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WINNING IN ASIA, AMERICAL STYLE: THE CASE OF THE AUTOMOBILE INDUSTRY

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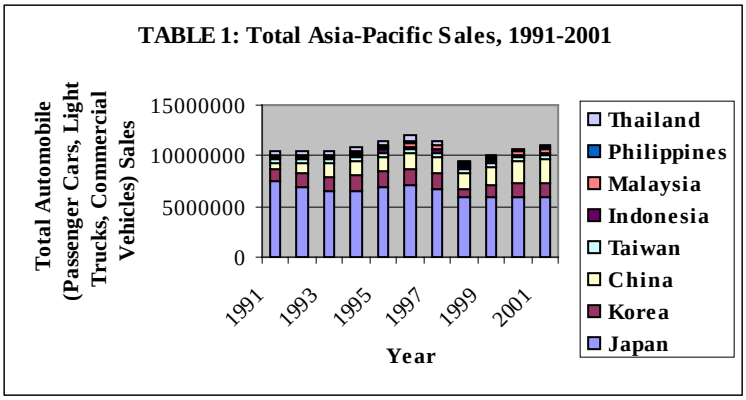
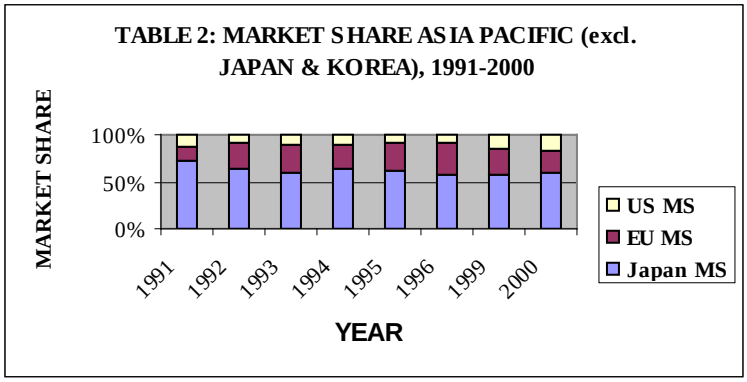
SECTION I: INTRODUCTION

Between 1985-1995 the global auto industry was thrown into crisis.. World demand for automobiles had stagnated. Declining international competitiveness had thrown North American and European automobile manufacturers into labor turmoil. Overcapacity threatened home markets, resulting in a glut of excess manufacturing capacity, now estimated at about 40 unneeded assembly plants world-wide. Japanese-U.S. and Japanese-European Union trade relations were increasingly strained, as Japanese automobile manufacturers penetrated western markets, while carefully protecting their home turf.

While these problems festered, the Asian auto market was exploding. Economic growth rates were high throughout the region; a middle class with a significant disposable income was emerging; and few people owned cars. But European and American firms faced formidable Japanese competition; Japanese manufacturers had built an important presence in Asia through decades of market penetration in sales and the location of manufacturing facilities. Indeed, by 1996, Japanese firms dominated the Asian market, with significant and growing European penetration of these markets, especially in China and Taiwan. After the Asian financial crisis, the Asian market lost steam, but had a rapid comeback, with sales approaching 1996 levels in 2001. Table 1 illustrates:



American automobile manufacturers, however, had failed to crack the Japanese and European stronghold on the Asian market. The market's close proximity to Japan, the unsuitability of American products in Asia (larger car sizes, greater fuel inefficiencies, and higher average retail prices), the need to protect its share of the North American market from Japanese and European penetration, and rampant protectionism in most Asian countries worked together to weaken the American position. Even in terms of traditional firm competencies, US firms were at a disadvantage. Their strengths in consumer-driven production, purchase financing, product marketing and product servicing were thwarted by the Asian markets' structural characteristics. Production levels and product variety were often state-determined. Financing tools were heavily influenced by host state credit decisions. Dealer networks were strictly controlled, and service networks could not be easily created. Overall, the 1985-1997 Asian market experience for the American automobile manufacturers was one of disappointment. As Table 2 shows, however, U.S. firms made significant inroads into Asian markets after 1997.



Why did US market share in Asia increase so dramatically, given the high barriers to entry? It is this question that we address in this paper. We argue here that, ironically, it was the Asian financial crisis that provided the opening in Asia for American auto firms. At first glance,

this is surprising because at the height of the crisis, overall auto sales fell by over 50% in Thailand, Indonesia, the Philippines**,** Malaysia and China, and though less dramatic, sales also fell in Korea and Japan. More importantly, however, the crisis put a break on rapid expansion of the automobile sector. Nonetheless, it also provided producers with the political bargaining power to push for economic liberalization throughout the region. As we will demonstrate below, American firms were able to use their bargaining expertise in multilateral institutions to press for an acceleration and a deepening of the liberalization process as a wedge to open markets. More directly, US firms used their increased asset valuation at home as a springboard to acquire significant stakes in struggling Japanese and Korea automobile firms. The traditional comparative advantage that American firms enjoyed in the field of corporate finance was also put to good use. This adept use of non-market and market strategies permitted the US to overcome its previous failure in the region.

We begin with a positional analysis of American auto firms in the Asian market. This includes a brief overview of the evolution of the auto industry in Asia and an analysis of the market forces that shape the opportunities and constraints faced by U.S. firms as they formulate their Asian strategies. In this overview we focus on a description of changing threats and opportunities, looking at firm competencies, and the nonmarket environment in the most important Asian countries. We then turn to a discussion of firm market and non-market strategies and tactics. We conclude by summarizing the ways in which American firms have responded to regional pressures and international competitive dynamics in Asia and the conditions for success of the market and nonmarket strategies that they have employed to increase their market share in the region.

II: POSITIONAL ANALYSIS OF THE INDUSTRY IN ASIA

A. Market Environment

The growth potential of the Automobile markets is the most striking feature of the Asian market landscape. In the 1980s, auto registration skyrocketed and Asia's share of the global auto production tripled. [1] As the 1990s opened, forecasts for increased sales were bright, and, after an initial slump, sales continued to increase even after the financial crisis.[2] As Vaughn Koshkarian, the president of Ford China, optimistically stated at the onset of the 1997 financial crisis: "By 2010 China will have four vehicles per 100 people and a market volume of between 5 and 6 million vehicles, the fourth largest market in the world. [Additionally] by 2010, after substantial consolidation, this automotive industry will have a highly educated, skilled and industrious workforce. In essence, China will have everything necessary to become a primary, manufacturing nation in Asia." Robert Buscelhofer, a member of the VW's car management board, underlined this prediction: " in the next five years, the world's total car market will increase by about five millions cars to about 42 million cars. Almost two million of them will originate in the Asia-Pacific market, a third in China and two-thirds in the remaining emerging markets."[3]

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1 In terms of auto registration, Asia witnessed an average rise of 46.3% between 1981 and 1988, with rates rising by 31.8 % in Japan and 204.6% in Taiwan, 210.8% in South Korea and 343.3% in China. Even if the important Korean and Japanese industries are excluded, Asia's share of global auto production increased from 1% to 3% The increases in registration and production continued well into the 1988-1991 period, with auto production increasing by a factor of 4 in Korea, a factor of 1.5 in Taiwan and a factor of 2.6 in Thailand. Similarly, auto registration increased by a factor of 4.3 in Korea, a factor of 3.2 in Taiwan and a factor of 3.5 in Thailand. See Karmokolias (1990), p. 4, 7.

2 In the 1992-2000 period, the forecasts for annual compound growth rates for new car sales were between 21.9% for China, 10% for Malaysia, and 4.8% for Indonesia, significantly higher than the world average of 2.4% Although dampened by the Asian financial crisis of 1997, growth rates continue to exceed those of most other developing countries. See Maxton and Wormland (1995), p. 155, and Financial Times, 6/25/1997.

3 *Financial Express*, 7/23/1997.

Within this context, automobile firms recognized first-to-market benefits of brand awareness and loyalty and establishing a distribution, service and production network in capturing market share. Japanese firms had that advantage in Asia. Throughout the post-war period they had come to dominate Asian markets, with significant and growing European market penetration, especially in China and Taiwan. Local Asian manufacturers also increased market share beginning in the 1980s. In Malaysia, for example, Proton and Peruda, both Malaysian firms, increased their market share from 15% of all automobiles sold in 1987 to over 60% by 1996, while Japanese manufacturers saw their stake reduced to less than 25% by the late 1990s.[4]

The vehicle market in the Philippines was divided between Japanese and Korean manufacturers; Japanese firms had an 80 percent market share, while Korean firms controlled 15 percent. In the Indian market, Suzuki, through its joint venture with the state-owned Maruti holding company, had been able to increase its market share from 33% in 1987 to over 43% by 1996; the remainder was divided between European, Indian and other Japanese manufacturers. Between 1991 and 1996 Japanese manufacturers controlled more than 90 per cent of the Indonesian market. Japanese and Korean manufacturers each control 95 per cent of their domestic markets, although the import share in the Japanese market increased from 1% in 1980 to over 5% by 1994. The only market that U.S. firms had successfully penetrated was the Taiwanese market where Ford increased its market share from 19% in 1991 to over 23% in 1996. Nonetheless, the Japanese manufacturers still controlled over 50% of the market. [5]

China was the only market that Japanese firms had not conquered. The Chinese regime had raised a number of barriers to entry for Japanese firms, and by 1985, Japan controlled only

4 See *AAMA World Motor Vehicle Data 1991-1998, Autonews Datacenter 1996-2001*, and *Ward's World Motor Vehicle Data, 1998-2001.*

20 percent of the market, with the remainder held by state-owned Chinese firms. Thus, both because of its potential for rapid growth and the small Japanese presence, American automakers have considered China to be the last market frontier.

