Prema-chandra Athukorala* Australian National University

Abstract: This paper examines the growth trajectory and the current state of the Malaysian automobile industry, with emphasis on the fate of the national car (Proton) project. The cause of the tragic ending of the Malaysian dream of building an internationally competitive national automotive industry was rooted in the very conception of the project. The project was designed primarily with an intrinsic import-substitution bias. The subsequent attempt to expand exports failed because of lack of a firm commitment on the part of its joint-venture partner, Mitsubishi. Given the export failure, Proton continued to remain a high cost producer whose survival depended crucially on government support through tariff protection, tax concessions, and other preferential treatments, including periodic capital injection on concessionary terms.

Key words: Automotive industry, Malaysia, multinational corporation JEL classification: F21, F23, I25, O14, O53

1. Introduction

Rapid manufacturing growth played a pivotal role in Malaysia's dramatic economic transition from a low-middle income to upper-middle income status within less than a decade from the late 1980s. It is therefore understandable that issues relating to industrial upgrading occupy the centre stage of contemporary policy debate in Malaysia on 'graduating from the middle' (Henderson and Phillips 2007; NEAC 2010, Yusuf and Nabeshima 2009). However, various prognoses of the slow process of industrial upgrading and the related policy prescriptions have so far focussed predominantly on the export-oriented industries, electronics in particular. Ironically, little attention has been given to various other industries which have failed to move from the import-substitution phase to global integration through export expansion and hence continue to rely for survival on government patronage rooted in the long-standing affirmative action policy. The purpose of this paper is to illustrate this glaring gap in the policy debate by examine the growth trajectory and the current state of the Malaysia automobile industry, with emphasis on the fate of the national car (Proton) project which was the pinnacle of the state-led industrialisation program launched in the early 1980s.

The automobile industry has been the target of industrial development in many countries as a growth driver - a source of employment, technological expertise, and a stimulus to other sectors through backward linkages. The automobile is a complex product, consisting of a large number of parts and components which involve different

^{*} Arndt-Corden Department of Economics, Crawford School of Public Policy, Australian National University, Canberra ACT 0200, Australia. Email: Prema-chandra.athukorala@anu.edu.au

production processes and factor proportions. There has been a massive transformation in the structure, conduct and performance of the world automobile industry over the past two decades or so, opening opportunities for countries in the periphery to join the global automotive production network (Klier and Rubestein 2008; Shapiro 1994). Until about the mid-1980s, auto firms were predominantly engaged in multi-market operations by setting up production bases in individual countries to serve those markets. Since then, the automobile industry has become increasingly globally integrated in the sense that manufacturing, sourcing and marketing has become increasingly cross-national. Production standards have become increasingly universal, accompanied by a palpable shift in production process from generic to modular technology. Consequently parts and components production have grown rapidly to cater for multiple assemblers. In this context, intense competition among carmakers has transformed the geographic spread of the automobile industry beyond the mature industrialised countries. The search for low-cost production sites have led to new waves of setting up production plants by automotive MNEs in peripheral countries. This paper aims to broaden our understanding of why Malaysia has failed to develop an internationally competitive automotive industry which delivers the anticipated development dividends, and thereby help frame policies for better outcomes in an era of rapid structural change in the global automobile industry.

The paper is arranged in five major sections. Section 2 surveys the evolution of the Malaysian policy regime relating to the automotive industry. Section 3 chronicles growth and structural change in the automotive industry, with emphasis on the role of the national car project. Section 4 examines the challenges faced by the national car projects and its final demise in the context of trade liberalisation and transformation in the global automotive industry. The final section summarises the main findings and policy inferences.

2. Policies

As in many other developing countries, in Malaysia the automobile industry was one of the first targets of industrial development through import substitution. In September 1963, the Malaysian government announced its intention to encourage the establishment of an automobile industry, beginning with assembly of cars, to give impetus to the industrialisation program. The Ministry of Trade and Industry (MTI) established a special inter-departmental agency to oversee the auto sector, the Motor Vehicle Assembly Committee (MVAC), whose functions included price administration, import regulation, promotion of local content, and control of the number of assemblers, makes, and models. Based on a feasibility study done by Arthur D. Little Inc, in February 1966, protective tariffs were imposed. Initially the tariff rates ranged from 30 to 80 per cent on built-up vehicles, depending on the engine capacity, and 20to 30 per cent on CKD kits and car parts (Bowes 1991).

