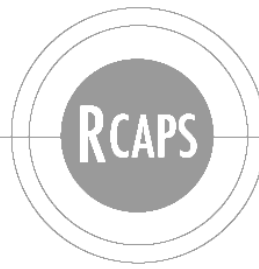


Ritsumeikan Center for Asia Pacific Studies



RCAPS Working Paper Series

RWP-16006

*The Automotive Industry in the Philippines:
Ready for Take-Off Yet?*

March 16, 2017

Kaoru NATSUDA

College of International Management,
Ritsumeikan Asia Pacific University, Japan

&

John THOBURN

School of International Development
University of East Anglia, UK

and

Graduate School of Asia Pacific Studies
Ritsumeikan Asia Pacific University, Japan

The Automotive Industry in the Philippines: Ready for Take-Off Yet?*

Kaoru NATSUDA

College of International Management,
Ritsumeikan Asia Pacific University, Japan

and

John THOBURN

School of International Development
University of East Anglia, UK

and

Graduate School of Asia Pacific Studies
Ritsumeikan Asia Pacific University, Japan

Abstract

This paper explores why the Philippines' automotive industry has been so much less successful than those of its Southeast Asian neighbours, despite its long history of automotive production. We stress policy inconsistency as an explanation, although past policies were successful in developing exports of a few key automotive components. We ask how far the 2015 Comprehensive Automotive Resurgence Strategy (CARS) will be able to rejuvenate the industry. We note that CARS faces challenges from the lack of a diversified local components industry, continued competition from imported second hand vehicles and competition under free trade agreements, particularly with Korea.

Keywords: Philippines, Automotive, Motor Industry, Industrial Policy, WTO

* We are also grateful for research finance from Ritsumeikan Asia Pacific University and the Japan Society for the Promotion of Science (KAHENKI Grant No.15K03496), although the usual disclaimer applies.

1. Introduction

During the last few decades there have been major changes in the location of automotive production towards Asia, as producers have searched for lower labour costs and have moved towards growing sources of demand - and as the domestic markets of North America and Western Europe have neared saturation (Athukorala and Kohpaiboon 2010, 11-12). China in particular has seen large increases in vehicle production, but Southeast Asia has also participated. Within ASEAN (the Association of Southeast Asian Nations), Thailand, and increasingly Indonesia, have become significant regional producers, and even Malaysia, despite its many problems, has a substantial motor industry. Yet the Philippines has been a laggard, with, as we shall discuss, vehicle production in the mid-2010s still below the level reached before the 1997 Asian financial crisis.

What has caused this stagnation in the Philippines? Why did the region's large multinationals, overwhelmingly Japanese, not expand their output along with growing Philippines' domestic demand in the 2000s? What has been the role of industrial policy, and how has policy changed to meet the policy restrictions introduced by the World Trade Organization (WTO) in the 2000s, particularly the WTO's trade-related-investment-measures (TRIMS)?

It is an especially appropriate time to ask these questions since the Philippines has introduced a new policy, starting in 2015, the "Comprehensive Automotive Resurgence Strategy (CARS)" programme. CARS follows a series of rather unsuccessful automotive development policies in the 1970s and 1980s, including the Progressive Car Manufacturing Programme (PCMP) and the Car Development Programme (CDP). The

Philippines government also was later forced under World Bank conditionality to liberalize the automotive industry by reducing tariffs and abolishing import bans on vehicles, and later by removing foreign exchange requirements in 2001 (as the result of negotiation with the United States) and local contents requirements under the WTO in 2003. The industry declined throughout the 2000s.

Despite the lack of success of industrial policies in the Philippines in terms of automotive assembly, certain types of automotive component production such as transmissions and wiring harness, which were established under earlier local content (LC) provisions and foreign exchange requirement policies, have become internationally competitive and serve as an export platform within Southeast Asia.

The CARS Programme hopes to develop the automotive industry by 2022, with a domestic output of over 500,000 vehicles. Certainly the Philippines' economy is expected to grow in the future, but the CARS programme faces various challenges such as low LC ratios, competition from imported second hand vehicles, and from cars imported under free trade agreements (FTAs). What has been the role of industrial policy in this failure, and how has policy changed to meet the policy restrictions introduced by the World Trade Organization (WTO) in the 2000s, particularly TRIMS¹? And now, is the Philippines ready for take-off into motorization in the near future? What are the challenges to the development of the automotive industry in the Philippines? This paper attempts to answer these questions by examining the development of the automotive industry in the Philippines firstly in historical perspective to see how it has arrived at its present situation.

¹ On TRIMS in relation to the automotive industry, see Natsuda and Thoburn (2014).

We then assess the challenges the industry faces, paying attention to the differences between local automotive assembly and domestic production of components. We draw on interviews conducted in the Philippines in 2014 and 2015, and on secondary sources both in English and Japanese.

The paper is organized as follows: the next section sets out an overview of the automotive industry in the Philippines. The third section looks at the structure of the automotive industry in the Philippines. The fourth section presents automotive industrial policy in the Philippines. The fifth section examines competitiveness and challenges to the automotive industry in the Philippines and the sixth section concludes.

2. The Automotive Industry of the Philippines in its Southeast Asian Context

The Philippines has a long history of vehicle production. In the mid-1970s, both vehicle production and sales were almost equal to those of Malaysia, though only at about 50,000 units. Vehicle production in the Philippines was larger than that of Thailand (see Table 1). There was no significant difference among ASEAN-4 countries except for Thailand's relatively large net vehicle imports up to the 1980s. In the 1990s before the Asian Crisis of 1997, both vehicle production and sales had increased rapidly and reached over 350,000 units in the these three countries, while the growth of the Philippine had been slower, rising to only 110,983 units of production and 144,435 of sales in 1997.

Table 1 Production and Sales of Vehicles in ASEAN Countries

Country	1975/76	1997	2014
---------	---------	------	------

	Production	Sales	Production	Sales	Production	Sales
Philippine*	51,265	51,265	110,983	144,435	86,218	269,095
Thailand	30,981	78,117	360,303	363,156	1,880,007	881,832
Malaysia	51,885	50,783	449,765	404,837	595,134	666,465
Indonesia**	75,570	72,438	389,279	386,691	1,298,523	1,208,019
Vietnam***	-	-	-	-	120,000	140,000

Source: Fourin (1994, 2015)

Note: Unit – number of vehicles

* Philippine’s 2014 production data from CAMPI (Interview on 6 February 2015)

** Indonesian data is 1976 (not 1975)

***Estimated data from Ministry of Industry of Vietnam (Interview 2015 March)

Most recently, Thailand and Indonesia have become major vehicle producing countries, accounting for over 1.8 million vehicles and nearly 1.3 million vehicles, respectively, in 2014. Thailand employed a series of automotive industrial policies (by selecting product champions) and successfully boosted the growth of the industry as an export platform for pick-up trucks and compact passenger vehicles (Eco-cars) in Southeast Asia (Natsuda and Thoburn 2013, 2014). In Indonesia, the automotive industry has developed along with the expansion of its large domestic market, and more recently by employing industrial policy through targeting low cost green cars (LCGC) (Natsuda et al. 2015, Thoburn and Natsuda 2017). In contrast with these countries, the Malaysian automotive industry has seen limited foreign investment. The Malaysian government launched national car projects such as Proton and Produa in the 1980s and 1990s, employing strongly discriminatory policies against foreign assemblers and parts suppliers. Although these policies have been revised under the WTO, the Malaysian automotive policies still have protectionist elements in order to protect national car producers, particularly Proton (Natsuda et al. 2013, Otsuka and Natsuda 2016, Segawa et al. 2014, Natsuda and Thoburn 2014). Even

the newly producing country in the region, Vietnam,² has already overtaken the Philippines in production. In 2014, the Philippine produced only 86,218 vehicles, and locally produced vehicles accounted for merely 32% of domestic sales vehicles (see Table 1), indicating substantial net imports.

