5	0	S Notes 3,9
-other	50	65	45	30	30	20	20	20	5	0	S Notes 3,9
Components and parts of CVDP participants	20	10	10	3	3	3	3	1	1	0	S Note 4
Others	50	65	45	30	30	20	20	20	5	0	S Note 9
Vehicles for transport of persons											
Passenger Cars	50	40	30	40	40	30	30	30	5	0	S Notes 3,6: cylinder capacity from 1000 cc to 3000 cc Notes 3,7: greater than 3000 cc
Components and parts of MVDP participants	30	20	10	3	7	10	10	3	0	0	S Note 4
Vehicles for transport of goods											
Dumpers for highway use with compression ignition internal combustion piston engine	30	30	20	20	3	3	3	3	0	0	A Note 3
Trucks											
-refrigerated	50	55	35	3	3	3	3	3	0	0	A Note 3
-other	30	55	35	30-	20-	20-	20-	20-	5	0	S Notes 3, 8:

				40*	40*	30*	30*	30*			gvw up to 18 tonnes S Notes 3,9: greater than 18 tonnes
Components and parts	20	10	10	3	3	3	3	1	1	0	S Note 8

* depending on gross vehicle weight

** see Annex 1 for definitions and notes description.

With the ratification of the Japan Philippines Economic Partnership Agreement, tariffs on passenger cars cylinder capacity from 1000 cc to 3000 cc imported from Japan are scheduled to be reduced as follows:

i. 29% as from date of entry into force of Agreement
ii. 26% as from Jan 1, 2007
iii. 23% as from Jan 1, 2008
iv. 20% as from Jan 1, 2009.

Further tariff reduction and elimination will be negotiated by the two countries in 2009. For car imports with cylinder capacity greater than 3000 cc, the customs duty shall be eliminated as follows:

i. 30% as from the date of entry into force of Agreement
ii. Free as from Jan 1, 2010.

D. Investment Incentives, Taxes and Export Promotion Schemes

Table 2 presents the various investment incentive schemes that investors in the automotive industry can avail of: Board of Investments Omnibus Investments Code (BOI-OIC), Philippine Export processing Zone (PEZA), and Subic Bay Metropolitan Authority (SBMA) and the Clark Development Corporation (CDC). BOI-registered enterprises are allowed income tax holiday up to eight years, tax and duty free importation of spare parts, and tax credit on raw materials. After the lapse of the income tax holiday, the regular corporate tax rate of 32% will apply to BOI enterprises. For export-oriented firms, PEZA grants the most generous incentives including income tax holiday, basic income tax rate of 5% of gross income, and tax and duty free importation of capital equipment, spare parts, and raw material inputs. Except for the income tax holiday, Clark and Subic enterprises enjoy the same incentives available to PEZA enterprises.

The automotive industry has been listed as a preferred area of investment which can enjoy the fiscal and non-fiscal incentives as indicated in Table 2. The 2006 Investment Priorities Plan (IPP) identified the manufacture of the following vehicle types:

- generic vehicles[4] that are designed/suited for Asian market
- brand new three or four-wheel Philippine utility vehicles for cargos and/or passengers
- alternative fuel vehicle.

[4] Generic vehicles are those produced using a common platform such as but not limited to chassis; and should have the following features: (i) vehicle model/variant should be produced in the Philippines and at least one other ASEAN country and (ii) there should be resource sharing/pooling or industrial complementation of parts and components among countries that produce the model.

For automotive parts and components, the following have been included in the list:

- transmission/engines
- tool & die to produce chassis and engine
- common facility for forging/metal stamping of motor vehicle parts and components.

Table 2: Investment Incentives by Type of Investment Regime

	Investment Regime	BOI OIC	PEZA	SBMA & CSEZ
Incentives	Income	4-8 years ITH	4-8 years ITH	No ITH
	Others	After ITH, payment of the regular corporate tax rate of 35% of taxable income	After ITH, exemption from national & local taxes, in lieu of this special rate of 5% tax on gross income	5% tax on gross income in lieu of all local & national taxes
	Importation of raw materials & supplies	Tax credit	Tax & duty exemption	Tax & duty exemption
	Purchase of breeding stocks & genetic materials	Tax exemption within 10 years from registration	Tax & duty exemption	Tax & duty exemption
	Imported capital equipment, spare parts, materials & supplies	Tax & duty exemption on spare parts & capital equipment	Tax & duty exemption	Tax & duty exemption

The government has also implemented an export incentive program for the industry. The program provides a preferential tariff privilege on a firm's imports on the basis of credits earned from its CBU exports. The granting of preferential tariff rates is contingent upon export performance on a yearly basis. An equivalent net foreign exchange earning (NFEE) is credited to the participant for every unit of CBU exported according to category.

The export program grants domestic manufacturers an export incentive in the form of tariff preference through the application of credit of $400 for every $5000 worth of exports phased down during the years from 2005-2009. For CBU export with FOB value of less than the minimum value according to the category, no NFEE will be credited.

The reduced tariff rates are: MFN rates of 30 percent and 20 percent will be reduced to 10 percent and the AFTA-CEPT rate of 5 percent will be reduced to 1 percent for imports from the other ASEAN countries. This export incentive will be equivalent to $400 per unit exported for year one to two of the program, $300 for year three, and phased down to $100 by year five. The CBU export models allowed are as follows: regular CBU exports, developmental CBU exports, niche CBU exports, and high value low volume CBU exports. The imported CBUs must not be locally assembled (model and/or variant importations are less than 1,000 units per year in 2003) and the participating company owns the brands. Currently, Ford Motor Company is the only firm that has taken full advantage of the country's automotive export program.

Table 3 presents the total foreign direct investment cumulative flows in the transport sectors for three periods 1980-1985, 1986-1992, 1993-1997 and 1998-2003. Even with the investment incentives, cumulative inflows have declined substantially from US$171 million to US$78 million between the periods 1992-1997 and 1998-2003.

Table 3: Cumulative Flows to the Transport Industry (in million US$)

Economic Sector	1980-1985	1986-1991	1992-1997	1998-2003
Manufacturing	715.51	615.53	2106.88	2875.89
Transport Equipment	67.08	37.84	171.14	77.75

Source: Bangko Sentral ng Pilipinas, Foreign Direct Equity Investment.

A 12 per cent value added tax is imposed on motor vehicles. In addition, imported and domestically assembled vehicles are subject to excise taxes. In August 2003, the base for the country's excise tax scheme was revised from engine displacement to vehicle price. An ad valorem tax on automobiles is imposed based on the manufacturer's or importer's selling price, net of excise and value-added taxes, in accordance with the schedule described in Table 4.

Table 4: Excise Taxes in the Automotive Industry

Net manufacturer's price/ Importer's selling price	Rate
Up to P600 Thousand	2%
Over P600 Thousand to P1.1 Million	Phil Peso 12,000 + 20% of value in excess of P600 Thousand
Over P1.1 Million to P2.1 Million	Phil Peso 112,000 + 40% of value in excess of P1.1 Million
Over P2.1 Million	Phil Peso 512,000 + 60% of value excess of Phil Peso 2.1 Million

Buses, trucks (excluding pick-ups), cargo vans, jeeps/jeepneys/jeepney substitutes, single cab, chassis, and special-purpose vehicles are exempted from excise taxes. Automobiles used exclusively within the country's freeport zones are also exempted.

Table 5: Income Tax, VAT, and Excise Tax Collections from the Auto Industry (in million pesos)

Manufacture of motor vehicles	2004	2005	2006
Income Tax	225.52	218.25	566.99
VAT	322.08	459.88	1,003.56
Excise	1,522.46	1,077.93	1,215.09
Sub-total	2,070.06	1,756.06	2,785.65
Manufacture of bodies for motor vehicles; trailers and semi-trailers			
Income Tax	2.48	4.00	2.87
VAT	56.13	68.90	74.92
Excise	19.00	11.40	0.00
Sub-total	77.61	84.29	77.79

Manufacture of parts and accessories for motor vehicles and their engine			
Income Tax	284.73	380.22	428.06
VAT	454.62	340.05	492.93
Excise	-	0.00	0.01
Sub-total	739.35	720.28	921.00
Total	2,887.01	2,560.63	3,784.44

Source: Bureau of Internal Revenue

Table 5 presents tax collections from the automotive industry for the years 2004, 2005 and 2006. These cover corporate income tax, value added and excise taxes from auto manufacturers and parts makers. Total tax collections increased from P2.9 billion in 2004 to almost P3.8 billion in 2006. About 72 percent of the total tax collections came from the automotive assembly segment of the industry. Income tax collections increased by 160 percent between 2005 and 2006, VAT payments rose by 118 percent, although excise tax payments changed by only 13 percent. Between 2004 and 2005, excise tax collections dropped by almost 30 percent.

III. Economic Structure and Performance of the Industry

A. Assembly Firms

The Philippine automotive industry consisted of 14 car assemblers with a combined annual capacity of 221,450 units and 21 commercial vehicle assemblers with a total capacity of 145,950 units. In 2002, the Chamber of Automotive Manufacturers of the Philippines (CAMPI) reported that the assembly sector generated total investment of around P40 billion and total employment of 15,000 workers.

Currently, only five of the 14 registered car assemblers are still engaged in auto manufacturing. Nine companies (Asian Carmakers Corp., Auto Prominence Corp., Columbian Autocar Corp., Dreamco Automobile Co., Inc. formerly known as Commercial, Italcar Pilipinas, Inc., Norkis Automotive Resources Corp., Proton Pilipinas Corp., Scandinavian Motors Corp., and Transfarm & Co., Inc.) are no longer active. Asian Carmakers and Scandinavian have shifted their operations to importing and distribution.

In the commercial vehicle assembly segment, there are 16 registered companies that are still engaged in assembly operations. The Board of Investments has listed the following as inactive participants: Francisco Motors Corp., Italcar Pilipinas, Inc., Norkis Automotive Resources Corp., Pasahero Motors Corp., Pilipinas Daeyang Heavy Industries Corp., Philippine Beijing Motors Corp., and Philippine China Automotive Services Inc.

Table 6 shows a total of 16 companies registered as participants of the Board of Investment's Car Development Program (CDP) and/or Commercial Vehicle Development Program (CVDP). The industry is dominated by five Japanese firms Toyota, Honda, Mitsubishi, Isuzu, Nissan and American manufacturer Ford.