The first assembly plant, Swedish Motor Assemblies (a joint venture with Volvo) commenced operation in 1967. During the next three years the government approved six other assembly plants to start operations in Malaysia. By 1980 there were 11 assembly plants in Malaysia which produced 122 models of 25 makes of passenger cars and commercial vehicles. Fiat, Mitsubishi, Volvo, Honda, Peugeot, Mercedes Benz, Toyota,

Daihatsu, Ford, Chrysler, Land Rover, Citroën were involved in assembly activities through equity and/or technical tie-ups with Malaysian (mostly Chinese) partners. By 1974 the annual output of locally assembled cars had reached 48,000. Most of the large autopart producing firms were foreign owned, predominantly by Japanese companies (Doner 1991).

The low domestic content of locally assembled cars became a major concern of Malaysia within few years of the birth of the local assembly industry. At the time, local content was averaged to less than ten per cent and was largely limited to tyres, batteries, paints and filters, amounting to less than 5 per cent of the value of an assembled car. In 1972, the government implemented a localisation policy which aimed to increase local content (by weight) starting with 10 per cent in 1972 to reach 35 per cent in 1982 (Lim and Onn 1983).

In 1979, MVAC came up with a 'mandatory deletion program' as a further measure to promote localisation. This policy involved deletion of certain components from import approval lists depending on their local availability thereby creating market opportunities for local part manufacturers. By the early 1980s, there were around 200 parts and components producers and the local content levels of locally assembled cars had reached about 20 per cent (Jomo 1993: p. 265).

2.1 The 'National Car' Policy

In November 1980, the Minister of Trade and Industry Dr Mahathir Mohamad (who became Prime Minister a year later) announced a state-sponsored heavy industry project with the stated objective of 'strengthening the foundation of the manufacturing sector' (Malaysia 1984: p. 27). The project was based on the premise that direct state involvement was necessary to overcome private investors' caution about high-cost, high-risk ventures with long gestation period. State sponsorship was also seen as a way to achieving the ethnic redistribution targets set under the New Economic Policy (NEP)¹.

In November 1980, the Heavy Industries Corporation of Malaysia (HICOM), a publicsector holding company, was incorporated to act as the apex government body for the implementation of the new policy. HICOM's mission was to establish industries in areas such as petrochemicals, iron and steel, cement, paper and paper products, machinery and equipment, general engineering, transport equipment, and building materials. The symbol of HICOM's industrialisation program was the national car company, Perusahaan Otomobil Nasional (Proton), a joint venture between HICOM and Mitsubishi Motor Corporation. The joint-venture contract was signed in May 1983. Mitsubishi contributed 30% of equity capital with the balance coming from HICOM financed through a 33 million yen loan arranged by Mitsubishi.

The Proton project made headlines at the time as Southeast Asia's most ambitious state-led project to develop a national car industry. Malaysia was the first (and so far

¹ A sweeping affirmative action policy package introduced by the Malaysian government in 1971 with a view to maintaining national unity and social harmony by eradicating the gap in economic status between native Malays (*Bumiputera*) who were mostly involved in low-income activities in the rural economy and other ethnic groups, mainly Chinese who were mostly involved in the modern sector of the economy.

the only) country in the region which sought to displace the existing private sector automakers with a joint-venture between a state-owned enterprise and a multinational corporation (MNC). The national car company was expected to rationalise the automobile industry, promote parts and components and other supportive industries, and increase *Bumiputera* involvement in the automobile industry which had long been dominated by foreign and local ethnic Chinese capital. At the time the project was launched, domestic assembly was undertaken by MNCs either through fully-owned subsidiaries or jointventure arrangements with local firms (fully-owned 27%, joint-venture with Chinese firms 43%, joint-ventures with Malay firms 30%) (Bowie 1991: p. 132).

Automobile and other industries earmarked for promotion under the heavy industrialisation move were provided with heavy tariff protection (Lim 1994). The initial automobiles tariff ranged from 40 to 60 per cent on completely knocked down (CKD) kits and auto parts, and from 80 to 150 per cent on completely built up (CBU) cars, with the highest rates on cars with engine capacities of 1200CC and 1600CC earmarked for Proton. Proton was also placed at a huge competitive edge over the other carmakers in the protected market through various tax concessions and indirect subsidies. Proton cars were exempted from the newly introduced 40 per cent import duty on CKD kits, and also exempted from various internal taxes such as sales tax, exercise tax at various rates, and road taxes (based on engine capacity). Malaysian Industrial development Authority (MIDA) began to force (formally or informally) other carmakers to produce only a limited range of models which did not directly compete with proton cars (officially or unofficially) (Doner 1991: pp. 110-11). In later years, low interest rate loans were given to civil servants for purchase of the national cars.