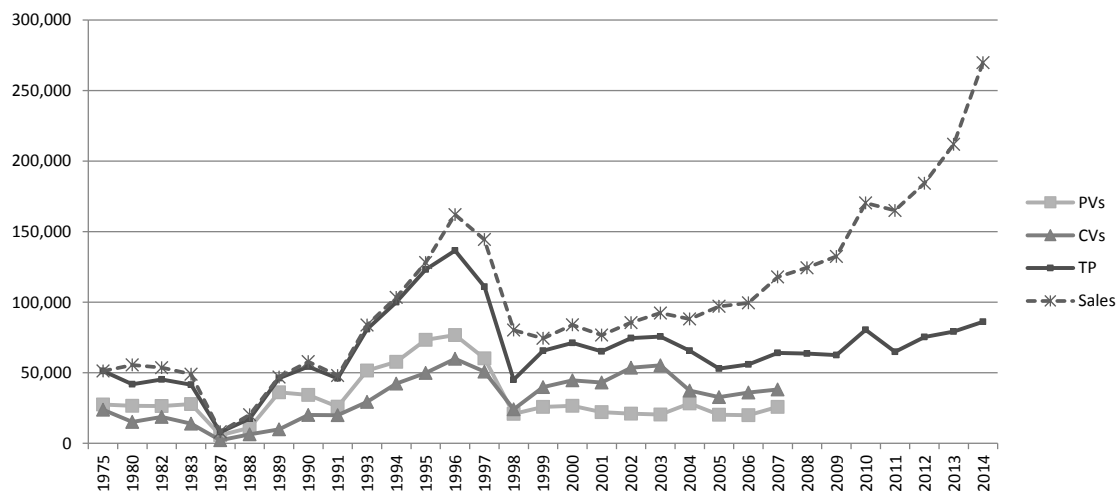
Figure 1 indicates the total number of vehicles produced and sold in the Philippines in the period of 1975-2014. It is worth noting that, unlike Thailand, Malaysia and Indonesia, vehicle production has never surpassed sales of vehicles in the Philippines: the Philippines always has been a net vehicle importer. The Philippines' vehicle production developed, albeit slowly, in the 1970s. The industry subsequently was damaged by political upheaval and economic crisis in the early 1980s³; and production dropped to only 7,905 units in 1987, the lowest ever. The Philippine's vehicle production started growing from the late 1980s to the mid-1990s and reached its peak of 136,556 units in 1996. However, the Asian Crisis caused a serious market slump, and production dramatically declined to 45,040 units in 1998. Although vehicle production has slowly recovered since 1998, it still remains low and has never reached its pre-Asian Crisis level.

Both production and sales had almost similar volume and trends until the mid-1990s. However, sales of vehicle have increasingly surpassed production since 1996, as net imports have risen. Vehicle sales has grown 2.7 fold in the period of 2006-2014.

Figure 1 Number of Vehicle Produced and Sold in the Philippines, 1975-2014

² We do not say much else about Vietnam in this paper as it is a relatively new producer. Some material on Vietnam can be found in Thoburn and Natsuda (2017).

³ The collapse of the Marcos government seriously damaged the industry (see Doner 1991 Chapter 7).



Note: PVs (Passenger Vehicles), CVs (Commercial Vehicles), TP (Total Production)
 Source: Fourin (1994, 2008, 2015)

3. The Structure of the Philippines’s Automotive Industry

Among the four well-established major automotive producing nations in ASEAN, the Philippines’ automotive industry has the smallest number of assembly plants, parts suppliers and employment among (see Table 2).

Table 2 Number of Assemblers, Part Suppliers and Employment in the Philippines, Indonesia, Thailand, and Malaysia

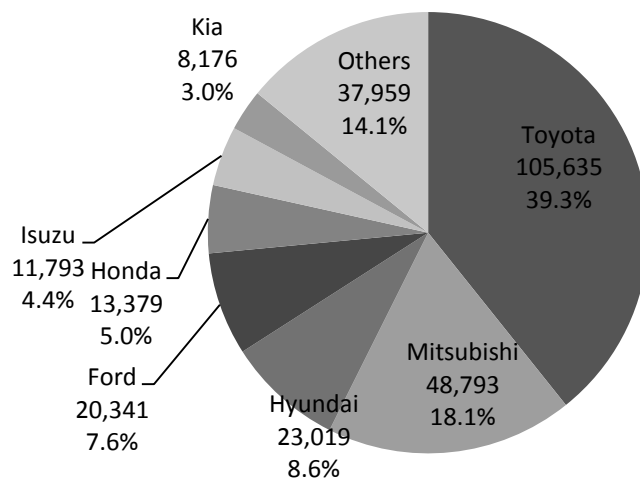
	Number of Assemblers	Number of Parts Suppliers	Employments in Assembly and Parts industries	Dealers, after Service etc..
Philippines	11	256	66,800	-
Indonesia	20	1,550	445,000	804,000
Thailand	16	2,390	525,000	-
Malaysia	11	550	250,000	300,000

Note: Fourin (2015) and data supplied by CAMPI (2015)

According to the Chamber of Automotive Manufactures of the Philippines (CAMPI), the Philippine’s automotive industry produced 86,845 units in 2014. Of these, Toyota

produced 41,403, constituting 47% of locally produced vehicles in the Philippines in 2014.⁴ There were 11 assemblers, approximately 90 Tier-1 parts suppliers (60% of which were joint ventures, 30% foreign, and 10% local), and 175 Tier- 2&3 suppliers (100% local firms) in 2015. In terms of market share (the total sales of 269,095 units in 2014), Toyota accounted for 39.3%, followed by Mitsubishi, Hyundai and Ford (see Figure 2).

Figure 2. Sales of the Vehicle by Brand in the Philippines in 2014



Source: Fourin (2015)

The Philippines is the only country in the ASEAN-4 where non-Japanese automotive producers such as Hyundai and Ford are ranked in the top 5 brand vehicles in the market share. It is worth noting that Hyundai does not own a production base in the Philippines, but their presence has become more significant in recent years. Indeed, Hyundai has been increasing its market share in lower income ASEAN countries such as Vietnam and Cambodia too by introducing small passenger vehicles (PVs) in recent years. In the case

⁴ Interview with the president of CAMPI (6 February 2015)

of Ford, it had long committed itself to the Philippines as its strategic production location in Southeast Asia. However, Ford withdrew from the country in 2012, and has been expanding its production capacity in Thailand.

4. Automotive Industrial Policy in the Philippines

4.1 Before the WTO policy regime

The early development of the automotive industry was based on the importation of completely-built-up (CBU) vehicles mainly from the United States until 1950. Due to the depletion of foreign reserves, the government of the Philippines introduced a policy to prohibit importation of CBU vehicles, by amending the Import Control Law of 1950. Under this scheme, the importation of components for completely-knocked-down (CKD) vehicle kits was only allowed for assemblers which were given a foreign currency allocation (Quimba and Rosellon 2012). The import ban on CBUs forced automotive manufacturers to establish their own plants to assemble imported CKD kits (Ofreneo 2016). Simultaneously it provided business opportunities for local entrepreneurs in the Philippines to diversify their business into automotive assembly by forming joint ventures with foreign producers such as those of Delta with Toyota, Francisco Motor with General Motors (GM), and DMG with Volkswagen (VW) (Doner 1991). Although the market in the Philippines was relatively small and fragmented with a demand of only 10,000 units, the automotive industry had 29 assemblers, producing 60 models in 1968 (Albada 1997, 3). The import ban and foreign exchange controls were eventually abolished and replaced with high tariffs of over 100% under the Diosdado Macapagal administration in the 1960s (Ofreneo 2008, 9).

The PCMP Programme in 1973

The Philippines' first formal automotive industrial policy, the Progressive Car Manufacturing Programme (PCMP) aimed at three main objectives: i) to achieve foreign currency saving by manufacturing automotive parts domestically, with the aim of raising local content from 10% in 1973 to 60% by the end of 1976 ii) to enhance manufacturing activity in small and medium sized enterprises (SMEs) through subcontracting and technology transfer; and iii) to facilitate exports of automotive parts in a regional automotive complementation programme (Aldaba 2000, 2). Under the scheme, the importation of CBU vehicles was banned again. Furthermore, in order to rationalize the industry, the number of registered firms allowed to import CKD kits, was limited to only five assemblers including Delta Motor (Toyota), Ford, PAMCOR (Mitsubishi), Franciso (GM), DMG (Nissan) in the Philippines (Albada 1997, 4; Ofreneo 2008, 68). Additionally, a Progressive Truck Manufacturing Programme (PTMP) for commercial vehicle production and a Progressive Manufacture of Automotive Diesel Engines (PMADE) for the localization of truck engine production were introduced in 1977

In retrospect, the most important aspect of the PCMP programme was that it created the foundation of the current auto parts export capacity in the Philippines. The programme forced the participants to make investments in the production of their own components. Thus, Mitsubishi established the Asia Transmission Corporation (ATC), Toyota established an engine plant, Nissan invested in a press-forming facility to manufacture engine parts, Ford established Ford Ensite for car body stamping, GM invested in engine transmission production. The number of parts suppliers increased from 32 firms in 1974 to more than 200 in the late 1970s (Ofreneo 2008, 68-69). Nonetheless, the PCMP

turned out to be a disappointment in terms of overall localization progress as well as rationalization of the industry (see Doner 1991, Chapter 7), despite the development of some component production. Although local content was reported to have increased from 34% to 43% in the period of 1978-1983, these figures were not accurate. In fact, the local value added element of total vehicle content was small due to a lack of local supporting industries such as steel mills and plastics (Albada 1997, 4).