In the late 1990s, the structure of the industry began to change dramatically as national competition gave way to cross-national mergers and acquisitions. During the 1990s, however, the competitive environment changed dramatically. Driven both by continued overcapacity and by intense competition in the Asian market, cross-national consolidation began to eclipse cross-national competition. Indeed, the problem of overcapacity had grown worse: in 1999, the average worldwide plant utilization was only 69%, compared with 80% in 1990. By the end of the decade, most national firms were pushed by lower profit margins to merge. For example, at the end of the 1990s, Ford held a controlling 33 per cent interest in Mazda, and GM had acquired 49 per cent of Isuzu and almost 10 per cent of Suzuki Motors. In 1999, GM bought 20% of the Subaru car business of Fuji Heavy Industries. And DaimlerChrysler's purchase of a one-third interest in Mitsubishi Motors merged German, American, and Japanese firms into the fourth largest auto company in the world. Below we discuss the implications of this trend for the competitiveness of American firms.

In addition to this cross-national consolidation, increased globalization of the automobile industry further changed the nature of competition**.** As Asian governments began to liberalize their economies, lowering tariff barriers and phasing out local content requirements, local producers could realize economies of scale by producing parts for a number of companies rather than just one or two. And auto firms could buy parts from the most efficient producers and ship them to their factories worldwide, rather than attempt to acquire all parts for each factory from

5 For more country-specific statistics the American Automobile Manufacturers' Association (AAMA) World Motor Vehicle Data (1991-2000).

small suppliers in each country. Indeed, increasing trade liberalization permitted Renault-Nissan and DaimlerChrysler to pursue strategies of volume production across at least two regional markets.

Even more radical strategies have been envisioned. The large manufacturers have begun to sub-contract the design and production of entire sub-assemblies, such as brakes, steering, and suspension. For example, companies such as Valmet, a Finnish engineering company with roots in paper-making machinery, Magna, a Canadian parts company, and Steyr-Daimler-Puch in Austria are outsiders who have begun to make sub-assemblies for established companies like Porsche and DaimlerChrysler. Some analysts predict that the large consolidated companies might even begin to shed some of their assets to parts suppliers. The process of globalization is still in its infancy, and as we shall see below, Asia may become the central location for the production of these sub-assemblies.

It is important to note here that these changes are connected to changes in the nature of automobile production. The Fordist model of mass standardization, vertical integration of supply networks and product homogenization had been increasingly replaced by the Japanese-led model of lean production by the early 1990s.[6] Lean production stressed the importance of just-in-time production techniques that relied upon smaller inventories, increased production automation, assembly line teamwork and flexible manufacturing outputs. Indeed Womack et al (1990) had argued that the lean production system, pioneered by the Japanese, was characterized by the systematic flushing out of waste and had placed a relentless emphasis upon cost-competitive quality. However, by the mid-1990s the advent of modular production with its reliance upon information technology and interchangeable parts meant that the industry was beginning to place

6 See Womack et al. (1991).

an increasing emphasis on the creation of supplier networks that were integrated and globally-based as well as the development of a global production network.[7]

B. Penetrating the Asian Market: Challenges for American firms

In this wide-open Asian market and rapidly changing industry, American auto firms had to overcome several challenges in order to capture markets in Asia. Following Porter's five-forces model, we discuss each of those challenges: 1) the bargaining power of suppliers, 2) the bargaining power of buyers, 3) the threat of substitutes, 4) the threat of new entry, and 5) the intensity of rivalry in the market.[8]

The bargaining power of suppliers

Local suppliers have little bargaining power vis-a-vis the major auto firms, because Asia lacks a network of suppliers capable of bargaining with long established and technically savvy Western firms. In fact, the relative absence of local suppliers provided a barrier to entry into these markets. Because local content requirements were mandated throughout Asia, firms wishing to locate production facilities in the region had to provide years of technical training, certification processes and technology transfer. Nonetheless the relative absence of local suppliers provided a long-term bargaining advantage for western firms. As individual firms provided firm-specific training, certification, and technology to local suppliers, their increased dependence on those firms was assured.[9]

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7 See Sako and Murray (2000).

[8] See Porter (1980).

[9] See ILO (2000).

American firms were initially at a disadvantage because their Japanese competitors had locked up most of the local firms and had even brought over most of their Japan-based suppliers. However, having learned the importance of keiretsu arrangements in terms of an automobile manufacturer's international expansion, U.S. automakers began to bring their own suppliers in addition to negotiating local arrangements. Hence, in GM's expansion into China, Delphi Automotive followed in order to build a reliable network of parts and components suppliers. Similarly, Ford's Visteon unit was increasing its presence in the Asian region in lockstep with its parent firm.

The Bargaining Power of Consumers

The growing demand for automobiles in these markets means comparatively weak bargaining power for consumers. In the mature North American and European markets, consumers can choose among hundreds of models, forcing manufacturers to move rapidly through product cycles, thus contributing to the increase in production costs. High demand gave local buyers in Asian markets little say over the level of product differentiation required; Western firms were therefore in a good position to slow product cycles and reduce manufacturing costs.

Threat of Substitutes

Auto manufacturers in Asia do not fear that alternate means of transportation will cut into the demand for automobiles. The most important threat would come from the public transport sector. In Asia, however, public transportation is underdeveloped, even in the cities. Four factors are responsible: First, public transport is not efficient in serving areas with low population or

employment densities. Low usage means infrequent service, and infrequent service, in turn, deters users. The kind of demographic fragmentation that characterizes most of Asia is an almost insurmountable challenge for public-transport systems. Second, the rapid growth of Asian economies has changed travel patterns as new growth areas have sprung up. Fixed transport systems, such as rail lines, quickly become obsolete under conditions of rapid growth. The sunk costs that characterize mass transit systems are simply too high in areas where the shift from rural to urban demographics is rapid, and also too high when growth in developing economies is low. Third, many types of public transport have high opportunity costs. Flashy rail systems can consume resources that could serve far more people if devoted to improving bus travel. And finally, the preference for public transit decreases as income level rises; at the same time, consumers increasingly prefer autos to motorbikes.

Threat of new market entrants

Since the Japanese firms were already well-established in these markets, the American firms viewed themselves as the new entrants. Hence, the Asian markets did not resemble the newly liberalized Eastern European markers where there was a free-for-all competition for market entry and competition among all the major automobile manufacturers. Nor did the Asian markets resemble the newly resurgent Latin American markets where product fragmentation allowed for the entry of new competitors like the Japanese and the Europeans. In terms of European competition, the American automobile manufacturers did not perceive as threatening competitors for two reasons: first, the European firms were value producers rather than volume producers, like the Japanese and the American firms. Second, the European firms, apart from some inroads in Japan, China and Taiwan were not particularly successful in gaining market

share in the majority of Asian markets. In terms of the expanding Korean manufacturers, the American firms perceived them as over-expanding firms, particularly susceptible to any serious economic downturn. As we will see below, this happened in the case of the Asian financial crisis.

Rivalry among market competitors

The issue of international competition has been complicated by transnational mergers and acquisitions. In the 1980s and 1990s, the auto industry was slow to respond to pressures for mergers despite excess capacity. Auto makers felt that consolidation would undermine brand recognition and loyalty, considered in the industry to be a key weapon in the fight for market share. And as the Japanese auto industry grew stronger, international competition among national firms had intensified.

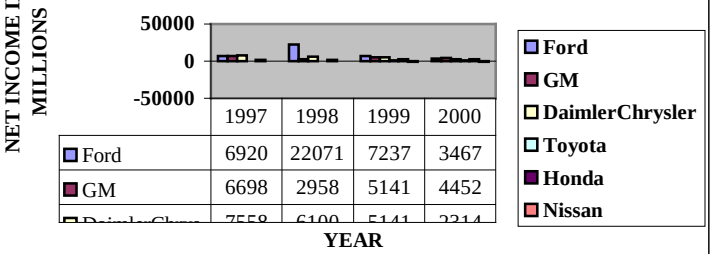
But, as noted above, by 2001 the structure of the industry had changed dramatically. Global competition was no longer between national firms but between cross-national consolidated firms, often acquired for their competitiveness in specific market niches. It is too soon to tell whether these mammoth firms will simply be holding companies for the smaller manufacturers, but it is likely that the mergers will diversify production profiles so that firms can position themselves more competitively worldwide. Daimler, for example, which holds a significant share of the world market for trucks and large cars, needed Mitsubishi's smaller models to fend off growing competitive assaults on its overall market share from Ford, Volkswagen and Opel. And a controlling stake in Mitsubishi with its strong position in Asia would give Daimler an immediate presence in Asian markets. Indeed, Daimler's CEO, Jurgen Schrempp, made it clear that he wanted the surging Asian market to provide a quarter of sales by

2010, compared with 3.2% in 1999. Similarly, when GM acquired Subaru, it held only 1 per cent of the Asian market, anticipating that Subaru would create a wedge giving GM more access.

C. American Strengths: The core market competencies of American firms

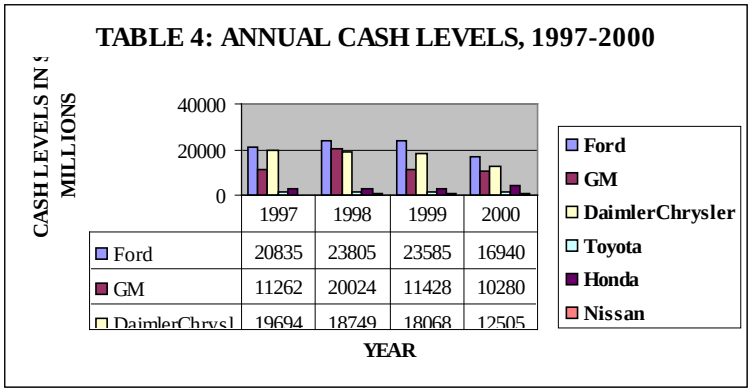
Given these market forces, American were at a disadvantage in relation to their well-established Japanese competitors, but these obstacles were not insurmountable. American firms have traditionally been more adept at financing and marketing than the Japanese, and thus, although Japanese firms have a competitive edge in price and quality, American firms can more easily enable potential customers to buy their products. The Asian financial crisis was particularly instrumental in highlighting the critical role of finance in the global competitive arena. More importantly, however, their limited exposure in Asia sheltered them from the worst effects of the crisis, positioning them to strike when their competitors were weakest. Indeed, it was after the crisis that they began to acquire significant stakes in their competitors' firms. Ford increased its stake in Mazda and gave Mazda the resources to increase its stake in Kia Motors of Korea. General Motors increased its stake in Suzuki and bid competitively for Hyundai Motors of Korea. Chrysler merged with Daimler Benz and attempted to acquire a controlling interest in Mitsubishi Motors.[10] The healthy financial position of US firms is indicated in the tables below.

