

## **THE IMPACT OF TRIMs ON MALAYSIAN AUTOMOTIVE SME VENDORS**

Rokiah Alavi & Syezlin Hasan\*  
Kulliyah of Economics and Management Sciences  
International Islamic University

*Tujuan kertaskerja ini adalah untuk mengkaji kesan pemansuhan Program Kandungan Bahan Tempatan ke atas vendor yang selama ini amat bergantung kepada Proton. Majoriti pengeluar alat-ganti dan komponen, terutamanya industri kecil dan sederhana (IKS), mengatakan bahawa pemansuhan program ini akan menjejaskan jualan dan perniagaan mereka. Kajian ini juga mendapati bahawa pengeluar IKS kebanyakannya menghadapi kos pengeluaran yang tinggi, tidak mempunyai daya-saing dan tidak efisien. Disamping itu, pengeluar IKS khususnya tidak mempunyai pengetahuan langsung mengenai pemansuhan program ini, walaupun selama ini perniagaan mereka bertahan dan berjaya disebabkan oleh bantuan kerajaan di bawah program Kandungan Bahan Tempatan. Ini bermakna, vendor-vendor Proton ini mungkin akan menghadapi kejutan, dan tidak bersedia apabila kerajaan memansuhkan program ini. Kesannya adalah kehilangan perniagaan, kerugian dan akhirnya banyak lagi kesan negatif yang berhubungkait dengan penutupan perniagaan yang mungkin akan timbul. Maka, adalah penting bagi pengeluar ini mencari jalan untuk memantapkan lagi kecekapan dan daya-saing mereka untuk menghadapi persekitaran perniagaan di mana bantuan dan sokongan kerajaan untuk pembangunan industri semakin berkurang akibat daripada tekanan dari luar.*

---

\* Rokiah Alavi is an associate professor at the Kulliyah of Economics and Management Sciences, International Islamic University. Syezlin Hassan is a lecturer at the same institution. An earlier version of this paper was presented at the first national conference on Entrepreneurship and Small Enterprises, at Langkawi, Malaysia, September 8-9, 2001. The comments from an anonymous referee are gratefully acknowledged.

## **INTRODUCTION**

The local content requirement (LCR) policy that has been implemented in Malaysia since the 1960s to promote its automotive industry has been identified as an investment measure that violates the Trade Related Investment Measures (TRIMs) Agreement. Therefore, as a member of the World Trade Organisation (WTO), Malaysia has to abolish the policy by January 1, 2000. However, the Malaysian government has so far been given two extensions by the WTO. Hence, the deadline for phasing out the programme has been extended to January 1, 2004.

The local content requirements compel automotive assemblers and producers to substitute imported parts with locally produced parts. The objective of this policy is to support local manufacturers, and to stimulate the industrialisation strategy. However, some analysts argue that the local content policy disguises the very high protection given to domestic production (Wonnacott, 1995; Abrenica, 2000). Thus, according to them, this policy could create very high economic costs to consumers, government budgets and the economy in general, mainly due to the inefficiencies and misallocation of resources that are usually associated with high protection levels. However, some host country governments believe that any negative trade effect associated with TRIMs is more than offset by their contribution to economic development (Chia, Freeman, Bora and Urata, 1999). Developing countries also argue that TRIMs play an important role in their economic development and could act as a pro-competitive device to counteract the behaviour of transnational corporations. Because of these reasons, many developing countries are reluctant to give up TRIMs.

It would be interesting, therefore, to examine the impact of LCR and its removal on the local auto parts and components producers. Are the benefits of protecting local manufacturers using LCR actually more than the costs? After more than three decades of protection, have the local firms achieved international competitiveness, and are they ready for market opening? In other words, what would be the impact of LCR removal on the small and medium-sized enterprises (SMEs) that are producing automotive components and parts? These are some of the questions that will be examined in this paper. The discussion is organised as follows. In the second part, a brief discussion on TRIMs will be presented. The third part provides a theoretical argument on why governments adopt local content

policy, and presents an overview of the policy in Malaysia. The fourth section examines the benefits and costs of the LCR policy in the Malaysian context. The implication of the local content requirement removal will also be analysed in this section. The final part concludes the paper.

## **TRADE RELATED INVESTMENT MEASURES (TRIMs)**

Trade-related investment measures are the key components of industrial and trade strategies deliberately adopted by the Malaysian government to enhance and stimulate the industrial development of the country. Some of these measures are seen as directly affecting economic efficiency and opportunities of foreign businesses in the country. Foreign investors claim that some of the investment measures adopted by the host government tend to obstruct free business environment, increase costs of production and reduce competitiveness in the domestic market. Therefore, multinational companies (MNCs) and proponents of free trade have regularly and persistently pressed for reductions in national controls on foreign investment. However, Malaysia and many other developing countries, non-governmental organisations (NGOs) and others defended the controls and restraints on foreign direct investment for a variety of social and national sovereignty reasons (Dunkley, 2000:67).

The Agreement on TRIMs covers conditions on investment which are related to trade in goods only. Measures related to export performance and technology transfer requirement in the goods sector, however, are not included in the TRIMs Agreement (Greenfield, 2001). Other measures outside the domain of trade in goods are covered in other WTO Agreements. For example, services are covered by the WTO General Agreement in Trade on Services (GATS), while export subsidies are covered in the Subsidies Agreement. Dunkley (2000:68) categorised TRIMs into two types; 'positive' (e.g. tax concessions to attract FDI) and 'negative' (various requirements imposed on foreign investors). The latter include the requirement that MNC investors use a quota of local inputs, limit the use of imported components, match foreign exchange usage to the volume of exchange generated, adopt local labour hiring targets, conduct R&D locally, etc. Ironically, the TRIMs Agreement deals only with the 'negative' investment measures.

In principle, the Agreement is meant to reduce or prevent distortions associated with national policies on investment. It prohibits member countries from adopting investment measures such as local content, foreign exchange and trade balancing. The TRIMs Agreement basically does three things (Greenfield: 2001):

1. Highlights obligations under the GATT Articles III (National Treatment) and Article 4 (elimination of quantitative restrictions on imports);
2. Lays down deadlines for removing trade-related investment measures;
3. Allows disputes between member-states to be settled by the WTO.

The Agreement does not define what a 'trade-related investment measure' is, but gives an Illustrative List which provides examples of what laws, policies or regulations may be considered as TRIMs. The exact description of TRIMs' prohibition under the paragraph 4 of Article III of GATT

*"..... include those which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage, and which require: (a) the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of its local production; or (b) that an enterprise's purchases or use of imported products be limited to an amount related to the volume or value of local products that it exports".*

Meanwhile, the obligation of general elimination of quantitative restrictions provided under paragraph 1 of Article III of GATT<sup>1</sup>

*"..... include those which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage, and which restrict: (a) the importation by an enterprise of products used in or related to its local production, generally or to an amount related to the volume or value of local production that it exports; (b) the importation by an enterprise of*

---

<sup>1</sup> See <http://www.wto.org>.

