

SMALL AND MEDIUM INDUSTRIES AND THEIR LINKAGES WITH LARGE FIRMS IN MALAYSIAN AUTOMOBILE INDUSTRIES

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**Intensification of Research in Priority Areas (IRPA) Final Report
IRPA No. 07-02-05-3203EA012
305/PHUMANITI/612304**

**1 APRIL 2006
USM PENANG**

ACKNOWLEDGEMENTS

We gratefully acknowledge the research fund provided by the Ministry of Science, Technology and the Environment, Malaysia. We are also grateful to the following for without their unfailing support the research would not have been possible: Research Creativity & Management Office (RCMO), Chancellory, Universiti Sains Malaysia; PROTON and PERODUA. We would like to record our appreciation and thanks to all respondent firms in Klang Valley for their co-operation.

Our research team is also grateful to Professor Sakuradani Katsumi, Professor Akira Watanabe from Japan and Dr. Tim Beal from New Zealand who provided us with conceptual and analytical framework of the research and introduction to some firms during our surveys with the firms.

We would also like to extend our appreciation to the Dean of the School of Humanities and the general staffs and the Section of Geography for providing all the supports and facilities to make our research successful.

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Abstract

Small and Medium Industries (SMIs) and Their Linkages with Large Firms in Malaysian Automobile Industries (*Types, Levels and Intensity of Linkages and Implications on the Growth and Development of Individual SMIs in The Klang Valley and Northern Region of Peninsular Malaysia*)

This study is concerning the linkages of automobile parts and components small and medium sized producing firms with their main customers. Their main customers are divided into two types of firms. The first type is the firms that supply raw materials necessary for the production of automobile parts and components. The second type is their anchor companies that are the car manufacturing firms that purchase automobile parts and components they produced.

The emergence of automobile production together with increasing number of car assembling activities in Malaysia led to the growth of numerous automobile parts and components producing firms to cater the needs of those industries. Those activities also lead to the growth of industries producing raw materials supplying to the needs of automobile parts and components producing firms. All these firms with related activities are interacting with each other forming linkages or net working among themselves. The linkages are in terms of normal business relationships, in terms of subcontracting ties, vendor-anchor relationships and other contractual commitments. As in any business related activities, there appear some very beneficial outcomes such as widening one's market coverage, improve production capacities with financial and technological assistances. However, inevitably there are some unwelcome setbacks such as late payment of orders, slow delivery and low quality of products. As a consequence of good business linkages among the related firms, all those setbacks were easily resolved.

In terms of growth of those automobile parts and components producing firms shows that there is more room for further growth. The firms mostly concentrate on local markets and very little for export and very high import contents. Following the surveys on those firms, found that more efforts are needed for improvement especially in technology know-how, latest technology and skilled labours. The existing government support programmes need to strengthened. The firms need to be supported in terms of research on improving existing and innovation on new products and less dependent on imports.

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CHAPTER ONE INTRODUCTION

1.1 INTRODUCTION

The importance of the Small and Medium sized Industries (SMIs) in Malaysian economy has been emphasized since Second Outline Perspective Plan (1991-2000) that began with the Sixth Malaysia Plan (1991-1995). Japan and Taiwan are two good examples in which SMIs give large contributions to the growth of the manufacturing industries and hence to the economic success of those countries. Malaysia can learn a lot from the experience of these countries to develop the method of linkages between SMI firms with the large firms. The linkages between these two sectors will give many advantages for both sectors. SMI firms will gain the benefits such as technology transfers, employees trainings, broaden market coverage , high quality products, funding, and many other aspects. On the other hand, the large firms will also benefit in terms of on time supply of raw materials, right quality products, local suppliers (reduced time and costs of purchases), and many others.

Past studies have shown that many newly developed countries implemented the linkages via sub-contracting by the large firms to SMIs as their suppliers. This has resulted in positive effects on the development of industrial sector. As an example, in Singapore large firms have sub-contracted in many

ways to not only SMI firms in the island country itself but also to the firms located outside of the country. The same procedures have also been implemented in Thailand. Some of their firms in garment and electronic sectors are sub-contracting works to other companies which are also acting as their suppliers. The internal factors of large firms such as on time delivery and high quality products are the most common reasons to involve the sub-contracting works. Meanwhile, external factors such as the process of globalization has forced many large firms moving ahead in getting the right suppliers through the sub-contracting works. Besides that, the incentives given by the host country to the MNCs, which are giving subcontracting works to the local firms, also contributed to the growth of local SMIs in the country.

