

CHAPTER 3

DEVELOPMENT AND CURRENT SITUATION OF THE THAI AUTOMOTIVE INDUSTRY

3.1 The Thai Automotive and Part Industry Developments under Government Policies

The Thai automotive and part industry began in the 1960s when the Industrial Promotion Act (IPA) was enacted in 1960 (Terdudomtham, 1997). Over the past four decades, Thai government policies regarding the automotive and parts industry have shifted from high to low local protections and from an import-oriented to more export-oriented strategies. They can be divided into five periods (Abdulsomad, 2003) based on Thai government policies which are: promotional period (1960-1970), industrial protection period (1971-1990), partial liberalization and internationalization (1991-1997), the period of the financial crisis and its aftermath (1997-1999), and the period after 2000.

The Early Promotional Period 1960-1970

Under the import substitution strategy, the Thai government enacted the Industrial Promotion Act (IPA) to provide incentives for investment in 1960. The automotive development was promoted through tax incentives offered by the government and protected the domestic market by high tariff barriers. The first automobile assembly plant in Thailand was Anglo-Thai Motor Company. It started to operate in 1961.

In the first year, the assembly plant assembled vehicles, 525 units. There were 310 passenger cars and 215 commercial cars.

In 1962, the tariffs on completely built-up (CBU) were 60 per cent for passenger cars, 40 per cent for commercial cars, and 20 per cent for trucks; whereas tariffs on completely knocked-down kits (CKD) were 30 per cent for passenger cars, 20 per cent for commercial cars, and 10 per cent for trucks.

However, a lack of technological capabilities forced the import of auto components and parts. As a result, in 1969 the Ministry of Industry (MOI) established the Automotive Industry Development Committee (AIDC) under a Cabinet Resolution in August 26, 1969. It was intended to develop the Thai automotive and parts industry. The AIDC would play an important role in the local content requirement (LCR) in a later period. In addition, in the same year, tariffs were increased on CBU passenger cars to 80 per cent, CBU commercial cars to 60 per cent, and CBU trucks to 40 per cent; whereas for CKD passenger cars it rose to 50 per cent, CKD commercial cars to 40 per cent, and CKD trucks to 30 per cent. This policy aimed to protect the Thai automotive industry from overseas competition and to promote Thai parts and components industries at the same time.

In 1970, the number of automobiles locally assembled increased to 10,667 units. There were 6,604 passenger cars and 4,063 commercial cars. Moreover, there were increases in automobile assemblers to 13 assembly plants (see table 3.1)

Table 3.1

The Establishment of Automobile Assemblers the Period 1961 to 1970

Year	Assembler Company	Share Holder
1961	1. Anglo Thai Motor	NA
	2. Thonburi Panich	Purely Thai-owned
1962	3. Karnasutra General Assembly	NA
	4. Siam Motors & Nissan	Nissan 25% Thai 75%
1964	5. Toyota Motors Thailand	Toyota 70% Thai 30%
1965	6. Prince Motors Thailand	NA
1966	7. Sahapattana Motor	NA
	8. MMC Sittipol	MMC 46.23% Thai 52.77%
	9. Isuzu Motors Thailand	Isuzu 49% Thai 51%
	10. Thai Hino Industry	Thai-Hino 30% Hino 35% Mitsui 35%
1968	11. Amulkamared Engineering	NA
	12. Thai Pradith Motor Assembly	NA
	13. Nai Lert	NA

Source: Techakanont (2002)

The Industrial Protection the Period 1971-1990

In this period, the Thai automotive and parts industry shifted from the simple assembly of imported auto parts to localization of automobile production. In July 1971, the Ministry of Industry (MOI) restricted the number of models locally assembled. According to the restriction, automobile assemblers were required to produce either passenger cars or commercial cars. Passenger car assemblers were allowed to assemble no more than three models, of which only one model could have engines more than 2000 cc. New passenger car assemblers were only allowed to produce one model which could have an engine more than 2000 cc. Commercial car assemblers were not allowed to assemble more than five models while new assemblers were allowed to assemble just three models. However, these restrictions were abandoned before they became effective because of collusion between Thai government official and assemblers (Abdulsomad, 2003).

In January 1, 1975, the local content requirements (value-based) were adopted at 25 per cent for passenger cars, 20 per cent for commercial cars with windshield, and 15 per cent for commercial cars without windshields. In early 1978, high tariffs were replaced with an important ban on CBU passenger cars, and import tariffs on CKD were raised to 80 per cent.

In September 1978, new local content requirements were implemented. Based on the new LCRs, locally assembled passenger cars increased to 35 per cent within two years, and increasing 5 per cent every year up to 50 per cent in 1983. In this period, there were significant increases of both MNE and Thai parts suppliers. For the group of MNE parts suppliers, there were Nippondenso (electrical equipment), Nippon Gasket (gaskets), Izumi Industries (pistons), Ricken (piston rings), and Daido Metal (bearing metals). For the group of Thai parts suppliers, there were Siam Nawaloha Foundary, Siam Machinery and Equipment, Burapa Steel, and Somboon Spring Industrial (Abdulsomad, 2003).