The PCMP was ended as a result of political upheaval followed by economic crisis in the early 1980s, and vehicles sales significantly decreased from 48,954 units in 1983 to only 4,335 units in 1986 (Fourin 1993, 204). At this time, automotive assemblers, all highly dependent on imported components, could not access foreign exchange due to the government's imposition of a foreign exchange ban in 1983. Consequently, many assemblers such as Ford, GM and Toyota withdrew from the programme, and only two assemblers such as Mitsubishi and Nissan remained in the country. As a result, the number of components suppliers decreased from 220 firms in 1978 to 40 firms in 1984 (Aldaba 1997, 4-5). The inconsistency of government policy also was a major problem in the industry. Under the PCMP, Renault and Mercedes were allowed to import CBU vehicles without establishing an assembly plant. Worse, some CBUs were even imported tax-free under the Marcos Administration. DMG (Nissan's local partner) was taken over by one of the Marcos' cronies (Ofreneo 2008).

The Car Development Programme (CDP) in 1987

In order to revitalize the automotive industry in the Philippines, the Aquino government replaced PCMP with the CDP. The CDP aimed to develop PVs of less than 2,800cc, and

to increase the local content of assembled vehicles, earn and save foreign exchange, create employment, and develop local supporting industry (Quimba and Rosellon 2012). Four characteristics can be identified in the programme. Firstly, the CDP continued to ban import of CBU vehicles. Secondly, the CDP limited participation: only three assemblers: Mitsubishi, Nissan, and Toyota (which withdrew from the market in 1985 and came back in 1988), were allowed to join the programme. Thirdly, the CDP imposed on assemblers the requirement to earn from revenues derived from exports 50% of their foreign exchange needs for their CKD imports. Fourthly, the CDP obliged the participants to comply with minimum LC requirements which increased annually from 32.26% in 1988, to 36.58% in 1989, then to 40.0% in 1990 (Aldaba 2000, 3; Fourin 1994, 206).

In parallel with the CDP, the government also introduced a Commercial Vehicle Development Programme (CVDP), replacing the PTMP, in 1987. The CVDP aimed to facilitate locally produced commercial vehicles such as the Asian Utility Vehicles (AUVs)⁵, light commercial vehicles (LCVs), trucks and replacement parts and components (Aldaba 2000, 3). The CVDP also employed LC requirements by classifying four types of commercial vehicles (see Table 3). Like CDP, the CVDP banned imports of CBU vehicles. Category I assemblers were allowed to import AUVs only on a component basis, while the other category assemblers were entitled to import only as CKDs (Aldaba 2000, 4). In addition, AUVs were exempted from excise tax until 2003 (Aldaba 2000, 11; Ofreneo 2008, 74).

⁵ An originally Philippine-designed (or similarly designed) LCV with a higher local content than normal LCVs.

Table 3 Local Content Requirement in CVDP, 1988-1990

Commercial Vehicle Category	1988	1989	1990
Category I: AUVs up to 3,000 kg gross vehicle weight (GVW)	43.10	51.21	54.86
Category II: LCVs up to 3,000 kg GVW	35.62	41.69	44.42
Category III: Vehicles from 3,001 kg to 6,000 kg GVW	16.83	20.33	21.90
Category IV: Vehicles from 6,001 kg to 18,000 kg GVW			
a). 6,001 kg to 9,000 kg GVW	16.50	19.91	21.44
b). 9,001 kg to 12,000 kg GVW	17.00	20.64	22.24
c). 12,001 kg to 15,000 kg GVW	10.69	12.65	13.53
d). 15,001 kg to 18,000 kg GVW	10.87	12.87	13.77

Source: Aldaba (2000, 3-4)

CDC Revision: the People's Car Programme of 1990 and the Luxury Car Programme of 1992

The government of the Philippines targeted the development of small passenger vehicles with gasoline engines of less than 1,200 cc, the so-called 'People's Car', by amending the CDP in 1990. Under this scheme, the government imposed three requirements. Firstly, the price ceiling was set at 175,000 peso (later increased to 220,000 peso in the last quarter of 1990, 235,400 peso in 1991, and finally to 300,000 peso in the mid-1990s). Secondly, local content requirements were also targeted at 35% in 1991 and finally at 51% in 1993. Thirdly, automotive producers had to earn at least 50% of the foreign exchange for their own import requirements by exporting automotive or non-automotive products. Furthermore, participants in the scheme were required to invest at least 200 million peso in production of their main components (Aldaba 2008, 3). Under the PCP, seven assemblers: Italcara (Fiat), Honda, Asian Car Makers (Daihatsu), Nissan, Mitsubishi, Columbian Autocar (Kia), and Transfarm (Daewoo) were registered. Although most of assemblers were not profitable under the PCP scheme due to the price ceiling, they were

looking for a shift to the main category, to which became eligible after one year of operation (Aldaba 1997, 5-6). Indeed, five assemblers out of seven moved to the main category (Abrenica 1996, cited in Aldaba 1997, 6); subsequently the automotive market in the Philippines became overcrowded with too many assemblers and models for a relatively small market.

Similarly, in the two years after the PCP programme, the government of the Philippines aimed to develop luxury passenger vehicles with engine size of above 2,800cc, by amending the CDP in 1992. This scheme allowed Volvo and Daimler Benz to enter the market. In addition, the CDP was again revised for the entry of new assemblers under the ASEAN Industrial Joint Venture (AIJV) Scheme, which allowed Malaysia's Proton to enter the Philippines market in 1994. Consequently, the participants in CDP increased from 3 firms in 1987 to 11 firms in 1994. However, the programme was undermined as a result of investment liberalization, which was part of the government's compliance with a structural adjustment programme (SAP) under the World Bank in 1991 (Ofreneo 2008, 71). Under the SAP, tariffs in the automotive industry were forced to be cut from 70% in 1981, 50% in 1982, to 40% in 1993. Tariffs on CKD were much lower, 30% in the 1980s, 20% in 1993-1994, and 10% in 1995 and further 3% in 1996-1997. Indeed, the tariffs on CBUs and CKDs were lowest among in ASEAN-4 countries (ibid., 72), although the lower tariffs on CKDs compared to CBUs meant that the effective rates of protection (that is, protection on value-added) on CBUs were higher than the nominal tariffs indicated.

Deregulation of the Automotive Industry in 1996

In 1996, the government of the Philippines liberalized the automotive industry for the

first time, by issuing Memorandum Order (MO) No. 346 in 1996. It deregulated the importation of all types of passenger cars and commercial vehicles, and also removed restrictions on the number of models (Aldaba 1997 and 2000). On the one hand, the Philippines pursued the liberalization in terms of entry of new models into the country, which was deemed to be of benefit to consumers. On the other hand, the government strengthened performance requirement policies for vehicle assemblers, aiming to localize the automotive industry by gradual increments of foreign exchange and LC requirements by 2000 (see Table 4). From the perspective of vehicle assemblers, there were strong contradictions in government policy. Assemblers had to commit to localization of vehicle production in response to the government's performance requirements; yet imported CBUs were expected to increase in importance in the market, working against localization. CKD kits were available at relatively low tariff rate under the SAP of the World Bank, however, increasing the effective rate of protection on assembly, which had higher tariffs.