*products used in or related to its local production by restricting its access to foreign exchange to an amount related to the foreign exchange inflows attributable to the enterprise; or (c) the exportation or sale for export by an enterprise of products, whether specifies in terms of volume or value of products, or in terms of a proportion of volume or value of its local production”.*

Thus, investment measures that violate Article III.4 of GATT 1994 can be summarised as the following<sup>2</sup>:

1. Specifying that particular products of domestic origin must be purchased or used by an enterprise, or
2. Specifying that a particular volume or value of some products of domestic origin must be purchased or used by an enterprise, or
3. Specifying that an enterprise must purchase or use domestic products at least up to a particular proportion of the volume or value of the local production of the enterprise, or
4. Restricting the purchase or use of an imported product by an enterprise to an amount related to the export of its (the enterprise's) local production.

The first three are local content requirements and the fourth is an indirect requirement of partial balancing of foreign exchange outflows and inflows. On the other hand, measures that are inconsistent with Article XI.1 of GATT are:

1. Imposing a general restriction on the import of inputs by an enterprise or restricting the import of inputs to an amount related to the export of its local production.
2. Restricting the foreign exchange for the import of inputs by an enterprise to an amount related to the foreign exchange inflow attributable to the enterprise.

---

<sup>2</sup> Das (1999:140-142).

3. Restricting exports by an enterprise by specifying the products, the volume and value of products, or the proportion of its local production.

The first two are requirements of a partial balancing of foreign exchange, and the third is an export restraint requirement for ensuring the domestic availability of the product.

The Agreement prescribes a time schedule for the elimination of all measures that are covered by it. A developed country member must eliminate these measures within two years, i.e by 1 January 1997. Developing countries are given until 1 January 2000, and least developed countries until 1 January 2002. Under the Agreement, member states were given 90 days from the date that the Agreement came into effect (January 1, 1995) to notify WTO of any existing TRIMs adopted by respective governments. There were 43 notifications by 24 developing countries (19 related to the auto industry and 10 related to the agro-food industry). The list of ASEAN countries that have submitted their notifications under the TRIMs agreement is given in Table 1.

Table 1: Measures notified under Article 5.1 of the TRIMs Agreement by ASEAN countries.

<b>Country</b>	<b>TRIM Measure</b>	<b>Industry</b>
Indonesia	Local Content	Automotive Industry Utility Boiler Fresh Milk and Soybean Cake
Malaysia	Local Content	General Automotive Industry
Philippines	Local Content	Automotive Industry Chemicals
	Foreign Exchange Balancing	Automotive Industry
Thailand	Local Content	Various Products

Source: Chia, Freeman, Bora and Urata (1999), Box 2.

If a government does not notify the WTO of an existing TRIM, then it is open to legal action by other WTO members. For example, the Indonesian government originally notified the WTO that its National Car Programme, P.T. Timur was involved in TRIMs, but then withdrew the notification. This led the governments of Japan, the US and the EC to lodge a complaint against Indonesia in the WTO when Indonesia started its National Car Programme. It was argued that the local content incentives provided under the National Car Programme violated the TRIMs Agreement. The WTO dispute settlement panel ruled against Indonesia in July 1998, forcing the elimination of the National Car Programme within 12 months<sup>3</sup>.

Article 5.3 of the Agreement permits developing countries and least-developed countries to apply for an extension of the transition period. The request is considered on the basis of the “development, trade and financial needs” of that country. The Agreement, however, does not explain how these requests will be decided or what these ‘needs’ could be. Discussions about the extension requests take place within the WTO Council for Trade in Goods (CTG). The countries will have to submit an extension request to the CTG and then have to justify the request in the face of detailed questioning from other members – the US, EC and Japan have usually been the most active<sup>4</sup>.

---

<sup>3</sup> In some cases government measures deemed as TRIMs were introduced after the Agreement came into Force. For example, the Indian government introduced a new law to support its automobile industry in November 1997. Under the law, the Indian government required all new foreign investments into the automobile industry to sign a standard MOU with the government establishing:

- A minimum US\$50 million investment in joint ventures with majority foreign ownership;
- A waiver of import licenses if local content exceeds 50 per cent;
- 50 per cent local content requirements for completely knocked down parts (CKD) and semi-knocked down parts (SKD) in first 3 years and 70 per cent within 5 years;
- and, the obligation to export within 3 years, with possible restrictions on imports for CKD and SKD if export requirements are not met.

The Dispute Settlement Body ruled that these conditions violate the provisions of the GATT enforced under the TRIMs Agreement, and the Indian government was asked to revoke the 1997 law.

<sup>4</sup> <http://www.dti.gov.uk>.

At the Seattle Ministerial meeting in 1999, a group of 12 developing countries, led by India, effectively revived the 1960s infant industry justifications for TRIMs by arguing that they “allow for accelerating the industrialisation process in developing countries and enable these countries to maintain balance-of-payments stability”, and that the TRIMs agreement should therefore be amended to extend the transition time for their expiry in developing countries “until such time that their development needs demand”.<sup>5</sup> Nine<sup>6</sup> WTO members submitted transitional period extension requests before the deadline expired on January 1, 2000<sup>7</sup> (see Table 2), maintaining that they need more time to bring their industrial policies into conformity with the TRIMs Agreement. Requests ranged from 1 year (Chile) to 7 years (Argentina, Columbia and Pakistan), and most of these cover the automotive sector and local content requirements. Pakistan’s request is for general engineering, electrical goods, agricultural equipment and automobiles, while Columbia’s is for agro-industrial processors and the issue of local harvests. Romania’s request covered automotives and shipbuilding (Raghavan, 2001). The first round of extension requests have been accepted by the Chair of the CTG’s ‘two by two’ proposal in November 2000<sup>8</sup>. This involves automatic 2 year extensions until the end of

---

<sup>5</sup> Paras 20 and 21 of a Communication received by the WTO General Council from India on behalf of Cuba, Dominican Republic, Egypt, El Salvador, Honduras, India, Indonesia, Malaysia, Nigeria, Pakistan, Sri Lanka, and Uganda. Document (WTO/GC/W/354 11 October 1999) in <http://wto.org>. At the same time Mexico argued that the TRIMs Agreement should be revised, and in any event, for the right to extend existing agreements for a further five years in order to avoid “developmental dislocations and problems in sensitive areas of their economy” (WTO document WT/GC/W/351).

<sup>6</sup> These countries are Argentina, Chile, Colombia, Malaysia, Mexico, Pakistan, the Philippines, Romania and Thailand.

<sup>7</sup> Egypt, however, submitted the application for extension after January 1, 2000. The delay is said to be due to internal discussions on whether its measures were covered by TRIMs. The application is therefore, still pending, and if this is not accepted by the CTG, the request would have to be treated as a waiver under the GATT Article IX. In exceptional circumstances, the Ministerial Conference may decide to waive an obligation imposed on a Member by this Agreement or any of the Multilateral Trade Agreements, provided that any such decision shall be taken by three fourth of the Members.

<sup>8</sup> There was a conflict between developed and developing countries on the process for negotiations of the extension deadlines. The developing countries have been pushing for the negotiation to be based on groups of member-states and be undertaken through a multilateral framework. This position was



2001 with requests for additional extensions for a maximum period of two years to be submitted by 31 August 2001. These further extensions would need to be accompanied by a reasonable phase out plan for the remaining TRIMs. The extensions are not guaranteed and will be dealt with on a case by case basis.