In 1983, the government replaced the value-based system with a point system. Automakers were required to use locally produced parts until the total points earned had achieved the government target. For example, the LCR target in 1984 was 45 per cent (or points). However, the LCR system was again revised in 1986. The implemented policies were to promote the development of local supporting industries,

a new revised “mandatory and selective items list” was implemented. This LCR finally touched its maximum of 54 per cent for passenger cars, and 70 per cent for one-ton pickup in 1991.

Partial Liberalization and Internationalization the Period 1991-1997

In 1991, with the establishment of the Anand Panyarachun government, the Thai automobile and part industry faced a new environment that shifted the industries into the internationally competitive industry. The import ban on CBU cars was lifted and completely restructured the tariff system on automobile and parts were introduced in July 1991 (Techakanont, 2002). These actions forced the Thai assembly and auto parts industry to improve efficiency and to manufacture higher quality automobiles to meet international standards for export. In addition, the Thai government also revised and approved the reconstruction of tariffs on CKD and CBU. As a result, the automotive industry realized and prepared itself for the fierce competition from international assemblers.

In 1993, the ban on new automakers which took effect in 1978 was lifted. It significantly changed the Thai automobile and parts industries from high local protection to a more liberalized one. As a consequence, many Japanese and US automakers (specifically Daimler Chrysler, Ford, and GM) and parts manufacturers aimed to set up their production bases in Thailand for the purpose of export.

In addition, according to a commitment from the Thai government under the General Agreement on Tariffs and Trade (GATT) in 1993, the Thai government had been forced to reassess the import duty structure for finished vehicles, kits, components, and raw materials to plan for the gradual stepping out of the LCR in 2000.

Since the early 1990s, the Thai economy had dramatically grown. As a result, consumer demand for automobiles increased with the rapid growth of the economy. This pressured automakers to expand their production capacities to respond to the rapid increases in domestic demand. This provided an opportunity for the government to undertake policy reform.

The Period of the Financial Crisis and Its Aftermath 1997-1999

The period 1986 to 1996, was recognized as a boom in the Thai automotive industry. In 1986, the volume of automobile production was 74,162 units and it increased to 559,428 units in 1996.

However, the financial crisis in 1997 hit the Thai economy. Fifty six financial institutions were closed and domestic absorption¹ shrank dramatically. The purchasing power of Thai people decreased significantly because of the baht depreciation. It depreciated almost 60 baht per US dollar in January 1998. As a result, the volume of automobile production dropped to 360,303 units and 158,130 units in 1997 and 1998 respectively. However, the volume of automobile production increased again in 1999.

The financial crisis caused many local firms in a trouble for three reasons. First, there was excess supply. Most local firms invested heavily before the crisis in order to increase production capacity to respond to the increasing demand for auto parts. Second, the depreciation of baht caused imported inputs expensive. Third, the closing of fifty six financial institutions caused a lack of liquidity in many local firms. As a result, many local firms were taken over by MNEs.

Since 1997, the Thai government has eased foreign ownership 100% instead of the previous joint venture regulation. As a result, many Japanese, European, and American automakers moved their production bases to Thailand and after that they have employed Thailand as a regional hub for automobile exports. Moreover, the depreciation of the baht was another reason encouraging newcomer assemblers to move their production bases to Thailand because they were able to access cheap resources (Takayasu and Mori, 2004).

The Period After 2000

The period since has been recognized as the period liberalization of the Thai automotive and part industry. International competition and globalization is the new environment for industries because of loosening tariffs, abolishment of the LCRs,

¹ The domestic absorption includes private consumption, private investment, and government consumption.

promotion of investments and exports, and more investments due to international organizations such as WTO, ASEAN, and AFTA.