Table 6: BOI Registered Motor Vehicle Companies

Company Name	MVDP Registration	Equity	Technical Licensing & Supply Agreement
1). Ford Motors Co. Phils., Inc.	CDP: Category II - May 29, 1998 CVDP: Category II- May 29, 1998	100 % - American	Mazda Motor Corp.
2).Honda Cars Phils., Inc.	CDP: Category I- November 26, 1990; Category II - February 18, 1993 CVDP: Category I- 2002; Category II- August 6, 1997	74.2%- Filipino; 25.8%- Japanese	
3).Nissan Motor Phils. Corp.	CDP: Category II- April 19, 1982; Category III- June 14, 1993 CVDP: Category I, II and III- April 19, 1982; Cat.II- Jan. 21, 2003	60% - Filipino;9.2% Japanese; 30.8% - Taiwanese	Nissan Motor Co., Ltd. Japan; Yulon Motor Co., Ltd., Taiwan
4). Mitsubishi Motors Phils. Corp.	CDP: Category II- March 1998; Category III- 1997; Category IV- 1995 CVDP: Category I- July 1988; Category III- July 1988;Category III- July 1988	100% - Japanese	Mitsubishi Motors Corp. Japan
5).Toyota Motors Phils., Corp.	CDP: Category II - January 9, 1989 CVDP: Category I (AUV) & II-April 13, 1989	60% - Filipino; 40% - Japanese	Toyota Motor Corp. Japan; Mitsui & Co., Ltd. Japan
6). Isuzu Phils., Corp.	CVDP: Category I, II,III, IV- June 1996	30% - Filipino; 70% - Japanese	Isuzu Motors Corp., Japan
7). Columbian Motors Corp.	CVDP: Category I, II, IV- July 18, 1988; Category V- July 24, 1997	46% - Filipino; 54% - Japanese	Nissan Diesel Motor Co., Ltd., Japan MAN Nutzfahrzeuge Aktiengesellschaft, Germany
8). Dreamco Automobile Co., Inc.	CVDP: Category II- February 12, 1998; Category III & IV- July 18, 1988	100 % - Filipino	Beiqi Foton Motor Co., Ltd., China Nanjing Automobile Export and Import Co., Ltd., ChinaSsangyong Motors Corporation,

			S.Korea DaimlerChrysler AG, Germany
9). Filipinas Daewoo Industries	CVDP: Category IV- October 31, 1991; Category V- October 16, 1997		Daewoo Motors Corp., S.Korea
10). Focus Ventures, Inc.	CVDP:Category II - December 12, 2006	100% Filipino	China First Automobile Group Import & Export Corp.
11). MAN Automotive Concessionaires Corp.	CVDP: Category IV - December 15, 1988	100% Filipino	MAN Nutzfahrzeuge Aktiengesellschaft, Germany
12). Pilipinas Transport Ind's, Inc.	CVDP: Category I (AUV) & II- September 4,	100% Filipino	Suzuki Motor Corp., Japan
13).Pilipinas Hino, Inc.	CVDP: Category III & IV-July 18, 1988; Category V- October 8, 1996	70% -Filipino; 30% - Japanese	Hino Motors Ltd., Japan
14). Porta Coeli Industrial Co., Inc.	CVDP: Category I (AUV)-June 3, 1993; Category I (AUV)- July 26,2002	100% Filipino	
15). Transport Equipment Automotive Components, Inc. (TEAC)	CVDP: Classification II	75% - Filipino; 25% - Chinese	SHANDONG KAMA AUTOMOBILE CO. LTD. (KAMA)
16). Universal Motors Corp.	CVDP: Category I, II & III-July 18, 1988	100% Filipino	

Source: Board of Investments

As evident from Table 7, the share of industry leader Toyota has been consistently increasing from 28.9 percent in 2002 to 38 percent in 2007. In the last six years, its average market share was 34.3 percent. Mitsubishi is far second with an average share of almost 15 percent while Honda is very close at about 14 percent during the period 2002-2007. Isuzu is fourth with an average share 11 percent while Ford follows with a share of 7 percent. Note that the annual shares of Mitsubishi, Honda, and Isuzu fell between 2002 and 2007. Ford's share was rising up to 2005, but dropped in the last two years 2006 and 2007.

The same five companies have consistently landed in the country's top corporations in terms of net income after tax. As Table 8 shows, Toyota's profits rose from P159 million in 2000 to P712 million in 2005. Honda Cars profits increased significantly from P13 million in 2000 to P640 million in 2005. Ford's profits also went up from P22 million in 2000 to P262 million in 2005. Isuzu's profits increased from P22 million in 2000 to P381 million in 2003, though this fell to P199 million in 2005. Mitsubishi registered profits amounting to P189 million in 2005. The same is true for their parts manufacturers, Toyota Auto Parts, Honda Parts, Mitsubishi, and Isuzu Auto Parts. Nissan posted profits of P423 million in 2005.

Table 7: Market Share, 2002-2007

Company Name	2002	2003	2004	2005	2006	2007	Average 2002-07
TOYOTA	28.9	30.1	33.2	36.6	38.5	38.2	34.3
HONDA	15.9	16.5	12.0	10.1	14.0	14.7	13.9
MITSUBISHI	19.0	16.7	14.4	13.4	12.6	12.7	14.8
NISSAN	3.4	4.2	6.5	5.0	3.1	2.4	4.1
COLUMBIAN AUTOCAR	0.5	0.4	0.6	2.8	2.4	2.4	1.5
ASIAN CARMAKERS	0.8	0.9	1.0	0.8	0.8	0.7	0.8
PROTON	0.1	0.1	0.1	-	-	-	0.1
SCANDINAVIAN MOTORS	0.3	0.3	0.4	0.4	0.3	0.2	0.3
COMMERCIAL MOTORS	0.1	0.1	0.0	0.1	0.1	0.1	0.1
UNIVERSAL MOTORS CORP.	5.5	4.9	3.8	3.1	2.7	2.8	3.8
PHIL-HINO	1.5	1.4	1.0	1.2	2.2	2.0	1.6
FORD MOTOR. CO. PHILS.	4.9	6.0	8.3	8.6	7.0	6.3	6.8
ISUZU PHILS. CORP.	14.1	14.0	10.5	9.9	8.2	8.3	10.8
GENERAL MOTORS	1.8	2.0	3.2	2.5	2.1	1.7	2.2
COLUMBIAN MOTORS CORP.	3.0	2.4	2.2	0.3	0.3	0.3	1.4
FIL-DAEWOO	0.0	0.1	0.0	0.0	0.0	0.0	0.0
FRANCISCO MOTORS CORP.	0.1	0.1	0.0	0.0	0.0	0.0	0.0
MAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HYUNDAI	-	-	2.8	5.1	5.5	7.0	5.1
PGA CARS, INC.	-	-	0.0	0.1	0.2	0.2	0.1

Source: CAMPI

Table 8: Net Income After Tax of Automotive Companies (in million pesos)

Company Name	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Toyota Motor Philippines Corporation	159	-	385	519	577	712
Toyota Auto Parts Philippines Inc	357	219	67	322	21	255
Honda Cars Philippines Incorporated	13	-	41	507	367	640
Honda Parts Manufacturing Corp	33	-	84	22	-	-
Nissan					61	423
Ford Motor Company Philippines Inc	22	32	-53	23	149	262
Mitsubishi Motors Philippines Corp					39	189
Mitsubishi Corporation	-370	-	135	393	-	-
Isuzu Philippines Corporation	22	-	241	381	181	199

Isuzu Autoparts Manufacturing Corp	275	123	316	572	734	722

Sources: Philippine Business Profiles Top 7,000 Corporations and Business World Top 1000 Corporations

Table 9: Philippine Automotive Sales, Production, and Imports

Year	Sales	Production/ CKD Sales	New CBU Imports	CBU Imports as % of total Sales	CKD Sales as% of total Sales
1990	57,865				
1991	47,949	47,008			
1992	60,360	58,899	941	2	98
1993	83,811	82,202	1,461	2	98
1994	103,471	99,346	1,609	2	96
1995	128,162	127,016	4,125	4	99
1996	162,095	137,365	1,146	1	85
1997	144,435	120,488	24,730	15	83
1998	80,231	67,903	23,947	15	85
1999	74,414	64,635	9,779	13	87
2000	74,000	70,851	3,149	4	96
2001	76,670	65,202	11,468	15	85
2002	85,587	74,734	10,853	13	87
2003	92,336	85,388	6,948	8	92
2004	88,068	58,822	29,246	33	67
2005	97,063	58,566	38,497	40	60
2006	99,541	56,050	43,491	44	56
2007	117,903	61,128	56,775	48	52

Source: Production data from 1991 to 1996 was from the Board of Investments. Data from 2000 to 2003 was from Kubo, T. "Asia: Climbing to the World's Largest Auto Industry and Market" in Asian Automotive Business Review, Vol. 15 No. 4, October 2004, Fourin, Inc., Japan. 2002 to 2003 were adjusted to exclude exports data. Data from 1997 to 1999 refers to sales of domestically assembled vehicles. Sales from 1990 onwards are from CAMPI and 2004-2007 sales break down are from TMP.

Figure 1: Sales, Production and Import Shares: 1972-2007

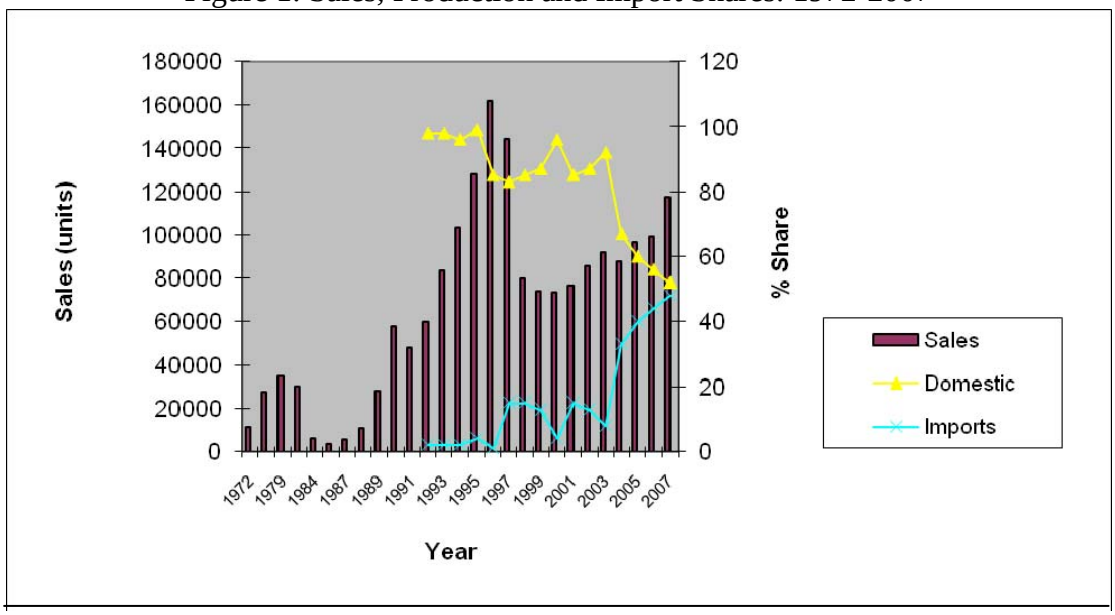
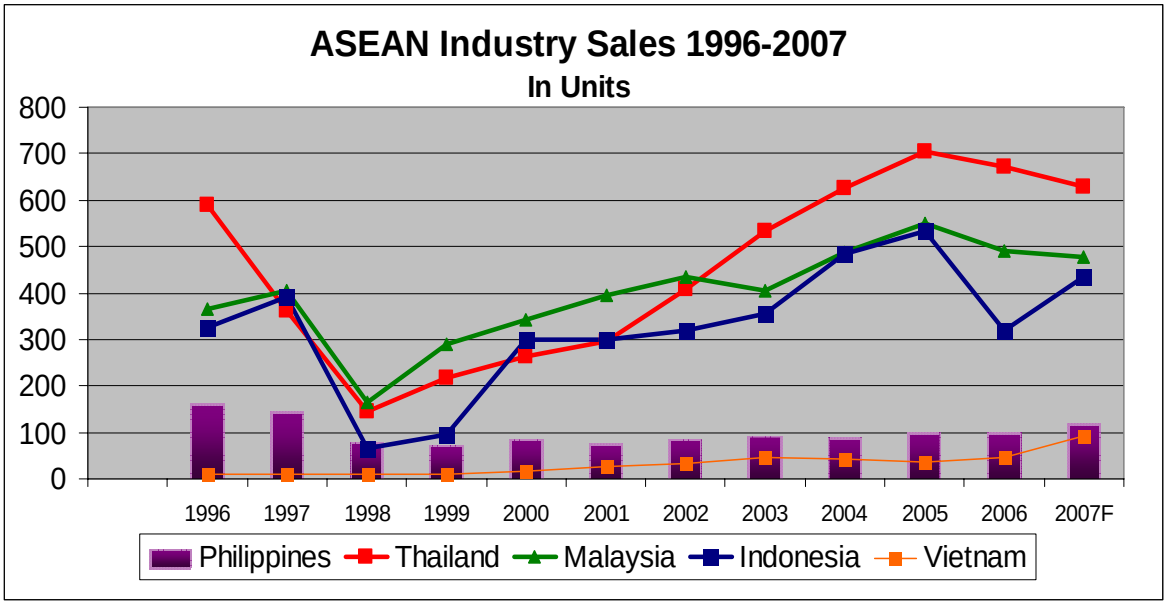