1.2 THE STATEMENT OF THE PROBLEMS

SMIs that have linkages with large firms are seen to have benefited from the linkages, which viewed as one of the major contributors to growth, development and competitiveness of SMIs (see UNIDO 1986, Berry 1997, Mitsuhashi 2000). Linkages between SMIs and large firms have given a lot of benefits to the industrialized countries such as Japan and Germany. In Japan, about 55 percent of SMIs depend on sub-contracting given out by the large firms as one of the crucial type of industrial linkages (Whittaker, 1997). Apart from that, 40 percent of Japanese large firms' export are using components and parts

that are produced by the SMI firms. In South Africa, numerous supports are provided in critical aspects such as financial, technical, and management to enable SMIs to strengthen the relationship with large firms (Cho, 1995). Even though linkages are found to extent across the countries, research indicates that certain factors limit the opportunities for linkages to prosper (Schimtz and Nadvi 1999), findings by Watanabe in Japan, Webster, Alder and Muhlemen (1997) in United Kingdom, Ruiz-Duran (1995) in Mexico and Berry and Escandon (1994) in Columbia validate the hypothesis that there are not only exist linkages arrangement, but also the linkages proved to be useful and beneficial to sustainable development of SMIs.

SMI linkages and networks in Malaysia are relatively new and not well developed. Studies on this aspect on linkages and networks have also been rather limited. This makes it difficult to provide any comprehensive review on SMIs linkages and networks in Malaysia. There are three main types of SMI linkages and networks in Malaysia: Japanese SMIs linkages and networks with Japanese large enterprises or Multi-National Corporation (MNCs); local SMIs linkages with Japanese MNCs or Japanese SMIs; and SMIs linkages and networks among themselves and with other MNCs (see in John, et al, 1994). The first type appears to be more obvious as far as linkages and networks are concerned. After the yen appreciation, existing Japanese companies and MNCs in Malaysia have increased their investments to enhance their production facilities (JETRO 1987).

This wave of investments mainly concentrated in electronics and electrical products, even though linkages have also been implemented in other manufacturing sectors in the economy. As for the electronics and electrical sub-sectors, many of them established their new export platforms, mainly located in Malaysian Free Trade Zone (FTZs) or with Malaysian Licensed Manufacturing Warehouse (LMW) under the Malaysian government incentives. These have been quickly followed by their SMIs supporting industries, to what is called 'Third wave' investment in Malaysia (see Anazawa 1994). In other words, the rapid and massive relocation of Japanese electronics and electrical MNCs into Malaysia has encouraged Japanese SMIs' sub-contractors to invest in Malaysia.

This reflects Japanese SMIs flexibility that through their networking, they have enhanced their businesses in Malaysia to cater the growing demand by MNCs. Without Japanese SMIs in Malaysia, it would not have been possible for them to procure enough materials from Japan. According to Anazawa (1994), the presence of Japanese large corporations, MNCs and SMIs has been predominant in Malaysian manufacturing sector with the following specific characteristics such as many SMI sub-contractors supplying parts and components under the umbrellas of few large assembling MNCs; these SMI subcontractors are also belong to pyramidal hierarchies; there is tough competition among SMI contractors; but there has been both cooperations as well as competitions between MNCs and SMI subcontractors.

The second form of linkages i.e. between Japanese corporations with local SMIs is viewed as rather limited. There are ample amount of benefits, expansion and development from the point of Malaysian SMIs through their linkages and networks with Japanese counterparts. Many of these have been discussed widely. One of the utmost benefit is the technology transfer, in addition to the creation of market. Increasing local contents and the development of supporting local industries have been important reasons for Japanese MNCs to have local sub-contractors. Basically, Japanese MNCs have their SMIs sub-contractors in Malaysia mainly as a way to reduce cost by replacing imports from Japan, it should not matter whether SMI sub-contractors are Japanese or local SMIs. To secure and hence continue linkages and networks with Japanese MNCs and corporations, local SMIs have to keep their prices competitive, delivery according to schedules for Japanese 'Just-In-Time' system. Having said these, however Japanese SMI sub-contractors in Malaysia have also certain advantages due to their technological superiority and easier access to Japanese MNC principals.