Table 4 Local Content and Foreign Exchange Requirements, 1997-2000

Category	LC Requirement	Foreign Exchange Requirement				Requirement for New Entrant
		1997	1998	1999	2000	
PV I	≥40%	7.5%	7.5%	15.0%	15.0%	Min of US\$ 10 million investment for component production
PV II	≥40%	45.0%	50.0%	50.0%	55.0%	
PV II	-	75.0%	75.0%	75.0%	75.0%	
CV I	≥45%	7.5%	7.5%	15.0%	15.0%	Min of US\$ 8 million investment for component production
CV II	≥45%	7.5%	7.5%	15.0%	15.0%	
CV III	≥21.9%	5.0%	5.0%	5.0%	5.0%	
CV IV	≥21.9%	5.0%	5.0%	5.0%	5.0%	
CV V	10.87 -16.5%	5.0%	5.0%	5.0%	5.0%	

Note: PV: passenger vehicle, CV: commercial vehicle; category I-IV are same as Table 1.

PV1: with engine of 1,200 cc or below and with a price determined by the BOI

PV2: with engine from over 1,200 cc to 2,190cc

PV3: with engine of over 2,190 cc

CV V: Over 18,000 kg GVW

Source: Fourin (1999, 133)

Table 5 Tariff, Excise Tax and VAT Structure for CKD and CBU in 1999

Type of vehicle			CKD			CBU		
			Tariff	Excise	VAT	Tariff	Excise	VAT
P V	Gasoline	ED ≤ 1600cc 1600cc < ED ≤ 2000cc 2000cc < ED ≤ 2700cc 2700cc ≤ ED	7% in 1998 10% in 1999	15% 35% 50% 100%	10%	40%	15% 35% 50% 100%	10%
	Diesel	ED ≤ 1800cc 1800cc < ED ≤ 2300cc 2300cc < ED ≤ 3000cc 3000cc ≤ ED	7% in 1998 10% in 1999	15% 35% 50% 100%	10%	40%	15% 35% 50% 100%	10%
C V	Van	Up to 9 passenger Over 10 passengers	(PV) 3%	(PV) 0%	10%	40% 20%	(PV) 0%	10%
	Trucks	Gasoline engine Diesel engine	3%	0%	10%	40% 20%	0%	10%
	Bus	GVW ≤ 18t 18t < GVW	3%	0%	10%	20% 20%	0%	10%
	4WD	Up to 9 passenger Over 10 passengers	(PV) 3%	(PV)	10%	40% 20%	(PV) 0%	10%
	SPV	Ambulance etc.	3%	0%	-	10%	0%	10%

ED: Engine Displacement, (PV) : same as PV rates

Source: Fourin (1999, 133)

Not long after the liberalization policy was introduced, the industry was in trouble again due to the Asian Crisis of 1997-1998. Vehicle sales of 162,087 units in 1996 dropped to 80,231 units in 1998. Correspondingly, vehicle production decreased from 136,556 units in 1996 to only 45,040 units in 1998 (see Figure 1). Many workers lost their jobs due to downsizing by assemblers and part suppliers. In order to recover from the Crisis, the tariff on PV CKD kits was increased from 7% in 1998 to 10% in 1999 (see Table 5). However, this rate was still much lower than that of other ASEAN countries, which were in the 33-80% range. Consequently, imported CKD kits were used for assembling in the Philippines, instead of locally produced components (Ofreneo 2008, 73). The World Bank's

liberalization policy thus appears to have hindered the localization of the Philippines automotive industry.

4.2 Under the WTO Regime

Liberalization and the Automotive Export Programme of 2003

As mentioned already, the government of the Philippines employed various performance requirements such as for local content and foreign exchange as a core automotive industrial policy. However, these performance requirement policies clearly violated the WTO's TRIMS rule, due to be implemented from the year 2000. After the Asian Crisis, although the government appealed in October 1999 on the grounds that the Philippines had not recovered from the crisis fully and requested a 5 year extension of the transition period, only a 3 year extension was approved by the WTO.⁶ Eventually, the Philippines phased out LC requirements in July 2003 (Fourin 2004, Ofreneo 2007, Quimba and Rosellon 2012).

In order to enhance the competitiveness of the automotive industry, the government of the Philippines introduced an Automotive Export Programme (AEP), which granted a preferential tariff privileged package as an export incentive under Executive Order (EO) 244 in October 2003 (effective for 5 years). The incentive was provided through a reduced tariff rate on CBU vehicles that the assembler imported into the Philippines. It was set at US\$400 per unit (of minimum of US\$5,000 of export value per unit) in the first and second year of the programme, followed by US\$300 in the third year, US\$200 in the

⁶ Foreign exchange requirements were abolished in 2001 as the result of negotiation with the United States (see Ofreneo 2007, 99).

fourth year and finally US\$100 in the fifth year (Albada 2007, 6-7). With the introduction of the programme, the government aimed at 200,000-250,000 units of production (150,000-200,000 units of local sales and 50,000-100,000 units of export) by 2007 (Fourin 2004). In response to the programme, Ford made an export plan of 100,000 units in the period of 2004-2008 and strengthened their export operation in the Philippines. However, the participation was very low – none except for Ford. In this regard, the government of the Philippines was unsuccessful in creating CBU export capacity. In fact, vehicle production decreased by over 12,000 units (from 75,659 units to 62,523 units) in the period of 2003-2009. Ford itself exported four models (Focus, Escape, Mazda Tribute, and Mazda 3 sport utility vehicles) to Thailand and Indonesia under the programme (Rosellon and Medalla 2012). In fact, Ford eventually closed down their production and withdrew from the Philippines in 2012, and relocating to Thailand. One of the main reasons for the failure of this programme is that the policy could not successfully attract Japanese automotive FDI in competition with Thailand. At that time Thailand, under its ‘Detroit of Asia’ plan - aiming to enhance the export capacity of the Thai automotive industry - introduced its ‘New Automotive Investment Policy’ in 2002. After this, Japanese automotive assemblers as well part suppliers made massive investments in Thailand, which led the country to become a regional export platform as well as a major world automotive producer. Vehicle production in Thailand doubled from approximately 600,000 units in 2002 to 1.2 million units in 2006, of which 50 percent were exported (Natsuda and Thoburn 2013).

In parallel to AEP, the government of the Philippines revised the automotive excise tax system, shifting from the size of engine displacement to vehicle price in October 2003

(see Table 6). However, the government of the Philippines again introduced policies which discouraged domestic automotive production. Two problems can be identified. Firstly, the lowest category of small compact cars was set at a low 2% of excise tax based on the idea of affordability for the country's rising middle class. However, these vehicles were not assembled locally, but imported from other ASEAN countries, particularly Thailand (Ofreneo 2008, 73-74). In short, excise tax reform facilitated the importation of CBU vehicles, rather than encouraging locally produced CBU vehicles. Secondly, excise tax was imposed on AUVs for the first time from September 2003, having been previously exempted. AUVs were classified under the lowest category of CVs. These models enjoyed fiscal incentives and accounted for a high market share until the early 2000s (ibid.). Following the excise tax imposition, AUV models, which accounted for 41.9% of the market in 2002 decreased in share to about 27% after 2004. Consequently, one Japanese assembler scrapped its 200,000 unit production plan in the Philippines, which had aimed at using AUVs as their strategic export model (Fourin 2006, 339). Although AUVs had relatively high local content ratio at that time, their production was discouraged by this fiscal policy reform.

Table 6 Excise Tax System in October 2003

Vehicle Price (Peso)	Excise Tax
Up to 60,0000	2%
600,001 – 1,100,000	12,000 + (vehicle price – 600,000) x 20%
1,100,001-2,100,000	112,000 + (vehicle price – 1,100,000) x 40%
Above 2,100,000	512,000 + (vehicle price – 2,100,000) x 60%

Fourin (2008, 236)

The CARS Programme of 2015

Industrial policy in the automotive sector over the decade after AEP in 2003 was noticeable in the Philippines by its absence. During the period 2003-2014 import penetration greatly increased: although sales of vehicles nearly tripled, production increased by only 14%. Indeed, vehicle production in 2014 was still more than 50,000 units lower than the peak of 1996. In order to revive the industry, the government of the Philippines has been teaming with the private sector since 2012 up to develop a roadmap “Philippines Automotive Manufacturing Industry Roadmap” (Llanto and Ortiz 2015). Then in 2015, EO 182 or the so-called “Comprehensive Automotive Resurgence Strategy (CARS)” was approved on 29th May.⁷ The objective of the programme is to increase competitiveness in the automotive industry through facilitating increased production volume and localization of the component industry, and generating employment. The programme aims to induce new investments in bulky components and large plastic parts such as body panels, bumpers, instrument panels, head lamps, shock absorbers, and plastic fuel tanks (Gutierrez 2015). It is also expected to generate 20,000 jobs in direct employment. The volume of production is hoped to reach 506,000 units⁸ (350,000 units for domestic and 156,000 units for export) by 2022. Consequently, the market share of locally manufactured vehicles is expected to increase to 70% by 2022 (Llanto and Ortiz 2015, Ofreneo 2016).