Table 9 shows that as of 2007, the Philippine automotive industry sold a total of 117,903 vehicles, the highest sales registered after the 1997 Asian financial crisis. However, this is still below the peak sales reached in 1996 of 162,095 units.

Production has been on a steady decline since 2004 while imports were rising. With the implementation of the five percent tariff under the AFTA-CEPT in 2003, a narrowing of the gap between production and imports shares is observed. In 2007, the two shares are already very close with production as percentage of total sales accounting for 52% while import share was at 48% (see Figure 1).

While our ASEAN neighbors started to recover in the early 2000s, the Philippines has continued to lag behind (see Figure 2). As the figure shows, the Philippines has the smallest sales volume with Vietnam catching up as its sales increase tremendously from 47,000 units in 2006 to 92,000 in 2007 (representing a remarkable increase of 97 percent).

Figure 2: ASEAN Industry Sales, 1996-2007 (in units)



Source: "Developments in the Automotive Industry: Philippines and ASEAN" A power point presentation by Rick Baker, Ford [October 2007].

It is also important to note that in the last four years, domestic assembly operations have been declining. As Table 9 shows, the number of domestically assembled vehicles sold dropped from 85,388 units in 2003 to 61,128 units in 2007. Given this shrinking scale of domestic production, CKD operations have become very costly. With the reduction of tariffs to five percent under the AFTA-CEPT, imports of domestic firms as a proportion of total industry sales have increased substantially from 8% in 2003 to 48% of total sales in 2007.

Based on the manufacturing data from the National Statistics Office, the automotive industry average share in total manufacturing value added reached 3.2 percent during the period 1976-1980. This, however, started to fall in the succeeding periods. In 2001 and 2002, the sector accounted for only one percent of total manufacturing value added. In terms of employment contribution, the number of workers in the sector was reduced from 12,126 workers in 1999 to 9,698 in 2003. This represented less than one percent of total manufacturing employment. Labor productivity in the industry increased from 163,615 pesos in 1999 to 263,209 pesos in 2002 (based on 1985 prices).

The industry exports passenger cars which increased from 2,895 units to 12,147 units in 2002 and 2003, respectively. Mostly, the passenger car exports comprised of new cars with spark ignition combustion engine exceeding 1500 cc not 3000 cc to Thailand and Indonesia. These are mainly Ford's exports under the ASEAN Industrial Cooperation Scheme. Isuzu also exported 90 CBUs between 2000 to 2003 to South America and Honduras and CKD vehicles to Vietnam.

Given the country's 87 million population as of 2006 and approximately US$13 billion annual OFW remittances (these are projected to rise to US$15 billion in 2008), the auto industry's potentials remain. In its Country Report, the Economist Intelligence Unit (2005) indicated that the Philippine market for cars and automotive parts has great potentials. Passenger car sales in the medium term are considered good since the total sales of new cars still account for only around 3% of total registrations. The Report also considered the market for automotive parts as sizeable.

B. Auto Parts and Components

The parts and components segment of the automotive industry is composed of 256 companies[5] producing around 330 different parts and components made of metals, plastic, rubber and composite materials for both the OEM and replacement markets. Of the 256 automotive parts manufacturers, 124 are considered first-tier manufacturers who are directly supplying the needs of domestic automotive assemblers. The remaining 132 are mostly small and medium enterprises (SMEs) serving as second and third tier sub-contractors who supply the needs of the first-tier manufacturers (Tenorio and Lugo, 2002). By the end of 1999, total investments in the sector amounted to about P27 billion. In 2001, total investments increased to P28 billion. Total employment was 45,000 workers, although this declined to 33,000 workers in 2002.

The bulk of the industry is composed of small firms with capitalization ranging from P0.5 to P5 million. Most of these firms operate as mom and pop style suppliers with varying capabilities and some real quality problems. These firms failed to develop as they have insufficient capital and technology that are necessary to improve their products. The large firms with capitalization of more than P100 million account for only about seven percent of the industry. They comprise the major players of the industry and are the same companies manufacturing parts for OEM car assemblers and engaged in exporting activities.[6]

Total exports increased by 15 percent in 2002 and by 13 percent in 2003. These were valued at around US$1.3 billion in 2002 and around USS1.5 billion in 2003. The bulk of total exports was accounted for by wiring harnesses which is a

[5] Motor Vehicle Parts Manufacturers of the Philippines (MVPMAP)

[6] The major players in the automotive components manufacturing sector are Yazaki-Torres Manufacturing Corp., United Technologies Automotive Phils., Temic Automotive (Phils.) Inc., Asian Transmission Corp., Toyota Autoparts Phils., Fujitsu Ten Corp. of the Phils. and Aichi Forging Co., Inc.. Other manufacturers with proven track record in both OEM and replacement markets include International Wiring Systems Corp.; Honda Parts Manufacturing Corp., Isuzu Auto Parts Manufacturing Corp., Philippine Aluminum Wheels Inc., Enkei Phils. Inc., Kosei Inc., Roberts Automotive & Industrial Parts Manufacturing Corp., Goodyear Phils., Inc and Othsuka Poly-Tech Phils. Inc. (see Aldaba, 2007).

labor-intensive component. In the past three years, however, the share of electrical wiring harnesses continuously declined from 41 percent in 2001 to 39 percent in 2002 and to 33 percent in 2003. The share of other parts and accessories, not elsewhere specified, increased from 21 percent in 2001 to 29 percent in 2002 and to 35 percent in 2003. The share of brakes and servo brakes exports fell from 19 percent in 2001 to 13 percent in 2003. Note that major components exports like transmissions and ABS controls are manufactured by Japanese vehicle assembly firms under the ASEAN AICO scheme. The industry's other major exports are steel belted auto tires with a share of 2.4 percent between 2001 and 2003.

C. Competitiveness and weak domestic linkages

Despite the imposition of high levels of tariff and non-tariff barriers for more than two decades, the local automotive industry has failed to develop as an efficient industry capable of competing internationally. Over the years, the government automotive policies and programs resulted in very limited localization as the automotive assemblers encountered difficulties in achieving the local content requirements set by the government.

At best, the local content program only had a limited impact on the growth and development of the parts and components industry. Very little parts and components are locally sourced with the domestic parts sector accounting for only 10 to 15 percent of the total number of parts and components needed by local assemblers. In contrast, the Thai auto industry sources close to 85-90 percent of their parts domestically.

Assessing the parts and components segment of the industry in 1994, Gimenez pointed out the following reasons why the government's local content program failed to develop the parts manufacturing sector as a world-class export sector:

- lack of locally manufactured raw materials, hence many of the raw materials used by components manufacturers are imported
- low productivity and lack of quality measures among small and medium parts makers
- old equipment and technology, many are using technologies that are more than 20 years behind
- lack of mold design technology, tool and die making.

While the local content regulation provided protection to domestic producers of parts, the effect was somewhat different on the assembly firms that must buy locally. The use of local components entailed a "cost penalty" among car assemblers who often must bear the high cost of local inputs, the inability of some local suppliers to meet product quality specifications, and the untimely delivery of some local suppliers. Moreover, the program required assemblers to put up their own parts manufacturing plants. Thus, Mitsubishi and Toyota invested in transmission plants, Honda and Ford constructed engine assembly plants, and Toyota and Nissan built stamping plants.

Table 10 presents the distribution of average production costs in vehicle assembly in 2007 based on a survey of major auto companies manufacturing different

vehicle types and models. Raw materials are the major elements in vehicle assembly accounting for an average of almost 85 percent of total production cost. The cost of local parts represented an average of 36 percent while the cost of imported parts accounted for an average share of 49 percent of total production cost. Direct labor accounted for an average of 1.6 percent of total cost while manufacturing overhead had an average share of 13.5 percent of total cost. Given the small scale of production of the industry, manufacturing overhead remains high. This negatively affects the firms' competitiveness. Based on the industry's seven car assemblers that are manufacturing eighteen models, the average production per model is only about 3,300 units.

Table 10: Distribution of Average Production Cost (in percent), 2007

Item	Average Share
Raw materials	84.9
Direct Raw Materials Used (local)	36.3
Direct Raw Materials Used (imported)	48.6
Direct Labor	1.6
Manufacturing Overhead	13.5
Total unit cost	100.0

Source: Based on survey-interview of major automotive companies conducted by the author.

The non-availability of the necessary parts and components domestically and the high dependence of the industry on imported parts (almost 49% of the total production cost) have continued to add up to the assemblers' rising costs of production. Although there are some domestic producers of certain inputs, quality problems have remained. The industry's high cost structure has tended to price vehicles assembled in the country out of world markets. With weak competitiveness, the linkage of small and medium parts makers with multinational corporations has also failed to develop.