Furthermore, local SMIs seem to contribute to the linkages up to the extent that products supplied to Japanese MNCs are made when Japanese SMIs alone cannot supply enough products that are required. This is despite the advice by the Malaysian government to Japanese corporations to increase procurement from local companies for such linkages. According to a survey, out of 40 non-Japanese SMIs sub-contractors, 27 were wholly Malaysian-owned, while the

remaining 13 were joint ventures with non-Japanese foreigners. From these 40 non-Japanese SMIs subcontractors sampled, 21 supplied parts and components to automobile sub-sector, while 12 supplied to electronics and electrical sub-sector (Woon and Kheng 1992). Indeed, it is the wish of the Malaysian government and local SMIs to make more and better use of the backward linkages brought about by the Japanese corporations through the sub-contracting system to progress and develop additional demand. This is simply because such linkages are indirectly exposed them to international markets and increase their competitiveness. It will be great for the government and local SMIs if they can utilize the externalities generated by Japanese corporations, simply because it will contribute to strengthening and widening the Malaysian manufacturing base. Nonetheless, the increasing number of Japanese SMIs subcontractors in Malaysia and their expanding production volumes suggest that it is possible for them to displace local SMIs and establish more exclusively Japanese inter-company network in Malaysia. Indeed, if Japanese corporations and SMIs establish their closed and exclusive linkages and networks among themselves, these will gradually lead to backward linkages to local SMIs. This provides greater challenges for local SMIs and the Malaysian government in their perceived importance of forward and backward linkages of SMIs in the economically diversified sectors.

Empirical evidences on industrial linkages in Malaysia can also be observed in few other individual studies (see Nazari 1995, Moha Asri 1996, Rasiah 2001 and Moha Asri and Mohd Kamal 2003). According to Meyanathan and Ismail (1994) domestic sourcing in electrical machinery and electronics production increased in the 1980s, i.e. MNCs producing electrical, consumer electronics and computers outsource between 10 and 70 percent of their inputs locally (in Rasiah 2001). Meanwhile Nazari (1995) observed that there was an increased trend in local outsourcing among large foreign electronics transnational corporation (TNCs), not only for simple and low value added, but also for more sophisticated high value-added components, inputs and tools. Moha Asri (1996), in his study of the textile and clothing industries, revealed that about 65 percent of the 51 small industries sold between 76 and 100 percent of their total output to large MNCs and local industries. Most of these small industries sold their products through a special contractual arrangements with large industries.

Realizing the importance of the linkages on the potential development of local SMIs, the government introduced several instruments through the Ministry of International Trade and Industry. Firstly, the sub-contract Exchange Scheme (SCX) in 1986 simply to promote growth of local supporting industries by facilitating their linkages with large-scale manufacturers. The SCX is a computerized clearing-house, linking companies producing component with

those which need them. It aims to bring buyers and vendors together, i.e. between buyer's requirement and vendor's capabilities and capacity to supply. Secondly is the umbrella concept scheme. This scheme focuses on marketing aspects of the SMIs' products. Large industries act as buyers and to market products under their brands. Under this arrangement, large firms also provide financial resources and expertise to assist SMIs in a number of areas such as production, design and technologies to enable the product meet standards, particularly with regard to quality standards, quality control and reliability in meeting delivery according to schedules (see ADB 1999). The last is Vendor Development Programme and the development of franchisees. To increase the local content of the Malaysian automotive industry, the government introduced mandatory deletion programmes for all vehicles assembled in Malaysia. In addition, local sourcing was given special emphasis to meet the Generalised System of Preference (GSP) requirement for the export market. Besides, Proton continues its efforts in increasing the local contents in its cars. Majority of these vendors are involved in the production of small plastic injection and metal stamped parts. Proton is providing opportunities for SMI vendors in the areas of die making, casting and forging. Furthermore, there are also special incentive schemes for large firms that support SMIs to become component suppliers for large firms. In the Vendor Development Programme, 82 anchor companies have given rise to the 209 vendor companies in areas ranging from electrical and electronic, furniture manufacturing and film production, and automotive and

telecommunications. With respect to franchising system, 59 franchisors and 19 master franchisees have spawned 2,080 franchisees in a diversity of sectors, from among the SMIs.