⁷ <http://www.gov.ph/2015/05/29/executive-order-no-182-s-2015/> [accessed on 20 May 2016].

⁸ A lot of News paper’s information indicates 600,000 units (without export target). For example, <http://business.inquirer.net/192860/palace-oks-road-map-for-automotive-industry> [accessed on 20 May 2016].

The CARS Programme is limited to the manufacture of three models with body shell assembly and large plastic assembly. Two types of measures can be identified under the programme. The first type is based on fiscal incentives. 4.5 billion pesos in annual tax incentives for 6 years or a total of 27 billion pesos (US\$600 million) over a 6 years will be provided.⁹ It consists of two categories: Fixed Incentive Support (FIS) and Production Volume Incentive (PVI). FIS aims to facilitate parts and components production, covering capital expenditure for tooling, equipment and training costs. PVI aims to encourage vehicle production with eligibility of i) at least of 50% of the assembly by weigh in body shell assembly, and ii) exceeding 100,000 units of production, iii) manufacture of major components in large plastic parts assembly. Incentives are paid through a tax payment certificate that can be used to settle tax liabilities including income, VAT and excise and customs duties.¹⁰ The second type is based on the industry-wide non-fiscal policy support, aiming to foster the domestic market through regulatory reforms and improvement of the policy environment for automotive manufacturing, such as streamlining registration processes, and business matching activities among investors and local parts suppliers (Llanto and Ortiz 2015)

In Southeast Asia, Thailand and Indonesia have introduced strategic automotive industrial policies by employing both supply and demand side strategies. Thailand (as well as Indonesia) provided tax incentives for producers (attracting investments) as a supply side

⁹ <http://industry.gov.ph/cars-programme/> [accessed on 20 May 2016].
<http://business.inquirer.net/192860/palace-oks-road-map-for-automotive-industry> [accessed on 20 May 2016].

¹⁰ <http://industry.gov.ph/cars-programme/> [accessed on 20 May 2016].
<http://opinion.inquirer.net/92487/cars-to-rev-engine-of-manufacturing> [accessed on 20 May 2016].

strategy,¹¹ but, at the same time, both countries provided excise tax or luxury tax reduction for consumers on particular types of vehicle as a demand side strategy. Thus Thailand and Indonesia created *product champions* (to use the Thai terminology) through targeting particular types of vehicle to be produced and promoted locally, namely pick-up trucks and Eco-cars in Thailand and LCGCs in Indonesia (Natsuda and Thoburn 2013, 2014, Natsuda et al. 2015).

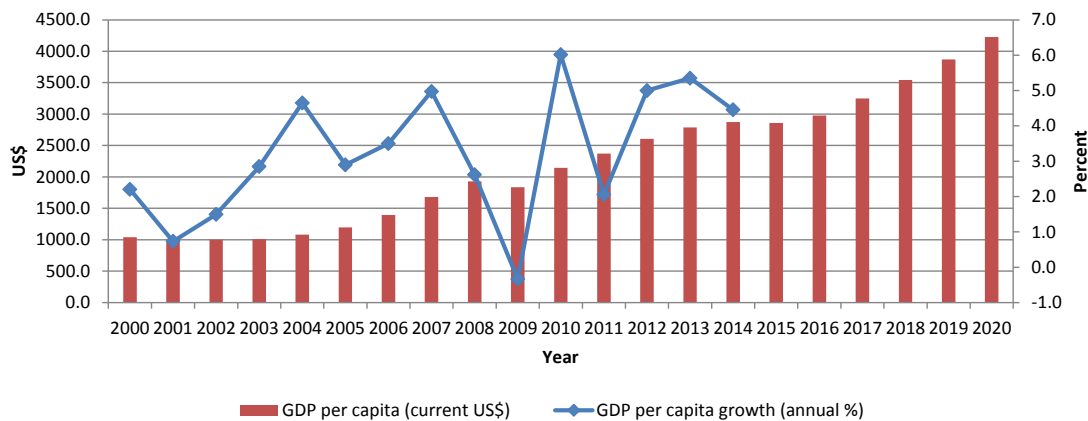
In the case of the Philippines, incentives are given to producers through tax concessions, but not to consumers; in comparison to Thailand and Indonesia, the Philippines lack of a demand side strategy. In other words, there is no market signal for consumers under the CARS Programme in the Philippines. The difference between the Philippines and the others appears to spring from weak state capacity in the Philippines. A high ranking officer in the Department of Trade and Industry (DTI) explained that “Unlike Thailand, it is extremely difficult to revise excise tax in the Philippines, which requires an approval from the national congress, namely a ‘Republic Act’ provision. Instead, the DTI is trying to use EOs as under the CARS programme to enhance the industry. Unlike Thailand, which has more decentralized the authority to ministries (Interview, 13th February 2015

The CARS Programme seems to be based on the expectation of continuous growth in the Philippines’ in the future, with the second largest population in the region. Figure 3 indicates GDP per capita and GDP growth rate in the Philippines. GDP per capita in the Philippines increased from US\$1,039.7 in 2000, \$2,145.2 in 2010, and to \$2,872.5 in

¹¹ In the case of Indonesia, the automotive industry is covered under the normal incentive scheme, not a priority sector.

2014, correspondingly the sales of vehicles grew from 83,949 units in 2000, 17,348 units in 2010, and to 269,842 units in 2014. Our interviewees in Southeast Asia suggest that motorization starts when GDP per capita reaches US\$3,000, which allows the middle class to be able to purchase cars. In the estimation of the IMF (see Table 3), GDP per capita in the Philippines is expected to exceed US\$3,000 in 2017 and continue to grow to over US\$4,000 by 2020. In the case of the neighboring country of Indonesia, its GDP per capita was US\$2,951.7 in 2010 and reached US\$3,494.6 in 2011; correspondingly vehicles sales increased by 45% in the period 2010 (764,710 units) to 2012 (1,116,230 units) (Natsuda *et al.*, 2015). Although socio-economic conditions including the distribution of population in the Philippines differ from those of Indonesia, the Philippines will be surely able to attain a much larger volume of vehicle sales than the current standard, if its economy continues to grow as the IMF expects in the future.

Figure 3. GDP per capita and GDP growth rate, 2000-2020



Note: Figures after 2015 is based on estimation by IMF

Source: World Development Indicator (Database) and World Economic Outlook (Database April 2016)

In response to the CARS Programme, some Japanese automotive producers have shown quite strong interest. Mitsubishi views the Philippines as a core strategic location after Thailand and Indonesia, expanding production capacity in the Philippines (Kurasawa 2014). It seems to be natural for Mitsubishi to commit the Philippines, because the Philippines is the only country where Mitsubishi can maintain a top-three market share in Southeast Asia. Prior to the CARS Programme in 2015, Mitsubishi acquired Ford’s former factory with 50,000 units of production capacity (Fourin 2015, 139). In February 2016, Mitsubishi formally announced their participation in the CARS programme, investing 4,300 million peso to establish a new press factory, and producing small PVs in the Philippines.¹² Similarly, Toyota is also planning to invest 7,600 million peso by replacing imported components from Thailand with local production in the Philippines in order to increase local content ratio (Fourin 2015, 138-139). Though the above two

¹²http://www.mitsubishi-motors.com/publish/pressrelease_jp/corporate/2016/news/detail4959.html [accessed on the 13th May 2016].

producers responded to the programme, an additional 400,000 vehicle production is necessary to achieve the target of the programme by 2022. One of the uncertainties derives from the linkage between local demand and local production. In the case of Thailand and Indonesia, the governments provided a clear market signal to consumers, indicating which type of vehicle to be promoted locally and easily available by reducing excise tax for particular types of vehicle. Under such a demand strategy, local production is more likely to meet local demand. In contrast, the Philippines' CARS programme is based on only the supply side. In this context, the target of over 500,000 unit production might be still uncertain how the local production can meet the local demand in the Philippines, particularly in relation with imported CBUs under the ASEAN Economic Community (AEC) as well as other FTAs.