As earlier noted, auto parts are one of the country's top three exports. However, these are highly concentrated in a few products such as wiring harnesses and transmissions which are highly import-dependent and labor intensive. Auto parts exports are made by large MNCs like Toyota Auto Parts, Fujitsu Ten, Yazaki, IWS (Sumitomo Electric), PAC (Denso), AFC (Aichi Steel), JECO, TRP (Tokai Rika), HKR, and Technol Eight. Backward linkages are limited because these exports are labor-intensive and highly import-dependent. As such, the value added of these export activities has remained low and their linkage with the domestic economy has been limited.

There are risks in relying in this existing pattern of production, investment, and trade which depends largely on low-skilled, labor-intensive segment of the international production network of MNCs. Foreign investments in these activities are highly mobile and with the presence of competing locations offering relatively cheaper labor, the Philippines becomes less attractive.

For instance, the number of Japanese auto parts companies operating in the Philippines declined from 43 in 2001 to only 34 in 2005 while those located in our neighboring East Asian countries went up (Yamamoto, 2006). In 2001, Thailand was

the preferred supply base of Japanese companies, although this has changed in 2005 with the supply base shifting to China. The number of Japanese auto parts in China increased from 134 to 294 between 2001 and 2005; in Thailand this went up from 151 to 185 during the same years. In Indonesia, this rose from 75 to 84; in Malaysia, from 38 to 43 companies.

Subcontracting arrangements are seen as possible mechanisms to help improve the competitiveness of small and medium enterprises and ability to create and upgrade backward linkages. In subcontracting arrangements, larger companies provide subcontractors certain technologies through specific guidelines on the use of machines or production processes to follow. In the auto industry, the number of subcontractors fell from 71 enterprises in 1994 to only 22 enterprises in 2003. Total sub-contracted work as percentage of industry value of output sold also declined from 0.61 percent to 0.53 percent between 1994 and 2003 (Aldaba, 2008).

IV. A Comparison of the Philippines and Thailand

Automotive is a highly global and a high-tech industry, it is capital intensive and requires economies of scale in order to make its operations profitable. To maintain their competitiveness, auto firms' cost, quality, reliability, and engineering must always be at par with global competitors. On the demand side, consumers always want a variety of models at reasonable prices.

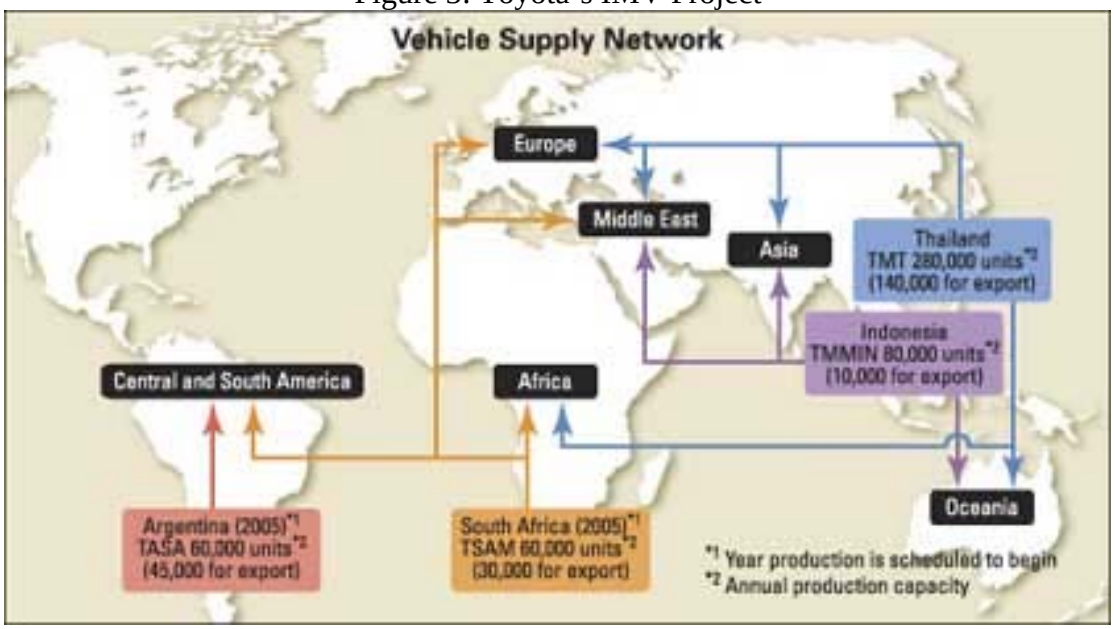
With the rising globalization and economic integration trends, a new form of industrial organization known as global production network (GPN) has emerged in the industry. In order to become more efficient, MNCs are fragmenting their production process by separating the capital intensive segments from the labor-intensive ones with the latter being transferred to developing countries that are characterized by large domestic markets. Toyota's Innovative Multi-Purpose Vehicle (IMV) Project is one example of a GPN (see Figure 3). Under the IMV Project, Toyota upgraded and expanded plants in Thailand (Toyota Motor Thailand or TMT), Indonesia (PT Toyota Motor Manufacturing Indonesia or TMMIN), Argentina and South Africa and turned them into assembly and export bases for a line of innovative IMVs. The Project also aims to increase imported components sourced from Toyota plants and suppliers in Asian and Latin America countries outside Japan.

In 2005, Toyota designated the Philippines and India as assembly points of IMV models but only for the domestic market (Ichijo, 2005). It still remains to be seen how feasible this is in the Philippines considering that mass markets need to be created to justify the production overhead that this would entail. The model of manufacturing vehicles where the market is has worked well in North America and Europe due to their high sales volume.

The 1990s witnessed the emergence of Thailand as the regional hub not only of Toyota but by the world's other large automakers such as Mitsubishi, Honda, Auto Alliance (Ford and Mazda), GM, and Isuzu. As the export platform of these companies, Thailand's production increased markedly from 589,126 units in 1996 to

1,176,840 in 2006. A total of 539,206 units were exported while 682,693 units represented domestic sales in 2006.

Figure 3: Toyota's IMV Project



Source: Toyota Motor Corporation

As of 2002, Thailand had 1,800 locally based suppliers with 700 classified as tier 1 suppliers while the remainder consisted of tier 2 suppliers. This domestic supplier base provides engines, engine components, body parts, brake systems, steering systems, suspensions, transmissions and electronics. With a strong supplier base, Thai-based auto makers source almost 90 percent of their parts domestically. In 2005, the assembly and parts sectors contributed 42.4 percent of Thailand's total manufacturing value added.

In Toyota's IMV Project, TMT regarded as the key base and is expected to export 140,000 units of pick-up trucks and SUVs. Historically, Toyota established its R&D centers only in Japan and developed countries in the US and Western Europe. In 2005, Japan's first R&D center (Toyota Technical Center Asia Pacific Thailand Co. Ltd) in an emerging market was opened in Thailand. This operates like those in developed countries, taking platforms and models developed in Japan to suit the needs of different emerging markets. In March 2005, Toyota established an R&D center in Australia to gain better understanding of local needs in Asia and Oceania.

Aside from its stable macroeconomic environment, good infrastructure, relatively large domestic market and the presence of an extensive network of components manufacturers; Thailand's success in integrating with the GPNs of foreign auto companies is the product of its long years of policy reform. Like many developing countries, Thailand had import-substitution from 1970 up to the mid-1980s. It has managed its trade and industrial policy quite well; as such, Thailand was able to shift successfully from a highly protected industry towards an export-oriented one in the early 1990s.

After thirty years of protection, the 1990s witnessed the opening up of the Thai automotive market. Tariff rates on both CKD kits and CBU vehicles were reduced by more than 50 percent. For passenger cars with size over 2300 c.c., tariff rates were reduced from 300 percent to 100 percent while the rate on passenger cars with size 2300 c.c. and below was reduced from 180 percent to 60 percent. For CKD kits, the tariff rate was lowered from 112 percent to 20 percent. With the reduction in tariff on both CKD and CBU, the gap between domestic and the foreign automotive prices was narrowed down (Rangsan, 1993 as cited in Poapongsakorn and Wangdee, 2004).

In 1992, the government again reduced the tariff rates. Tariff on CBU with engine size of 2400 c.c. and below was reduced to 42 percent, and for CBU with engine size over 2400 c.c., tariff was lowered to 68.5 percent. The tariff reduction lowered domestic automotive prices and combined with economic expansion, auto sales rose during the period 1991-1996, reaching a peak level of 589,126 units. (Poapongsakorn and Wangdee, 2004).

Deregulation and liberalization along with the removal of local content policy in 2000 transformed the Thai automotive industry making it the regional hub of many foreign automakers and the world's largest production base for one-ton pick-ups. Thailand was able to use its trade and tax policy strategically in the promotion and development of its niche market, the one-ton pick- ups.

Table 11: Tariffs and Excise Taxes in the Thai CBUs

CBU Type	Before 1992	1992	1999	2000-present
Passenger cars over 2400 cc				
Tariff rate	300	68.5	80	80
Excise tax	44-55	41.8	43-50	41-48
Passenger cars under 2400 cc				
Tariff rate	180	42	80	80
Excise tax	44-55	35.75	41.25	38.5
Pick-up truck				
Tariff rate	120	60	60	80
Excise tax	9.9	na	5.5	3.3

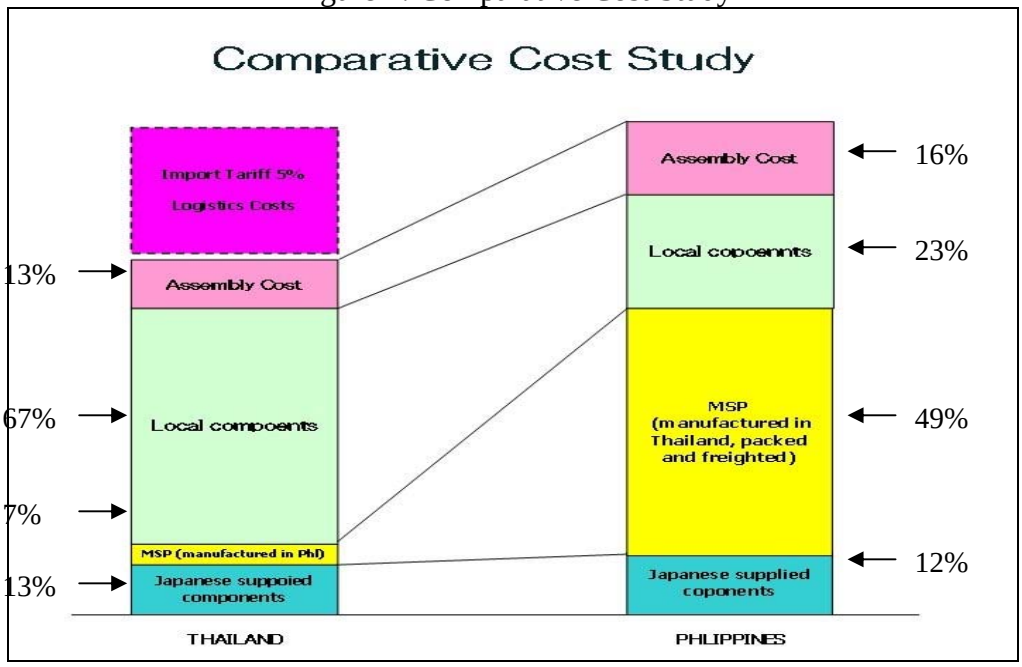
Source: Ministry of Finance as cited in Kohpaiboon (2006).