In the case of Malaysia, the first extension was granted until January 1, 2002. The Malaysian government therefore, has started to phase out its local content programmes. Malaysian International Trade and Industry Minister, Datuk Seri Rafidah Aziz announced<sup>9</sup> on November 20, 2000 that the process of phasing out the local content policy would involve the abolition of the Local Materials Contents Programme (LMCP) and the removal of eleven products from the Mandatory Deleted Items (MDI)<sup>10</sup> list for which local manufacturers have achieved international competitiveness. The remaining 19 items listed in the MDI would be removed on January 1, 2004. (Malaysia has been granted a second extension to phase out its local content policy by December 31, 2003.)

---

advanced by the governments of Malaysia, Brazil, Mexico and Pakistan (Greenfield, 2001: 3). In contrast, the US, Japan and Canada were of the opinion that requests for deadline extensions should only be considered on a 'case-by-case' basis and should be negotiated bilaterally. The failure to resolve this conflict over how to process extension requests under the TRIMs Agreement was one of the disagreements which contributed to the internal collapse of the Seattle WTO trade talks. Since the Seattle talks, the WTO CTG has held several meetings to try to resolve the dispute over extension procedures. This was partly resolved in early July 2000 when it was decided that the Council chair would oversee multilateral negotiations. However, requests will still be dealt with on a case by case basis and are open to bilateral pressure from the US, Japan and the EC.

<sup>9</sup> Information obtained from <http://www.sibexlink.com.my/freenews>.

<sup>10</sup> This includes coil springs, exhaust systems, external body protective moulding, relays, fuel tank, glass components, metal damping sheet, seat and slide assemblies, seat pads, windscreen washers and shock absorbers.

Table 2: TRIMs Extension Requests

	Country	Length of Extension Requested	TRIM Measure
1	Argentina	7 years to 31 December 2006	Automotive Industry
2	Chile	1 year to 31 December 2001 (originally to 31 May 2001)	Exemption from customs duties for CKD/SKD auto units when off-set by exports
3	Colombia	7 years to 31 December 2006	Imports subject to absorption of domestic products
4	Egypt*	5 years to 31 December 2004	Reduced customs duties on imported components incorporated in domestic assembly
5	Malaysia	2 years to 31 December 2001	Local content policy on motor vehicles, target of 60% for cars and motorcycles and 45% for commercial vehicles
6	Mexico	4 years to 31 December 2003	Measures relating to automotive industry and auto transportation vehicles
7	Pakistan	Minimum of 7 years from January 2000	Reduced customs duties on imports of raw material, components and parts for domestic assembly
8	Philippines	Five years to 31 December 2004	Local content and foreign exchange requirements for cars, motorcycles and commercial vehicles
9	Romania	Five years to 31 December 2004	Companies with foreign capital of US\$60 million subject to integration value degree of 60% and export of minimum 50% of annual value of production
10	Thailand	Five years to 31 December 2004	Local content requirement for production of milk and dairy products

Source: <http://www.dti.gov.uk>, "WTO Trade Related Investment Measures (TRIMs) Agreement", Annex 2.

Note: \* Egypt applied for extension after the deadline, and therefore is not listed in the first group of countries requesting for extension.

## **WHY GOVERNMENTS INSIST ON THE LOCAL CONTENT POLICY**

The local content requirement on manufacturing industries is a policy meant to strengthen and enhance linkages between industries. The main objectives of imposing local content requirement are to increase employment opportunities in the domestic economy, to create backward linkages, and to promote productivity and growth of the economy. Local content requirements are usually imposed on the automotive industry because of its production characteristics. The automobile industry involves thousands of components supplied by many producers and as such, is suitable for local content regulation. Moreover, many developing countries regard the automotive industry as a strategic starting point in their drive towards heavy industrialisation. In 1980, about 54 per cent of countries studied by UNIDO (1986: 10) have been found to have LCR policies solely in the automobile industry.

The local content requirement is expected to promote backward linkages between industries, where it expands the volume or value of products produced by various manufacturers as a direct result of an increased local sourcing by automotive manufacturers and assemblers. Theoretically, this policy is expected to increase input procurement from local firms because of several reasons: (i) close proximity with suppliers makes procurement cheaper, more predictable, flexible and easier to negotiate and monitor; (ii) easier to provide new technical information, product specifications and materials as changes take place in production; (iii) lower risks of disruption of supplies; and (iv) the ease of establishing trust and working network with face-to-face interaction. It also strengthens inter-firm relationships in areas such as technical support, technology transfer, training and skills development and R&D. Increased local sourcing facilitates employment creation, production capability expansion, and augments the revenues of local firms. These developments contribute favourably to the balance of payments and also accelerate productivity, and enhance economic growth.

### **The Local Content Requirement Policy in Malaysia**

Discussion on the LCR policy in Malaysia is very much related to the promotion of the automotive industry. Therefore, we will see that the emphasis given to the LCR policy changes according to the government's involvement in promoting the automobile industry. This can be distinctly

divided into two phases. The first phase is the period from the mid-1960s to the early 1980s; it is characterised by protective promotion of local assembly of imported CKD parts when the government began pursuing the import-substitution industrialisation (ISI) strategy. The introduction of the National Car Programme (NCP) in the mid-1980s marks the beginning of the second phase.

The local content programme gained importance following the government's acceptance of the Walker Report in 1970 (Paramjit, n.d.). The report recommended raising the local content (computed by weight) over a 10-year period, from 10 per cent in 1972 to 35 per cent in 1982, with penalties imposed for non-compliance. The purpose of the scheme was to standardise major components and to reduce the variety of vehicle makes and models. The local content programme was however deferred following criticisms concerning the use of weight as criterion and the rising prices of automobile as a consequence of the oil crisis during 1973-1975 (Rasiah, 1998). In the 1980s, the local content in the industry was at an insignificant level despite numerous programmes aimed at increasing local sourcing. The main reason for this was the overpriced locally produced car components and parts (about 50 per cent higher than imports, on average) resulting from the fragmented market, due to the existence of numerous makes and models (Luetert and Sudhoff, 1999; Chan, 1996), and the inefficiency of the automobile components and parts industry (Doner, 1991). Although there are original equipment (OE) suppliers, most of these suppliers operated with an uneconomic volume of production because they were required to make frequent changes to production to meet the different requirements of the numerous models (Low, 1998). Many depended on the small domestic market, and became multi-brand and multi-model suppliers.

Dissatisfied with the role of the private sector in the progress of the automotive industry, and in order to stimulate linkages in the economy, the Malaysian government intervened directly by setting up the first national car project (undertaken by Perusahaan Otomobil Nasional Berhad - Proton) in 1985. It was a joint venture between Mitsubishi Motor Corporation (MMC), Mitsubishi Corporation and the Heavy Industries Corporation of Malaysia (HICOM). Proton rolled out its first batch of cars in 1985. Preferential treatment measures and heavy protection was provided to the industry. Following its 'success', a second national car project, Perodua, was set up in 1993 to produce cars with smaller engines (below 1000 c.c.). This time the joint venture was between Daihatsu and Mitsui of Japan,

Permodalan Nasional Berhad (PNB), Med-Bumikar Mara and UMW Holdings. Proton, and to some extent Perodua, now form the focal point and backbone of the automotive parts and components industry and spearheaded the development of more original equipment parts manufacturers (Low, 1998).