TABLE 3: ANNUAL NET INCOME, 1997-2000



	1997	1998	1999	2000
Ford	6920	22071	7237	3467
GM	6698	2958	5141	4452

10 These acquisitions have not been limited to Asia. Ford has acquired Jaguar, Rover and Volvo in Europe, whereas General Motors has acquired Saab and entered into a significant equity position in Fiat.



This financial position and growing stake in Japanese and Korean forms also positioned them to start up new operations in the Asian market. Ford is operating plants in China, Thailand and Taiwan, while increasing the presence of its financing unit from Taiwan and Thailand to China, Japan, Indonesia and Malaysia. General Motors has established plants in China, Japan, and Indonesia and is expecting to begin production in its plant in Thailand. In short, American firms have leveraged their financial well-being to acquire new positions in Asian-based automobile manufacturers while increasing their investment presence in the area.

D. The Nonmarket Environment

But despite these radical changes in the market environment and the financial and marketing strengths of American firms, the Asian market continues to be a difficult one to penetrate for all firms. Throughout Asia, high growth rates, low labor rates and a rapidly growing and consuming middle class is accompanied by a high level of state intervention, trade protectionism and a rigid institutional and regulatory structure intended to support domestic auto producers and suppliers in order to increase the value-added of its own automobiles and to facilitate corollary industry growth. As Abdulsomad has shown, in Asia, “no industry has

become as politicized as the automobile industry, which is now regarded as vital to their national economic development strategies."[11] Hence, we have focused our analysis of the institutional structures in which non-market interventionist policies are formulated in the automobile sector. Our focus is on the following issue-areas: taxation (including import tariffs, excise duties, sales and consumption taxes and commodity duties), import restrictions, local content requirements (including the promotion of national champions) and non-tariff barriers (technical standards such as environmental and fuel economy ones, licensing regulations, certification and distribution procedures).

What follows here is a brief overview of the aforementioned restrictions, regulations, requirements and legal regimes imposed by the most important Asian countries who place national auto and auto parts production at the center of their development policies. Also we have included all the major policy changes that have occurred in the late 1990s that have increased the automobile sector's liberalization in many of these countries. Yet, since most of these changes are very recent, it remains to be seen whether they will remain in place or significantly enforced.

China[12]

The Chinese government published its first industrial policy for the automobile sector (cars, buses, trucks, motorcycles, engines, parts) in 1994, outlining its policies toward foreign participation in its market.[13] Guiding parameters for this policy were: self-sufficiency, export

11 See Abdulsomad (1999, 1).

12 This section on the non-market issues in the Chinese automobile sector relies upon the European Union's Market Access Sectoral and Trade Barriers Database, available online at the following address: http://mkaccdb.eu.int/mkdb/.

13 Four more sectors have been targeted for similar policies so far: petrochemicals, machinery, electronics and construction. Publication of the latter has been held back, in part in reaction to the vociferous criticism to which the auto policy gave rise, which was intended as a blueprint for other sectoral policies. The stated objective is to turn

capacity, high-tech production (through the import of foreign technology), and Chinese control over decision making. Indeed, the policy aims are to develop the Chinese automotive industry in order to meet 90% of domestic demand by 2000 and to become an internationally competitive, export oriented, large scale industry by 2010. After the Asian financial crisis in 1997, the Chinese government attempted to restructure the industry by reducing the number of manufacturers operating in China and creating larger companies in order to achieve economies of scale.

Cars in China are subject to high rates of taxation, both at the regional and national levels. The tax structure is extremely complex; there is significant variation in terms of sales and consumption charges across most regions. Recently, however, the continued importance of state-owned enterprises as the consumers of automobiles has decelerated consumer pressures for reduced taxation.

The designation of the automobile sector as one of the "five pillars" of economic development has meant consistent policy-level support for import restrictions. To achieve development goals, the policy requires the maintenance of discretionary import restrictions (the objective was to ensure that local car production satisfies 90% of domestic demand by the year 2000. That goal was achieved through the imposition of tariffs at prohibitive levels (30 to 100 per cent) throughout the 1990s. Even with China's entry within the World Trade Organization tariffs will only be reduced to 25% in 2005 and auto parts tariffs will fall to an average of 10%, thus allowing the domestic automobile manufacturers to prolong their adjustment to external competition.

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these five sectors into "pillars" of the Chinese economy. For a more in-depth analysis of the pervasiveness of state intervention in the Chinese automobile sector see Biziouras and Crawford (2001).

China has been at the forefront of the movement throughout Asia to impose local content requirements for foreign producers. All foreign automobile manufacturers have entered into joint-venture agreements with state-owned enterprises so that the local partner can ensure that local content requirements are met. These foreign firms have committed significant monetary and technological resources for the modernization of the joint-venture automobile plants in order to guarantee that their local parts suppliers are integrated within their quality control procedures. The end result has been the rapid acceleration of auto assembly with local content, often exceeding 60 % within four to five years.

China applies restrictive import licensing to a number of product categories including motor vehicles, key parts for vehicles, crane lorries, vehicle tires, and motorcycles. Import licenses are difficult to obtain. The procedures and the criteria for the licenses are not transparent and are therefore not in line with basic WTO obligations. Most of the automotive industry products are subject to import quotas. Import quotas for cars are difficult to obtain. Moreover, the number of licenses granted for an application was significantly reduced in 1998. Quotas are granted on the ground of a specific application including a detailed description of the car. However auto quotas are to be progressively phased out following WTO accession talks.

This level of state intervention is also apparent in the certification procedures. China requires testing and certifications of foreign products to ensure compliance with standards and specifications unknown and unavailable to the exporter. Standards and testing requirements often demand higher quality standards from foreign products than those that are applied to China's domestic products. Generally China does not accept foreign (EU) certification of product quality. And in many cases the application of Chinese standards requirements is applied arbitrarily.

Japan and Korea[14]

Japan and Korea are similar in that they had well-developed, markets by the early 1990s. Nonetheless, those markets were difficult to penetrate. American firms had less than one per cent of the Korean market and little over one per cent of the Japanese market.[15] This virtual lock-out was achieved through the imposition of non-tariff barriers to trade Nonetheless, despite the process of trade liberalization to permit market access, both countries maintain a regulatory structure that imposes a significant barrier to entry for foreign firms.

Unlike China, Japanese taxes were neither high nor restrictive. Additionally, by the early 1990s, there were no explicit import restrictions. Furthermore, local content requirements had been phased out, given the rapid growth of the Japanese automobile manufacturers in the 1960s and 1970s and their global expansion in the 1990s. Additionally, there were no investment requirements nor were there any industry development policies in place. However, the non-tariff barriers were many and onerous.

In terms of distribution and dealer networks there were few entry points for American manufacturers. Additionally, there were few American parts suppliers that could enter in the relational agreements of the keiretsu networks. Repair garages had to undergo a costly and lengthy process of certification, authorization and official designation.

In terms of technical standards there were significant non-tariff barriers to be overcome. Frontal crash testing procedures had to be carried out locally and through a whole series of new

[14] In the Japan and Korea section we have relied upon the 1995 Report of the Office of Automotive Affairs on the Japan-US Automotive Trade Agreement, the June 1999 Monitoring Report on the US-Japan Automotive Trade Agreement, the 1996 US-Korea Automotive Trade Agreement and the October 1998 US-Korea Memorandum of Understanding: Market Access for Foreign Motor Vehicles as well as the APEC Automotive Committee Automotive Profile of Japan and the Automotive Profile of Korea.

[15] In Korea European automobile manufacturers had less than one per cent of market share, whereas in Japan, by focusing on the high value-added products of BMW, Mercedes and Jaguar, they had achieved approximately three per cent of the total automobile sales.

tests. Emission tests were also lengthy and often uncertain. Customs inspection was another issue that had to be dealt with because of its length, complexity and bureaucratic intransigence. All these non-tariff barriers imposed significant and unnecessary additional costs for the American automobile manufacturers attempting to sell in the Japanese market.

By the end of 1999, Japan had moved effectively to eliminate the majority of these non-tariff barriers. American manufacturers had achieved representation in 192 dealer locations, penetrating five per cent of the overall Japanese dealer network.[16] American parts exports had increased from $ 1 billion in 1992 to over $2.4 billion by 1999.[17] Additionally, eight specified components – shock absorbers, struts, power steering systems, trailer hitches, stabilizers, torque rods, torsion bar springs, and motorcycle clutches – had been removed from the critical parts list and could be repaired and sold without regulation.[18]

The garage certification process was deregulated and new types of repair garages, requiring significantly less regulation, were created. Emission and crash tests were standardized and they were less lengthy and more predictable. Customs inspection was eliminated for the vast majority of American automobile models through the approval of specific types, rather than individual models, by the Japanese Ministry of Transportation.[19] Table 6 shows the increase in U.S and European market share with these moves toward liberalization.

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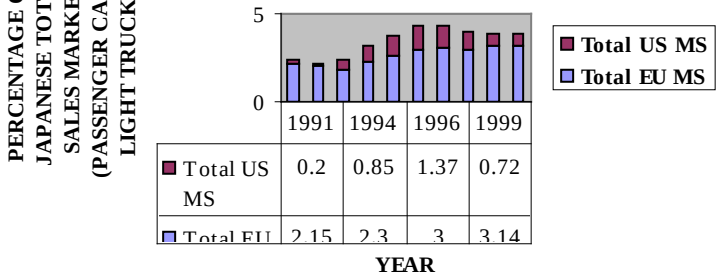
[16]Office of Automotive Affairs (1999, 15).

[17] Office of Automotive Affairs (1999, 21).

[18] Office of Automotive Affairs (1999, 26).