Recently, the second Industrial Master Plan (IMP2) and the SMI Development Plan (2001-2005) identified SMIs as central to the deepening of key industrial clusters, and target SMIs especially those in industrial sectors with prospects for further growth to spearhead international clusters and create strategic industries for technology acquisition such as automotive and wood-based industries (SMIDEC 2001). Specifically, incentives have been structured under the SMIDP to strengthen SMI capabilities in the areas of finance, technology acquisition, skills upgrading, market and infrastructure development which involved broad-based programmes. These are Industrial Linkages Programmes (ILP) and Global Supplier Programmes (GSP). The former, aims to promote and develop SMIs to become reliable and competitive suppliers of critical parts and components and services to leading industries, while the latter aims to enhance the capacity and capabilities of SMIs to provide world-class services and products to large corporations, or MNCs, and their branch operations world-wide.

The automotive industry is chosen because the study recognizes that this sector is included in the industrial priority list in the IMP2 and SMIDP (SMIDEC 2001), as it is becoming increasingly important industrial sub-sector in the

country. The study also take into consideration the differences not only in the level of enterprise growth, but also the different nature of industrial linkages and clusters, which emerged as a result of industrialization processes pursued over the last 30 years or so in the country. The automotive industry, which is policy-driven, has generated a number of vendors supplying to the national cars and motorcycles manufacturers. Hence, it is highly desirable to examine and analyze the forms, levels and intensity of linkage-structures that might exist between the two and possibly to distinguish some useful policy implications from fresh and insight findings.

A review of literature indicates that there are a number of benefits that can be reaped by SMIs in the country through linkages with large firms. Many countries have recognized this by providing with considerable supports and policies to promote linkages. The strategic importance of the linkages between firms has been increasingly recognized in Malaysia and the government has given high priority to SMIs linkages in its industrial development strategy. In other words, industrial linkages development occupies a prominent position in the development agenda of SMIs in the country.

Elaboration above have shown the importance of linkages between SMI firms with the larger related industries in industrial development of a country. Malaysian government has also shown its interests on the SMIs as part of the country's industrial expansion. Malaysia is also giving its priority to the

expansion of automobile manufacturing industry as being played by two government led national car manufacturing companies that are the Proton and Produa. With these two companies the government is hoping that they will create linkages with the smaller or SMIs which are contracted to produce parts and components for Proton and Produa. This will eventually lead to further expansion in Malaysian industrial activities. Nonetheless little is actually known on some basic empirical features relating to the existing linkages. Some basic questions such as what type of linkages that have emerged between SMIs and large firms; their capacities and intensities; problems and constraints; implications of the linkages and many other features are yet to be discovered.

Hence it is the purpose of this research to study on several aspects related to the linkages between SMIs with the larger firms in automobile manufacturing sector in the country. This study will look at the types of linkages existed, their intensity, their roles, problems faced and how to improve further their existence.

The report of this study is divided into several chapters. Chapter one is on the introduction and problems statements. Chapter two is on the growth of automotive industry in general and the growth of supporting industries and linkages created by them. This chapter will also feature the development of automotive industry in this country. Chapter three is on the methodology of research which is based on questionnaire interviews with automotive parts and components SMI manufactures in the Klang Valley. Chapter four is on the

profiles of the SMI respondent firms that are producing parts and components for the automobile manufacturing companies. The chapter will also touch on the emergence of vendor development programmes which are initiated by the government in support of the development of automotive industry and related SMIs in the country. Chapter five is on the linkages existed between automotive parts and components manufacturers with their raw material suppliers. Profiles, business relationships, problems faced and many other features in the linkages are elaborated in this chapter. Chapter six would be on the linkages between SMI parts and components manufacturers with their vendors. Chapter seven is on the analysis of several aspects of the linkages found in the Malaysian automotive industry especially between the SMIs with the larger firms in the industry. This chapter is also the conclusion chapter which wrapped up the findings on all aspects of linkages in the automotive industry in Malaysia as stipulated in the objective of the study.

Also listed in this report as an appendix is the bibliographical references which are used in the background search and the analysis of the study.

Lastly is the appendix on the questionnaires used in the interviews with the respondent SMIs as part of the methodology in order to arrive at the findings of the study as outlined by the objectives of the study.