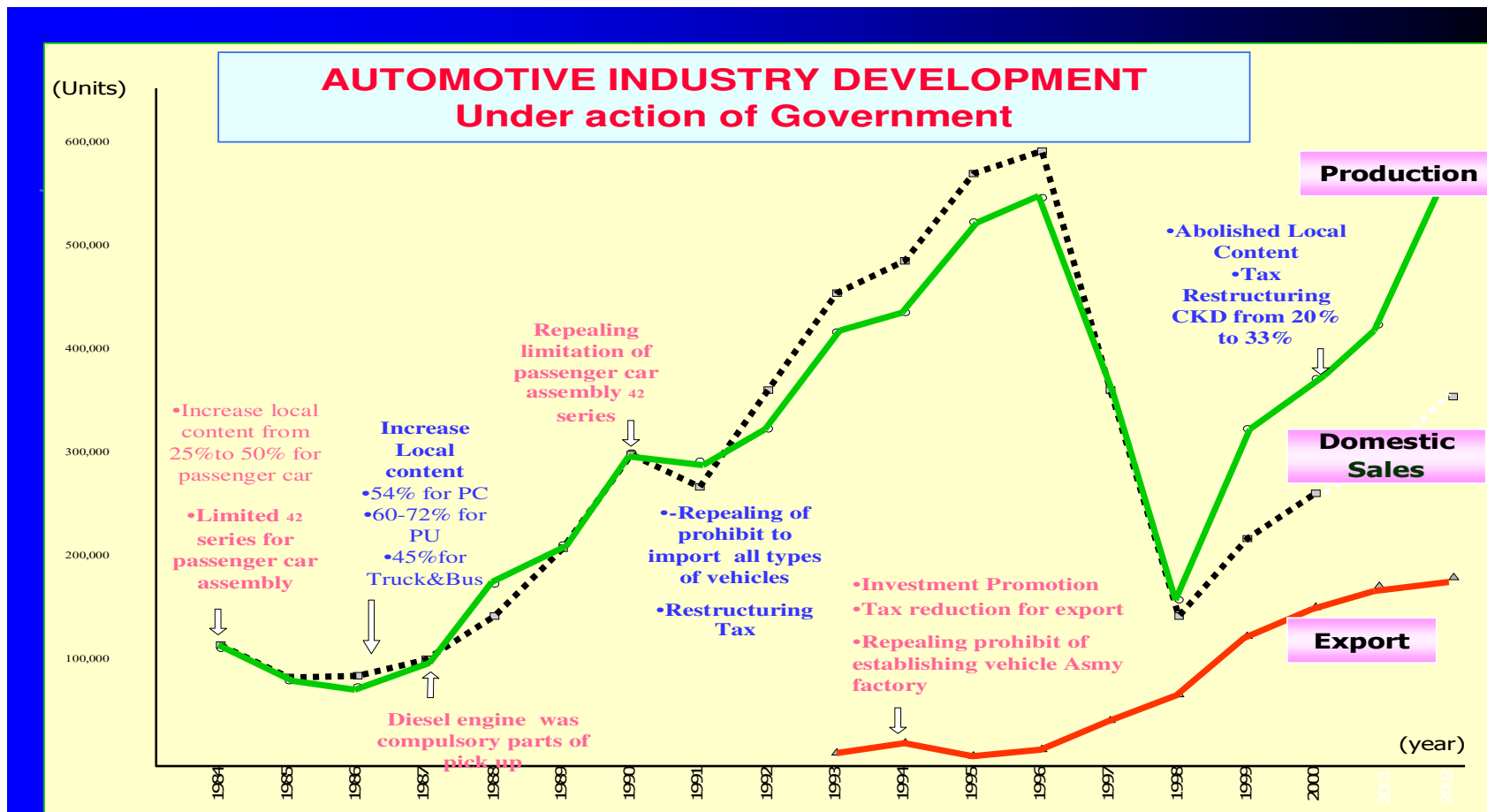
The liberalization has forced automakers and auto part manufacturers to improve efficiency and produce higher quality automobiles to meet international standards for exports. In addition, the liberalization means a greater role for the private sector in the automotive industry.

Table 3.2
Summary of the Thai Automotive and Part Industry Developments under
Government Policies 1961-2000

Year	Development
1961	1960 Thai government enacted the Industrial Promotion Act to promote investment.
1962	Tariffs on CBU passenger cars, commercial cars, and trucks were 60, 40, and 20 respectively. Tariffs on CKD passenger cars, commercial cars, and trucks were 30, 20, and 10 respectively.
1969	The Ministry of Industry (MOI) established the Automotive Industry Development Committee (AIDC). Tariffs on CBU and CKD passenger cars, commercial cars, and trucks were increased.
1971	The MOI restricted number of models locally assembled.
1975	The local content requirements (LCRs) were adopted.
1978	Import ban on CBU passenger cars and import tariffs on CKD were increased to 80 percent. The LCRs were revised.
1983	The LCRs were changed from the value-based system to the point system.
1986	The LCRs were revised again and adopted until the end of 2000. This LCR finally reached at its maximum of 54 per cent for passenger cars, and 70 per cent for one-ton pickup in 1991.
1991	The import ban on CBU was lifted and the tariff system completely restructured for automobile and parts.
1993	Thai government forced to reassess the import duty structure for finished vehicles, kits, components, and raw materials.
1995-1997	Entry of US big three (Daimler Chrysler, Ford, and GM)
1997	The financial crisis hit the Thai economy.
1998	The volume of automobile production dropped to 158,130 units.
2000	The LCRs were abolished.