[19] Office of Automotive Affairs (1999, 9).

TABLE 6: JAPAN MARKET SHARE, 1991-2000



	1991	1994	1996	1999
Total US MS	0.2	0.85	1.37	0.72
Total EU	2.15	2.3	3	3.14

YEAR

Similar to Japan, Korea entered the 1990s with a series of pervasive and onerous non-tariff barriers that made penetration of its market by American manufacturers very difficult, if not impossible. This market penetration issue was compounded by the fact that Korea, unlike Japan, had also higher than the average OECD country, tariffs and taxes. Tariffs on passenger cars stood at 15 per cent in 1994 and they were reduced to 8 per cent by 1998, yet remained significantly higher than Japan's zero per cent tariff structure. Automobiles were also subject to a special consumption tax of 15% for vehicles with an engine capacity below 2000 cc and of 20% (effective from 1996) for those above 2000 cc. In addition, an acquisition tax is levied which used to be at 15% for vehicles exceeding a price of 70 million Won and at 2% for vehicles below this price threshold. Additionally, there were higher taxes for US automobiles that further decreased the possibility that consumers would buy them. Korea also levied an Education and the Rural Development tax.

In order to keep its trade deficit with Japan under control, Korea had prohibited the import of a number of Japanese products (187) through its "Import Source Diversification Scheme" (ISDS). American automobile manufacturers were indirectly affected by the ISDS since it covered Japanese parts and components of finished products made in the United States.

In terms of local content requirements, since 1986, Korea had a "localization program" in place to encourage domestic production of certain imported commodities. The localization

program aims to strengthen the Korean industrial structure and promote domestic technological development by fostering the domestic production of a list of imported machinery, parts and materials which are currently being imported at high prices. However, in combination with a strict rules of origin program, it affected American firms adversely.

However, the non-tariff barriers were the main issue for American automobile manufacturers attempting to enter the Korean market. Documentation was lengthy and costly and could not apply to an entire class of product models. The fuel economy, noise pollution and environmental standards were not comparable to either EU or US standards. Testing had to be carried out according to Korean specifications which often meant significant delays for the imported automobiles to reach the Korean consumer. The existence of multiple agencies, with overlapping jurisdiction over aspects of the testing process, increased uncertainty and reduced the transparency of the entire process, especially to the American manufacturers.

By the end of 1998, Korea had implemented a series of measures that increased sectoral liberalization and harmonization with global standards. In terms of tariffs, it harmonized with a WTO-approved ceiling of 8 per cent and agreed to be engaged in future multilateral negotiation agreements to further reduce or eliminate tariffs on imported automobiles. It also initiated a special 30 per cent cut in the Consumption Tax, implemented a 40 per cent reduction in the rate applied to US-type vehicles under the annual Vehicle Registration Tax, and it eliminated Education and Rural Development taxes.

In terms of import restrictions, it abolished its "Import Source Diversification Scheme" in 1999 and had eliminated local content requirements by 2000. It simplified the documentation process and has moved to increasingly harmonize its testing procedures with internationally

recognized standards such as ISO. Additionally, it has moved aggressively to streamline its testing and standard certification system in order to avoid overlapping jurisdictions.

From July 1, 1997 Korea also allowed submission of documents for the automotive test items for which tests are conducted according to Korea's test standards and methods regardless of whether the country concerned has the same or higher standards than Korea. This means that for the present test items to which US-made cars are subject in Korea, the American firms will be able to submit documents for these items provided that tests are conducted according to Korean methods and satisfy Korean standards. Indeed, Korea committed to the institution of a self-certification system by the end of 2002 that will allow US automobile manufacturers to certify their products, becoming the third country in the world, in addition to the United States and Canada, to institute a self-certification system. Perhaps, more importantly, the 1998 US-Korean Automotive Trade Agreement introduced a secured financing system which would enable Korean consumers to more easily finance the acquisition of US-made vehicles.

Indonesia and Malaysia[20]

Indonesia, like Malaysia actively supported a national car project, even if it meant the appearance of undue state influence and charges of corruption. Subsidies, prohibitions on foreign investment, excessive import duties, high taxes and significant import restrictions were part of a concerted Indonesian strategy of developing a domestic automobile industry. Foreign firm entry was dependent upon the creation of a joint venture with an Indonesian firm, much like in China. Local content rules were strict. State-subsidized incentives in the form of lower import duties and taxes were given if a higher local content utilization was achieved. The 1993 policy averaged

[20]We have relied for data on the APEC Automotive Committee Automotive Profile of Indonesia and on the European Union's Market Access Sectoral and Trade Barriers Database.

tariffs of 150 per cent for passenger vehicles, 70 per cent for light trucks and commercial vehicles, 25 per cent for engines and 150 per cent for body parts.

However, the most important form of aggressive state intervention occurred with the 1996 National Car Policy. The National Car Policy granted local automobile manufacturers "pioneer status" if their products (1) were branded under their own, Indonesian-owned mark; (2) were produced domestically; and (3) used domestically made components. Before a 1998 WTO ruling on subsidies and counterveiling duties, "Pioneer" companies were exempted from duties on imported components (at 65%) and their sedans were exempted from a 35 per cent luxury tax for a period of four years. In return, they had to achieve a minimum of 20%, 40% and 60% local content by the end of, respectively the first, second and third year of operation. The production facilities used for the manufacture of these automobiles had to be fully owned by Indonesian interests and the eventual co-operation agreements with foreign auto makers had not to include commitments limiting the possibility to export. The "Pioneer" status had been granted to PT Timor Putra National, a company controlled by former President Soeharto's youngest son, and it was established as a joint venture with Kia Motors of South Korea.

However, the Asian financial crisis of 1997-98, led to the demise of the Suharto regime. Hence, following the 1998 WTO decision, came the January 1999 Agreement with the IMF, and consequently the National Car Policy was abandoned. In June 1999, Indonesia launched a new policy of automotive development where the first moves towards sectoral liberalization have occurred.

The local content rules have been de-emphasized, even though an automobile manufacturer still benefits from reduced taxation. ? Tariffs have been subsumed within the regional ASEAN trade liberalization process with the goal of achieving a common effective

preferential tariff. By the end of 2002 the maximum tariff in and among ASEAN countries is 5 per cen. There is a common inclusion list, effective since January 1, 2000, in which the maximum tariff is 20 per cent and the maximum tariff for the products included is 5 per cent. Indonesia has eliminated import barriers, such as the ban of completely brand new cars in the country. Further, it has eliminated specific import quotas and the requirement that imported cars to be partially produced in Indonesia. Finally, it has accepted the WTO Valuation Agreement, thus greatly reducing the lack of transparency and the excessive duties of the previous customs system.

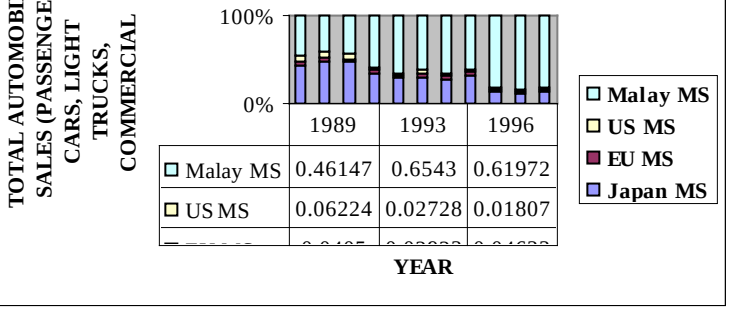
Malaysia, in contrast, has remained deeply embedded within the "national champion"" strategy of automotive development. Indeed, the success of the Malaysian project, which was launched in the mid-1980s and led to the control of over 70 per cent of the Malaysian market by the local firms of Proton and Perodua, was the reason that Indonesia launched its National Car Policy.

In the 1990s, Malaysia continued aggressive support for its national champion policy. Foreign direct investment in the automobile sector was tightly regulated and the government intervened indirectly, through the allocation of loan guarantees and subsidies to help finance the high developmental costs of setting up an automobile industry. Import duties were high for the non-national car producers; in contrast, national car producers were granted partial exemptions from the excise duties and given preferential import duties. Tariffs and taxes were high for foreign produced automobiles and the entire state sector was adamant about the need to support domestic firms. Hence, prices for the national car producers were regulated to ensure reasonable increases, and price competition was discouraged among all participating firms in the Malaysian

market. Additionally, direct local marketing centers were established in order to create an effective distribution mechanism.

However, this pattern of preferential treatment for national car producers continued after the Asian financial crisis. The Malaysian government intervened in credit markets and extended the period for auto loan repayment in order to prevent a liquidity crisis, and it subsidized dealers who were facing bankruptcy by forcing banks to re-open credit lines and relax terms on loans. In terms of the national car producers, it increased their exemption from import duties and supported their affordability through indirect subsidies. The end result was the increase in market share for the national car producers, at the expense of their non-national competitors, even in a significantly reduced automobile market such as the one after the 1997-98 Asian financial crisis. And since Malaysia has committed to the ASEAN Free Trade Area, it is now faced with increased calls for sectoral liberalization. However, its entire policy framework is based upon the maintenance of a stringent protectionist trade regime and thus it may not prove capable of dealing with the imminent changes. Table 5 illustrates.

TABLE 5: MALAYSIA MARKET SHARE, 1989-2000



	1989	1993	1996
Malay MS	0.46147	0.6543	0.61972
US MS	0.06224	0.02728	0.01807

The Phillipines, Thailand and Taiwan[21]

The Philippines,Thailand and Taiwan shared two important non-market characteristics: 1. A complex import duty, tariff and taxation structure for most of the 1990s, which stressed the importance of local content development. 2. A burgeoning commitment to sectoral liberalization, despite legacies of protectionism. Hence, they stood in the middle between the aggressively interventionist states of China, Malaysia and Indonesia and the more non-tariff-barrier oriented states of Korea and Japan.