The government's direct intervention in spearheading the programme is noteworthy. A co-ordination committee on the use of local components for Proton was established under the Chairmanship of Ministry of Trade and Industry (MITI) with representatives from Treasury, Malaysian Industrial Development Authority (MIDA), Malaysian Industrial Development Finance (MIDF), Bank Pembangunan, Standards Research Institute of Malaysia (SIRIM) and Small Scale Industries Division of MITI (HICOM, 1985). The committee was responsible for developing a local content programme and identifying various parts that can be manufactured locally. Among the factors that were taken into account in choosing local manufacturers include quality, price, the extent of *Bumiputera*\* equity participation, export market potential and the local content to be achieved (HICOM, 1985). In 1985, Proton identified 282 components that can be manufactured locally for the National Car Project. The policy guidelines that have been developed in the sourcing of local components are:

- (i) parts to be produced should be of acceptable quality and price;
- (ii) multi-sourcing of local components are encouraged to ensure reliable supply and reasonable prices.

To accelerate the development of local automotive parts and components manufacturing, the government introduced the local material content programme (LMCP) and the vendor development programme (VDP). Even though the LMCP is applicable for both the national car manufacturers and assemblers, the programme is mainly targeted at assemblers who are franchise holders of foreign automotive manufacturers. VDP, on the other hand, is meant for the National Car Producers (NCPs) to help *Bumiputera* auto parts and components manufacturers.

The local content requirement is monitored through the specific localisation programme, i.e., the mandatory deletion programme (MDP) and the LMCP. The MDP was introduced by the government in the 1980 to enhance the

---

\* The Malays and other indigenous people of Malaysia.

local content programme. Under this programme, “a component part is deleted from CKD packs (imported) when the local parts manufacturer is able to supply the original equipment market requirement for the assembly parts” (Arshad, 1996: 3). A list of 30 items was identified as mandatory localised components (see Table 3).

Table 3: Mandatorily Deleted Components for Passenger and Commercial Vehicles

1. Air Filter	16. Radiator Hoses
2. Alternator and Voltage Regulator	17. Seatbelts
3. Battery	18. Seat and Slide Assemblies
4. Carpet and Underlay	19. Seat Pads
5. Coil Spring	20. Shock Absorbers
6. Exhaust System	21. Spark Plug
7. External Body Protective Moulding	22. Starter Motor
8. Flasher Relay	23. Tubeless Tyre Valves
9. Fuel Tank	24. Tubing for Brakes, Clutch, and Fuel
10. Glass	25. Tyres
11. Horn	26. Wheel Nuts
12. Leaf Spring	27. Windscreen Washer
13. Melt Damping Sheet	28. Wiper Motor
14. Mudflaps	29. Wire Harnesses
15. Radiator	30. U-Bolts Assemblies

Source : MIDA (2001), Appendix X.

Note : The MDP list is as of October 2001. 11 have been identified to be removed items from the list by the end of 2001 (see footnote 9).

The LMCP, which was implemented in 1992, provides local content target for both passenger and commercial vehicles. The target is to achieve 45-60 per cent of local content over the period of five years for various types of vehicles (see Table 4). The Vendor Development Programme (VDP) was launched in 1988, and the government designed this programme to complement the MDP and LMCP programmes to boost and support the development of the automotive component industry. Under this programme, the anchor companies guarantee market for the products produced by the vendors. In addition, the vendors are granted with financial and technical assistance by the parent company. For example, Proton assisted the *Bumiputera* Small and Medium sized enterprises (SMEs) to venture into the manufacturing of automotive parts and related supporting industries, such as forging, electroplating, tool-making and machining. For this, Proton received RM 7 million under the Fifth Malaysia Plan (1986-90)

and an additional RM 15 million under the Sixth Malaysia Plan (1991-1995) from MITI (Abdulsomad, 1998).

Table 4: Local Content Programme for Passenger and Commercial Vehicles

Types and Category of Vehicles	Local Content Target (%)				
	1992	1993	1994	1995	1996
Passenger vehicles up to 1,850 cc	30	40	50	55	60
Passenger vehicles 1,851 - 2,850 cc and Commercial vehicles up to 2,500 GVW	20	30	35	40	45
Passenger vehicles above 2,850 cc and Commercial vehicles above 2,500 GVW	Mandatory Deletion Items Only				

Source: MIDA (2001), Appendix XII.

Note: The local content target has remained unchanged since 1996.

The government also intervened directly to upgrade the technological and technical skills of local parts manufacturers by assisting the firms to forge partnership with reputable foreign firms. Such collaborative arrangements between local automotive parts vendors and foreign firms took the form of joint-ventures, technical assistance programmes and purchase agreements (Table 5).

Table 5: Collaborative Arrangement between Vendors and Foreign Firms

Source Country	Joint-Venture	Technical Assistance	Purchase Agreement	Total	Percentage of the Total
Japan	32	75	2	123	56
Germany	4	10	1	16	7
Taiwan	3	8	-	12	5
Korea	6	9	-	15	7
France	-	9	2	11	5
Others	10	24	3	42	19
Total	55	135	9	219	100

Source: Paramjit (n.d.), Table 13

As at 1998, of the 219 "match-making" programmes initiated by Proton for its vendors, 56 percent was with Japanese firms, 7 percent each with German and Korean firms, and 5 percent each with Taiwanese and French companies (Paramjit, n.d). The high rate of collaboration with Japanese firms is mainly due to Proton's tie-up with Mitsubishi and its supplier network. They produce original equipment parts and components such as metal stamped and pressed parts, plastic injection moulded parts, wire harnesses, wiper, lamps, radio cassettes and air-conditioners according to the specification set by the anchor company.

### **BENEFITS AND COSTS OF IMPLEMENTING LCR POLICY**

In Malaysia, the LCR policy was successful in increasing the level of local content in the automotive industry. It has contributed positively to the development of the automotive parts and components manufacturing Small and Medium sized enterprises (SMEs), and has stimulated technological and skill development in the sector (MIDA 2001: 5-7; Leutert and Sudhoff, 1999). The main factors that contributed to the success of this policy were: (i) the items in the mandatory list were non-core items which the automotive manufacturers and assemblers found convenient to source from local suppliers and (ii) the low level of technology required to produce the parts and accessories demanded by the producers and assemblers.

The success of the local content requirement policy in the automotive industry can be seen in the Saga model manufactured by Proton. The level was 18 per cent in 1985 when the first batch of Saga rolled out of the assembly lines, and increased to 67 per cent by 1993, and over 70 per cent as of April 1999 (MIDA, 1999 and 2001).