As Table 11 shows, pick-up trucks always received the lowest excise tax and tariff rates vehicles in the last three decades. Prior to 1992, pick-up trucks had an excise tax of 9.9 percent while passenger cars were imposed a rate that ranged from 44 to 55 percent. The tariff rate on pick-up trucks was 120 percent while those on passenger cars ranged from 180 to 300 percent.

Currently, pick-up trucks have an excise tax rate of 3.3 percent while passenger cars are imposed rates ranging from 38.5 to 48 percent. As a result, the relative price of pick-up trucks have been reduced tremendously. Doner et al (2004 as cited in Kohpaiboon, 2006) indicated that the price of one-ton pick-ups was around half that of a medium-size passenger car. Note also that the tariff rates on pick-up trucks declined from 120 percent before 1992 to 60 percent during most of the nineties, however, since 2000, the tariff rate on pick-up trucks has been increased to 80 percent in line with the tariffs on passenger cars.

Figure 4 compares the cost of assembly of comparable vehicles in the Philippines and Thailand. One can easily see the considerable differences in the cost of production between the two countries. Imported raw materials are made up of multi-supplied parts (MSP) manufactured in Thailand and supplied components from Japan. Imported raw materials account for only 20 percent of the total production cost in Thailand; in the Philippines, these comprise 61 percent. Assembly cost covers utility, labor, and tooling/jig amortization. Due to the Philippines' small level of operations, its assembly cost is 1.75 times higher than Thailand.

Figure 4: Comparative Cost Study



Evidently, vehicles assembled in the Philippines are more costly than those assembled in Thailand. With only 23 percent local content, production costs for the Philippines ran about 1.4 times higher than those in Thailand where local content accounted for about 67 percent of total production cost. The ratio declines to 1.2 if the vehicle is imported as a completely built unit to the Philippines which would now include import tariff of 5 percent and logistic costs. Note that with the removal of the local content program, the share of domestic parts and components fell from 40% in 1995 to the current percentage share of 23 percent while imports increased from 53 percent to 65 percent of total production cost. Overall, the share of parts and components to total cost declined from 93 percent to 84 percent between 1995 and the present year.

V. Globalization and the Need for Industry Adjustment Measures

A. Fundamental issues and problems

The cost differences and inefficiency of the vehicle assembly industry in the Philippines may be explained by two fundamental factors: *(i) low-volume production,*

i.e., assemblers are operating below the optimum size of production and *(ii) absence of a strong supplier base* in the Philippines.

Volume, particularly the current weak domestic demand, has remained a major internal problem in reducing firms' costs and improving their competitiveness. The small size of our domestic market is the major factor that explains the industry's lack of competitiveness. This has been exacerbated by the unfair competition from the entry of smuggled second vehicles in the Subic Bay Freeport and other special economic zone ports.

Table 12 compares **imports of used vehicles data** from the Land Transportation Office (LTO) and the National Statistics Office (NSO). NSO imports data are based on the import entries of used vehicles while the LTO data refer to newly registered used imported passenger cars, SUVs/UVs, trucks, and buses.

Table 12: Used Vehicle Imports: NSO Trade Data vs. LTO Registration Data

	1998	1999	2000	2001	2002	2003	Total	Average
LTO newly registered imported used vehicles	81,034	78,369	88,057	97,024	113,327	103,228	561,039	93,507
NSO imports of used vehicles	4,480	5,112	46,384	22,071	20,967	31,726	130,740	21,790
Difference	76,554	73,257	41,673	74,953	92,360	71,502	430,299	71,717

As the table shows, a substantial discrepancy is found between the NSO and LTO figures on used CBU imports. The NSO cumulative total of 130,740 represented only about one-fifth of the LTO new registration data for used cars whose cumulative total amounted to 561,039. On the average, the difference between the two data sets is around 71,700 vehicles between 1998 and 2003. This large data gap between the two data sets could indicate some under reporting in the case of NSO but more importantly, this figure could represent a rough estimate of smuggled vehicles. The under reporting at NSO could be attributed to the absence of import entries submitted to NSO.

Table 13: Average Price of Selected Used Vehicle Imports, 2002

PSCC Code	Description	Country Source	Quantity	CIF Value in US$	Average Price in US$
7812022	Passenger cars w/ spark ignitn combustn engine exceedg 1,500 not 3,000 cc, used	Japan	678	702,602	1,036
7812022	Passenger cars w/ spark ignitn combustn engine exceedg 1,500 not 3,000 cc, used	Usa	2,923	431,279	148
7812032	Passenger cars w/ spark ignitn nternl combustn engine,exceedg 3,000 cc, used	Japan	3	1,703	568
7812049	Oth motor vehicle w/ compression ignitn combustn engine,1,500cc/less,for person	Japan	25	10,933	437
7812066	Jeep w/ compresn ignitn nternl combustn piston engine, exceedg 2,500 cc, used	Japan	9	3,357	373
7812066	Jeep w/ compresn ignitn nternl combustn piston engine, exceedg 2,500 cc, used	S.Korea	73	40,334	553
7821902	Motor vehicles [(including vans)] for the transport of goods (excluding	Japan	4,692	4,355,318	928

	REFRIGERATED VANS)				
7821902	MOTOR VEHICLES [(INCLUDING VANS)] FOR THE TRANSPORT OF GOODS (EXCLUDING REFRIGERATED VANS)	S.KOREA	517	789,114	1,526
7821908	MOTOR VEHICLES [(INCLUDING VANS)] FOR THE TRANSPORT OF GOODS (EXCLUDING REFRIGERATED VANS)	JAPAN	12	5,965	497

Source: NSO Trade Data

The industry has been facing stiff competition from second-hand imported vehicles which are priced 30% to 50% lower than their new counterparts depending on vehicle model. Table 13 shows import information on used vehicle imports based on the NSO trade data. The table indicates that average prices for used vehicle imports coming from Japan, US, and South Korea ranged from US$148 to US$1,526 in 2002. In contrast, NSO CIF prices for brand new cars are as follows: low-price car (900-1299 cc) has an average price ranging from US$7107 to US$7996, compact car (1300-1799 cc) has an average price range of US$10,039 to 10,128; family (1800-2499 cc) has an average price range of US$15,085 to 15814, while a deluxe car (2500 cc upwards) has an average price range of US$ 124,578 to 195,451.

The shrinking domestically assembled CBU sales due to the unabated entry of smuggled second-hand vehicles and our weak supplier base have been preventing foreign automakers from seriously considering the Philippines for a more important role in their GPNs. In the early 2000s, Ford made the Philippines its regional hub for passenger cars. But, currently Auto Alliance (joint venture of Ford and Mazda) is expanding its Rayong plant in Thailand for the assembly of 100,000 units of passenger cars. Recently, the Supreme Court issued another ruling which turned down the second motion for reconsideration and confirmed that this decision is final and executory. Again, the issue now is the **effective enforcement of EO 156** to eliminate the smuggling of used vehicles.

It is important to note that for auto assembly to be viable, scale economies are necessary. Hence, production must be geared for both the domestic and export markets. The larger the domestic market, the more attractive a country becomes as a potential site for automakers' export platform. If we are able to stop smuggling and if our domestic sales will increase beyond the peak of 160,000 which we hit in 1996, these MNCs might take a second look at us and re-evaluate the role to be played by the Philippines in their regional production networks.

With the implementation of the AFTA-CEPT five percent tariff in 2005, the share of imports to total sales increased substantially from an average of 11 percent during the years 1999-2003 to 44 percent in 2006 and 48 percent in 2007 (see Table 14). Given the present condition of the automotive industry, the elimination of tariffs by 2010 under the AFTA-CEPT would pose extreme difficulties for the industry.

Table 14: Tariff Rates and Import Penetration Ratios (in %): Passenger Cars

Year	Tariff Rate		Import Penetration Ratio	Year	Tariff Rate				Import Penetration Ratio
	CKD	CBU			MFN		AFTA		
					CKD	CBU	CKD	CBU	
1990	30	50		2000	10	30			4
1991	30	50		2001	10	30			15
1992	30	50	2	2002	10	30			13
1993	20	40	2	2003	10	30			8
1994	20	40	2	2004	5	30	3	5	33
1995	10	30	4	2005	5	30	3	5	40
1996	3	40	1	2006	5	30	3	5	44
1997	3	40	15	2007	5	30	3	5	48
1998	7	40	15	2008	1	30	0	5	
1999	10	40	13	2010	1	30	0	0	

Note: Import Penetration Ratio=CBU Imports by Assemblers/Domestic Sales

The large increase in the importation by the industry seems to signal towards this direction. Given the highly competitive global market in which they operate; Toyota, Ford and all the other assemblers will find it hard to justify their assembly operations in the country. Given its linkages with the auto parts and components industry, the demise of assemblers poses potential dangers for the parts and components sector. This may result in a tremendous negative impact on the metal, plastic, seat and trim, and other industry-related segments supplying the automotive industry. Toyota has 53 first tier suppliers, Ford has 42 while Isuzu has 82 suppliers of parts such as stamped parts; air con system; carpet and seat assembly; door trims; fuel and tank assembly; audio and other accessories; radiator; alternator; brackets, bolts, and nuts; battery; exhaust, wheel and tire assembly.

Unless strategic adjustment measures are designed and effectively implemented by the government, this trend of increasing CBU importation is expected to continue in the future as manufacturers shift their operations from domestic production to CBU imports.

B. What should be done to move the industry forward

The industry's lack of competitiveness, absence of economies of scale and a weak supply base are the fundamental issues that must be addressed in order to strengthen the industry and integrate it into the regional production networks of foreign automakers. The entry of cheap, smuggled second-hand vehicles has also put tremendous pressure on the industry.

Strong political will is needed to address the smuggling issue. The government must make a stronger, clearer position because smuggling is hurting the future of the industry. For the Supreme Court decision to be effectively implemented, the technical and regulatory capacity of the Bureau of Customs, Department of Environment and Natural Resources, Department of Trade and Industry-Bureau of Trade Regulations and Consumer Protection, and Land Transportation Office must be strengthened. These are the main agencies responsible for the implementation of the law banning second hand imports and regulating and monitoring safety, health, and environment standards for

the industry. Building the capacity of these agencies is extremely necessary for effective regulation and control of second-hand imports.

Aside from stopping smuggling, automakers and parts manufacturers need to prove their competitiveness in terms of price, quality, delivery, including engineering know how. To be chosen as partners of international auto companies, their competitiveness must be at par with that of competitors abroad. To benefit from the economic integration process, a lot depends on the response of global automotive companies and domestic firms. Their capacity to exploit the new market conditions and ability to seize the opportunities arising from regional arrangements such as AFTA and bilateral agreements like the JPEPA are important factors that will determine the gains from the integration process.