The Philippines orchestrated its interventions in the automobile sector around tariffs, taxes, and local content requirements. The Philippine government applied an ad valorem excise tax on all passenger cars, whether imports or domestics. The base has been the "dealer's selling price." The tax rate ranges from 15 to 100 percent and is based on engine displacement. Commercial vehicles and SUVs are not subject to the tax. A Value Added Tax of 10% is applied to all vehicles. The Philippines also imposes an import processing fee of 250 pesos per shipment. All minimum import prices in this sector were discontinued in 1992.

The tariffs averaged around 15 per cent for all types of vehicles (passenger cars, light trucks, commercial vehicles). They were among the lowest in the ASEAN regional grouping and they were simplified in 1991. They were rather predictable and transparent and not subject to frequent change. Additionally, they were part of a concerted effort, starting in 1998, to become aligned with the proposed ASEAN AFTA Common External Preferential Tariff.

However, the Philippines had an elaborate local content framework. The government imposed local content requirements to participants in the Car Development Program (CDP), the

[21] For this section we have relied upon the APEC Automotive Committee Automotive Profile of China (Taipei), on the European Union's Market Access Sectoral and Trade Barriers Database for the Philippines, and on the March 2002 Ministry of Industry, Office of Industrial Economics, Automotive Industry in Thailand.

Commercial Vehicle Development Program (CVDP) and the Motorcycle Development Program (MDP). Passenger car (CDP) makers must attain local content of at least 40 percent. Under the Board of Investments' proposed changes to the MVDP, the local content requirements for vehicles would rise to 42 percent in 1997, 45 percent in 1998, 48 percent in 1999, and 50 percent by 2000. The BOI may award an amount equal to 50 percent of the net foreign exchange earnings generated during the prior year by any Category I and II participant that has achieved a weighted local content average of 50 percent or more for all its participating makes and models.[22] There are no mandatory deletion items under the CDP.

While there is no local content requirement for Category III cars (2190 ccs and above), participants must invest $10 million in parts and component manufacturing for the export and domestic market. Generally, Category I and II participants must earn between 5 percent and 55 percent of their foreign exchange for CKD imports through the generation of export earnings, while Category III participants must earn 75 percent of their foreign exchange requirements in this manner. For commercial vehicles the local content requirement is generally 45 percent, but ranges down to 14 percent for heavy industrial and special purpose vehicles. The BOI may award an amount equal to 50 percent of the foreign exchange generated during the prior year by any CVDP firm that has achieved a weighted local content average of 55 percent or more for its participating makes and models. There are no mandatory deletions under the CVDP. MDP participants must achieve a local content of 35 to 45 percent. The BOI may award an amount equal to 50 percent of the foreign exchange generated during the prior year by any MDP participant that has achieved a weighted local content average of 55 percent or more for all its participating makes and models.

[22] Category I vehicles (people's cars) possess an engine displacement of 1,200 cc or below; Category II (main cars) are above 1,200 cc but below 2190 cc; and Category III (luxury cars) are 2190 cc and above.

In terms of non-tariff barriers, the Philippines have consistently remained one of the few Asian countries where import licensing, import quotas, technical and environmental standards have been closely harmonized with global standards. As such, they have been characterized by low import quotas, predictable and stable import licensing agreements, and transparent technical and environmental standards.

However, the Philippines is under significant pressure because of the need to adapt to the AFTA liberalization drive, especially in its local content regulations. Even though, it has begun, especially in the aftermath of the crisis, to harmonize its tariff structure and tax rates with ASEAN, it has not effectively begun to integrate local content requirements with the regional sectoral liberalization drive, i.e. whether to abolish the local content requirement.

Similar to the Philippines, Taiwan entered the 1990s with a complex system of tariffs and taxes and a commitment to maintain high local content in the automobile sector. However, unlike the Philippines, Taiwan has used WTO membership to abolish local content requirements, simplify its taxes and commit to a specific time schedule for the reduction of tariff quotas.

In terms of tariffs, Taiwan has agreed to use the tariff quota system of the WTO. Its goal is to reduce the tariff to 17.5 per cent by 2010 and to abolish the tariff quota system by 2011. These tariff reductions are significant if one realizes that tariffs for light duty vehicles stood at 29 per cent and for heavy duty vehicles at 37 per cent in 2001.

However, Taiwan has maintained high taxes in the automobile sector. The following automotive products, both of imported and domestic origin, are subject to a Commodity Tax, at the rates indicated: Sedans with cylinder volume below 2,000 cm – 25%. Sedans with cylinder volume above 2,001 cm and below 3,600 cm – 35% . Sedans with cylinder volume above 3,601 cm – 60%. Trucks, buses and other vehicles – 15%. Motorcycles – 17% .□ For imported

passenger vehicles, the duty is normally levied at the time of sale to domestic buyers, and for auto parts and supplies, the duty is levied at the moment of importation. Its amount is calculated by applying the rate (5%) on the addition of the taxable value (as prescribed by Customs Import Tariff), the customs duties, the harbor construction dues and the commodity tax.

In the 1990s, local content requirements applied for automobile and motorcycling manufacturing in Taiwan. These appear to be explained by the Government's concern for employment problems in the automobile and motorcycle industry and the potential economic and social disruption. These local content rules applied equally to foreign and domestic enterprises.[23] However, membership in the WTO led to their elimination in order to comply with the TRIMS measures. Additionally, WTO membership has solidified the harmonization of the safety standards testing process with existing Japanese ones as well as the harmonization of environmental standards with US ones for exhaust emissions.

Thailand used local content rules, complex tariff schedules and taxation as the centerpiece of its automobile policy, but with greater complexity than either Taiwan or the Philippines. The Thai government's goal was to create a domestic-based production hub for the rest of South East Asia. However, the Asian financial crisis, led to the radical rethinking of its local content policy and the restructuring of the tariff structure towards a more simplified one.

Throughout the 1970s, starting with the 1972 car-assembly policy, the Thai state consistently supported the creation of locally-based automobile industry. Starting in 1975, it required from all automobile assemblers, 25 per cent local content for passenger cars and 20 per

23 Local content requirements for the automotive industry were as follows: Small and middle-size cars: 50% of total value of component parts of each vehicle had be supplied locally and at least four items from a list of fifteen designated major items had to be manufactured domestically. Large automobiles and heavy trucks weighting between 3.5 tons and 10 tons: 37% of total value of component parts of each vehicle had to be supplied locally and at least three of fifteen critical component parts have to be manufactured domestically. Heavy trucks weighting above 10 tons: 31% of total value of component parts of each vehicle had to be supplied locally and at least two of fifteen critical component parts have to be manufactured domestically.

cent for light trucks and commercial vehicles. By 1978, local content rates had been raised to 50 percent and it prohibited registration for any new assembly plants. In the same year, it prohibited the import of completely built-up cars. By 1982, given the higher price of locally produced contents, the local content was reduced to 45 per cent. By 1991, the same local content rates were applied to all light trucks produced and the restriction on the importation of completely built up units was lifted.

By 1991 a complex structure of commercial and consumer taxes had been erected. They privileged domestically-produced vehicles, but nothing like what unfolded in Malaysia. By the mid-1990s, the Board of Investment was beginning to grant tax credits to new foreign assemblers and by 1994 the Ministry of Industry allowed the registration of new car-assembly plants.

However, the complexity of tariffs and taxes persisted. Tariff rates differed dramatically between commercial vehicles and completely built up units. The tariffs for the import of completely built-up units (ranging from 40 for trucks to 68.5 percent for larger passenger vehicles) were generally at least twice those for completely knocked-down units (20 percent). On the other hand, components that were not brought in as CKD material (i.e. replacement parts) were also subject to rates significantly above CKD levels. At the same time, efforts to promote local component production were harmed by high raw material tariffs (35 percent), which generally approached twice those applied for finished imported parts.

Taxes were complex and high. The excise taxes varied by engine size and ranged from 27 percent to 43 percent, as set forth below: - CBU and CKD off-road Vehicles: 27%, - CBU and CKD passenger cars as well as public transport, - cars with an engine size of 2,400 cc and below 35%, - CBU and CKD passenger cars with an engine size of between 2,401 cc and 3,000 cc and engine power not exceeding 220 horsepower as well as public transport cars with an engine size

of between 2,401 cc and 3,000 cc 41%, - CBU and CKD passenger cars with engine size exceeding 3,000 or engine power exceeding 220 horsepower 43%.

Yet, by 1998 Thailand was embarking upon a process of gradual and committed sectoral liberalization. By January 1, 200, theThai Cabinet had abolished the local content requirements, that had been applied to automobile assembly and had revised the automotive tariff structure. Both of these policies have been enforced since January 1, 2000. The new automotive tariff, remains complex, but it has been significantly simplified.[24] Even more importantly, Thailand has already harmonized its tariff structure with the AFTA sectoral liberalization process. It supports the goal of an integrated regional market that will "enhance the competitiveness of ASEAN's exports and lower production costs through improved economies of scale."[25]

In sum, American firms faced a non-market environment in Asia in which they found extensive state intervention in the automobile sector, privileging domestic producers over foreign ones. Such extensive state intervention was accompanied by significant bureaucratic interference in the market, leading to long-term market distortions. They were different in the methods that they used. In China, Malaysia and Indonesia, the goal was the creation and survival of domestic automobile manufacturers through aggressive state intervention, often with corrupt consequences. In Japan and Korea the goal was to protect the already existing domestic producers from foreign competition. In Taiwan, the Philippines, and Thailand, the goal was the creation of a complex regulatory structure that would allow the host countries to maintain

[24] The new automotive tariff structure is presented in *Automotive Industry in Thailand* (2002, 14).

[25] See *Automotive Industry in Thailand* (2002, 11).

flexibility to both encourage domestic production and reap the benefits of increased sectoral liberalization.

The critical question for the American automobile manufacturers has been how to penetrate these markets. How can a foreign competitor undo the cozy relationship between domestic producers and their political guardians in a non-democratic setting? Furthermore, what type of non-market strategies will prove to be successful when combined with existing market strategies? Additionally, what would be the appropriate institutional setting for such an integration of market and non-market strategies?