5. Competitiveness and Challenges to the Automotive Industry in the Philippines

5.1 Components Production and Export

Some of the Philippines' past policies resulted in some positive influences shaping the current Philippine automotive industry. Foreign exchange requirement and local contents requirement policies (abolished in 2001 and 2003, respectively) forced automotive assemblers to establish an export platform for certain components in the region. Thus the Philippines initially established an automotive parts industry under its industrial policy, and later successfully consolidated the industry into regional production networks under regional FTAs such as the Brand to Brand Scheme (BBC) in 1988, followed by the ASEAN Industrial Cooperation (AICO) scheme in 1996, the ASEAN Free Trade Area (AFTA), and most recently the ASEAN Economic Community. Such production networks provide an opportunity for the regional division of labour in Southeast Asia,

specializing on particular components production using economies of scale in each country. On the one hand, such regional agreements have provided an opportunity for the expansion of exports of particular components from the Philippines. On the other hand, the industry generally still remains underdeveloped except for such specialized components, and has failed to diversify its parts industry.

In the Philippines, 11 assemblers and 265 parts suppliers manufacture approximately 330 components. At least 123 firms are located in the Philippine Economic Zone Authority, exporting at least 70% of their products. Of these, the largest 15 exporting firms account for 80% of total automotive export revenue in the Philippines (Sturgeon et al. 2016, 29). The Philippines' auto parts industry consists of metalworking (accounting for 47%), plastic, seats and trim (18%), rubber (15%), allied (13%) and chemical (7%), producing the following components: i) suspension such as tyres, steel rims, aluminum wheels, leaf and coil springs; ii) interior items such as carpets and seats; iii) electrical systems such as wiring harness, batteries, lamps and relays; iv) pressed components including mufflers, radiators, seats, frames, seat adjusters, oil and air filters and pedals; v) rubber and plastic components including fan belts, rubber hoses and small plastic parts; vi) mechanical parts such as transmission and engine parts; vii) cast and forged components including gear blanks, brake disks and brake drums (Albada 2007, 19-20).

During the 1970s, participants in PCMP were required to manufacture components not only for the domestic market, but also for export in order to acquire foreign currencies. Such performance requirements provided opportunities for the Philippines' automotive industry to localize some component productions. Under such programmes, the

Philippines provided labour competitiveness in terms of a combination of labour cost, manual dexterity, and technical skills. For instance, Mitsubishi established Asian Transmission in 1973. Later other firms such as Toyota, Honda and Isuzu followed Mitsubishi’s strategy to produce and export transmissions in the Philippines, particularly under the AICO, aiming to create regional parts complementary capacity in the 1990s. In general, Japanese manufacturers believed that workers in the Philippines were suitable in terms of manual dexterity and technical skills to assemble the numerous tiny gear parts (such as seals, springs, shafts, interlock assemblies) that make up the gear box (Ofreneo 2016). These assemblers established a parts manufacturing firm (transmissions), separately from assembling operation and export to other ASEAN countries as well as Japan and other countries (see Table 7). In this context, the Philippines has been playing an important role as a production base in the region.

Table 7 Assembler’s Part Production Firm in the Philippines

Firm	Est. Year	Components and Production Capacity	Main Export Destination
Asian Transmission (Mitsubishi)	1973	MT: 540,000 units Engine: 30,000 units	Export to ASEAN countries, Japan and Taiwan
Toyota Autoparts Philippines	1992	MT: 330,000 units CVJ: 200,000 units	Export to Asian countries and South Africa
Honda Parts Manufacturing	1992	MT: 140,000 units	Export to ASEAN countries and EU
Isuzu Autoparts Manufacturing	1996	MT: 248,000 units	n.a.

Note: MT-Manual transmission, CVJ - Constant velocity joint, n.a - not available

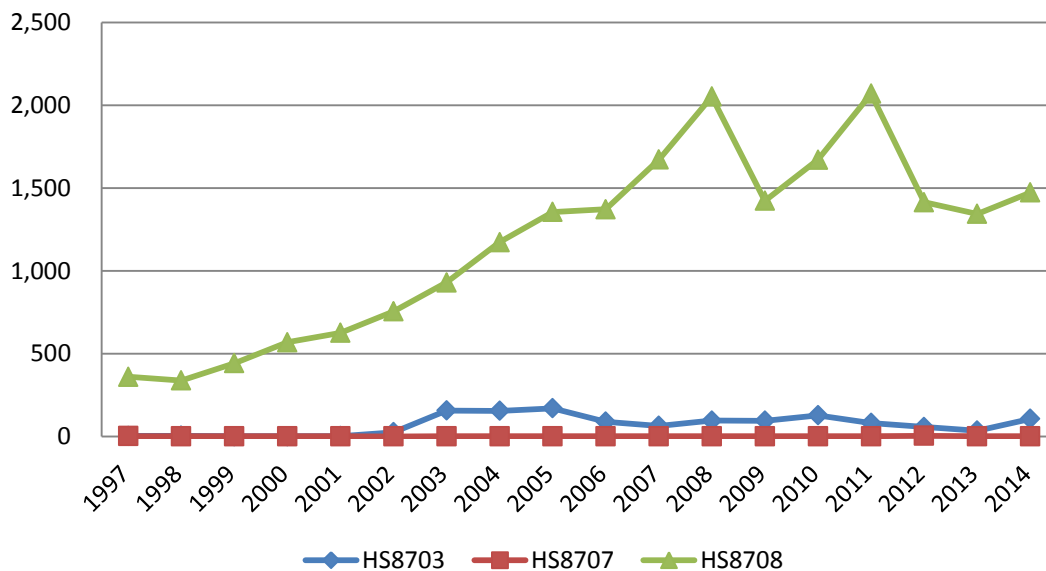
Source: Fourin (2015, 147)

Other major parts exporters in the Philippine automotive industry are Yazaki-Torres manufacturing Corp (wiring harness), and International Electric Wiring Systems (wiring harness). With regard to wiring harness production, the Philippines has been growing as

a production base in Southeast Asia. There are at least 15 firms that produce wiring harness. Six of them are ranked among the largest 10 exporters of automotive parts in the country (Sturgeon et al. 2016). Wiring harness is characterized by labour-intensive and skill-intensive production, requiring dexterity and technical skills. Wiring harness workers in the Philippines, who are mostly high school graduates with post-secondary technical skills training, are suitable. Similarly, Temic Automotive - a firm producing anti-lock brake systems (ABS), requires various parts such as calipers, ball screws, nuts, pistons, and valves, was established by a German firm, Telefunken (Ofreneo 2016).

Figure 4 indicates Philippine's exports of passenger vehicle (HS8703), body parts (HS 8707), and parts and accessories (HS8708). Although there are no major exports of passenger vehicles and body parts, parts and accessories export have grown rapidly and expanded four fold in the period of 1997-2014. Indeed, the export of HS8708 reached over US\$ 2 billion in 2008 and 2011, but it accounted for US\$1.47 billion in 2014. The export of parts and accessories accounted for 88.7% of the total export in the Philippine automotive industry in 2014. The main destinations of HS8708 were Japan (US\$365 million or 24.8%), followed by Thailand (US\$339 million or 23.1%), China (US\$196 million or 13.3%) and Indonesia (US\$113 million or 7.7%) in 2014.