Table 6: Proton's Vendors

Year	No. of Vendors	Bumiputera Vendors	No. of Local Parts
1985	17	4	228
1986	33	7	325
1987	40	7	398
1988	46	9	525
1989	67	13	901
1990	78	21	1014



Year	No. of Vendors	Bumiputera Vendors	No. of Local Parts
1991	99	29	1177
1992	106	35	1316
1993	125	39	2899
1994	128	42	3444
1995	138	48	3828
1996	151	71	4076
1997	176	88	4187
1998	188	93	4319

Source: Paramjit (n.d.), Table 12

A total of 4,319 parts were procured locally in 1998 as a result, compared to 228 when Proton first started. The number of local vendors has increased from 17 in 1985 to 188 in 1998 (see Table 6). Currently, there are more than 350 companies manufacturing component parts. Out of 188 vendors supplying parts and components to Proton in 1998, 176 of them were local while the remaining five were from Thailand (3 vendors) and Singapore (2 vendors). As shown in Table 6, the percentage of Bumiputera vendors also increased, from 23 per cent in 1985 to 49 per cent by 1998.

These local vendors are located throughout Peninsular Malaysia and manufacture various types of component parts (see Table 7). About 71 per cent of the vendors are based in Selangor, and the others come from other parts of Malaysia.

Table 7: Local and Overseas Vendors by Location

Location	Percentage
Penang	6.1
Perak	1.7
Selangor	70.7
Kuala Lumpur	8.3
Negeri Sembilan	5.0
Malacca	1.7
Johore	1.7
Terengganu	2.1
Thailand	1.7
Singapore	1.0

Source: Vendors' Directory 1998/99

Table 8 show the categorisation of vendors by industry. About 40 per cent of the vendors are from the metal industry, 18 per cent from the electrical sector, 10.5 per cent from plastics and 12.2 per cent from the rubber industry.

Table 8: Vendors by Industry

Industry	Percentage
Metal	39.8
Electrical	18.2
Electronics	0.6
Plastic	10.5
Rubber	12.2
Others	18.7

Source: Vendors' Directory 1998/99

Most of the vendors are Small and Medium sized enterprises (SMEs). Out of a total of 188 vendors, 51.4 per cent are Small and Medium sized enterprises (SMEs) (paid-up capital less than RM2.5 million). Table 9 provides the details on the categories of vendors, based on their paid-up capital.

Table 9: Vendors Based on Paid-up Capital

Paid-up Capital	Percentage
less than 1 million	27.1
1 - 2.5 million	24.3
SME	51.4
2.5 - 5 million	11.6
5 - 10 million	14.4
10 - 15 million	8.3
15 - 20 million	3.3
more than 20 million	11.0
LSI	48.6

Source: Vendors' Directory 1998/99

Following the increase in the number of vendors and the rapid development of the motor vehicles assembly and manufacturing sector, the production of automotive component parts and accessories increased by 21.36 per cent to RM3,320.9 million in 1997 compared to the previous year.

Table 10: Output of the Automobile Industry

<i>Industry Description</i>	<i>Industry Code</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>Average Annual Growth Rate (1992-95)</i>
Manufacture of Motor Vehicle Bodies	38431	224,275	264,734	332,078	364,799	17.9%
Manufacture and Assembly of Motor Vehicles	38432	3,236,781	3,676,983	5,000,877	6,883,030	28.6%
Manufacture of Motor Vehicle Parts and Accessories	38439	988,148	1,320,955	1,965,212	2,484,629	13.8%
% of Manufacture of Parts and Accessories to Manufacture and Assembly of Vehicles	(38439/ 38432)	31%	36%	39%	36%	

Source: IDB (1999); Table 4

The total production for 1999 and 2000 was RM3,320.3 million and RM3,943.6 million, respectively. The growth in the automotive industry in the early 1990s can be seen from Table 10. While the manufacture and assembly of motor vehicles grew by 28.6 per cent a year between 1992 and 1995, the manufacture of motor vehicle parts and accessories grew faster at 36 per cent. (Actually, the data may not have captured the entire production of parts and accessories for automobiles because some auto parts are also classified under other categories, i.e. rubber, metal, glass and plastics.) The parts and accessories sector has become substantial and constitutes more than one-third the size of motor vehicle manufacturing and assembly (IDB, 1999).

However, despite the local content requirement and increased local procurement, the imports of parts and accessories have increased as well. This is mainly due to the rapid growth in domestic demand for motor vehicles and the corresponding growth in motor vehicle manufacture and assembly. The total imports of completely-knocked-down (CKD) parts for both passenger vehicles and commercial vehicles have increased from 1993 to 2000 (see Table 11). CKD parts for passenger vehicles increased from

RM1.3 billion in 1993 to RM3.0 billion in 1995, but fell gradually since then to RM1.2 billion by 1998, before picking up to RM2.2 billion and RM3.4 billion in 1999 and 2000, respectively. The fall in the imports in the mid-1990s could be due to reduced demand for locally assembled cars and also the currency depreciation in 1997. The import of CKDs for commercial vehicles has seen an increasing trend as well. It increased significantly from RM777 million in 1993 to RM1.7 billion in 1995, and increased further to RM2.5 billion by 1996. However, currency depreciation in 1997 reduced CKD imports substantially to RM471 million in 1998.

Table 11: Imports of Motor Vehicles and Parts, 1993 – 2000 (RM million)

	1993	1994	1995	1996	1997	1998	1999	2000
Passenger Vehicles								
CKD	1,338.3	1,934.0	3,043.4	2,794.8	2,795.3	1,173.8	2,244.4	3,397.6
CBU	192.8	278.6	385.4	425.1	289.0	140.7	146.8	102.3
Sub-total	1,531.1	2,212.6	3,428.8	3,219.9	3,084.3	1,314.5	2,391.2	3,499.9
Commercial Vehicles								
CKD	777.0	1,114.1	1,702.0	2,281.1	2,476.7	471.6	987.3	1,610.4
CBU	257.5	272.2	510.6	797.7	344.1	295.0	122.2	187.9
Sub-total	1,034.5	1,386.3	2,212.6	3,078.8	2,820.8	767.5	1,109.5	1,798.3

Source: MIDA (1999) and (2001).

Overall, there is no doubt that the local content programme had helped to accelerate the growth of the parts and components segment of the automotive industry. Nevertheless, the LCR policy can only be considered as successful if these gains outweighed the costs.

### *The Costs*

Even though the local content requirement promotes the development of local suppliers and strengthens backward linkages, it can adversely affect automobile producers and assemblers if the suppliers are inefficient, produce at high costs and are not internationally competitive. Inefficiencies occur when the LCR is imposed for a long period, and the effect is worse if the government does not set a target for these companies to achieve international competitiveness within a specific period of time. If the costs of protection outweigh the benefits noted in the previous section, then the net impact of the LCR policy would be negative, and the automobile producers, consumers and the economy as a whole will be adversely affected.