As we will discuss below, the penetration of these markets can be accomplished through the use of bilateral and multilateral negotiations as well as with the use of financial resources, which were becoming increasingly scarce in the aftermath of Asian financial crisis. In the cases of Korea and Japan, bilateral market access negotiations, as well as superior financial resources, proved to be effective in opening markets that were almost hermetically sealed. In the cases of Malaysia and Indonesia, regional multilateral settings proved be of some help in addressing non-market issues. However, in the cases of the Philippines, Thailand and Taiwan regional and global organizations such as ASEAN and the WTO proved to be significantly effective in accelerating sectoral liberalization in the host country.

E. Non-Market Competencies

With the exception of Japan, Korea and China, i.e., the two developed Asian markets and the most promising emerging Asian market, American firms used their superior expertise in lobbying at the national, regional and international level in order to gain market access. They

achieved this goal by uniting at the regional and international levels and by pursuing their traditional lobbying strategies at the national level.

They utilized the APEC and the ASEAN regional organizations in order to accelerate external voluntary sector liberalization in Malaysia, Taiwan, and Thailand and in the Philippines. Their managers, engineers, governmental affairs specialists, and senior executives participated in the Steering and Advisory Committee meetings in order to accelerate automotive sector liberalization, especially targeting tariffs, taxation and local content provisions.[26] Indeed, two very early comments about the direction in which ASEAN and APEC should be going in terms of the liberalization of the automobile sector proved to be more than "prophetic". As General Motors' Chairman John F. Smith, Jr., stated in 1998, one of three U.S. representatives appointed by U.S. President Bill Clinton to the APEC Business Advisory Council (ABAC), the private sector arm of APEC, which advises APEC leaders on business-related issues,

> Despite the really tough economic environment in Asia, we need to stay the course. Asia has benefited from its open markets, and it is important that their markets stay open, otherwise there is the real possibility we will see the financial crisis deepen. Trade liberalization makes good economic sense and even more so in these trying times. Liberalization of trade in Asia will greatly increase the region's competitiveness, contribute to the welfare of the region's citizens through job creation, infrastructure development, skills training and consumer choice, and promote the sustainable economic development of APEC member economies - all of which will help the region recover from the crisis… The automotive industry's critical role in the development process has long been recognized by APEC economies. Unfortunately, some economies have responded by implementing policies that seek to support the development of local auto production at the expense of regional production. At the APEC summit, one of our primary aims is to get the APEC Trade Ministers to agree to a dialogue on how to promote greater regional integration and trade liberalization in the automotive sector.[27]

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26 GM and Ford successfully lobbied to accelerate the relaxation of restrictions and lower tariff barriers from the established date of 2006 to 2002. See *APEC Automotive Group* (1999).

[27] General Motors Press Release, 10/11/1998. Available at the following address: http://www.gm.com/cgi-bin/pr_display.pl?574.

Similarly, Ford stated, upon the initiation of the AFTA process in the late 1990s that it "supports the AFTA initiative as this would permit consideration of ASEAN as a single market, providing economies of scale, reduced costs and broader product offerings for consumers."[28]

And they achieved what they wanted by 2001, when the Joint Industry Report for the APEC Automotive Dialogue published its report. Within this APEC document, entitled "Effective Automotive Policies and Barriers to Growth," the Joint Industry professionals, policy-makers, academics concluded that what they would recommend to Governments for the development of a healthy and sustainable industry would be the following:

> Stable national economic performance. Consistent, transparent and non-discriminatory economic and regulatory policies. Open trade and investment policies which foster rational decisions based on market principles. Removal of domestic content requirements. Lowering of high tariff walls. Removal of quotas, licensing and distribution controls. Monetary policies which promote low interest rates, exchange rate stability and capital availability. Good availability of consumer finance. Reduction in distortion impact of auto duty and tax policies. Harmonization of auto standards – engineering, safety, emission and customs. Improvement of infrastructure – roads, parking, complementary public transport.[29]

The Joint Industry Report argued for a reversal of the protectionist policies pursued in the 1990s. They were able to heavily influence the final report in such a way through a strategy of agenda-setting. In the fourth APEC Automotive Dialogue Meeting, held on April 17-19, 2002, the list of speakers appears to be dominated by senior executives of Ford and GM and US Department of Commerce policy-makers, especially in such important panels as "Customs Issues," "Harmonization of Technical Regulation," "ASEAN Automotive Industry – Prospects and Challenges," "The new WTO Round of Negotiations." What this meant for the American firms was that market liberalization would create for them a more level playing field in Asia.

[28] See Ford Motor Company, Public Policy Releases. Available at the following address: http://www.ford.com/en/ourCompany/newsroom/worldwidePublicPolicy/trade/marketAccess.htm

[29] See APEC Secretariat (2001, 6-7).

At the international level, American firms together were instrumental in bringing the case of the Indonesian national car project to the World Trade Organization Dispute Settlement branch and were successful in forcing the elimination of Indonesian restrictions in 1998. This was accomplished by a concerted effort between Ford and GM in their appeal to then Secretary of Commerce Mickey Kantor to visit Jakarta in June 1996 in order to negotiate with the Indonesian Minister. Furthermore, they were instrumental, through the American Automobile Manufacturers' Association (AAMA), in getting the US to join Japan and the European Union in filing a complaint with the WTO's Dispute Settlement Board.[30]

At the national level**,** the automobile industry generated significant electoral pressure through its employees, and through its financial strengths. The industry was relentless in its congressional lobbying efforts to convince Congress to de-link human rights and trade issues, arguing that that linkage would shut American firms out of Asia as European competitors swept in. As Carl Levin, the Democratic Senator from Michigan put it during the 1996 vote on Permanent Normal Trade Relations with China,

> it is unrealistic to expect that other companies will not make investments in China if ours do not. European and Asian companies would presumably fill any gap the United States left. And they could just as easily export their Chinese-made products to the United States as our companies could, which, in the end, would probably displace more U.S. jobs than would be displaced if American companies were the investors. Let's assume you have an American and a German refrigerator manufacturer vying to make refrigerators in China. If both companies were going to ship refrigerators back to the United States, the jobs of people making refrigerators in the United States would seemingly be at least as much jeopardized by the German made-in-China refrigerator as the American made-in-China refrigerator. Actually, the job displacement would probably be less with the American made-in-China refrigerators being sold back here because the American company is more likely to use some US made components, stimulating some US exports. And not only will European and Asian businesses probably be less likely to use American made components in items they assemble in China, they will probably have fewer

[30] See Shari (1996).

US stockholders gaining from their investments in China than would be the case with an American company's investment.[31]

American firms also directly pressured the Clinton Administration for bilateral talks aimed at increasing American firm sales and investment stakes in local automobile manufacturers. An indicative example is the bilateral negotiation rounds with Korea, prior to the 1998 US-Korea Automotive Trade Agreement. In this instance, the AAMA argued that "the time is ripe to 'get tough' with Korea [because] of Seoul's alleged failure to meet 'minimal commitments' agreed in a 1995 memorandum of understanding when it promised to substantially increase market access for foreign passenger vehicles."[32] In China, American firms used the home country administration to open doors and convinced U.S. negotiators to link the possibility of WTO membership for China with trade arrangements that would be beneficial to U.S. firms

In sum, American automobile manufacturers were faced with a powerful challenge in Asian markets. Asia, like other regions, suffered from overcapacity in the auto sector. Japanese firms had cornered a large market share, even in countries like Malaysia and Indonesia where host governments actively supported the creation of national automobile firms. But American firms could not avoid the Asian market; it was the most rapidly growing regional segment, both in terms of production and consumption, of the global automobile market. If American firms were to grow beyond their regional pre-eminence in the North American market, which had been solidified through the conclusion of NAFTA, and beyond their stable holdings in the European market, they had to find a way to compete in Asia. And to compete, they had to invest significant

[31] See Levin (1996). Also available at the following address: http://levin.senate.gov/issues/chinapntr.htm.

[32] See Dunne (1997).

capital in an area that was increasingly overwhelmed with production capabilities. It is to the story of American strategies in increasing its competitive position that the discussion now turns.

III : STRATEGIC AND TACTICAL ANALYSIS

Market Strategies

Competition between American, Japanese, Korean, and European automobile manufacturers in the Asian markets was part of an overall struggle within the global automobile industry for market expansion with internal rationalization. [33] Competing in Asia was an attempt to build effective scale by playing the regional platform game, i.e., sharing numerous components across models and different regional markets in order to achieve economies of scale and reduce complexity and manufacturing costs.

In Asia, American firms were thus engaged in a powerful struggle with the Japanese, primarily, but also with European and Korean companies.. Hence, they had to decide on which of their firm competencies they could best rely on in order to compete successfully. American firms were underdogs; they had fewer strongholds since the Japanese had the first-to-market advantage, and they were behind in terms of cost and quality. However, they were able to utilize timing and deep pockets to their advantage.

Between 1985 and 2000, Japanese firms controlled over 90 per cent of their home market, while Europeans and Americans split the remaining 5% .[34] The Japanese controlled over

33 The Korean manufacturers created production facilities in Thailand, Malaysia, the Philippines and Indonesia, but these production facilities had small capacities (Chung 1997). Similarly, the Europeans were particularly competitive only in China, because of the "first-mover" advantage of VW, and maintained significant import market shares in Japan (Freussenet and Lung 1997).