CHAPTER TWO

AUTOMOTIVE INDUSTRIAL LINKAGES

2.1 INTRODUCTION

This chapter will elaborate on the development of the automobile industry in Malaysia. It includes the history of automobile industry in Malaysia in brief, the type of linkages that are implemented in the automotive industry which include sub-contract; auxiliary-parent relationship (input relationship); ancillary relationship (output relationship); complementation; and services. Finally, the vendor development programmes such as Industrial Linkages Programme (ILP) and Global Supplier Programme (GSP) that are implemented by SMIDEC and other government agencies will be focused.

2.2 THE AUTOMOTIVE INDUSTRY DEVELOPMENT

The history of the automobile has begun since the 18th century. The vehicles began with the theoretical plans as illustrated by both Leonardo da Vinci and Isaac Newton about the motor vehicles. The actual motor vehicle was created in 1769, limited for military tractor made by French engineer and mechanic Nicolas Joseph Cugnot (1725 - 1804). The vehicle used steam engine and built under his instructions at the Paris Arsenal by mechanic Brezin. It was used by the French Army to haul artillery at a whopping speed of 2 1/2 mph on

only three wheels. The following year (1770), Cugnot built a steam-powered tricycle that carried four passengers. Since then, there are almost 100,000 patents have been created for the modern automobiles. The popular inventors in automobile industries are Nicolaus Otto, Karl Benz, Gottfried Daimler, Rene Panhard, Emili Levassor, Chales, Frank Duryea, Ransome Eli Olds, Henry Ford to name a few. The present vehicles running on petrol, diesel, electric and battery powered engines are the inheritance of the past works on thousands of innovations on engines and vehicles patterns of the above inventors.

Since the early days, the production of vehicles has been dominated by three countries – United States of America (USA), Japan and Germany. Table 2.1 shows the world motor vehicles production since 1999 to the end of 2002. Within that period, the production has increase by 3.89 percent. USA contributed more than 20 percents, followed by Japan around 17 percents, and Germany in between 9-10 percents. Meanwhile, the countries like France, China, South Korea, Spain, Canada, Mexico, United Kingdom, Brazil, Italy, Russia, Belgium, and India produced between 1-6 percents each. Lately countries like Malaysia, Thailand, South Africa and Czech Republic have started to produce cars but their contributions are very small with less than one percent each.

Table 2.1: Total world motor vehicles production

States	Year (Percent)			
	1999	2000	2001	2002
USA	23.03	21.93	20.29	20.86
Japan	17.50	17.38	17.36	17.43
Germany	10.06	9.47	10.11	9.29
France	5.62	5.74	6.44	6.28
China	3.24	3.54	4.15	5.53
South Korea	5.03	5.34	5.23	5.35
Spain	5.04	5.20	5.06	4.86
Canada	5.41	5.08	4.50	4.47
Mexico	2.74	3.31	3.27	3.10
United kingdom	3.49	3.11	2.99	0.09
Brazil	2.39	2.86	3.23	3.05
Italy	3.01	2.98	2.81	2.43
Russia	2.07	2.06	2.22	2.07
Belgium	1.80	1.77	2.11	1.80
India	1.45	1.36	1.45	1.52
Thailand	0.57	0.56	0.82	1.01
Czech Republic	0.67	0.78	0.83	0.76
South Africa	0.56	0.59	0.72	0.69
Malaysia	0.45	0.49	0.64	0.67
World total (Units)	56,556,754	58,374,162	56,304,925	58,842,299

Source: OICA (2003) World Motor Vehicle production

Web: <http://www.oica.net/htdocs/Main.htm> Download as November 20,2003

2.3 THE HISTORY OF AUTOMOTIVE INDUSTRY IN MALAYSIA

The motor vehicles were introduced in Malaysia in the 19th century with the construction of roads in line with the need to transport tin from mining sites to the ports. Cars and lorries were imported in completely built unit into the country. This was later followed by cars locally assembled and finally being built locally by Malaysian car manufacturing plants as we can find at present.

The history of the development of automotive industry in the country is not that long enough and can be classified into several phases of growth.