In 1983, the first Proton plant was built in the HICOM industrial estate in Shah Alam (15km from Kuala Lumpur). It was designed to produce 80,000 cars with provision for extending the capacity to 120,000 by 1988. The first Proton car (Proton Saga, with 1300cc and 1500cc engines) was based on the Mitsubishi Lancer. A second factory was built in Proton City at Tanjung Malim in the late 1990s with an initial capacity of 250,000 (with provisions for expanding to 500,000 at Phase 2).

Four years after the heavy industrialisation strategy was launched, the Malaysian economy was hit by a world commodity slum, the worst since the country's independence in 1957. The economy which had been growing at an annual rate of nearly 8 per cent during the previous five years contracted by 1 per cent during 1985-6 as a result of a sharp decline in the prices of tin and palm oil which dominated the Malaysia export composition at the time. The motor vehicle project was among the worst hit by the recession. To make matters worse, the weakened economy and the resulting balance of payment deficit caused a massive depreciation of the Malaysian currency, the ringgit, against the currencies of the major trading nations. This coupled with the steep appreciation of the yen after the Plaza Accord in September 1985 caused Proton's repayment burden on the start-up yen loan to increase in ringgit terms. The ringgit cost of CKD kits too increased sharply with the yen appreciation, increasing Proton's cost of production. In this volatile climate, in 1988 the government opted to place the management of Proton under Mitsubishi, in return for a promise for expansion of capacity and the export of proton cars.

Proton's alliance with Mitsubishi soon came under stress because of the incompatibility of Malaysia's objective of developing an international competitive national car industry with the objectives of Mitsubishi's corporate strategy driven by global profit maximisation. Conflicts of interest begun to emerge in relation to two areas of operation: procurement of parts and components locally and exporting the national car. Relating to the former, the Malaysian government intended its national car to be something more than a vehicle stamped by Mitsubishi using parts and components imported from its parent company in Japan. In the joint-venture agreement Mitsubishi did agree to the objective of increasing the local content of Proton cars. However, in practice, it was reluctant to accept local components, often labelling them 'inferior'.

There were frequent conflicts between Mitsubishi and the Joint Coordinating Committee on Local Content for the national car (JCC) (a Committee set up by MTI to monitor localisation of the automotive industry) on removing from the list of parts and component imports those items which were locally available. In most cases JCC's intervention was virtually ineffective because there was no standard procedure for verifying Mitsubishi's quality concerns and also because of Mitsubishi's ability to dictate prices relating to intra-firm transactions. Under the cover of the original Joint-venture agreement, Mitsubishi also opposed Proton purchasing components from other competitive sources. For instance, an attempt by the Malaysian government to set up a joint venture to produce high-quality ABS breaks in Malaysia to be used in the next generation of Proton cars had to be abandoned because of the opposition by the Mitsubishi management.

With regard to exporting the national car, the original agreement with Mitsubishi contained a *de facto* restriction on exports of Proton cars: the contract stated that for five years Mitsubishi would help produce a car for the domestic market. It could be that, assuming that the domestic market's rapid growth would absorb most of the Saga, Dr Mahathir simply did not press Mitsubishi on exporting at the planning stage of the project. However, the need for exporting for the viability of the project became clear when the domestic auto market collapsed in the aftermath of the economic crisis. In 1985, Prime Minister Mahathir suddenly ordered Proton to start exporting within two years after commencing commercial production. Officially Mitsubishi promised to consider the proposal, but it never acted on the promise. Presumably Mitsubishi autos in the 1.3- and 1.6-liter range produced in Japan, Thailand and elsewhere. The Mitsubishi management also often expressed concern that Saga's low quality would damage Mitsubishi's image.

In addition to the conflict of interest on local procurement and exporting decisions, over time the Malaysian authorities became increasingly concerned about outdated technology provided by Mitsubishi in exchange for high management and technology fees paid and the high cost of auto parts imported from within the Mitsubishi global network (Jomo 1993). These considerations led the Malaysian government to turn to forging alliance with other global partners, bypassing Mitsubishi.

In 1991, Prime Minister Mahathir announced plans for a second national car company, Perodua (Perusahaan Otomobil Kedua, or Second Automobile Enterprise) to

produce smaller cars which do not directly compete with Proton models to create a new lower middle class car market. Another Japanese company, Daihatsu (associated with Toyota) was selected as the joint-venture partner although Mitsubishi was capable of producing small cars with the same engine capacity. The new company was established in 1993, and began production in 1994 of its first car (Kanchil) with an engine capacity of less than 1,000cc and costing much less than the Proton Saga with the same tariff concessions, tax rebates and other specific government supports enjoyed by Proton.