Figure 4 Export of HS8703, HS8707 and HS8708, 1997-2014

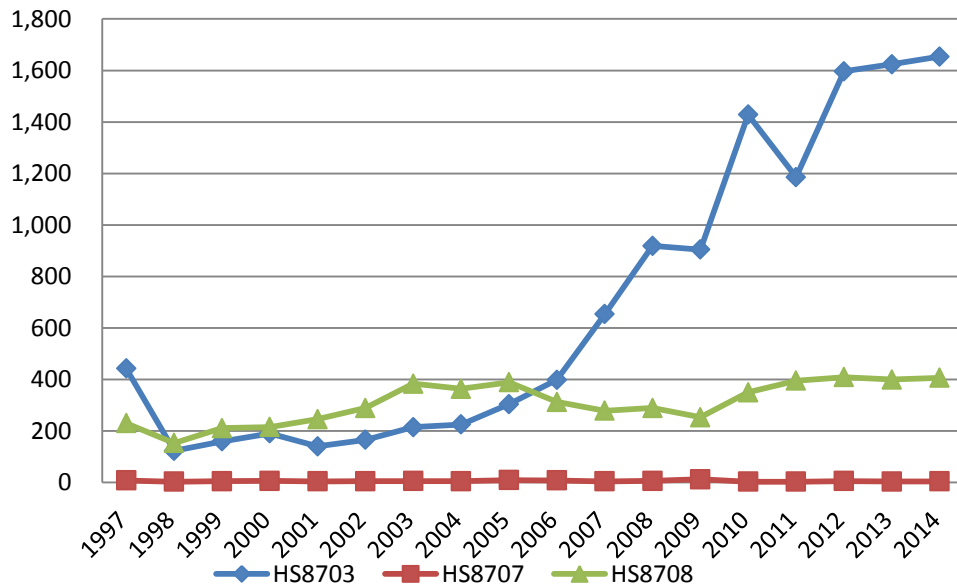


Unit: US\$ million

Source: Global Trade Atlas Database

Figure 5 indicate Philippine’s imports of passenger vehicle (HS8703), body parts (HS 8707), and parts and accessories (HS8708). Unlike exports, passenger vehicle import accounted for US\$1.65 billion in 2014. Imports expanded 3.7 fold in the period 1997-2014. With regard to parts and accessories, imports accounted for 0.4 billion in 2014. It is worth nothing that the export of HS8708 (parts and accessories) is a little smaller than the import of HS8703 (passenger vehicles, accounting for US\$1.65 billion) in the Philippines in 2014. Surprisingly, in the period of 1998 and 2011, the export of HS8708 exceeded the import of HS8703 in the Philippines, which indicates the international competitiveness of particular automotive parts in the Philippines.

Figure 5 Import of HS8703, HS8707 and HS8708, 1997-2014



Unit: US\$ million

Source: Global Trade Atlas Database

5.2 Local Content

The Philippines have expanded their export capacity of automotive parts, yet the local content ratios in locally produced vehicles are still very low. For instance, the local content ratio of Toyota’s Vios (which is the largest production model in the Philippines in 2014) is estimated at an average of 23 percent (Fourin 2015, 138). Albada (2008) analyses the comparative cost structure of vehicle production between Thailand and the Philippines, asserting that the total vehicle production cost with 23% of local content ratio in the Philippines is 1.4 times higher than that of Thailand with 67% of local content ratio. In terms of assembly cost, Philippines, which has small level of operations is 1.75 times higher than Thailand (Albada 2008, 22). Consequently, this low local content ratio and low level of economies of scales result in higher production cost of vehicles in the Philippines. According to CAMPI, it is estimated that locally produced vehicles in the

Philippines are approximately US\$1,800-2,000 more expensive than imported vehicles from Thailand of the same model.¹³ Of course, the CARS programme surely will enhance local parts production of bulky components and large plastic parts. Nonetheless it is still uncertain how much locally made parts will be used in the assembly of vehicles in the Philippines. One of executives in the industry thinks that such bulky parts, wiring harness, and transmissions will survive in the Philippines, but the rest of components production might be wiped out in competition with other ASEAN countries under AEC.¹⁴

5.3 Importation of second-hand vehicles

The second challenge for the Philippines' automotive industry is the importation of second-hand vehicles from Japan and Korea. This issue has been pointed out as a hindrance in the automotive industry for a long time in the Philippines. Under Republic Act 8506, the importation of used cars was prohibited except for imports of returning residents from abroad and second hand trucks, buses, and special purpose vehicles, which were approved by the Bureau of Import Services. In general, used cars were banned in the Philippines. However, this did not apply to free ports, which were allowed to operate as separate custom territories ensuring free flow of goods and capital. In the case of the Subic Bay Freeport (one of the largest in the country), approximately 70 firms were channeling second-hand cars into the country (Aldaba 2008, 4-5). Consequently, for instance in 2004, the sales of new vehicles accounted for 88,068 units in comparison with 138,787 second-hand vehicles (Nomura 2007, 2-3). There is no doubt that the imported second-hand vehicles have negatively influenced the sales of new vehicles in the

¹³ Interview with the president of CAMPI (on the 6th February 2015)

¹⁴ Interview on the 10th February 2015.

Philippines for a long time.

In response to the issue, the government of the Philippines issued EO 156 in 2002. Under this law, the importation of all types of used cars and components was prohibited except those that may be allowed under certain special conditions (Llanto and Ortiz 2015). However, EO 156 could not be enforced due to a temporary restraining order in March 2003. Indeed, the second hand vehicle importers were able to obtain court injunctions stopping the implementation of EO 156 because of their powerful political patrons (Ofreneo 2016). This case was brought to the Supreme Court. Eventually, EO 156 was appealed with a decision to prohibit the import of second-hand vehicles except for the Subic Bay Freeport (but it was under the condition that vehicles could not be brought into other areas in the country) (Aldaba 2008; Nomura 2007). In this regard, second-hand imported vehicles were banned in the most regions, but the ban is not fully implemented across the country. In other words, this issue has been unsolved for over 14 years in the Philippines. A high ranking government officer in the Department of Trade and Industry in the Philippines estimates 20 percent of registered vehicles (which accounted for approximately 3.5 million units in 2014) in the Philippines have been illegally imported.¹⁵ Furthermore, JETRO (the Japan External Trade Organization) asserts that the Philippines is not doing enough to tackle the issue, claiming 70,000-80,000 second-hand vehicles are still imported every year (Kurasawa 2014).

5.4 Free Trade Agreements

Another challenge for the CARS Programme is in relation with FTAs. Three types of

¹⁵ Interview (13th February 2015)

competition under FTAs potentially influence the CARS programme in the Philippines. The first type can be identified as intra-firm competition in Japanese assemblers under the AEC. The second type is intra-regional competition with non-Japanese assemblers under AEC. The third type is a competition with imported CBUs under FTAs, particularly the ASEAN-Korea Free Trade Area (AKFTA).

In ASEAN-4 countries, Japanese brand vehicles accounted for over 80% (86 % including Malaysia's Perodua) of the market in 2013.¹⁶ Two features can be identified about Japanese brand vehicle producers. Firstly, most of the major Japanese assemblers in Southeast Asia produce their vehicles and sell within the region (and also export to the rest of the world in the case of Thailand).¹⁷ Secondly, a regional division of labour in vehicle production has been established by Japanese producers within ASEAN. In this regard, the location of CBU production in each country is carefully planned within the region according to their market demand and local conditions including government policies.

Table 8 indicates Toyota's regional division of labour by model in ASEAN region. Toyota specializes in particular models to produce in each country and exchanges their products between countries. Such a division of labour is partly created by differences in market demand. Thailand historically has strong demand for CVs due to their agricultural uses and more recently for Eco-cars. Malaysia has a demand only for PVs. Indonesian consumers have a strong demand for MPVs due to their large family size and more

¹⁶ Calculating from Fourin (2015).

¹⁷ Thailand exports product champions such as pick-up trucks and Eco-cars.

recently for LGCCs. Consequently, a division of labour in CBUs has been established in ASEAN region. In other words, Toyota’s production strategy in ASEAN is based on the effective use of scale economies and complementation relationships within the region. It is worth noting that although Toyota has established a mutually complementing system within the region, Toyota in association with Daihatsu started exporting their Indonesian LCGCs to the Philippines with initial export volumes of 500 units a month in 2014.¹⁸ Though the Japanese assemblers create a regional division of labour, intra-firm competition is expected to increase in the region in the future. In addition, components industries might be more affected, as one of the executives in the industry pointed out. Competition with other ASEAN countries under the AEC might be a challenge for the Philippines.

Table 8 Toyota’s Regional Division of Labour by Model in ASEAN in 2013

Model		Thailand	Indonesia	Malaysia	Philippines	Vietnam
PV	Vios	⊙	*	○	○	○
	Yaris	⊙	*	*	*	*
	Corolla	⊙	*	*	*	○
	Camry	⊙	*	*	*	○
	Prius	○	*	*	*	*
MPV	Avanza	*	⊙	*	*	*
	Innova	*	⊙	○	○	○
	Noah	*	○	*	*	*
SUV	Fortuner	⊙	⊙	○	*	○
CV	IMV	⊙	*	○	*	*
	Hiace	○	*	⊙	*	○

Note: MPV: Multi Purpose Vehicle, SUV: Sport Utility Vehicle

⊙: Both export and domestic markets, ○: domestic market only, *: no production

Source: Nonami (2013)

¹⁸ Toyota’s website: <http://www2.toyota.co.jp/en/news/14/02/0203.html> [accessed on the 23rd May 2016].