2.3.1 Phase 1 (Mid 1960s to early 1980s)

The history of the automotive industry in Malaysia begun in mid 1960s when the assembly of completely knocked down (CKD) cars began. Malaysian government has approved six assemblers of automobile to operate in Malaysia. The first locally assembled vehicle rolled out in 1967 by Swedish Motor Assemblies (SMA). In the early years of the direct foreign investment of assembled vehicle the policy set was simple, local content policy have not been introduced not until 1972. The policy emphasized that at least 10 percent of the parts must be local content. In the 1982 the policy has increased the amount of local contents to 35 percent of any assembled vehicles in the country.

2.3.2 Phase 2 (Mid 1980s to the present)

The automobile industry is the pioneer industry, which brought a change in the mode of industrial organization and technology transfer in the country. Phase I was featured with limited success of the automobile development programmes. It was in phase 2, that big changes in automobile industries have taken place spearheaded by Malaysian Heavy Industries Corporations (HICOM). The first national car project was launch in 1983 through the establishment of

Perusahaan Otomobil Nasional Sdn. Bhd. (PROTON). The first PROTON plant was set up in Batu 3, Shah Alam, Selangor. PROTON rolled out its first car model namely "Proton Saga" in 1985 under a joint venture cooperation between HICOM, Mitsubishi Corporations (MC) and Mitsubishi Motor Corporations (MMC). Currently, PROTON has produced a number of other models such as Iswara, Wira, Tiara, Putra, Satria, Perdana, Juara, Waja, Gen 2 and most recently the Savvy.

Following the PROTON's success, a second national car namely Perusahaan Otomobil Kedua (PERODUA) was established in 1993 to produce smaller cars (below 1300 cc). PERODUA plant located in Sungai Choh, Rawang Selangor. The first model of PERODUA car is called Kancil introduced in 1994. PERODUA now produced various models such as Kembara (Jeeps), Rusa (Van) and Kelisa and Myvy (saloons). Following the success PROTON and PERODUA, several other automobile firms have been set up producing other vehicles in Malaysia. MODENAS produced motorcycles which were launched in 1996, Malaysian Truck and Bus Project produced trucks and buses launched in 1997 and Nazaria was the latest addition launch in 2002.

The development of automobile industries in Malaysia provides a great opportunity for the emergence and development of small, medium and large scales related industries. Currently there are 350 part and component manufacturers in Malaysia catering the needs of those automobile firms. In terms of location,

most of the automotive firms built their factories and offices in Klang Valley. However a few of them are operating in Johor, Perak, Kedah and Pahang.

According to SMIDEC (2001), the automotive industry in Malaysia can be divided into four groups. The first group is manufacturing passenger and commercial vehicles such as by PROTON (passenger cars), PERODUA (passenger cars, vans and four-wheel drive vehicles); Malaysian Truck and Bus Sdn. Bhd. (MTB) producing heavy commercial vehicles; and Industri Otomotif Commercial (INOKOM) producing light duty trucks and vans. All these firms are under government led initiatives or government linked companies. The second group is consisting of nine non-government but privately owned companies assembling passenger vehicles or passenger and commercial vehicles based on franchise or contract-assembly involving completely knocked down (CKD) kits and locally sourced parts. The third group is a combination of 320 automotive parts and components manufacturers consisting of associate firms of major manufacturers or assemblers, transnational firms and large local firms. The last group is motorcycle manufacturers one of which is Motosikal Dan Enjin Nasional (MODENAS) a government linked company and four other non-government linked assemblers with a total installed capacity of 650,000 units. Each manufacturer has their own factory in Malaysia.

Meanwhile, the commercial vehicles sub-sector can be classified into three categories such as the light segment (below 2000 c.c. capacity engine, diesel or petrol) which is mainly built-up vans and pick-ups (flat-bed trucks); the medium

truck and buses, usually up to five tonnes capacity; and the heavy commercial vehicle category. Malaysia produced 64,000 trucks, pick-ups, four-wheel drive vehicles, vans and buses in the year 2000, with less than one percent of the production are exported. Local manufacturers, MTB, PERODUA and INOKOM accounted for 30 per cent of local production in 2000. In Malaysian market share, PROTON was leading with a 26 percent of the total vehicle sales, followed by Toyota (22 per cent) and PERODUA (13 per cent).