The first three Proton models (Saga, Wira and Iswara) were all based on Mitsubishi platform model. Subsequently, Proton turned to British engineers in designing the Proton Saga facelift, the Iswara and subsequently collaborated with Citroën and its local partner (Diversified Resource Bhd) in producing two other new models. On October 30, 1996 Proton acquired a controlling interest (64% stake) in Lotus Group International Ltd in England, a leading independent supplier of engineering services and technology to the global automobile industry. Lotus was engaged in the design of cars (starting with Proton Gen-2 (code named Wira) to be produced at the new Tanjung Malim plant which commenced operation in 2004.

Eventually, Mitsubishi sold its stake in Proton to Khazanah National Bhd (the government's investment arm) in 2004. Since then Proton has been a fully Malaysianowned and managed company and its link with Mitsubishi has been limited solely to the purchase of some car components through arm's length deals.

3. Performance

The first Proton Saga came off the Proton assembly line at the end of August 1985, nearly a year before the date originally scheduled. The new car had a local content amounting to 47 per cent of its value, compared to 35 per cent of other locally-assembled vehicles. Total sales (70,000 cars) accounted for 45 per cent of all passenger car sales in that year. Production dropped to 33,500 during the ensuing two years because of the economic recession, but recovered sharply reaching 82,000 units in 1990 (70%) of total sales. Domestic content had reached 80 per cent by then. The two national car companies had captured more than 90 per cent of the domestic car market by 2000 (Table 1). They had captured virtually the entire domestic market for cars under 1600cc by the turn of the 20th century. The number of parts produced locally had increased from 228 in 1985 to 4850 by the late 1990s, increasing the local content of Proton cars to over 80 per cent.

Proton's rapid penetration in the domestic market was based largely on price competitiveness artificially created by government policy (see Table 1). Given the import duty concession on imported parts and components and other tax concessions, proton was able initially to price its cars at least 10 per cent cheaper than the equivalent makes in the 1.3 to 1.5 litre class. With an increase in overall tariff levels and additional government support in the form of low-interest loans to the customers of national cars, the price differential increased in subsequent years, reaching to about 20 per cent by the late 1990s. In the face of 'competition' from Proton, the other automakers dramatically cut production, closed down operations (Ford and Mazda), or shifted production to commercial vehicles and/or high-price cars that did not compete with Proton cars.

| | Total (units) | Share of national cars | | |
|------|------------------|------------------------|--------|---------|
| | | Total | Proton | Perodua |
| 1985 | 63857 | 12.0 | 12 | |
| 1990 | 80420 | 64.2 | 64.2 | |
| 1995 | 224991 | 80.2 | 62.5 | 17.7 |
| 2000 | 282103 | 92.7 | 63.4 | 29.2 |
| 2005 | 416692 | 81.9 | 40.3 | 34.9 |
| 2006 | 366738 | 73.8 | 32.2 | 41.6 |
| 2007 | 442885 | 74.7 | 30.3 | 42.4 |
| 2008 | 497459 | 72.3 | 29.2 | 43.1 |
| 2009 | 486342 | _ | _ | _ |
| 2010 | 543594 | _ | _ | _ |
| 2011 | 535113 | 59.6 | 26.4 | 33.2 |
| 2012 | 552189 | 52.6 | 22.5 | 30.1 |

Table 1. Domestic car sales and the market share of national carmakers, 1985-2009

– Data not available.

Source: 1985-2000: Tham (2003); 2001-09: Malaysian Motor Traders Association, http:// www.maa.org.my/info_summary

The expansion of domestic sale was, however, not adequate for Proton to achieve economies of scale. Throughout the 1990, its annual output remained well below 200,000 units, the minimum efficient scale of production for a single plant (Bowie 1991: p. 121), because of its failure to penetrate the export markets. Therefore, Proton continued to remain a high cost producer whose survival depended crucially on government support though tariff protection, and other preferential treatments, including periodic capital injection on concessionary terms by the government through the Employee Provident Funds and the government-owned oil company, Petronas (Rasiah 1997).

Penetrating the export market turned out to be a key focus of Proton from the time its sales plummeted during the recession in the mid-1980s. Given Mitsubishi's reluctance to engage in exporting, the Malaysian management of Proton began to focus on developing marketing channels independently of Mitsubishi. They tried to strike deals with car seller in many countries, but selling a Mitsubishi car through non-Mitsubishi dealers turned out to be a daunting task.