But at the same time, the government has an important role in order for the potential benefits to materialize. To strengthen the industry, support from all sectors is needed to formulate a more coherent set of policies and comprehensive strategy and program to enhance industry competitiveness. The government must cooperate with the private sector, workers, academe, and other concerned groups in moving the industry forward. Equally important is the need to encourage the industry to specialize and expand in market segments where it is closest to being internationally competitive.

First, temporary industry adjustment measures and incentives must be designed to improve performance and enable the industry to face competition arising from zero tariffs from AFTA by 2010. Globalization and liberalization have become an irreversible trend. In the medium to long-term, the industry faces the problem of how to survive the international competition that is expected to grow intensely especially with the increasing efforts to promote regional integration through AFTA and ASEAN+3 (Japan, South Korea, and China) and bilateral agreements through the JPEPA. Competition will force high cost producers to exit the market and lead to a reallocation of output from the less efficient firms to the most efficient ones. At the same time, competition will force firms to continuously apply measures to increase efficiency and improve productivity.

Given the country's current limited domestic market, individual brands and models cannot be produced in large quantities, thus preventing assemblers from reaping the benefits from mass production. However, the removal of tariff and non tariff barriers through AFTA is an important step in creating a market that is of sufficient size to allow economies of scale in production and provide incentives for investment. Foreign automakers will hesitate to source export vehicles from a country where the domestic market is very small. In the light of our current weak domestic demand, weak supplier base, absence of economies of scale and the associated high production costs, a period of industry adjustment is therefore necessary to enable firms to cope with a zero tariff environment by 2010. A carefully drafted program of enhancing the competitiveness of suppliers and parts makers is also required to enable the Philippines to maximize the benefits from the whole integration process.

To help firms in their restructuring, it is important to design an industrial adjustment program covering both domestic assemblers and the local suppliers of parts and components. The program will provide incentives to help the industry

gradually adapt to the changing external conditions characterized by increasing globalization and economic integration in East Asia. Through the program, existing capacity is expected to be utilized and productivity to be enhanced. The incentives are also expected to trigger private investments especially in the parts and components sector.

Second, a review of the current auto export program is needed to make it more responsive to recent global developments and in line with the industry adjustment and incentive program to be formulated. Currently, the government has an export incentive program (EO 312) for automotive assemblers with Ford being the only participant. According to Ford, the zero tariffs under JPEPA may erode the incentives under EO 312. For Japanese-owned assemblers, there is a need to redesign the Program to make it more compatible with zero tariffs under JPEPA. Thus, an evaluation of the Program should be carried out and identify changes necessary to improve and broaden participation. A similar program for exporters of parts and components should also be crafted.

Third, a complete package of technical, financial, marketing, and human resource development for the auto parts sector which are mainly small and medium enterprises and programs to strengthen and link our local parts and components with MNCs. The government support to SMEs should not be through increased tariff protection but through the provision of access to capital and technology which are at the root of their underdevelopment. Given the parts suppliers' limited technology and R&D capability, finding technologically fit foreign partners will be important. Active participation of the industry association will be needed in matchmaking or linking domestic firms with MNCs.

Programs linking domestic parts suppliers not only with domestic assemblers but also with MNCs and their production networks will also be crucial. One way to develop internal and external linkages is through the development of clusters in the industry. Clusters are important in improving firm competitiveness and broadening the local supply base. Currently, the industry is implementing "ECOP-Big Enterprise, Small Enterprise" (EBESE) Program with Toyota Motor Philippines Corporation taking the lead in strengthening the capacities of its suppliers. Increased involvement and commitment from other industry members along with allocation of sufficient government funds for the Program to make it more sustainable is necessary.

Other policy measures that must be pursued are:

- Removal of tariff distortions that allow inputs to parts manufacturing to have higher tariffs than outputs since this contribute to high production costs and lack of competitiveness of the industry.

- Identification of gaps in the value added chain that will guide investors and encourage the localization of these parts. While auto parts are among the country's major exports, these are largely concentrated in a few products. Moreover, there is a need to address the lack of raw materials in the country.

- Reform the excise tax structure in such a way that market demand is stimulated.

- Other market expansion programs include cooperatives engaging in transport services by pooling together OFW resources and arranging tie-ups with domestic assemblers.

- Improvement of infrastructure provision in the country particularly utilities like power and ports operation to help firms bring down their operating/overhead costs.

All these broad steps are necessary to strengthen the industry and enable it to take advantage of the opportunities arising from the AFTA and JPEPA. This may be the industry's last chance; but there is hope that with the correct strategy and its effective implementation, the Philippines can still make it.

C. Automotive Industry Adjustment Scheme

An adjustment program is necessary to strengthen the viability and international competitiveness of the automotive industry and facilitate its integration into the regional/global production networks of foreign automakers. Since tariff protection levels are already low, vehicle assemblers are expected to rationalize and increase their production volumes through exports in order to bring down their unit costs. It is important to note that the assignment of vehicle exports is determined not only by firm competitiveness but also by the global strategy of the parent company. The decision of the parent company to assign the manufacture of an export vehicle model to a country will also depend on the policy regime prevailing in the country. If the country's sales volumes are high, the parent company can be in a better position to exercise leverage over first tier component suppliers to locate in the country. It is also important to note that with higher volumes, the localization of components can be economically attained.

Figure 5: Impact of Market Expansion on Assembly and Parts Manufacturing

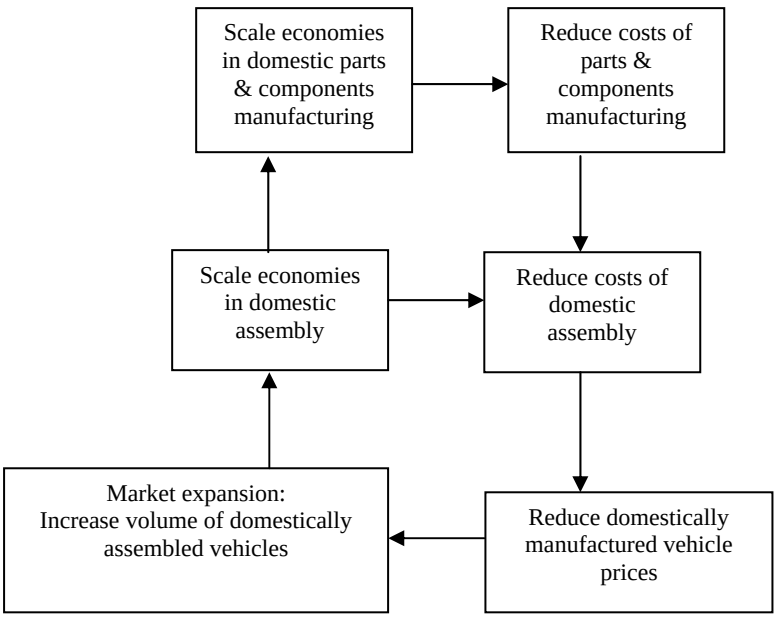


Figure 5 presents the effects of higher vehicle volumes on both assemblers and parts and components manufacturers. Higher volumes through both domestic and export market expansion will allow both assemblers and parts and components manufacturers to attain scale economies. For parts makers, higher volumes will lead to lower costs enabling parts localization to be economically efficient. In turn, this would reduce assembly costs further. To achieve this, the industry has to be gradually integrated into the global automotive industry.

To achieve the goal of integrating with the global auto industry, adjustment measures during the transition period are necessary. During the adjustment period, government support is crucial to aid firms as they restructure their operations. The government can assist the industry by providing adjustment measures and incentives to encourage the industry's participation in global production networks. These measures should provide enough time for industry restructuring, make the industry more competitive, reduce unemployment losses in the short-run, and keep the prices of motor vehicles at affordable levels.

To change the behavior of firms, the adjustment program should have credible incentives. One way would be to introduce incentives that would encourage the firms to increase their production volume. The experiences of Australia and South Africa have shown that this could be achieved through an import-export complementation scheme.

The Experience of Australia

The Australian government crafted an assistance package for the automotive industry as its policy direction changed from protection towards export-orientation. The initial assistance package consisted of three elements (Industry Commission, 1997):

- Tariff assistance
- Automatic duty free (ADF) entitlement for vehicle producers
- Export facilitation scheme (EFS).

Tariffs on the automotive industry were, in general, substantially higher than most manufacturing industries. To assist automakers, three separate tariff rates were designed: (i) a 22.5% tariff on passenger motor vehicles (PMVs) and PMV derivatives and OE components for these vehicles, scheduled to decline by 2.5% each year to 15% by January 2000; (ii) a 15% tariff on replacement components for PMVs and their derivatives scheduled to remain at this level until January 2000; and (iii) a 5% tariff on LCVs and 4WD and all components for these vehicles, scheduled to stay at this level until January 2000. These tariffs also applied to second-hand vehicle imports plus an additional specific tariff of $12,000. This was introduced in July 1991 in response to industry concerns that high volume importation of second hand vehicles from Japan would exert significant competitive pressure on the local industry.

After the abolition of the local content requirement in 1989, vehicle producers continued to be entitled to duty free importation worth 15% of their value of

production, provided they produce at least 30,000 units per model annually. This volume requirement was abolished in 1996. The **value of production is the value of PMVs produced for domestic sale**. Producers may also include the value of their vehicle exports in their value of production, however, they would be unable to earn export credits for their exported vehicles. Vehicle producers can use their duty free entitlement to import PMVs or OE components, but not replacement components.

The EFS allowed vehicle and component producers to earn export credits in return for automotive exports and to use these credits to offset the duty on imports. Export credits were earned at a rate of one dollar for every dollar of "**Australian automotive value added" in exports**. One dollar of export credit provided a duty reduction of one dollar multiplied by the tariff rate for PMVs.

Export credits could only be earned on "eligible exports". Generally these included PMVs, OE components for PMVs, automotive machine tools, automotive tooling and automotive design, development and production services and emerging automotive technology. Export credits could be freely traded among participants and carried forward for use in future years if necessary. In Australia, most export credits were earned on OE component exports.

Export credits could only be used to offset duty on "eligible imports". Generally, these included PMVs, LCVs and 4WDs, replacement components for these vehicles and OE components for LCVs and 4WDs. Most export credits were used to offset the duty on imported PMVs. Export credits could also be used by PMV producers to offset duty payable on their imports of PMVs or OE components above 15% duty free entitlement.

Currently, the Australian Automotive Competitiveness and Investment Scheme (ACIS) provides subsidies to Australian manufacturers of vehicles, components, including service providers in order to encourage innovation and investment in the industry (see Box 1). Participating motor vehicle manufacturers are given duty credits for their local and export production as well as engines and engine components manufactured. They are also able to obtain credits for their new investments and R&D expenditures. For component producers, auto machine tool manufacturers and service providers, duty credits are given for their new investments and R&D expenditures.