Table 2.2: Motor vehicles production in Malaysia from 1995 to Oct. 2000

Year	Passenger vehicles		Commercial Vehicles	
	Unit	Percent Increase	Unit	Percent Increase
1995	227,727	44.49	61,128	39.51
1996	280,944	23.42	92,733	51.69
1997	335,030	19.25	108,140	16.62
1998	128,979	(61.5)	18,370	(83.01)
1999	241,176	86.98	46,458	152.90
Jan-Oct 2000	233,430	-	65,157	-

Source: MIDA (2001) pg. 85

Table 2.2 shows that the production of the motor vehicles since 1995 to Oct 2000. For Passenger vehicles in 1995 Malaysia have produced around 227,727 vehicles or 44.49 percent and increased further in 1997 to around 335,030 vehicles. However, in 1998 the production declined to 128,176 because of the financial crisis in ASEAN countries. The same pattern can also be seen in

commercial vehicles production where the production has increase from 1995 to 1996 but decline in 1997 to 1999. However, in January 2000 until October 2000 the production has increase to 65,157 vehicles.

**Table 2.3: Production of vehicles by national makes
from 1995 to Oct. 2000**

Year	Passenger		Commercial	
	PROTON	PERODUA	MTB	PERODUA
1995	155,000	-	-	-
1996	181,065	47,966	-	7,826
1997	222,310	63,225	3,345	11,933
1998	81,692	38,962	493	6,127
1999	155,587	70	2,270	16,418
Jan-Oct 2000	151,440	64,588	6,167	12,702

Source: MIDA (2001) pg. 71

Meanwhile, Table 2.3 shows the national makes of vehicles in Malaysia. There are two main companies leading the production of the vehicles in Malaysia. PROTON as the first national car maker has produced more than 10 models of passenger vehicles since 1984. The production level of PROTON cars increases every year until 1997 (222,310 vehicles). However, in 1998 the production dropped to 81,692 vehicles but in 1999 it started to increase again (155,587 vehicles). For the PERODUA, the same pattern also happened. For commercial vehicles Malaysian Truck and Busses has produced 3,345 commercial vehicles in 1997 and dropped to 493 in 1998. However, the

production has increased in 1999 (2,270) and until October 2000 (6,167). For PERODUA, its production of commercial vehicles has increase form 7,826 (1996) vehicles to 11,933 (1997). The production of PERODUA commercial vehicles has dropped in 1998 before production started to increase in 1999.

Table 2.4: Total market share of vehicles by national makes from 1995 to Oct. 2000

Year	Passenger		Commercial	
	PROTON	PERODUA	MTB	PERODUA
1995	68.06	-	-	-
1996	64.44	17.07	-	8.43
1997	66.33	18.87	3.09	11.03
1998	66.33	30.20	2.68	33.35
1999	59.84	26.92	5.57	40.32
Jan-Oct 2000	64.87	27.67	9.46	19.49

Source: MIDA (2001) pg. 71

In terms of local market share for the national car makers, PROTON held more than 64 percent of passengers vehicles from 1995 to October 2000 except in 1999 (59.84 percent). For PERODUA, it has achieved 17.07 percent share in 1996 and increase to 30.20 percent 1998 but dropped back to 27.67 percent in October 2000. For the commercial vehicles the market share of MTB has increase from 3.09 percent in 1997 to 9.46 percent (until October) in 2000. PERODUA's

commercial vehicles market share increased from 8.43 percent in 1996 to 40.32 percent in 1999 (Table 2.4).

Table 2.5: Total new vehicles registration

Year	Passenger Vehicles	Commercial Vehicles
1995	258517	74582
1996	337416	108378
1997	314399	90438
1998	142194	21657
1999	296716	19987
Jan-Oct 2000	231041	24003

Source: Road Transport Department cited in MIDA (2001) pg 91.

Ups and downs in the market shares for national cars are in tandem with Malaysia's annual total new vehicles registration (Table 2.5). In the period of 1995 to 1999 it has increase from 258,517 to 296,716 passenger vehicles and commercial vehicles increased from 74,582 vehicles in 1995 to 108,378 in 1996.