In 1984 Proton joined hands with a prominent Malay business figure, Kushiri, to set up as exporting firms, Edarlaus Enterprise. In late 1984, Proton signed an agreement (through Edarlaus) with Mainland Investment, a car dealer in the UK who already held exclusive franchise rights for the distribution of eleven makes of cars caterering for the low-end car market in the country. Initially, the promotion of Proton saga in UK under the banner of Japanese technology, Malaysian style had some success. Saga was able to compete successfully with the Soviet Lada and Yugoslavian Zastava, eventually driving them off the UK market. By the late 1990s total annual sales of saga in UK amounted to over 10,000. The success was short lived, however. In the face of stiff competition from Japanese and Korean cars, which rapidly gained better image over the 'cheap, but low

quality' image of Proton, sales began to fall precipitously in the subsequent years. Total sales declined from 2752 in 2002 to 1518 in 2008 and then to 960 in 2009.

In December 1986, Proton signed a letter of intent with Bricklin Industries Inc. of New York, nominating the company as its sole distributor in the lucrative US market. Bricklin came up with a plan to sell 100,000 Sagas in the first year (1988). But Bricklin exited from the deal after failing to obtain the technical approval from the US authorities for Proton Saga imports, costing Proton millions of ringgit in the subsequent law suit. There is anecdotal evidence that the deal fell because the Proton export model failed to meet American safety standards and the new Mitsubishi management team (which took over the management of Proton in mid-1988) ensured the demise of the deal through 'implicit disapproval' by simply shunning their responsibility for quality assurance.

Proton also attempted to penetrate markets in various other countries including Australia, New Zealand, Ireland, Trinidad and Tobago, Sri Lanka and China with little success. The company exited from some of these markets (e.g. New Zeeland and Ireland) after a few years, and, in other countries, its sales have remained negligible, without showing any market share gains.

By the early 2000, total exports accounted for less than 10% of total sales. The net contribution of exports to the company's balance sheet was even lower than the gross figures suggest because the cars were sold in the UK and other overseas markets at a significantly lower price than in Malaysia. Moreover, exporting a car that was specifically designed for the Malaysian market required certain modifications to meet safety regulations in those countries. This meant that it was more expensive to build these models than those sold in the domestic market.

Proton cars have continued to suffer from a 'cheap car image' from the very beginning, even in the domestic market, simply because Proton's marketing strategy relied overwhelmingly on price rather than on quality in winning markets. Immediately after Dr Mahathir ceremoniously drove the first Proton Saga off the assembly line of the Shah Alam factory in September 1985, local wits promptly dubbed Proton Saga 'Potong Harga' (meaning 'cut price' Proton). This image remained deeply rooted in the minds of both local and overseas customers. Proton failed to erase this bad image through quality improvement. In the J.D. Power survey of consumer perception, Proton cars have been ranked persistently at the very bottom end of the user-satisfaction scale. In a recent nationwide survey of car owners in Malaysia, out of 14 brands (makes) Proton came second from bottom, just above the other Malaysian national car, Perodua (Media News 2010).

The lacklustre outcome of the export drive meant that the small size of the domestic market continued to be a severe constraint on Proton's operations; limited domestic market size precluded realisation of economies of scale which could lower unit cost of production. The expansion of production capacity by building a large second plant, driven by political expediency rather than based on sound economic reasoning, and the competition from the second national car company at the lower end of the car market presumably confounded Proton's problems.

Automobile production and exports from Malaysia and Thailand are compared in Figures 1 and 2. Thailand is ideal for comparison, particularly for illustrating the lacklustre outcome of Malaysia's national car policy. In the 1960s and 1970s, the

automotive industry policy in Thailand was quite similar to that in Malaysia. In line with the import-substitution industrialisation program, governments in both countries used tariff protection to entice foreign automobile producers to set up assembly plants to serve the domestic market. Local content requirements (LCR) were subsequently introduced to force the nascent automobile industry to forge backward linkages. However, from about the mid-1980s Thailand embarked on a private-sector led growth centred on the involvement of MNCs in order to globally integrate the domestic automobile industry, in a sharp departure from the state-led domestic market oriented strategy of Malaysia (Doner 2009; Kohpaiboon and Jongwanich 2013).