34 The same holds for the auto parts market of the Japanese home market.See Office of Automotive Affairs. (1999, 21-22)

85% of the Indonesian market, approximately 60 % of the Thai market, around 75 % of the Taiwan market, and around 75 % of the Philippine market. Even in the Chinese market, where the state had excluded Japanese auto firms until the mid-1990s, Japan was rapidly advancing. In addition, Japanese firms controlled the auto parts industry in these markets, allowing them to control the production supply chain.. With the exception of Taiwan, American firms were not able to develop similar strongholds, given the Japanese first-to-market advantage.[35]

With regard to cost and quality, the Japanese also had an advantage over their American competitors because of their greater labor productivity. In 1990, the American firms produced just 14.4 factory unit sales for each employee of the corporate payroll, while their Japanese competitors produced 30.3, yielding a 53% differential in their favor. Additionally, Japanese firms' early penetration of the Asian market had allowed them to increase their content localization rates to such an extent, that they were not subject to the equivalent price markups that the American and European firms faced because of import taxes and tariffs. However, by the mid-1990s, American firms had increased labor productivity, reducing disparities between themselves and their Japanese competitors. By 1997, the Japanese firms had dropped to 23.5 units per employee, while American firms had increased their output per employee to 18.4 units, thus dropping the labor productivity differential to 22%.[36]

With regard to timing and know-how, American firms were more competitive. They had learned a powerful lesson by watching the Japanese penetrate their own domestic markets.[37] The

[35] For these market shares see *AAMA World Motor Vehicle Data 1991-1998, Autonews Datacenter 1996-2001,* and *Ward's World Motor Vehicle Data, 1998-2001.*

36 See Miller (1999, 15).

37 The 1980's automobile trade friction between the U.S. and Japan resulted in the implementation of voluntary export restraints on the Japanese automotive firms. However, as Berry et. al have shown (1995), the end-result of this form of non-market intervention was the trans-plantation of Japanese production facilities in the U.S. as well as the increased segmentation of the Japanese automotive products towards higher-value offerings.

Japanese had imported just-in-time production techniques, and built long-term relationships with parts suppliers.[38] American firms were successful at imitating their Japanese competitors, especially in their initial forays in the Asian markets, but they even went a step further: they decreased the number of their parts suppliers and they integrated their suppliers within their global production networks.[39] They were also moving towards the implementation of modular production techniques in which the emphasis was passing sub-assembly responsibilities to a limited number of "tier 1" vendors. These vendors would produce modules (such as a 4-corner suspension set) that could then be attached to a vehicle chassis as it passed particular stations on the assembly line.

The implementation of advanced production techniques began at the same time that the Asian financial crisis occurred. The crisis allowed the American latecomers the opportunity to attack the Japanese firms by stressing the critical role that key acquisitions could play in the creation of market share. Between 1965 and 1995, Japanese firms had gradually and carefully created efficient cross-national production channels and built first-to-market advantages. Asia's overall weak financial position after 1997, however, allowed cash-rich American companies to acquire significant stakes in both from cash-strapped and over-extended Korean and Japanese competitors. And jittery governments throughout Asia were thus eager to maintain their direct foreign investment levels in the aftermath of the crisis.

After 1997 American firms came to Asia with deep pockets bulging with cash. Three factors played an important role these firms' financial strength: the uninterrupted growth of the

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38 The long-term and close spatial proximity of parts suppliers became increasingly apparent to American automobile manufacturers as one of the most important sources of Japanese firm success in penetrating foreign markets (Levinsohn 1995).

39 See Shimokawa (1998)

North American automobile market in the 1990-1999 era, the increased rationalization and extensive internal firm restructuring leading to even greater profitability, and the increased premium that the equities markets placed on American firms. Hence, by 1998 they had achieved cash at hand levels of $42.4 billion while the Japanese had approximately $24.2 billion.[40] The importance of this disparity became apparent not only in the allocation of resources for acquisition purposes, but for also for the American firms' organizational strategies.

Organizational Strategies

After American firms first established their trade positions in the Asian markets, they followed the European counterparts' organizational strategies, and they joint ventures with host state trading firms. The benefits from these arrangements lay in the increased informational advantages in both the market and non-market environment of the host states. However, American firms increased their equity participation in these joint ventures once they began production in these countries. GM established wholly-owned subsidiaries in Taiwan, Thailand Indonesia and China. Similarly, Ford increased its participation in the joint venture in Taiwan and established a fully-owned subsidiary in Thailand. And the increased cash positions that the American firms had in the late 1990s allowed them to increase their holdings of local supplier firms in Thailand, Indonesia and Malaysia. Overall, the American firms moved more quickly than their Japanese counterparts to increase holdings in their local affiliations, even in the face of growing political and economic volatility.

This strategy of organizational adaptation in a changing market environment was the key to the recent success of American auto firms in Asia. If they could not overcome the historical

40 See Miller (1999, 2). See also the attached tables that compare American and Japanese automobile manufacturers in terms of annual net income and cash on hand in the 1997-2000 period.

advantages of their Japanese competitors, then they could attempt to control their competition through acquisitions. Ford's increase of its Mazda's holdings from 10% to 34% (a controlling interest under Japanese law) in April 1996 signaled the beginning of the consolidation of the global automobile industry. General Motors followed by increasing its position in Suzuki to 10% in late 1998, and it also raised its share in Isuzu to 49% by early 1999. The Korean market was more difficult to penetrate: Hyundai successfully outbid Ford for control of Kia Motors in late 1998, but both Mazda and Ford retained their interests in Kia of 8 and 17 percent respectively. General Motors and Ford bid for control of the heavily indebted Daewoo Motors with General Motors winning the competition and paying $ 251 million for a 42 per cent stake.[41]

What the 1998-2000 era shows is the ability of the American firms to radically alter their presence in the home market shares of both their Japanese and Korean competitors through acquisition and equity participation rather than the more traditional forms of market share penetration. As Tables 3 and 4 show, such a disparity in available funds has been very rare.

Nonmarket Strategies

As discussed above, the non-market environment in Asia created formidable market obstacles and was a moving target after 1997. State intervention characterized that environment throughout Asia. And Japanese firms used it to their advantage. Yoshimata (1999) and Doner (1997) have shown how the Japanese state aided the their automobile manufacturers to penetrate Asian markets by strengthening corporate linkages and supporting ancillary sector expansion. American firms took a different tack: in the more developed markets of Japan and Korea, U.S. firms successfully lobbied the government to pursue bilateral negotiations for increased market

[41] See Buckley (2002).

access and overall market liberalization. In the less developed but rapidly growing markets of Indonesia, Thailand, Malaysia, Taiwan and of the Philippines, they used supranational institutions such as APEC and the WTO in order to achieve a more level playing field, thus increasing their chances for greater market share. What follows is a country analysis of this two-tier approach.

In Korea, where U.S. and European imports never exceeded 1 per cent, American firms petitioned the U.S. government to negotiate for increased market access. In 1995, Korea and the United States signed a Memorandum of Understanding that committed the Korean government to a series of deregulatory measures whose end-result would be increased share of the Korean market for American firms. However, the slow implementation of this agreement led U.S. automobile manufacturers to join together to demand that increased pressure be placed upon the Korean government. In the Fall of 1998, their joint lobbying efforts convinced the USTR to threaten Super 301 restrictions on Korean imports if it did not implement market liberalization promises. At this point, the Korean government capitulated and committed to a new Memorandum of Understanding that increased deregulation.[42]

This same approach was used in Japan. The 1992 visit by President Bush led to a series of Japanese firms' commitments to increase American firm participation both in the automobile and auto parts markets. However, by 1995 the United States was still running significant and growing deficits in both areas, thus prompting the Clinton Administration to engage in a dangerous game of brinkmanship when it threatened the imposition of 100 percent punitive

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42 . It committed to a process of self-certification and permitted the financing of automobile products through non-bank based credit organizations. It further reduced import taxes on U.S.-type vehicles and narrowed tax differentials among different automobile products See the Report by the United States Trade Representative's Office (USTR 1998).

tariffs on a number of luxury Japanese imports if Japan did not open its auto market. The Japanese state made a series of compromises on its strict market regulations in order to increase American firm market share both in the automobile and auto part industries.

These compromises unfolded over the 1995-1999 period. More American cars could be seen in Japanese sales outlets as dealer dealer networks were deregulated.. Hence, by 1999, Ford, GM, and Chrysler cars were sold in 5 percent of all Japanese sales outlets, and American auto parts firms were permitted to compete in the Japanese parts market. The car mechanic certification process was changed to allow increased servicing of American automobiles. An increased number of automobile parts were removed from the "critical list," including brake parts in 1999, thus allowing American parts makers to avoid rigid certification processes that had previously prevented them from entering the Japanese home parts market.[43] Furthermore, on January 11, 1999, following a U.S. complaint at the WTO, the Japanese government modified its law concerning the rational use of energy, thus changing its methodology of calculating fuel economy standards for imported vehicles. Again, American firms had one less non-tariff barrier to deal with. In both the Korean and Japanese cases, the American firms had increased market share through the use of the American state as a bargaining tool in their negotiations with the host countries.

However, in order to open the smaller, but more rapidly growing Asian markets, American firms appealed to supranational institutions. In the case of the Indonesian national car project, they advocated and got the American government's decision to take the case to the WTO Dispute Settlement Mechanism where Indonesia was found to be guilty. Even though the Suharto regime terminated the project as a result of the increasing political crisis that it was experiencing

[43] Interagency Enforcement Team Report 1997-1999

in Indonesia in 1998, the case does indicate how pressure from a supranational institution could bring about change in domestic policy-setting. In the case of Malaysia, Philippines and Thailand, the American firms used APEC's Automotive Dialogue forum to push for an acceleration of the sectoral liberalization process. Working under the auspices of the Transportation Working Group, industry representatives from American firms engaged in a process of agenda-setting where the emphasis was placed on increasing the rate of sectoral liberalization, even in the aftermath of the Asian financial crisis.[44] At its 1999 meeting in Bali, APEC leaders "recognized the importance of the auto sector by including it under the Early Voluntary Sectoral Liberalization Initiative," and agreed that although "liberalization will inevitably involve pain, in the form of costs of adjustments, these costs are likely to be smaller when governments commit to an explicit liberalization timetable that contributes to greater confidence among investors". Not only did countries like Malaysia and Indonesia, which had previously supported active protectionist policies, argue for liberalization, they also agreed that "liberalization programs should also include reference to non-tariff measures and that foreign investment can help reduce the costs of adjustment and promote trade"[45].