Protection given to the vendors via the LCR policy works in exactly the same way as tariff protection does. The initial criterion for justifying protection for a firm or an industry is the recognition of the fact that a gap exists between the average cost of production of domestic producers and their foreign competitors. This gap is often created by the lack of experience, technological know-how and the differences in the country's history and stage of development. It has generally been accepted that new industries have little experience in terms of production techniques, management, marketing and other entrepreneurial expertise. These factors result in new local producers being unable to compete with established, efficient and internationally competitive producers. Local producers are thus considered to be "infants", relative to the grown-up, competitive firms in the industrial countries. The proponents of protection argue that if the domestic industry were to be established, it needs time and support to grow up under protection in order to gain the necessary experience to produce cost-efficiently. Hence, government intervention is necessary to allow local firms to grow and later compete with the competitive foreign firms. In theory, protection provides the time necessary for local producers to grow and reap the benefits of economies of scale in production.

Evidence from many countries has shown that any form of protection given to manufacturing firms will result in the 'infant industry syndrome', where the firms fail to grow up and instead tend to remain inefficient. In Malaysia, the LCR scheme has unfortunately created the 'infant industry syndrome' among the parts and accessories SME vendors. Many of the local suppliers are not only producing at an uneconomical scale and at higher prices, but also delivering lower quality output. Furthermore, they are encountering serious problems in marketing and meeting delivering schedules. The common concerns about local suppliers include the lack of quality control, their inability to deliver on time and the high prices they charge. In addition, many local suppliers also lack the 'right' attitude towards commitments to upgrade quality and advance technologically.

To illustrate, Proton suppliers in general were found to operate with out-of-date production techniques and at low levels of automation. Leutert and Sudhoff (1999:252) reported that although 50 per cent of the surveyed Proton suppliers had some computer-aided design (CAD) equipment, the systems were not well used, and reliance on principal assemblers and technology suppliers for designs was still heavy. Modern equipment is hardly used in the production process. They further noted that these firms were reluctant to invest in automated and modern equipment because of the unfavourable return-to-cost ratios. Suppliers, on the other hand, claimed that they are facing obstacles because of the unstable, unsteady and unpredictable volume of orders from Proton. This is because these firms are highly reliant on Proton – with more than 50 per cent of their production being delivered to this anchor company. The LCR is the main obstacle to the technological upgrading of these supplier firms. Proton's effort to nurture small start-up suppliers have led to a fragmented industry structure with more than 300 firms producing various parts and accessories for the automobile sector. The fragmented industrial structure hinders a firm's capability to upgrade their technological processes.

The lack of efficiency and international competitiveness is also reflected in the negligible share of exports by these supplier firms. A study by FMM in 1990 (FMM, 1991:21) found that about 20 per cent of the automotive parts and accessories suppliers did not export at all, while 80

per cent of them exported less than 20 per cent of their turnover<sup>11</sup>. The share of exports in total output is very negligible, i.e 0.3 per cent in 1993, 0.2 per cent in 1994 and 0.4 per cent in 1995. However, the value of automotive parts exported recorded a gradual increase from RM125.4 million in 1993 to RM209.8 million in 1995 and RM440.1 million in 1999 (see Table 12).

Table 12: Exports of Motor Vehicles and Parts, 1993 –2000 (RM Million)

Types of Vehicles/ Parts	1993	1994	1995	1996	1997	1998	1999	2000
Passenger	387.8	313.4	418.8	475.4	559.8	667.8	492.4	300.9
Commercial	39.1	22.5	27.6	32.5	43.9	305.3	58.6	91.1
Motorcycles	9.0	10.4	9.8	16.4	18.6	85.0	136.9	127.9
Parts	125.4	174.4	209.8	211.7	263.3	314.3	440.1	324.3
Total	561.3	520.7	666.0	736.0	885.6	1,372.6	1128.0	844.2

Source: MIDA (1999) and (2001).

In contrast, all non-suppliers have a high level of technology assimilation in the production process, and the keener competition faced by these firms made them more competitive. About 30 per cent of these non-suppliers are already exporting (see Leutert and and Sudhoff ,1999 and IDB, 1999).

Thus, we can conclude that the LCR policy has actually pampered the inefficient producers at the expense of domestic consumers and the government's budget (taxpayers). This policy has also compelled the national car producers to utilise local parts that are much more costly than parts that could have been imported in the absence of the policy. Consequently, the costs of production of Proton is higher and this increases the pressure on the national car producer to demand for greater tariff protection to compensate for using local parts. Hence, the protection given to one sector engenders protection to another (Abrenica, 2001:7). This explains why the level protection for the automotive sector is very high, with the rate of effective protection reaching as high as 3,500%!<sup>12</sup> Thus, it appears that in Malaysia, the costs

<sup>11</sup> Leutert and and Sudhoff (1999:255).

<sup>12</sup> Calculated by Abrenica (2000).



of protecting local auto parts and components producers using the LCR policy have outweighed its benefits.

### **The Impact of LCR Removal on Producers**

We have established earlier that the LCR policy has nurtured a significant number of local auto parts and components suppliers. A large percentage of these vendors are SMEs and highly reliant on Proton (Abdul Rahim, 1991; Hamid Noori, 1994; and Leutert and Sudhoff, 1999). We did a survey on Proton's vendors to evaluate the impact of LCR removal on the industry. One hundred and forty-three questionnaires were sent to all firms in Selangor and Kuala Lumpur which supply parts and components to Proton. We received 98 replies. Of this, sixty five per cent of the respondents was SMEs and the remaining ones were large scale industries (LSIs). The survey was done in year 2000.

Our survey shows that, on average, 73 per cent of the output of firms is sold to Proton (see Table 13). The majority of the firms that rely heavily on Proton are SMEs; they supply more than 75 per cent of their total output to Proton. In contrast, the large-scale vendors supply less than fifty per cent to Proton and have a close network with other local and foreign auto assemblers. It is apparent, therefore, that the SMEs are very much dependent on Proton to sell their products. Hence, it is expected that the impact of LCR abolishment on the SMEs would be significant.

Table 13: Vendor's Dependence on Proton

Type of Firm	% of Output Sold to Proton
All firms	73%
SMEs	75%
LSIs	40-50%

Source: Survey 2000.

The level of awareness among the SMEs on the impending policy changes is quite worrying. We asked the respondents whether they were aware of the TRIMs Agreement, and whether they know of the possibility of LCR removal. Only 35 per cent of the local vendors is aware of the Agreement (see Table 14), and the majority of them were SMEs. This finding is very disturbing because it implies unpreparedness

SMEs. This finding is very disturbing because it implies unpreparedness on the part of these firms to face market liberalisation. It appears that the protected environment had made them very complacent. This does not augur well for their survival when the LCR is finally eliminated.

Table 14: Awareness about TRIMs (% of Total Number of Firms)

Type of Firm	Aware	Unaware
All Firms	35%	65%
SMEs	25%	75%
LSIs	70%	30%

Source: Survey 2000.

In the questionnaire, we explained the TRIMs Agreement and its implication on the local content programme. We then asked the respondents about the effect of LCR removal on their future business. Sixty eight per cent of the respondents said they would be adversely affected by the removal of local content requirements, 14 per cent said that there would be a positive effect, while the remaining were unsure of the effect (see Table 15). Out of the 14 per cent of the respondents who said there would be a positive effect from the LCR removal, 80 per cent was confident of facing the world market as they were internationally competitive. These firms indicated that they were already exporting and also selling to customers other than Proton in the domestic market.