In the early 1990s, production levels in the two countries were not very different. But the gap has increased rapidly during the ensuing years (Figure 1). By 2012 total production in Malaysia amounted to only a third of Thai production. The major explanation for the widening gap is the failure of the Malaysian auto industry to penetrate export markets (Figure 2). The 1990 value of total automobile exports (vehicles and parts) was comparable to that of Thailand. But the gap in export value between the two countries has widened dramatically: by 2012 exports from Malaysia (USD271 million) amounted to a mere 13 per cent of exports from Thailand (USD19,586 million). The Malaysian car industry, moulded by the national car policy for over two decades, is characterised by a continued heavy concentration in passenger car production. Given the continued emphasis placed on producing passenger cars under heavy overall



Figure 1. Automobile production¹ in Malaysia and Thailand, 1999-2012 ('000 units)

Note: 1. Production comprises "passenger cars" and "commercial vehicle" including light commercial vehicles, heavy commercial vehicles and heavy bus and coach. Source: Based on data compiled from Organisation Internationale des Constructeurs d'Automobiles (OICA) website (http://www.oica.net)



Figure 2. Automobile exports from Malaysia and Thailand, 1990-2012 *Source*: Based on data compiled from UN Comtrade database.

protection and preferential treatment for the two national car producers, unlike in Thailand, the product composition has not diversified into commercial vehicles.

4. Trade Liberalisation and the Demise of the National Car Project

Malaysia has significantly reduced tariffs and virtually eliminated quantitative import restrictions over the past two decades as part of market-oriented policy reforms from the late 1980s and under WTO commitments since 1995. However, high tariff protection and domestic tax concessions accorded to the motor car industry continued to remain a major anomaly in the trade and industrial policy regime of the country for the next two decades.

By 2005, automobile tariffs ranged from 42 to 80 per cent on completely knocked down kits, and from 140 to 300 per cent on completely built-up cars. Most automobile parts and components, except tractor parts (duty free) are subject to 25-30 per cent tariffs. According to estimates based on data for 2005, the effective rate of protection for passenger motor vehicle was 57.1 per cent compared to an overall manufacturing average of less than 10 per cent (Athukorala 2005). As already noted, government policy also kept the national cars cheaper than other makes by the simple strategy of taxing the competitors, while giving the two national car producers exemptions or rebates from these same taxes.

This anomaly in the trade and industry policy regime has already reached the day of reckoning. The closeted life enjoyed by the two national car producers under heavy protection has come under threat from Malaysia's liberalisation commitment under the AFTA and a number of free trade agreements (AFTA) signed with some of its major trading partners. Maintaining high-tariffs is also not consistent with Malaysia's WTO commitments.

Malaysia is a founding member of the Association of the South East Asian nations (ASEAN) and the ASEAN Free Trade Agreement (AFTA) (signed in 1992). Under the Common Effective Preferential Tariff (CEPT) provision of AFTA, in 2002 Malaysia reduced tariffs applicable to imports from AFTA member countries on 8,764 tariff lines to between 0 to 5 per cent. However, Malaysia has obtained AFTA approval for not including automobile products (218 tariff lines) into the CEPT scheme in view of the difficulties faced by the domestic automobile industry. The postponed reduction commitments were eventually honoured on 1 January 2008. The next round of CEPT cuts to be implemented in 2010 would eliminate all import duties on intra-FTA trade. The CEPT scheme also effectively bans all tariff and non-tariff barriers in member countries which discriminate against goods (including vehicles) that are considered "Made in ASEAN" (in terms of the 40% cumulative value added criterion). This means that preferential exercise tax and other preferential treatments enjoyed by the two national car companies are AFTA inconsistent. Malaysian authorities have not yet declared when these commitments would be honoured, but once that is done, most of the price advantage enjoyed by the two national car companies by way of the 50 per cent rebate on duties parts and component imports and domestic excise tax concessions would be eliminated. According to some tentative estimates, these concessions have so far kept comparable imported cars 30 to 60 per cent more expensive compared to cars produced by Proton and Perodua plants.

Tariff reductions under the CEPT scheme have already begun to expose the two national car producers to competition from the international carmakers who have already established production bases in other AFTA member countries, particularly in Thailand. Proton's sales dropped from 166,118 in 2005 to 115,538 in 2006, a 35 per cent contraction. In 2007 Proton lost the top selling position in the Malaysian market (to Perodua) for the first time since 1985. The combined market share of the two companies has also declined in recent years (from 92.7% in 2000 to 72.3% in 2008) as foreign car makers have begun to increase assembling cars in Malaysia (Table 1). In the 2006 financial year, Proton recorded a loss of USD23 million and this increased to USD 46 million in 2007. In January 2008, the government arranged for EPF to purchase 830,000 shares to support the financial position of the ailing carmaker. The relative resilience of Perodua in the face of import competition seems to reflect its competitive edge in the low-end of the car market (Gomas 2011).