Figure 3.1

Thai Automotive and Part Industry Developments under Government Policies



Source: The Thailand Automotive Association (2006)

3.2 The Thai Automotive and Part Industry Developments under the Private Sector

As mentioned in section 3.1, the historical development of the Thai automotive and parts industry can be divided into five periods. Therefore, the role of the private sector is also divided into five periods as well which are the role of the private sector in the 1960s and 1970s, the role of the private sector during the protection period 1971-1990, the role of the private sector between 1991 and 1996, the role of the private sector during the financial crisis and its aftermath 1997-1999, and the private sector after the year 2000.

The Role of the Private Sector in the 1960s and 1970s

The government policies in the 1961s were perceived by the private sector as good opportunities for investment in the automobile sector. In the beginning, the group from the private sector that invested in the automotive sector was local dealers and distributors of CBU vehicles. The evolution of these dealers and distributors were their transformation in setting up assembly plants or joint ventures with foreign automakers to assemble vehicles in Thailand. These local private companies had a very close relationship with Thai commercial banks at that time² (Abdulsomad, 2003). The assembly plants which were purely Thai-owned, such as Siam Motors & Nissan; the assembly plants were joint ventures between Thai and Japanese such as Toyota Motor Thailand, Prince Motors Thailand, Isuzu Motor Thailand, and Thai Hino Industry; and Thai and European joint ventures such as Karnasutra General Assembly (see more details in table 3.1).

In addition, local private companies were involved directly in the development of the automotive industry as parts manufacturers. Many of them were original parts manufacturers (OEM) and suppliers for local assembly plants.

The role of the private sector became prominent in November 1967 when The Association of Thai Industries (ATI)³ was established. The ATI played a crucial role

² Siam Motors (Nissan), for example, has a close relationship with the Bangkok Bank and Karnasutra (Fiat and Ford) with the Krung Thai Bank (Abdulsomad, 2003).

³ The association of Thai Industries (ATI) was later transformed into The Federation of Thai Industries (FTI) in 1987. The FTI was supervised by the MOI. This encouraged closed cooperation

in dealing with the government policy at the end of the 1960s and early 1970s. For instance, at a seminar in March 1970, the ATI openly criticized tax policies and incentives and the failure to develop a long-term industrial strategy.

The Role of the Private Sector during the Protection Period 1971-1990

Early in the protection period, the ATI expected the new automobile strategy to protect the industry from foreign competition and restricting new assemblers (Doner; 1991 and Abdulsomad, 2003). The ATI had the power to negotiate with the government in order to be oligopolists in the automobile industry. The ATI emphasized that the industrial development through the localization⁴ would be ineffective if there were new entries by assemblers. As a result, the ATI appreciated the new measures in July 1971 because they protected the domestic market from foreign competition. The new measures included an expansion of local content and a series of measures such as limits on vehicle types, models, engine sizes, and minimum capacity. Thus, the policies in 1971 were perceived by the private sector as a victory. The confidence in negotiations with the government in formulating the automobile policy has continued strongly.

In 1976, The Auto Parts Industry Club (APIC/FTI) and The Automotive Industry Club (AIC/FTI) under The Federation of Thai Industry were formed (Abdulsomad, 2003). However, the establishment of these two associations was unsuccessful because there were a lot of conflicts between auto parts suppliers and automakers. Thus, many auto parts suppliers withdrew from APIC and established a new association in 1978 which was The Thai Auto Parts Manufacturers Association (TAPMA). It was an independent private sector group protecting the parts suppliers' interests from automakers. TAPMA accused APIC/FTI was dominated by Japanese automakers. In 1981, the automakers established The Thai Automotive Industry

between the public and private sector in Thailand in determining and backing policymakers in the process of national industrialization (Abdulsomad, 2003).

⁴ In 1971, the government aimed to promote the automobile sector through localization. It was expected to force automobile assemblers to transfer technologies to local parts suppliers and to stimulate employment.

Association (TAIA) to strengthen their power and to protect their interests from those of TAPMA.

The government perceived the creation of business cooperation as a positive sign because it expected the cooperation would strengthen the industry against foreign competition.

The Role of the Private Sector between 1991 and 1996

The period 1991-1996, was considered as a boom by the Thai automotive industry because of the expansion of the Thai and world economies. The volume of automobile production and domestic sales was remarkably high. Automakers increased their production capacities to serve the growth of domestic demand. Besides, auto part manufacturers also increased their production capacity and responded to automakers as well. In this period, the government gradually liberalized the automotive sector since the Anand government. As a result, association encouraged members to become competitive through improving production technologies and product quality.

The Role of the Private Sector during the Financial Crisis and Its Aftermath 1997-1999

The financial crisis in 1997 had a significant negative impact on the Thai automotive and parts industries. The shrinking of domestic absorption, the closure of 56 financial institutions, and the baht depreciation, all of them reflected the decrease in purchasing power and domestic demand. Several hundred small local parts manufacturers went out of business and the remainder experienced financial difficulties (Abdulsomad, 2003). Therefore, new funds had to be injected into local parts manufacturers. As a result, many local parts manufacturers were dominated by MNEs. After that, MNEs have played a crucial role in the Thai automotive sector.