In addition to Japanese producers, a large volume of investments has been planned by non-Japanese assemblers, namely GM, Ford and VW in Thailand and Indonesia in recent years.¹⁹ This trend is the second threat to the CARS Programme. In Thailand, Ford and GM are planning to produce Eco-cars by 2019; VW is also planning to establish a new factory. In Indonesia, GM is planning to produce 150,000 compact cars a year in 2017. By the same token, VW is also planning to manufacture 100,000 vehicles in 2017. These firms do not own production bases in the Philippines. In fact, Ford is relocating their production from the Philippines to Thailand. There is no doubt that these CBUs will be exported to the Philippines under AEC and will compete with vehicles produced under the CARS Programme in the near future.

Also, the ASEAN-Korea Free Trade Area (AKFTA) could be a much larger challenge for the CARS Programme. Under AKFTA, tariffs on CBU PVs from Korea set at 20% in 2015 were reduced to 5% in 2016.²⁰ Korean producers have only small assembly operations in Southeast Asia, depending instead on vehicle exports from Korea.²¹ AKFTA is expected to facilitate Korean vehicle exports to ASEAN countries after 2016. As mentioned earlier, the Philippines is the only country in which Hyundai has a large market share in the ASEAN-4. For instance, its market share was 5.1% (or 4,924 units)

¹⁹ Nikkei Shinbun (3rd February 2015).
<http://www.nikkei.com/article/DGXLZO82719990S5A200C1FFE000/> [Accessed on 23rd May 2016].

²⁰ <http://akfta.asean.org/>, [accessed on 18th January 2017]

²¹ Korean brand producers assembled only 461 vehicles (16,887 vehicles including Malaysian Inokom and NAZA) in Southeast Asia (excluding Thonburi in Thailand) and sold 60,949 vehicles (67,732 vehicles including Inokom and NAZA) in ASEAN 4 countries (Fourin 2015).

in 2005, increased to 8.6% (or 23,019 units) in 2014. In this context, imported vehicles under AKFTA will be a threat for the CARS Programme in the Philippines, unless the programme can successfully attract Korean automotive investment into the country.

Conclusions

The automotive industry in the Philippines has failed to develop for over four decades. In the early stages, the Philippines employed various performance requirement policies, which would now violate current WTO rules, particularly TRIMS. Such policies were not able to enhance the development of the vehicle assembly industry in the face of local political upheaval, policy inconsistency, and liberalization urged by the World Bank, whereas the policies did succeed in assisting the auto parts industry to specialize on the production of particular components in the Philippines. Indeed, the Philippines has a strong competitive advantage in the production of transmissions and wiring harness.

In 2015, the government announced the CARS Programme in order to stimulate the development of the automotive industry with over 500,000 vehicle production planned by 2022 in the Philippines. Although there is no doubt that the Philippines' economy will continue to grow and reach the stage of motorization in the near future, it is still uncertain how local demand vehicles will be able to be met by local production in the Philippines due to the absence of market signals and policy to stimulate local consumption of domestic vehicles. Furthermore, the CARS Programme might face various challenges such as low local content ratios, imported second hand vehicles, and imported CBU vehicles under FTAs in the future. In this regard, the automotive industry in the Philippines still seems to need more time to take off.

References

Aldaba, Rafaelita (1997) *Micro Studies: Philippine Car Assembly Sector*, Discussion Paper Series No.97-21, Philippine Institute for Development Studies.

Aldaba, Rafaelita (2000) *Increasing Globalization and AFTA in 2003: What are the Prospects for the Philippine Automotive Industry?*, Discussion Paper Series No.2000-42, Philippine Institute for Development Studies.

Aldaba, Rafaelita (2007) *Assessing the Competitiveness of the Philippine Auto Parts Industry*, Discussion Paper Series No.2007-14, Philippine Institute for Development Studies.

Aldaba, Rafaelita (2008) *Globalization and the Need for Strategic Government-Industry Cooperation in the Philippine Automotive Industry*, Discussion Paper Series No.2008-21, Philippine Institute for Development Studies.

Athukorala, Prema-chandra, and Archanun Kohpaiboon (2010) *Thailand in Global Automobile Networks*, Geneva: International Trade Centre.

Doner, Richard (1991) *Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia*, Berkeley, University California Press.

Fourin (1994, 1999, 2004, 2006, 2008) *Ajia Jidosha Sangyo (Asian Automotive Industry)*, Nagoya, Fourin.

Fourin (2015) *ASEAN Jidosha Sangyo (ASEAN Automotive Industry)*, Nagoya, Fourin.

Gutierrez, Rommel (2015) *The Philippine Automotive Industry: Roadmap Localization for Competitiveness*, DTI-BOI Regional Conference, August 6, 2015 Tagaya City, the Philippines.

Kurasawa, Maki (2014) AREA Report The Philippines: Kokunai Seisansha Kakudai heno Michi (Road to expansion of domestically produced vehicles), JETRO Censor 2014 August, 58-59.

Llanto, Gilberto and Ortiz, Ma Kristina (2015) *Industrial Policies and Implementation: Philippine Automotive Manufacturing as a Lens*, Discussion Paper Series No.2015-39, Philippine Institute for Development Studies.

Natsuda, Kaoru, Otsuka, Kozo and Thoburn, John. (2015) “Dawn of Industrialisation? The Indonesian Automotive Industry”, *Bulletin of Indonesian Economic Studies*, 51(1), 1-22.

Natsuda, Kaoru, Segawa, Noriyuki. and Thoburn, John (2013) “Globalization, Industrial Nationalism, and the Malaysian Automotive Industry”, *Global Economic Review* 42(2), 113-134.

Natsuda, Kaoru and Thoburn, John (2013) “Industrial Policy and the Development of the Automotive Industry in Thailand”, *Journal of the Asia Pacific Economy*, 21(6), 413-437.

Natsuda, Kaoru and Thoburn, John (2014) “How Much Policy Space Still Exists Under the WTO? A Comparative Study of the Automotive Industry in Thailand and Malaysia”, *Review of International Political Economy*, 21(6), 1346-1377.

Nomura, Toshiro (2007) Philippine no Jidosha Sangyo to IMV (The Automotive Industry in the Philippines and IMV), *Kenkyu Nenpo*, 39, 57-76.

Nonami, Masahiro (2013) *Toyota's Business Strategy in Indonesia*, JETRO Seminar March 4, 2013, Jakarta, Indonesia.

Ofreneo, Rene (2007) V. Philippines, in United Nations Conference on Trade and Development, *Elimination TRIMS: The Experience of the Selected Developing Countries*, New York and Geneva, United Nations.

Ofreneo, Rene (2008) Arrested Development: Multinationals, TRIMs and the Philippines' Automotive Industry, *Asia Pacific Business Review*, 14(1), 65-84.

Ofreneo, Rene (2016) Auto and Car Parts Production: Can the Philippines Catch Up with Asia?, *Asia Pacific Business Review*, 22(1), 48-64.

Otsuka, Kozo and Natsuda, Kaoru (2016) “The Determinants of Total Factor Productivity in the Malaysian Automotive Industry: Are Government Policies Upgrading Technological Capacity?”, 61(4), 1550046-1-18.

Segawa, Noriyuki, Natsuda, Kaoru and Thoburn, John (2014) “Affirmative Action and Economic Liberalisation: the Dilemma of the Malaysian Automotive Industry”, *Asian Studies Review*, 38(3), 422-441.

Sturgeon Timothy, Daly Jack, Frederick Stacey, Bamber Penny and Gereffi Gary (2016) *The Philippines in the Automotive Global Value Chain*, Center on Globalization, Governance & Competitiveness Duke University.

Quimba, Francis and Rosellon Maureen (2012) Innovation in the Automotive Sector of the Philippines, *Asian Journal of Technology Innovation*, 20(S1), 49-65.

Thoburn, John and Natsuda, Kaoru (2017) “Comparative Policies for Automotive Development in Southeast Asia” in Hansen, A and Nielsen, K.B. (eds.) *Cars, Automobility and Development in Asia: Wheels of Change*, London, Routledge, 17-36.