There was speculation in Malaysian policy circles at that time that Proton would be sold to a foreign company in the new competitive market setting. However, this option was not politically palatable not only because of the political sensitivity of any move to lose a national champion, but also because of possible employment losses and the unavoidable disruption to the supplier/trader network built around Proton over the years. Many of Proton's car parts supplying firms are owned by *bumiputera* business men who form the backbone of the support base of the ruling UMNO party (Rasiah 1997). The only viable option was to find a strategic partner in order to enhance Proton's competitiveness in the domestic and global markets.

In October 2004, Proton initiated negotiations with Volkswagen AG of Germany to establish a strategic partnership. Under the proposed tie-up, Proton was to gain access to Volkswagen Group's superior technical capabilities and technology. Volkswagen was to utilise Proton's spare capacity at the Tanjung Malim plant to assemble cars for export

to the Southeast Asian market, where the German auto giant had a weak presence. In January 2006, Proton announced ending of partnership talks. According to media commentaries, talks collapsed because of Proton's refusal to let a foreign company become a substantial shareholder or take a major management role. This unexpected announcement resulted in a 19 per cent overnight drop in Proton's share price to their lowest value in seven years. Subsequent talks with PSA Peugeot Citroën France (in January 2007) and with General Motors (in February 2007) also failed.

After the collapse of the negotiations with Volkswagen, ironically Proton turned for help to its old joint-venture partner, Mitsubishi. In September 2008, Proton and Mitsubishi agreed to negotiate on a technical-cooperation pact (*The Star* 2008). Under this arrangement Proton is to source a Mitsubishi vehicle produced in Japan to replace one of its current models (Waja) and Mitsubishi in turn would market Persona and a Proton's upcoming multipurpose vehicle through the Mitsubishi market networks in certain markets. The agreement would also involve Mitsubishi and Proton jointly developing a small hatchback car (A-class segment car, with space and greater fuel economy) for sales in both domestic and international markets. Mitsubishi has clearly stated that it does not intend to make any equity contribution to Proton under the deal.

In March 2009, Proton entered into a production-sharing agreement with Detroit Electric, a US-based start-up carmaker.² Under the agreement, Detroit Electric will produce electric cars on Proton's sedan car and hatchback manufacturing platforms, with style changes made to distinguish them from Proton's existing model. Proton will use Detroit Electric's drive systems in its own cars for sale in Southeast Asia. Detroit Electrics' aims were to sell 40,000 Malaysian made cars globally in its first year and 270,000 by 2012. Market analysts, however, have expressed doubts about the success of the new venture: the new electric car had mixed results when the company invited prospective US dealers to test drive it (Financial Times, March 2009).

The renewed production collaboration with Mitsubishi failed to avert sharp contraction in Proton's domestic market share or to revive total sales turnover through export expansion. Eventually, in January 2012, Proton was sold at a rock-bottom price of RM1.2 billion (USD 330 million) to DRB-HICOM³, an investment holding company with a significant involvement in automobile assembly. DRB-HICOM assembles cars in Malaysia for Tata, Honda, Isuzu, Suzuki, Mercedes Benz and Volkswagen. It is currently restructuring Proton in collaboration with Volkswagen, with a total collaborative investment of over USD 1 billion.

5. Concluding Remarks

The Malaysian experiment with a state-centred national car industry in collaboration with a MNC produced a high-cost, non-competitive domestic car industry which eventually failed to withstand competitive pressure in a rapidly globalising world car market unleashed by the country's trade liberalisation commitments. The cause of the tragic

² Detroit Electric was launched in 2008 with USD100 million from investors led by Albert Lam, a former chief executive of Lotus Engineering owned by Proton.

³ Diversified Resource Berhard (DRB)–The Heavy Industries Corporation of Malaysia (HICOM).

ending of the Malaysian dream of building an internationally competitive national car was rooted in the very conception of the project. Even though the new selective industrialisation push was often rationalised as an attempt to emulate the examples of Japan and Korea (hence the 'Look East policy', a term coined by Mahathir in 1981), in practice the national car project was based largely on traditional import-substitution criteria. The two national car companies were continuously supported with heavy tariff protection and various tax concessions and restrictions imposed on potential privatesector competitors, without subjecting their performance to any market-based performance norms. In particular, unlike in Korea, trade protection and other government supports were not made conditional on export performance. Export performance was later made a performance criterion as an afterthought; but was not effective because it was not part of the original joint-venture agreement.