The Private Sector after the Year 2000

A new environment in the Thai automotive sector was introduced in early 2000 when the LCRs were abolished. All measures protecting local firms were abandoned. As a result, liberalization and foreign competition have been inevitable.

As mentioned in section 3.1, new assemblers have entered and employed Thailand as a hub for automotive exports. Thus, world-class quality and competitive prices are required from local assemblies. However, the capabilities of local parts suppliers were limited by local protection in the past. As a result, local first-tier suppliers have been replaced by MNE first-tier suppliers in the OEM market. Many local suppliers went out of business and many of them have been relegated to lower tier suppliers relying on simple parts productions. So, MNE parts suppliers have played a crucial role in parts production and they have been sources of technological assistance for local parts suppliers.

Table 3.3
Summary of the Thai Automotive and Part Industry Developments under
Private Action 1961-2000

Year	Development
1961	It was perceived by private sector as opportunities for investment in the Thai automobile sector.
1967	The Association of Thai Industries (ATI) was founded.
1971	The ATI appreciated new measures.
1976	The Auto Parts Industry Club (APIC/FTI) and The Automotive Industry Club (AIC/FTI) were founded.
1978	The Thai Auto Parts Manufacturers Association (TAPMA) was founded.
1981	The Thai Automotive Industry Association was founded.
1991-1996	Private associations encouraged members to become more competitive.
1997-1999	Many local parts suppliers were dominated by MNEs.
2000	MNEs have played a crucial role in auto parts production as first-tier suppliers.

3.3 Current Situation of the Thai Automotive and Part Industry

The financial crisis in 1997 hit the volume of automobile production in Thailand. The volume of production dropped from 559,428 units in 1996 to 360,303 units and 158,130 units in 1997 and 1998 respectively. However, they have increased continually since 1999 because of expansions of the world and Thai economies. On average, during 1999-2005, the growth rate of automobile productions is around 20 per cent. In 2005, the volume of automobile production was 1,125,316 units. Table 3.5 shows the volume of automobile production and domestic sales from 1964 to 2005.

Besides, the financial crisis has changed the structure of the Thai automotive and part industry. There have been many new automakers who have moved their production bases to Thailand and have employed her as a regional hub for automobile exports because they could access a low input price caused by the baht depreciation and could reduce transportation costs (proximity between assemblers and customers in ASEAN which is considered a potential emerging market). As a result, Thailand has become more export-oriented in automobiles since 1997. Table 3.6 shows the value of automobile exports. ASEAN is a potential destination of Thai passenger car exports and Australia is a potential destination of Thai truck exports (see table 3.7).

In addition, the entry of new automakers reflects that Thailand has become export-oriented in the auto part industry because automakers have close relationships with MNE part suppliers and they have been persuaded by the automakers to establish factories in Thailand to supply auto parts. Moreover, MNE part suppliers have been able to access inexpensive raw materials caused by the baht devaluation. Therefore, they could produce auto parts relying on raw materials in Thailand and export to other countries with effective cost. Consequently, Thailand has been relying on less imports of auto parts. Figure 3.2 shows the decrease of auto part imports. Furthermore, Thailand has also increased auto part exports since 2000. In 2005, the value of Thai parts exports (HS 8708) was 85372.03 million baht. The potential destinations of Thai part exports are ASEAN, Japan, and the US (see table 3.8). The highest value of part exports during 2000-2005 were wheels, seat belts, brakes, servo-brakes, and radiators (see table 3.9).

Table 3.4**The Volume of Automobile Production and Domestic Sales during the Period 1961-2005**