Table 15: The Impact of Abolishing LCR Programme

Adverse Effect	Positive Effect	Unsure of the Effect
68%	14%	18%

Source: Survey 2000.

Many local firms are still very young (having been established less than a decade ago), lacking in experience and not yet ready to face open competition at the global level. The advantage the local vendors may have over importers would be their long-term relationship already built up with Proton. In addition, the costs of delivery and related services could be much lower. By year 2005, we will see full market liberalisation in all aspects of international trade in goods and services. If the local auto components and parts suppliers remain highly reliant on Proton, and if they fail to widen their market base, their survival could

be in jeopardy. This is because the survival and sustainability of their main buyer, Proton, itself is very uncertain under the ASEAN Free Trade Area's (AFTA) trade liberalisation scheme. The AFTA agreement requires most products to have their tariffs reduced to between 0-5 per cent<sup>13</sup>. Although most component parts are already on the fast track schedule of tariff reduction, CKDs and CBUs are still in the exclusion list.

Recent policy reforms in the ASEAN automotive market may have a further impact on the Malaysian industry. In the Philippines, the tariff differentials were reduced substantially over the past years, in view of its commitments to close the gap and implement a uniform 5 per cent tariff by year 2004. The CBU rates for both vehicle types are now pegged at 30 per cent, while the CKD rates were increased from 3 to 10 per cent. But, the Philippines requested for postponement in implementing its TRIMs commitments to abolish requirements on local content<sup>14</sup> and net foreign exchange earnings. Thailand complied with its WTO commitment by eliminating its local content scheme on deadline. However, the Thai government increased the tariffs on CBUs and CKDs, supposedly to compensate for the reduced protection to local producers that resulted with the lifting of the local content requirement. Indonesia abolished its local content policy in 1999 following the

---

<sup>13</sup> Passenger cars, commercial vehicles and motorcycles which were placed in the Temporary Exclusion List (TEL) of the Common External Preferential Tariff (CEPT) Scheme were transferred into the CEPT by 1 January 2000 (for the original six countries of ASEAN) at tariff rates of 20% and below. Malaysia has sought flexibility to defer the inclusion of these products into the scheme until 2005 because the financial crisis has slowed down the country's industrial plans. Malaysia is now required to come up with a schedule, to reduce duties to 0-5% on these products. The number of tariff lines excluded by Malaysia is 218 (68 tariff lines on CKD and 150 CBU). The current applied import duties on CBU cars ranges from 140-300%, vans (60-200%) and commercial vehicles (50%). The CKD duties on cars ranges from 42-80%, vans 10-40% and commercial vehicles (nil). Malaysia has included 142 tariff lines on automotive parts and components into the CEPT Scheme and duties on these products are at 20% and below (MITI, 2000).

<sup>14</sup> In Philippines, the local content programme is implemented differently. Philippine assemblers can offset the local content requirement with export earnings. This means the assemblers can opt to export the parts and then apply the export revenues to compensate their local content obligations.

disputes in the WTO over its National Car Program. Duties on imported cars were scaled down as well and non-tariff barriers were removed completely.

Malaysia, in contrast, extended the duration for implementing its local content policy until 2004 and fortified its protection by raising tariff barriers on all vehicles types (see Table 16). Abrenica (2000) calculated the effective rate of protection (ERP) given to the automotive industry in ASEAN countries and found that the ERP for Malaysia was very high at 3,500 per cent, while the ERP for Thailand was the lowest at 42 per cent. The ERP granted to Indonesian and Philippine assemblers did not vary much from that in Thailand - 68 per cent and 64-69 per cent, respectively. This means that the auto assemblers and auto parts manufacturers in other ASEAN countries are operating in a more competitive environment. The level of protection given to automotive producers and assemblers through tariff barriers, and to local auto parts and component producers through local content programme in Malaysia is clearly too high. The problem is once the protection becomes established, and major automotive producers, component suppliers, trade unions and other groups rely on them, it would be extremely difficult to remove them (Pursell, 1999: 14).

**Table 16:Key Reforms in the ASEAN Automotive Industry, 1997-2000**

	Philippines		Malaysia		Indonesia		Thailand	
	1997	2000	1997	2000	1997	2000	1997	2000
Tariff Structure:								
CBU								
Passenger Car	40%	30%	140-	140-	200%	65-80%	42-	80%
Commercial Vehicle	20-45%	30%	200%	300%	5-105%	5-45%	68.5%	33-60%
CKD			35-50%	60-			30-66%	
Passenger Car	3%	10%		200%	65%	25-50%		33%
Commercial Vehicle	3%	10%	42%	42-80%	0-25%	25%	20%	33%
			5%	5-40%			10-20%	
Local Content	PC: 45% CV:13.7 -45%	retained	PC:60% CV:45% plus 30 MDIs	retained	CKD tariffs based on local content	abolished	PC:54% With 28 MDIs CV:45- 72%	abolished

Source: Abrenica (2000), Table 2

Note : PC stands for Passenger Car. CV stands for Commercial Vehicle.

Another challenge faced by the local automotive manufacturers is that, once the tariff and non-tariff barriers (NTBs) sheltering them are dismantled, foreign car makers, mainly the Japanese, are likely to increase their production capability and they could easily seize Proton's and Perodua's captive market in the domestic economy. Furthermore, under the TRIMs Agreement, the government will be required to remove all differential treatments that favour Proton, Perodua and other local establishments. Even though individual countries can impose high tariffs and still comply with the WTO rulings, the TRIMs Agreement does not allow for differential treatment on the basis of ownership and export subsidies. Such deregulation moves would most likely induce many foreign auto-makers to either invest in auto parts production or to buy over local firms. In Thailand, for example, the IMF-imposed structural adjustment programme has resulted in many auto parts producers going out of business or being made minority partners. Investment liberalisation programme in Thailand also saw many foreign firms such as Mazda, BMW, DaimlerChrysler and Hino, to name a few, grabbing the golden opportunity to increase their stakes in local companies or to take over complete control of local Thai firms (see Abdulsomad, 2001).

Many MNCs are, however, outsourcing their supplies, and this offers opportunities and also poses a threat to the existing Proton vendors. Suppliers who are efficient, able to meet strict requirements in terms of quality and reliability, and can offer cheaper prices are likely to survive and benefit from the opening up. However, the chances of local firms being a part of the first-tier suppliers are very remote, and they will most possibly belong to a second (or lower) tier of firms supplying relatively simple and lower cost parts and components. In addition, most MNCs have strong intra- and inter-firm linkages with subsidiaries within their respective TNC systems that may inhibit them sourcing from external (non-group) suppliers. This means that foreign firms may not use locally produced parts, even when local supplies of high quality and standard are available in the domestic market.

Another big challenge facing local firms is the competition from Thai auto parts producers. Banking on market liberalisation moves in the future, many Japanese, European and American auto-makers have already set up their production base in Thailand, to reap the maximum advantage in the region. Thailand is expected to be the second Detroit in Asia, and that imposes another obstacle to Malaysian producers.