Output expansion within the confines of a limited domestic market was not adequate for Proton to achieve economies of scale. Subsequent attempts to expand exports failed because of lack of a firm commitment on the part of its joint-venture partner, Mitsubishi. Proton made many attempts to penetrate export markets independent of Mitsubishi, but selling a Mitsubishi car through non-Mitsubishi dealers turned out to be a daunting task. Given the export failure, Proton continued to remain a high cost producer whose survival depended crucially on government support through tariff protection, tax concessions, and other preferential treatment, including periodic capital injection on concessionary terms.

References

- Athukorala, Prema-chandra. 2005. Trade policy in Malaysia: Liberalization process, structure of protection, and reform agenda. ASEAN Economic Bulletin **22(1)**: 19-34.
- Bowie, Alisdar. 1991. Crossing the Industrial Divide: State, Society, and the Politics of Economic Transformation in Malaysia. New York: Columbia University Press.
- Doner, Richard. F. 1991. Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia. Berkeley: University of California Press.
- Doner, Richard F. 2009. The Politics of Uneven Development: Thailand's Economic Growth in Comparative Perspective. Cambridge: Cambridge University Press.

Financial Times. 2009. Proton to build cars for Detroit Electric, March 29.

- Gomez, E. Terence. 2011. The Politics and Policies of Corporate Development: Race, Rent and Redistribution in Malaysia. In Malaysia's Development Challenges: Graduating from the Middle, ed. Hal Hill, Tham Siew Yean and Ragayah Haji Mat Zin, pp. 62-82. London: Routledge.
- Henderson, Jeffrey and Richard Phillips. 2007. Unintended consequences: social policy, state institutions and "stalling" of the Malaysian industrialisation process. *Economy and Society* **36(1)**: 78-102.
- Jomo, K.S. 1993. The Proton saga: Malaysian car, Mitsubishi gain. In Japan and Malaysian Development in the Shadow of the Rising Sun, ed. K.S. Jomo, pp.263-290. London: Routledge.
- Klier, Thomas and James Rubenstein. 2008. Who Really Made Your Car? Restructuring and Geographic Change in the Auto Industry. Michigan: W.E. Upjohn Institute for Employment Research.
- Kohpaiboon, A. and J. Jongwanich. 2012. International production network, clusters, and industrial upgrading: evidence from automotive and hard disk drive industries. *Review of Policy Research* **32(2)**: 211-238.

- Lim, Chee Peng. 1994. Heavy industrialisation: A second round of import substitution. In Japan and Malaysian Development in the Shadow of the Rising Sun, ed. K.S. Jomo, pp.244-162. London: Routledge.
- Lim, Chee Peng and Chan Onn Fong. 1983. Ancillary firm development in the Malaysian motor vehicle industry. In *The Motor Vehicle Industry in Asia: A Study of Ancillary Firm Development*, ed. Konosuke Odaka. Singapore: Singapore University Press.
- Malaysia. 1984. Mid-term Review of the Fourth Malaysia Plan. Kuala Lumpur: Government Printers.
- Media News. 2010. "Cheap Car" tag dogs Proton after 20 years, January (http:// www.mediaweek.co.uk/news/528213)
- MIER (Malaysian Institute of Economic Research). 2009. Automotive Industry Survey Report No. 24: Stuck in Low Gear, First Quarter 2009, Kuala Lumpur: MIER.
- NEAC (National Economic Advisory Council). 2010. *New Economic Model for Malaysia,* Parts 1& 2. Kuala Lumpur: NEAC.
- Rasiah, Rajah. 1997. Rent management in Proton. In *Rents and Development*, ed. M. Khan and K.S. Jomo. Cambridge: Cambridge University Press.
- Shapiro, Helen. 1994. Automobiles: From import substitution to export promotion in Brazil and Mexico. In *Beyond Free Trade: Firms, Government and Global Competition*, ed. David B. Yoffie. Boston: Harvard Business School Press.

The Star. 2008. Proton in product collaboration with Mitsubishi, 5 October.

- Tham, Siew-Yean. 2003. Malaysian policy for the automobile sector: focus on technology transfer. In *Production Networks in Asia and Europe: Skill Formation and Technology Transfer in the Automobile Industry*, ed. Roger Busser and Yuri Sadoi, pp. 51-70. London: Routledge.
- Yusuf, Shahid and Kaoru Nabeshima. 2009. Tiger Economies under Threat: A Comparative Analysis of Malaysia's Industrial Prospects and Policy Options. Washington DC: World Bank.