Year	Production				Domestic sale			
	Passenger car	Commercial car	Total	% growth	Passenger car	Commercial car	Total	% growth
1964	3,978	3,289	7,267	110.94	11,178	9,891	21,069	36.82
1965	4,408	5,687	10,095	38.92	10,974	13,724	24,698	17.22
1966	4,898	5,749	10,647	5.47	14,984	15,835	30,819	24.78
1967	6,211	6,607	12,818	20.39	23,316	26,115	49,431	60.39
1968	7,209	6,779	13,988	9.13	27,898	36,188	64,086	29.65
1969	6,110	6,030	12,140	-13.21	24,376	41,069	65,445	2.12
1970	6,604	4,063	10,667	-12.13	21,828	27,438	49,266	-24.72
1971	9,017	5,997	15,014	40.75	18,008	26,595	44,603	- 9.46
1972	11,630	7,755	19,385	29.11	18,027	26,156	44,183	- 0.94
1973	17,935	9,499	27,434	41.52	30,175	39,843	70,018	58.47
1974	17,572	14,891	32,463	18.33	29,211	44,644	73,855	5.48
1975	15,524	15,467	30,991	-4.53	23,388	54,729	78,117	5.77
1976	15,333	25,729	41,062	32.50	20,699	57,642	78,341	0.29
1977	18,564	47,310	65,874	60.43	25,480	75,843	101,323	29.34
1978	21,869	45,200	67,069	1.81	23,233	66,034	89,267	-11.90
1979	21,602	45,137	66,739	-0.49	22,043	66,816	88,859	-0.46
1980	23,441	50,544	73,985	10.86	26,840	62,361	89,201	0.38
1981	26,650	60,509	87,159	17.81	27,672	62,372	90,044	0.95
1982	24,629	52,655	77,284	-11.33	27,356	63,830	91,186	1.27
1983	33,945	75,314	109,259	41.37	32,779	85,732	118,511	29.97
1984	36,127	74,910	111,037	1.63	31,500	82,049	113,549	-4.19
1985	24,861	58,244	83,105	-25.16	22,097	63,125	85,222	-24.95
1986	21,046	53,116	74,162	-10.76	22,481	55,973	78,454	-7.94
1987	29,333	68,815	98,148	32.34	27,116	74,508	101,624	29.53
1988	54,459	99,724	154,183	57.09	38,768	107,712	146,480	44.14
1989	58,761	154,787	213,548	38.50	47,705	160,538	208,243	42.16
1990	73,766	231,077	304,843	42.75	65,864	238,198	304,062	46.01
1991	76,938	206,177	283,115	-7.13	66,779	201,781	268,560	-11.68
1992	104,565	223,393	327,958	15.84	121,411	241,546	362,957	35.15
1993	144,449	275,582	420,031	28.07	174,169	282,299	456,468	25.76
1994	109,830	325,231	435,061	3.58	155,670	330,008	485,678	6.40
1995	127,640	398,040	525,680	20.83	163,371	408,209	571,580	17.69
1996	138,579	420,849	559,428	6.42	172,730	416,396	589,126	3.07
1997	112,041	248,626	360,667	-35.53	132,060	231,096	363,156	-38.36
1998	32,008	126,122	158,130	-56.16	46,300	97,765	144,065	-60.33
1999	78,538	248,695	327,233	106.94	66,858	151,472	218,330	51.55
2000	103,089	308,632	411,721	25.82	83,106	179,083	262,189	20.09
2001	156,066	303,352	459,418	11.58	104,502	192,483	296,985	13.27
2002	169,321	415,630	584,951	27.32	126,353	283,009	409,362	37.84
2003	251,684	498,828	750,512	28.30	179,005	354,171	533,176	30.25
2004	299,439	628,642	928,081	23.66	209,110	416,916	626,026	17.41
2005	277,603	847,713	1,125,316	21.25	193,617	509,644	703,261	12.34

Source: Federation of Thai Industries and Thailand Automotive Institution

Table 3.5
Thai Automobile Exports the Period 1996 - 2005

Year	CBU	
	Unit	Million baht
1996	14,020	4,253.36
1997	42,218	16,226.99
1998	67,857	28,125.55
1999	125,702	50,187.21
2000	152,835	63,349.15
2001	175,299	83,894.7
2002	181,471	82,474.66
2003	235,122	102,208.1
2004	332,053	149,232.8
2005	440,705	203,025.4