## CONCLUSION

Trade and services liberalisation moves under the WTO ruling offer opportunities and pose threats to the existing SME vendors. Suppliers who are efficient, able to meet strict requirements in terms of quality and reliability, and can offer cheaper price are likely to survive and benefit from the opening up. The production, technological, marketing and delivery capabilities of local suppliers are the key determinants for their future survival. Since LCR and tariff and non-tariff protections will eventually be removed, local producers have no other way except to learn how to market and sell their products in a competitive environment. It is important that local firms focus on the range of products that they can be competitive in (in terms of price, quality and delivery). It is also crucial that they move from being a single-brand supplier so as to expand their business. They must acquire experience and knowledge by meeting the requirements of many buyers in contrast to the sheltered and privileged environment that they have been enjoying in the past. Unless they heed this wake-up call, they will become obsolete and fade out in the open market of the near future.

## REFERENCES

1. Abdul Rahim Hussein, 1991, "Proton's Experience as a Marketing Intermediary and Special Export Link: the Payung Concept" in Ismail Muhd Salleh and Katifah Rahim (eds) *Enhancing Intra-Industry Linkages: The Role of Small and Medium Scale Industries*, Kuala Lumpur: ISIS, pp. 43-48.
2. Abdulsomad K., 2001, "Government Policy, Liberalisation and Globalisation of the Automobile Industry in Thailand", *Business and Society*, Vol.2 No.1, pp.57-76.
3. \_\_\_\_\_, 1998, "Promoting Industrial and Technological Development Under Contrasting Industrial Policies: The Automotive Industries in Malaysia and Thailand", in K.S. Jomo, Felker G. and R.Rasiah (eds.), *Industrial Technology Developments in Malaysia: Industry and Firm Studies*, London: Routledge.

4. Abrenica M.J.V., 2000, "Liberalizing The ASEAN Automotive Market: Impact Assessment", obtained from [http://www.asean\\_auto.org/Liberalize.pdf](http://www.asean_auto.org/Liberalize.pdf).
5. Arshad Y., 1996, "Specific Opportunities for Investment in the Automotive Industry and Supporting Engineering Products and Services", paper presented at the Seminar on Opportunities for Domestic Investment in the Manufacturing Sector, MIDA, FMM, and MIDF. Kuala Terengganu, Malaysia.
6. Chan K.C., 1996, "Specific Opportunities For Investment as a Vendor/Sub-Vendor to PROTON", paper presented at the Seminar on Investment Opportunities in the Manufacturing Sector. MIDA, FMM, MIDF, and Perbadanan Kemajuan Negeri Perak, Ipoh, Malaysia.
7. Chia S.Y., N. Freeman, B. Bora, S. Urata, 1999, "East Asia and options for WTO 2000 Negotiations on Investment", paper presented at the World Bank-PECC Trade Policy Forum Conference on East Asia and Options for WTO 2000 Negotiations, Manila, 19-20 July.
8. Das B.L., 1999, *The World Trade Organisation: A Guide to the Framework for International Trade*, Penang: Third World Network.
9. Doner R.F., 1991, *Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia*, Berkeley: University of California Press.
10. Dunkley G., 1997, *The Free Trade Adventure: The WTO, the Uruguay Round and Globalism – A Critique*, London: Zed Books.
11. Evans P. , 1994, *Unpacking the GATT: A Step by Step Guide to the Uruguay Round*, London: International Organisations of Consumers Unions.
12. FMM (Federation of Malaysian Manufacturers), 1991, "Survey", in *FMM Forum*, Kuala Lumpur.



13. Greenfield G., 2001, "The WTO Agreement on Trade-Related Investment Measures (TRIMS)", Briefing Paper Series: Trade and Investment, Canadian Centre for Policy Alternatives, Vol.2 No.1.
14. Hamid Noori, 1994, "A Study on Technological Change in Three Selected Industries in Malaysia (Part B)", a report to SIRIM, AMT Management and Resource, unpublished.
15. HICOM (Heavy Industries Corporation of Malaysia Berhad), 1985, "The Role of HICOM in Setting-up Industrial Linkages-The Expected Spin-Off Effects on the National Economy", a paper presented at the Symposium on Linkages Between Large and Small Industries, 12 December, Kuala Lumpur, Malaysia.
16. IDB, 1999, "Issues for the Member States of the Islamic Development Bank in the Built-in Review of the Agreement on Trade Related Investment Measures (TRIMs) of the WTO", IDB Study on Trade and Development, Jeddah, Saudi Arabia.
17. Jomo K.S., 1994, "The Saga: Malaysian Car, Mitsubishi Gain" in Jomo K.S. (ed.), *Japan and Malaysian Development – In the Shadow of the Rising Sun*, London: Routledge.
18. Leutert H.G and Sudhoff R., 1999, "Technology Capacity Building in the Malaysian Automotive Industry", in *Industrial Technology Development in Malaysia: Industry and Firm Studies*, London: Routledge.
19. Low P., 1998, "The Malaysian Automotive Component Parts Manufacturer – Issues and Challenges", paper presented at the 2<sup>nd</sup> Conference on ASEAN Auto Supporting Industries, July, Kuala Lumpur.
20. MIDA, 1999, *Study on Transport and Machineries Industries*, Industry Briefs, Kuala Lumpur, Malaysia.
21. \_\_\_\_\_, 2001, "The Automotive Industry in Malaysia", Transport and Machinery Industries Division, unpublished report.

22. MITI, 2000, "Malaysia's Commitments Under Wto, Afta and Other Related Arrangements/Agreements that have Implications for the Domestic Auto Industry", an unpublished note distributed by MITI.
23. Noori H., 1994, "A Study on Technological Change in Three Selected Industries in Malaysia (Part B)", a report to SIRIM, AMT Management and Resource, unpublished.
24. Paramjit Singh (n.d.), "The Malaysian Automotive Industry", ASEAN Auto Database, <http://www.aseanauto.org/mal/report.htm>
25. Pursell G., 1999, "Australia's Experience With Local Content Programs in Auto Industry: Lessons For India and Other Developing Countries", paper presented at the conference on 'WTO, technology Transfer, and Globalisation of Firms', Institute of Economic Growth, New Delhi, March 25-26.
26. Raghavan C., 2001, "TRIMs Extension: EC-ACP Waiver Requests Before Good Council", obtained from <http://www.twinside.org.sg/title/extension.htm>
27. Rasiah R., 2001, "Liberalisation and Car Manufacturing in SEA-4", *Business and Society*, Vol. 2 No.1, pp. 1-23
28. \_\_\_\_\_, 1998, "Regulation and Market Structure of Southeast Asia's Car Industry", IKMAS, Universiti Kebangsaan Malaysia, (unpublished).
29. UNIDO, 1986, "Industrial Policies and Strategies in Developing Countries: An Analysis of Local Content Regulations", *Industry and Development*, No. 18, Vienna.
30. Wonnacott P., 1996, "The Automotive Industry in Southeast Asia", *The World Economy*, Vol. 19 No.1, pp. 24-30
31. \_\_\_\_\_, 1995, "The Automotive Industry in Southeast Asia: Can Protection Be Made Less Costly?" Washington D.C.: Institute for International Economics.