The Case of South Africa

In South African, there were three government support schemes applied at a time when tariffs for both CBUs and components were gradually reduced along with the removal of their local content program (Franse, 2006):

- motor vehicle development program (MIDP)
- duty free allowance (DFA)
- small vehicle incentive scheme (SVI)

Under the MIDP, export credits can be earned by exporting and these can be used to offset import duty payments for imported components. One Rand of credit is earned for every one Rand local value added.

Box 1
Australia's Automotive Competitiveness and Investment Scheme

As its automotive tariffs fell from 15% to 10% in 2005 (scheduled to decline further to 5% by 2010), the Australian Government introduced the "Automotive Competitiveness and Investment Scheme" (ACIS) to support the development of Australian automotive industry. ACIS aims specifically to encourage investment and innovation in the industry using production and investment incentives. Its first stage which started on January 1, 2001 ended in December 2005 with a ceiling for incentives limited at $2 billion. Stage 2 began in January 1006 and will end in December 2010. It includes capped incentives up to $2 billion; uncapped production credits; and a $150 million Motor Vehicle Producer Research and Development (MVPR&D). Stage 3 is scheduled from 2011 till 2015 and covers capped incentives up to $1 billion and uncapped production credits.

Australian producers under the following four groups are eligible to apply for ACIS registration:

- *Motor Vehicle Producers (MVPs):* producers of at least 30,000 motor vehicles or engines per year
- *Automotive Component Producers (ACPs):* producers of at least $500,000 of one kind of automotive component annually for use as original equipment in at least 30,000 vehicles or 30,000 engines OR producers of at least $500,000 of original equipment components annually, where that production represents at least 50% of the total value of a producer's automotive component production
- *Automotive Machine Tool or Automotive Tooling Producers (AMTPs):* producers of at least $500,000 of automotive machine tools or automotive tooling annually, where at least 50% of that production is used to produce original equipment
- *Automotive Service Providers (ASPs):* providers of at least $500,000 of automotive services annually, where at least 50% of those services relate to the production of motor vehicles or original equipment.

MVPs will be able to obtain duty credits for production of motor vehicles for local and export markets, engines & engine components and for 10% of the value of new investment in Plant and Equipment (P&E). In circumstances where MVPs produce automotive components for a third party, they will be qualified for the 25% P&E investment incentive and 45% R&D incentive. In addition, they are also eligible to claim 45 cents for every dollar spent on R&D provided that MVPs successfully applies for funding under the MVP R&D Scheme. On the other hand, ACPs, AMTPs and ASPs will be able to get duty credit equivalent to 25% of the value of new investment in P&E and 45% of the value of investment in R&D.

There are two types of credits available under ACIS, the production credits and investment credits. The former can be earned only by MVPs and may be capped or uncapped. The latter on the other hand are based on investment in P&E and R&D and can be earned by all the groups mentioned above subject to $2 billion cap.

The ACIS Administration Act allows the transfer of duty credits to another party. It can also be applied to importation of certain eligible imports and can be offset against an unearned credit liability.

Source: AusIndustry [Nov 2006], Automotive Competitiveness and Investment Scheme Customer Guidelines.

The DFA is equal to 27 percent of a vehicle's wholesale price. This can be rebated against the duty payable on imported components used in the production of

vehicles for the domestic market. The DFA is a subsidy for domestically assembled vehicles.

The SVI is an allowance equal to 3 percent for every R1000 below the qualifying value of R40,000 offered to vehicle manufacturers of small vehicles. Due to rising vehicle price inflation, there was no benefit derived from this scheme.

The Motor Industry Development Program has created substantial incentives to invest and to produce for export and for the domestic market in both assembly and parts industries. It has led to increased exports and investments in the sector, though employment has not grown rapidly. The Program has been reviewed and extended twice. It now is scheduled to continue until 2012 and has been expanded to include a direct investment subsidy in the form of a "Productive Asset Allowance" that provides import duty credits equal to 20 percent of the value of qualifying investments. In terms of cost, however, the subsidies are considered to be substantially large. Hence, there are now calls for the elimination of the incentives after 2012 due to the large transfers and rents that accrued to auto producers.

The Case of the Philippines

A more stable policy environment and serious commitment from the industry to restructure operations are necessary to strengthen the industry. At present, a common industry position is yet to be defined. Some players view that the direction should be towards the promotion of both domestic and export markets. Some believe that the future of the industry lies in the production of parts and components along with assembly operations geared towards the domestic market provided a sufficient volume is present. Others think that the production of end-of-life vehicle models should be pursued by the industry while some have been pushing for the promotion of a national car known as PhUV.

Developing parts and components and focusing on the manufacture of vehicles for both the domestic and export markets seem to be the best way to integrate the industry into the global automotive industry and link domestic auto parts companies especially the small and medium enterprises with regional production networks. It must be noted that given the limited resources of the government, the adoption of a diverse strategy would be very costly. Hence, industry members must carefully evaluate their positions and arrive at a consensus on how to improve industry competitiveness and enable its integration into the global automotive industry. The implementation of zero tariffs under AFTA-CEPT Program in 2010 might lead to a further deterioration of the domestic industry. To complement the zero tariff environment, an adjustment scheme is necessary to:

- improve industry competitiveness
- encourage investments
- expand domestic market and encourage exports
- allow the industry to create a niche in the global market and actively participate in the production networks of foreign automakers.

In designing adjustment schemes such as the ACIS and MIDP, the government should be guided by following principles:

First, incentives should be provided **only to potentially viable domestic manufacturing firms.** The incentives should be for a limited time only to ensure that only the most efficient firms will be given temporary support.

Second, it is important that a strong and capable institution performs monitoring and regular evaluation to assess the effectiveness of the scheme. In Thailand, for instance, they have an institute that focuses solely on the industry (the Thailand Automotive Institute or TAI). It performs a coordinative function to ensure that industry development is attained as well as conducts research to formulate suitable policies along with an industry master plan. As Techakanont (2007) pointed out, TAI has played an important role in promoting, cooperating and coordinating industry development with both government and private sector as well as with local and international agencies.

Third, the incentives can also be used to promote and develop other manufacturing activities in the automotive industry:

- motor vehicle and parts exports
- fuel efficient vehicles
- inexpensive vehicles for the C and D markets
- improvement of scale economies with additional incentives given for firms that are able to reach or surpass a certain scale or volume
- introduction of new technology

Currently, motor vehicles have a tariff rate of 5% under the AFTA-CEPT scheme and this is scheduled to be eliminated by 2010. CKD tariff rate are already zero. There are seven car assemblers manufacturing eighteen models at a total of around 60,000 units. The average production per model is around 3,300 units which is very small. With this scale of production, it would be difficult to compete in a zero tariff environment. Hence, it is important that a temporary adjustment scheme be devised to help firms adjust and restructure their operations in the light of zero tariffs.

As illustrated by the cases of Australia and South Africa, the adjustment program can use incentives based on tariffs. However, this would seem to be low-powered given our prevailing low tariffs and their scheduled elimination two years from now. An alternative would be to apply an excise tax based incentive, which is relatively more high-powered than one that is duty based. In here, excise tax revenues may be used to support the industry adjustment scheme. This excise tax based incentives could be used to expand the market and encourage firms to increase their production for both the domestic and export markets through excise tax concessions.

The country's existing auto export program is based on an import-export complementation scheme except that it can only be applied to CBUs and does not include parts and components. So far, the scheme has attracted only one participant, Ford Motors. It is proposed that the program be expanded to allow both vehicle and component producers to earn export credits. Credits can only be earned on **"eligible**

vehicles and parts". These credits can be freely traded among participants and carried forward for use in future years if necessary.

Another measure directed to consumers would be to issue **tax credits to buyers of domestically manufactured vehicles** for a temporary period in order to stimulate demand for domestically assembled vehicles.

VI. Conclusions

The industry is under considerable pressure given the following: (i) presence of cheap smuggled second-hand vehicles; (ii) tariff reduction from 30 percent to 5 percent under the AFTA-CEPT scheme since 2004; and (iii) complete elimination of tariffs by 2010 within AFTA. The industry's current lack of competitiveness, absence of economies of scale and a weak supply base are the fundamental issues that must be addressed in order to strengthen the firms and integrate them into the regional production networks of foreign automakers.

With rising globalization & economic integration, competition has become tougher. With the emergence of regional and global production networks, countries must compete not only against their competitors in the same industry but also, within the same network, where they need to compete against other subsidiaries of their mother companies located in other countries. Toyota has designated the Philippines as assembly point of IMV models Vios and Innova but only for the domestic market. Given the absence of critical mass, this entails high production overhead. Without a large domestic market, this model of "manufacturing vehicles where the market is" will be difficult to justify. This model is feasible in North America and Europe due to their high sales volume. In the case of Ford, the Philippines has been designated as its regional hub for small and medium passenger cars in the early 2000s while Thailand has been its hub for one-ton pickup trucks. Its Thai plant, Auto Alliance, is currently being expanded to produce and export 100,000 units of passenger cars.

The Philippines, at present, has seven car assemblers manufacturing eighteen models at a total of around 60,000 units. The average production per model is 3,300 units which is very small. With this small scale of production, it would be difficult to compete with other subsidiaries within the same network as well as with other auto makers in an environment where tariffs are already zero. Government action is crucial as firms adjust toward a zero tariff environment. Strong political will is needed to curb smuggling. Without resolving the smuggling issue and the formulation of the necessary adjustment program to help the industry during the transition process, the possibility is high that existing assemblers might shift towards CBU trading. This poses potential dangers of further eroding our manufacturing base.

Economics tells us that subsidies can distort markets and the competitive process; however, subsidies cannot be completely prohibited as there are some circumstances where their application is justified. In the case of the automotive industry, economies of scale are crucial for the survival and future viability of the

industry. A temporary adjustment scheme is necessary to complement the zero tariff environment in order to:

- improve industry competitiveness
- encourage investments
- expand domestic market and encourage exports in market segments where we are closest to being internationally competitive
- allow the industry to create a niche in the global market and actively participate in the production networks of foreign automakers.

In designing adjustment schemes, the government should be guided by the above principles. Incentives should be provided **only to potentially viable domestic manufacturing firms** that are deemed capable of adjusting.

Aside from an incentive adjustment scheme, a complete package of technical, financial, marketing, and human resource development for the auto parts sector which are mainly small and medium enterprises and programs to strengthen and link our local parts and components with MNCs. Government support to SMEs should not be through increased tariff protection but through the provision of access to capital and technology which are at the root of their underdevelopment. Given the parts suppliers' limited technology and R&D capability, finding technologically fit foreign partners will be important. Active participation of the industry association will be needed in matchmaking or linking domestic firms with MNCs.

Programs linking domestic parts suppliers not only with domestic assemblers but also with MNCs and their production networks will also be crucial. One way to develop internal and external linkages is through the development of clusters in the industry. Clusters are important in improving firm competitiveness and broadening the local supply base. Increased involvement and commitment from both the government and other industry members in the "ECOP-Big Enterprise, Small Enterprise" (EBESE) Program will be needed to make it more sustainable.