Source: The Thai Automotive Industry Association

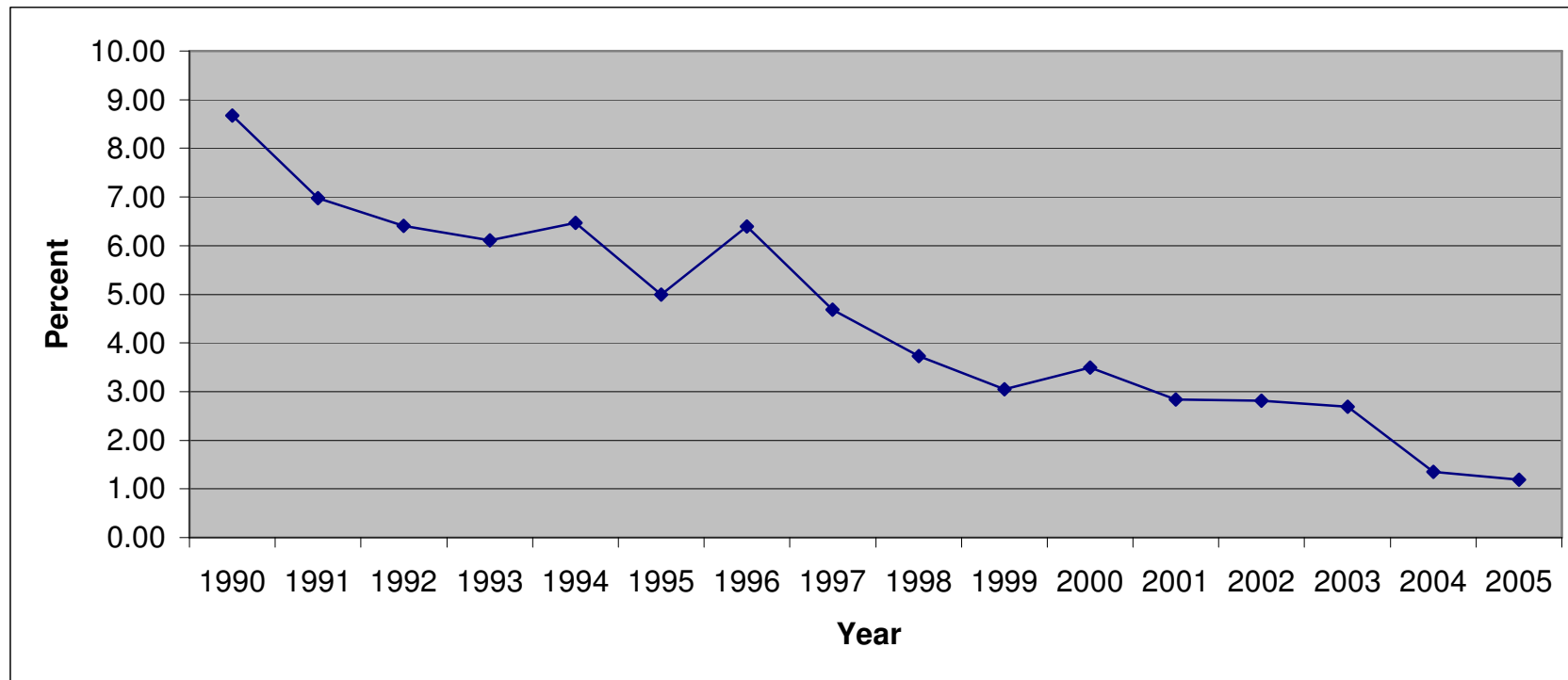
Table 3.6
Destinations for Thai Automobile Exports (1999 – 2005)

1999-2005	ASEAN	Australia	Japan	Others	Total value (million baht)
Passenger cars	95,275.31	33,139.8	18,181.32	76,104.71	222,701.14
Trucks	30,879.22	117,575.06	858.7	356,559.5	505,872.48
Others	4,422.69	82.89	25.55	1,267.26	5,798.39

Source: United Nations Database

Figure 3.2

The Decrease in Import Values of Auto Part in Locally Assembled Cars



Source: Kohpaiboon (2006)

Table 3.7
The Value of Thai Part Exports

Destination	Value : Million baht					
	2000	2001	2002	2003	2004	2005
Total	20272.45	21780.2	26976.26	39787.37	56885.84	85372.03
ASEAN	4250.59	5431.39	7606.6	10686.74	15187.61	27174.09
EU	3217.29	2968.81	2969.15	3663.67	4498.56	4736.46
Japan	5182.98	6197.06	7149.32	9628.83	11845.26	12362.04
US	2511.62	2610.36	3064.66	3010.37	4271.01	13188.51
Others	5109.97	4572.57	6186.54	12797.75	21083.4	27910.93

Source: United Nations Database

Table 3.8

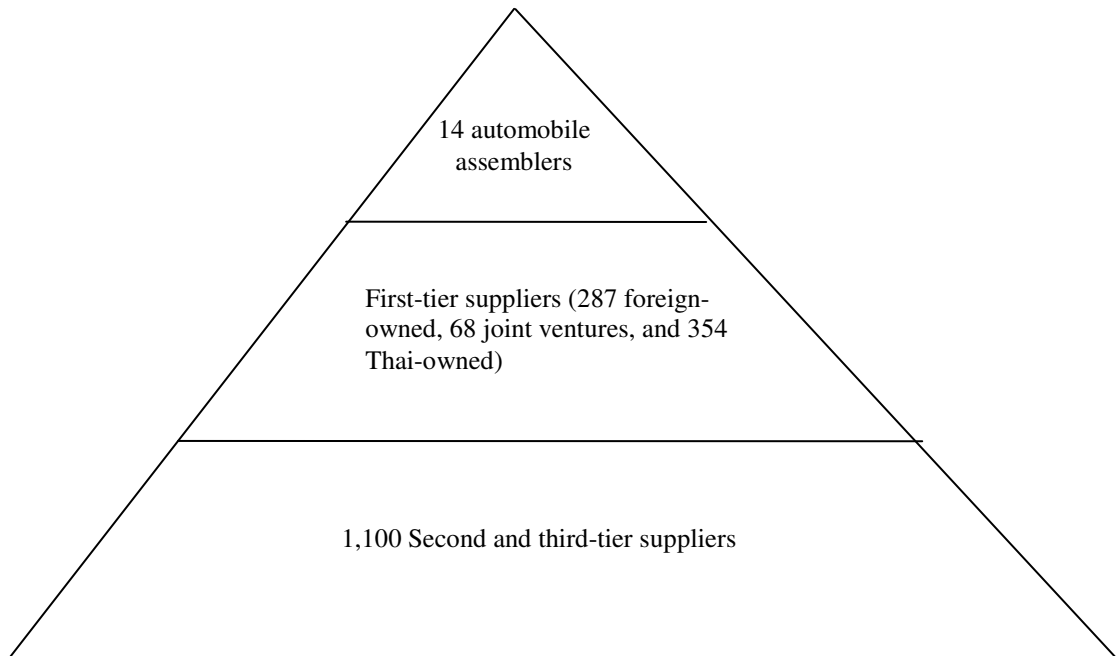
The First Ten Highest Value of Thai Part Exports