Table 2.6: Total sales of automotive part and Accessories from 1995 to Oct 2000

Year	Sales Values (RM Million)	Percent Increase
1995	2001.80	7.23
1996	2736.30	36.69
1997	3320.90	21.36
1998	1988.50	-40.12
1999	3002.30	50.98
Jan-Oct 2000*	3220.00	-

*Provisional figure

Source: MIDA (2001) pg. 90

Similarly, in terms of component parts and accessories for automotive sector, there has been a positive growth from 1995 to 1997. Table 2.6 shows that there was an increase in sales of automotive parts and accessories from 1995 to Oct 2000. In 1995 it has increased by about 7.23 percent and 36.69 percent in 1996. However the increase dropped to 21.36 percent in 1997 but increased tremendously to 50.98 percent (RM3002 Million) in 1999. SMIs have contributed around 20 per cent of this sub-sector's output. This sub-sector can be classified based on Original Equipment Manufacturer (OEM) market as component for assemblers and manufacturer of vehicles and Replacement Equipment Manufacturer (REMs). SMIs contributed around 11.8 percent to the gross output, 12.1 percent of value added and 25.5 percent of employment. In this sub-sector 85 percent of SMIs are involved in the motor vehicles body, parts and accessories manufacturing.

In the period between 1995 to Oct 2000, Malaysian government has approved 287 projects for investment under automotive sector or equivalent to RM6,231,277,556. Out of this amount, 69.97 percent were domestic investment, while the balance were from foreign investors. Most of the foreign investments came from Japan, UK, US and Germany. In terms of employment, it has created around 29,992 job (Table 2.7).

Table 2.7: Approved investment in automotive sector in Malaysia from 1995 to Oct. 2000

Year	No. of Project	Employment	Domestic Investment (RM)	Foreign* Investment (RM)	Total Investment (RM)
1995	59	5442	953,415,070	461,295,652	1,414,710,722
1996	46	4067	850,548,553	332,793,665	1,183,342,218
1997	48	7476	745,361,730	281,365,397	1,026,727,127
1998	57	4450	1,170,680,989	503,129,351	1,673,810,340
1999	40	4332	381,503,901	231,335,939	612,839,840
Jan-Oct 2000	37	4225	258,574,023	61,273,286	319,847,309
Total	287	29992	4,360,084,266	1,871,193,290	6,231,277,556

* Major investment project by Japan, UK, US and Germany

Source: MIDA (2001) pg. 92

Generally, the growth of automotive sectors has resulted in positive impacts on employment, total export and total value added. Table 2.8 revealed that motor vehicles assembly sector has created about 11,272 employment in 1995 and increased to 15,147 in 2000(October). Meanwhile, motor vehicle parts and accessories sector has created around 16,651 job opportunities in 1995 and increased to 20,011 in October 2000.

Table 2.8 : Total employment in automotive industry from 1995 to Oct. 2000

Year	Sector		Total
	Motor Vehicles Assembly	Motor Vehicles Parts and Accessories	
1995	11272	16651	27,923
1996	15772	17306	33,078
1997	18945	18156	37,101
1998	12800	13067	25,867
1999	13660	15720	29,380
Jan-Oct 2000	15147	20011	35,158

Source: MIDA (2001) pg. 94

Table 2.10 : ASEAN vehicle sales by type

Countries	Years				
	1996	1997	1998	1999	2000
Malaysia	275,693	307,901	137,690	239,647	284,100
Thailand	172,004	131,837	46,419	66,632	81,000
Singapore	26,628	26,591	28,514	38,616	52,000
Philippines	88,977	75,139	34,494	27,263	32,950
Indonesia	43,914	73,215	11,941	11,635	30,000
Vietnam	4,674	3,425	2,894	3,705	4,780
Others	11,000	7,000	3,000	5,000	7,000
Total	622,890	625,108	264,952	392,498	491,830

Source: Economic Intelligent Units in SMIDEC (2001) pg 104

However, in ASEAN countries, Malaysia is a leading producer in terms of vehicles sales. Table 2.10 shows that motor vehicles sales in ASEAN has dropped from 622, 890 vehicles in 1996 to 491,830 vehicles in 2000. Malaysian was luckier as her sales of vehicles increased from 275,693 vehicles to 284,100 in 2000. It was followed by Singapore with 26,628 vehicles sold in 1996 to 52,000 vehicles in 2000. Meanwhile, Vietnam's motor vehicles sales also increase from 4,674 vehicles in 1996 to 4,780 vehicles in 2000. Countries like Thailand, Philippines, Indonesia, and other ASEAN countries were experiencing a declining in vehicles sales in 2000 compared with 1996.