These comprehensive measures are necessary to strengthen the automotive assembly and parts industry and enable it to take advantage of the opportunities arising from globalization in general and the AFTA in particular. Since the zero tariff under the AFTA-CEPT is barely two years away, implementing these adjustment measures at the earliest time is extremely important. With the correct strategy and its effective implementation along with serious industry commitment to rationalize operations, the Philippine automotive industry can be strengthened. Once developed, the industry can create spill-over effects on the manufacturing industry and improve its backward linkages with many other sectors.

To realize all these, a strong and capable government unit that will implement a more coherent and well-coordinated set of policies for the industry is a necessary condition. Strengthening and building the capacity of the BOI's motor vehicle division would be one important step in this direction.

References

Aldaba, R. (2008) "SMEs in the Philippine Manufacturing Industry and Globalization: Meeting the Development Challenges", Chapter 8 in ERIA Research Project Report 2007 No. 5, *Asian SMEs and Globalization* edited by Hank Lim, March 2008 IDE-JETRO, Japan.

_____. (2007) "Assessing the Competitiveness of the Philippine Auto Parts Industry", Philippine Institute for Development Studies (PIDS) Discussion Paper 2007-14.

Franse, Ricardo (2006) "The Response of an Original Equipment Manufacturer to the Motor Industry Development Programme: A Case Study" Masters thesis, Rhodes University, South Africa.

Gimenez, A. (1994) "An Assessment of the Automotive Parts Manufacturing Industry in the Philippines" an unpublished report.

Manuzon, Maricar T. (2002), "No Two Ways About It The country needs to harmonize rules on used vehicle imports" Philippine Business Magazine: Volume 9 No. 6.

Kohpaiboon, A.(2006), "Thai Automotive Industry: Multinational Enterprise and Global Integration", paper submitted to the World Bank Office (Thailand).

Poapongsakorn, N and Chayanit Wangdee (2004), "The Thailand Automotive Industry", Thailand Development Research Institute, Bangkok.

Tenorio, A. and L. Lugo (August 1, 2002), "Automotive Parts Making: A Dying Industry", Business World.

Techakanont, K. (2007) "Development of Supporting Industries and Agglomeration of Automotive Cluster in Thailand", a paper presented at the JBIC International Symposium on "Promoting Regional Linkage to Enhance Asia's Competitiveness and Dynamism", Jakarta, Indonesia, 30-31 August 2007.

The Economist Intelligence Unit (2005), "Country Outlook", February, 2005.

The Industry Commission (1997), "The Automotive Industry" Volume 1: Report and Volume II: Appendices, Melbourne, Australia.

Yamamoto (2006) "Benchmark Survey Project Competitiveness of ASEAN vs. China vs. India on Auto Parts Industry." Powerpoint Presentation.

Annex 1

JPEPA Tariff Rates

A: customs duty eliminated as from the date of entry into force of Agreement

S: customs duties shall be as provided for in the terms and conditions set out in the note

Note 3: (a) Philippines may apply import duties specified in Annex A of EO 418 (imposed a specific duty of P500,000 in addition to the ad valorem duty on used vehicle imports), as may be amended, on used vehicles in addition to customs duties as indicated in column 4. (b) The Philippines shall follow its normal domestic procedures in any amendment of EO 418, and shall notify Japan of the amendment of EO 418 in 60 days advance of its publication. (c) on the request of either party, the parties shall negotiate on issue such as market access conditions on used motor vehicles.

Note 4: (a) (i) the customs duty for the originating goods which are not specified for the application of import duties in EO 262 shall be eliminated as from the date of entry into force of the Agreement. (ii) the customs duty for the originating goods which are specified for the application of import duties in EO 262 shall be eliminated as follows:

(aa) the MFN applied rate at the time of importation in accordance with EO 262 as from the date of entry into force of the Agreement.

(bb) free as from Jan 1, 2010.

Notwithstanding the above provisions of this subparagraph, on the request of the importing party, the parties shall negotiate on the delay of the elimination of the customs duty on the originating goods and agree on a schedule of such elimination. The negotiation shall be requested and initiated in 2009.In no case shall the date of elimination be later than Jan 1, 2013.

Note 6: The rate of customs duty shall be reduced as follows:

(i) 29% as from date of entry into force of Agreement
(ii) 26% as from Jan 1, 2007
(iii) 23% as from Jan 1, 2008
(iv) 20% as from Jan 1, 2009.

The parties shall negotiate on further reduction or elimination of the customs duty on the originating goods and agree on a schedule of such. The negotiation shall be initiated in 2009.

Note 7: (a) the customs duty shall be eliminated as follows:

(i) 30% as from the date of entry into force of Agreement
(ii) Free as from Jan 1, 2010

Notwithstanding the above provisions of this subparagraph, on the request of the importing party, the parties shall negotiate on the delay of the elimination of the customs duty on the originating goods and agree on a schedule of such elimination. The negotiation shall be requested and initiated in 2009.In no case shall the date of elimination be later than Jan 1, 2013.

The request referred to in subparagraph (a) above shall be made on condition that investments for new commercial operations in the Phils in the segment of passenger vehicles of a cylinder capacity exceeding 3000 cc are actually made within the period from Dec 31, 2005 to the time of such request in any of the following forms:

(i) production expansion
(ii) introduction of a new model, or
(iii) introduction of a new production line.

Note 8: The rate of customs duty shall be reduced as follows:

(i) 29% as from date of entry into force of Agreement
(ii) 26% as from Jan 1, 2007
(iii) 23% as from Jan 1, 2008
(iv) 20% as from Jan 1, 2009
(v) free as from Jan 1, 2010

Notwithstanding the above provisions of this note, on the request of the importing party, the parties shall negotiate on the delay of the elimination of the customs duty on the originating goods and agree on a schedule of such elimination. The negotiation shall be requested and initiated in 2009.In no case shall the date of elimination be later than Jan 1, 2013.

Note 9: The rate of customs duty shall be reduced as follows:

(i) 19% as from date of entry into force of Agreement
(ii) 18% as from Jan 1, 2007
(iii) 17% as from Jan 1, 2008
(iv) 15% as from Jan 1, 2009
(v) free as from Jan 1, 2010

Notwithstanding the above provisions of this note, on the request of the importing party, the parties shall negotiate on the delay of the elimination of the customs duty on the originating goods and agree on a schedule of such elimination. The negotiation shall be requested and initiated in 2009.In no case shall the date of elimination be later than Jan 1, 2013.

Note 10: The rate of customs duty shall be reduced as follows:

(i) 14% as from date of entry into force of Agreement
(ii) 13% as from Jan 1, 2007
(iii) 12% as from Jan 1, 2008
(iv) 10% as from Jan 1, 2009
(v) free as from Jan 1, 2010

Notwithstanding the above provisions of this note, on the request of the importing party, the parties shall negotiate on the delay of the elimination of the customs duty on the originating goods and agree on a schedule of such elimination. The negotiation shall be requested and initiated in 2009.In no case shall the date of elimination be later than Jan 1, 2013.

Annex 2

List of Persons Met/Interviewed for the Paper

1) Meetings/Plant Tour at Toyota Motor Philippines Corporation

Names of Persons Met	Company Name
Mr. Hiroshi Ito	President Toyota Motor Philippines Corporation
Dr. David Go	Director, Senior Executive Vice President, Treasurer Treasury Division Manager & General Administration Division Manager
Attorney Rommel Gutierrez	Vice President Management Services Office and Corporate Planning Group
Mr. Jose Maria Aligada	First Vice President General Administration and Manufacturing Division
Mr. Leodivigis Gilbuena	Vice President Information and Systems Department and Corporate Planning Group
Mr. Joseph Matthew Sobrevega	Industrial Relations Manager

2) Meetings/Plant Tour at Ford Group Philippines

Names of Persons Met	Company Name
Mr. Henry Co	Chairman Ford Group Philippines
Ms. Florina Vistal	Vice President Corporate and Government Affairs

3) Meetings/Plant Tour at Honda Cars Philippines, Inc.

Names of Persons Met	Company Name
Mr. Alfredo Magpayo	SVP and Treasurer
Ms. Armenia Ballesteros	Department Head Management Services

4) Other Industry Executives

Names of Persons Met	Company Name
Mr. Melchor Dizon	Vice President
Mr. Kazuhiko Sho	Executive Vice-President Isuzu Philippines Corporation
Ms. Richard Baker	President Ford Group Philippines

5) Meetings/Plant Tours in Thailand

Meeting at the Thailand Automotive Institute, Samutprakarn (15 November 2007)

Name of Person Met	Company Name
Mr. Vallop Tiasiri	President

Meeting and Plant Tour at Toyota Motor Thailand in Samut Prakarn (15 November 2007)

Names of Persons Met	Company Name
Mr. Shuji Eguchi	General Manager

	Planning Department, Asia, Oceania & Middle East Toyota Motor Corporation, Nagoya, Japan
Mr. Chaipiti Muangkula	General Manager Government Affairs Office Toyota Motor Thailand
Mr. Surachai Surabunchakarn	Manager Government Affairs Office Toyota Motor Thailand
Ms. Duangchai Oden	Assistant Manager Government Affairs Office Toyota Motor Thailand

Meeting and Plant Tour at Yarnapund Public Company Limited Automotive Genuine Parts Factory in Samutprakarn (15 November 2007)

Names of Persons Met	Company Name
Mr. Samphan Phanpanit	President
Mr.Suraphant Kankhetr	Executive Director of Marketing
Mr. Taweesak Nimsakul	Marketing Department Manager

Meeting at Ford Office in Klongtoey, Bangkok (16 November 2007)

Names of Persons Met	Company Name
Mr. Liam Benham	Vice President Government Affairs Ford Asia Pacific & Africa
Mr.Trakarn Chindavijak	Manager, Asia Pacific & Africa Government Affairs Ford Motor Company

Company Presentation and Plant Tour at Auto Alliance (A Ford and Mazda Joint Venture) in Rayong (16 November 2007)

Names of Persons Met	Company Name
Dr. Panat Boonkham	General Manager, Quality Division
Mr. Sathirayuth Sangsuwan	General Manager, Human Resources
Ms. Nattpole Khiencharoen	Manager, Vehicle Commodity Supplier Technical Div.
Ms. Swanya Viriyathana	Site Engineer, Quality Division
Ms. Chalita Phungjab	Site Engineer, Quality Division

Company Presentation and Plant Tour at Visteon in Rayong (16 November 2007)

Names of Persons Met	Company Name
Mr. J. Scott Ecie	Director of Manufacturing
Ms. Bencham Kunthong	CBG Program Manager

Company Presentation and Plant Tour at Halla Climate Control (Thailand) in Rayong (16 November 2007)

Names of Persons Met	Company Name
Mr. Somkiart Treeravatananon	Manager Marketing Department
Mr. Sunchai Loyfakhajohn	Quality Assurance Department Manager
Mr. Kititep Leakhawipat	Assistant Manager Marketing Department