HS-CODE	Description	2000	2001	2002	2003	2004	2005	Total
		Million baht	Million baht	Million baht	Million baht	Million baht	Million baht	Million baht
870870	ROAD WHEELS	3,476.51	3,189.02	3,579.72	4,765.05	5,398.47	7,062.23	27,471.00
870821	SAFETY SEAT BELTS	965.87	1,375.89	1,925.24	3,676.88	4,741.92	3,894.14	16,579.94
870839	BRAKE,SERVO-BRAKE	720.3	914.93	1,087.52	1,616.87	2,478.79	3,406.90	10,225.31
870891	RADIATORS	1,342.36	1,755.72	1,534.53	1,364.78	1,509.87	1,674.86	9,182.12
870894	STEER WHEEL RELATED	867.89	680.95	779.7	948.35	1,678.71	2,747.40	7,703.00
870893	CLUTCHES	335.14	332.01	367.14	569.52	1,149.28	1,716.06	4,469.15
870880	SUSPENSN SHOCK ABSR	496.37	565.07	502.05	464.82	449.57	919.04	3,396.92
870850	DRIVE AXLE+DIFFRNTL	85.83	257.66	324.58	275.62	394.59	836.24	2,174.52
870860	NON-DRIVING AXLES	469.16	82.44	197.77	282.13	342.31	784.79	2,158.60
870831	MOUNTD BRAKE LINING	159	169.62	144.1	380.72	519.68	669	2042.12

Source: United Nations Database

As mentioned in section 3.1, the abolition of the LCRs in 2000 means the liberalization in the Thai automotive and part industry and that new entry automakers have established their production bases in Thailand to gain competitive advantage for automotive exports. As a consequence, a competitive environment in the industry encourage automakers need to be competitive in terms of price and quality; including international standards, which must be met in automobile production (Kohpaiboon, 2006 and Techakanont, 2007). Thus, high quality and cost-effectiveness of auto parts manufactured by first-tier suppliers are expected by assemblers. In a present situation, local first-tier suppliers have been replaced by MNE part suppliers in supplying auto parts to automakers because of a lower capability in technology. Besides, many local first-tiers have been forced to leave from the industry or have also been relegated from OEM first-tier suppliers to second and third-tier suppliers. So, they are in the assembly line just relying on simple part production and more complicated parts are manufactured by MNE part suppliers. Figure 3.3 shows the structure of the Thai automobile industry. There are 14 assemblers in the Thai automobile industry (see a list of automobile assemblers in Thailand in table 3.10), 709 first-tier suppliers, and 1,100 second and third-tier suppliers.

In sum, the volume of Thai automobile production has been increasing since 1999 to 2005 because of increases in both domestic and foreign demand. Besides, the Thai automotive and part industry have become more export-oriented. The potential destinations of passenger car exports and trucks are ASEAN and Australia respectively. The potential destinations of part exports are ASEAN, Japan, and the US. Thus, it can be inferred that AEAN is a potential emerging market for Thai automobile and part exports. Remarkably, export orientation and liberalization in the Thai automotive and part industry have a positive relationship. As a result, local first-tiers have been replaced by MNE part suppliers and local first-tiers have been relegated to be lower tier suppliers by relying on simple part productions.

Figure 3.3**The Structure of the Thai Automotive Industry**

Source: The Thai Automotive Industry Association (2003)

Table 3.9**Automakers in Thailand**

Rank	Assembler	Brand
1.	Toyota Motor Thailand	Toyota
2.	MMC Sittiphol	Mitsubishi
3.	Isuzu Motors (Thailand)	Isuzu
4.	Siam Nissan Automobile Siam Motors and Nissan	Nissan
5.	Honda Automobile Thailand	Honda
6.	Bangchan General Assembly	Jeep, Chrysler
7.	Thonburi Automotive Assembly Plant	Diamler Chrysler
8.	Y.M.C. Assembly	BMW, Peugeot, VW
9.	Thai Rung Union Car	Isuzu
10.	Hino Motors (Thailand)	Hino
11.	Thai-Swedish Assembly	Volvo, Land Rover
12.	Auto Alliance (Thailand)	Ford, Mazda
13.	General Motors Assembly Center	Chevrolet
14.	BMW Thailand	BMW

Source: The Thai Automotive Industry Association (2006)