The American firms were particularly successful in institutionalizing industry representation at the supranational level. They were also successful at pushing vehicle standardization projects whose aim was to reduce the heterogeneity of the Asian local content markets. The Supplier Group of the APEC Automotive Dialogue Group recommended in its December 1999 report that the APEC countries, and especially the ASEAN countries, "must

44 Indeed, in the automotive parts supplier sector, the Report of the 1st APEC Automotive Dialogue states that "the U.S. will lead a group to conduct ongoing discussions to produce a report devoted to rescue and improvement" of the ASEAN supplier industry. This Report has stressed the need not only for product harmonization, but also the need for extensive sectoral liberalization.

[45] A report of this meeting is included in the *APEC Automotive Dialogue* 1999

eliminate their restrictive trade regimes…[because] local content measures simply do not drive local purchases".[46] It also added that high tariffs must be also eliminated, both internally and externally, and that ASEAN governments also need to pursue "the adoption of internationally harmonized standards and work through the UN/ECE to develop these standards in accordance with the work plan of the APEC Road Transportation Harmonization Project" .[47]

CONCLUSION

American firms were latecomers to the Asian auto markets. With the exception of Taiwan, where Ford maintained a healthy position, because of the ban of Japanese imports, the American firms had to re-enter markets that they had abandoned in the early 1980s, like Malaysia and the Philippines, compete anew for increased market access in mature markets like Japan and Korea, and they had to compete aggressively to establish trade and production positions in Thailand, Indonesia and China. Until the 1998 Asian financial crisis their record of success appeared to be a very limited one.

However, when the Asian financial crisis hit, they were able to use an integrated set of market and non-market strategies in order to penetrate the protected and state-directed Asian markets. They utilized their financial "deep pockets" to acquire significant stakes in Japanese and Korean automobile manufacturers and Indonesian, Thai and Malaysian parts makers. They utilized their market-entry timing in combination with those deep pockets to be the only new firms in markets like the Philippines and Thailand when there was limited foreign direct

[46] APEC Supplier Group Report 1999.

47 APEC Supplier Group Report 1999. The APEC Road Transportation Harmonization Project included a large number of automotive industry representatives, especially from American firms. This report is also available at the following address: http://www.autotradecouncil.org/apec.html.

investment in the area, thus increasing their bargaining power vis-à-vis host states. And they utilized their recent advances in labor productivity and production techniques to better integrate these markets into their global production platforms.

Additionally, they used a variety of non-market strategies to increase their chances for success. They aggressively lobbied the U.S. government to grant permanent normal trade relations status with China, even arguing for a delinking of trade issues from sanctions on human rights violations. They continued to lobby for increased market access in Japan and Korea through bilateral trade negotiations that begun with the VER non-tariff trade barriers of the early 1980s. They succeeded in achieving a series of agreements that changed Japanese and Korean import regulations. They lobbied the U.S. government to bring a WTO dispute against the Indonesian state for its "national car" project, which was eventually scraped by the Indonesians. They used their membership at the APEC Automotive Dialogue to push for an acceleration of sectoral and regional trade liberalization measures and for product harmonization. Both measures, which have been already implemented, have decreased the advantages of Japanese competitors and the host states' ability to actively intervene in the automobile sector. And all this has happened in the midst of an international automobile industry consolidation that will set the stage for subsequent developments. Future research questions should investigate whether the American firms' strategies will prove to be successful in the long-run.

APPENDIX

SELECTED COUNTRY PROFILES:

China

The three largest passenger car manufacturers, Shanghai VW, First Auto VW and Tianjin Daihatsu and the three largest commercial vehicle manufacturers, China First Auto Group, Harbin Hefei, and Changan Automobile, accounted for nearly 50 % of China's total vehicle output in 2000. Prior to 1979, China produced only about 160,000 passenger cars each year; trucks and buses accounted for over 90% of total vehicle output. The country currently has 123 producing companies with more than 200 assembly plants with annual production capacity ranging from 100 units, in small garage factories, to 150,000 units, in modern joint-venture facilities. The component sector is even more scattered; industry analysts estimate that of the thousands of auto-parts' makers in China only a tiny percentage has the ability to manufacture quality products.

The Chinese government's announcement of a plan to develop China's automotive industry prompted American producers to try capturing as much market share as possiblet Both GM and Ford engaged in a process of heavy lobbying. GM, which recently opened a plant in Shanghai, has established four joint ventures in China and plans substantial new investments in an auto parts venture with Jinbei Auto Co. It has witnessed its production in China increase from virtually zero in 1998 to over 30,000 units by the end of 2000 and continued to accelerate production in order to take advantage of the state-owned market with its Buick towncar models and to capture a share of the bourgeoining consumer market with a new line of minivans.

According to the March 2002 sales figures from the passenger car market, Buick has already achieved a 10 per cent market share, rapidly chasing the passenger car market leader VW, which is still maintaining its 50 per cent market share. GM also appears to be using China as a production platform in order to lower transaction costs as it attempts to capture market share throughout Asia. In October 2002 GM planned to ship 5,000 units of its Chevrolet Venture minivan to the Philippines from its Chinese factories over a five-year period. Furthermore, Delphi Automotive, the world's largest parts maker and a former GM subsidiary had eleven plants in China by mid-2002.[48] GM thus has the best connections in upstream markets of any foreign auto maker.

The American firm presence in China was the result of extensive pressure by the home country government as well as intense regional arrangements within China. General Motors operates through both Opel and a GM joint venture. Opel China is a wholly owned subsidiary registered in Germany and established to facilitate potential Opel investment in China. It has a representative office in Guangzhou, Guangdong, PRC. The Guangzhou office is responsible for the development of potential Opel engine and vehicle projects in China. Jinbei GM Automotive Company Limited is a joint venture producing light commercial vehicles in Shenyang, PRC. The GM China-Shanghai Operations includes a Representative Office that supports a joint venture company, which will consist of vehicle, engine, and transmission assembly operations, as well as a marketing and administration headquarters. The new company represents 50/50 percent ownership for GM and the Shanghai Automotive Industry Company (SAIC). The new vehicle for assembly as part of this joint venture will be a mid-to-high luxury sedan.

[48] Keith Bradsher, "Industry Baffled by Honda's Plans in China," *The New York Times*, July 12, 2002, p. W1.

Ford presently has five joint ventures in China for the manufacture of automotive components and has 20 percent equity participation in Jiangling Motors Corporation, which will soon will be producing a 9-12 seater bus and commercial van for the Chinese market.

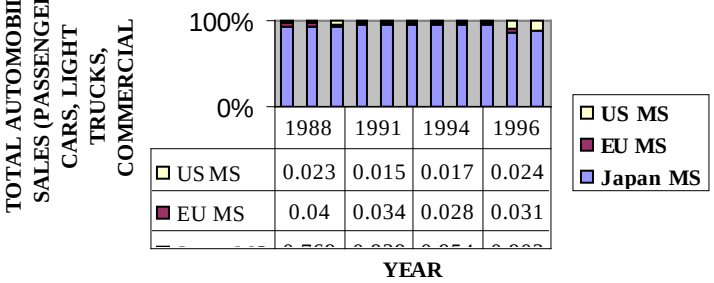
Indonesia

The Indonesian motor vehicle industry is highly fragmented with 11 assemblers assembling over 20 brands on a sub-contract basis. Local assembly is dominated by Japanese companies. Before the Asian crisis, the Indonesian market reached domestic sales of cars between 330,000 units (1996) and 380,000 units (1995 and 1997). The sharp fall of demand after the beginning of the crisis led to a de facto halt in imports of cars and auto parts. Moreover, many companies were operating at extremely low levels of production. The situation was worsened by very high interest rates (above 30% in 1999) and by a cash stripped leasing sector. It was here that American firms saw their opening.

GM Indonesia was formed September 13, 1993, as a joint venture between General Motors and PT Garmak Motor. Since November 1997, GM Indonesia became a wholly owned subsidiary of GM Corporation. The company introduced its first Opel passenger car, the Opel Vectra in 1994, the Opel Optima (Astra) in March 1995 and the world's first right-hand drive Opel Blazer in December 1995. Within only two years, Opel Blazer has become the leader in Indonesia's sport utility vehicle segment. At the present time, Blazer is the only model produced by GM Indonesia. At the height of the crisis, GMAC LIPPO Finance positioned itself strategically to immediately address the need to provide financing/leasing support for General Motors. GMAC LIPPO Finance also targeted services that address the burgeoning, broad-based

consumer demand for efficient automotive financing for all vehicles. Ford has not expanded its production facilities in Indonesia, but it is radically altering its strategy for acquisitions within the Indonesian automobile sector because of depressed asset valuations. The table below indicates the dramatic increase in US market share in Indonesia since 1995.

TABLE 7: INDONESIA MARKET SHARE, 1988-2000



	1988	1991	1994	1996
US MS	0.023	0.015	0.017	0.024
EU MS	0.04	0.034	0.028	0.031

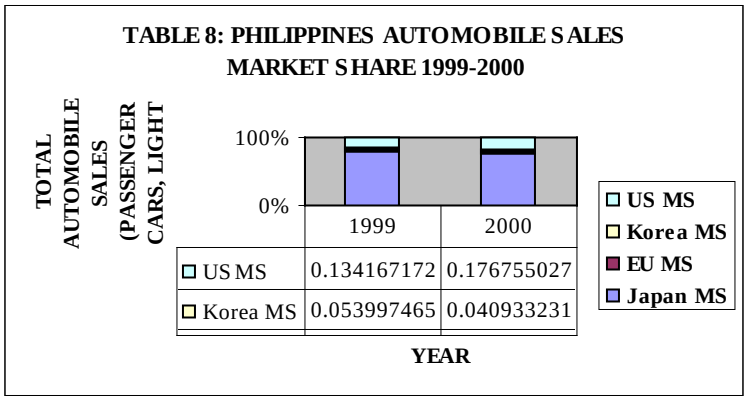
Philippines

The Philippine automotive sector is dominated by local vehicle assemblers and parts and component manufacturers.[49] Passenger cars account for approximately 55 percent of total sales, with utility vehicles and vans comprising the largest remaining shares of the market. The market is highly fragmented, with 18 licensed assemblers. They are led by Japanese firms, which hold approximately 80 percent of the vehicle market and 70 percent of the parts and components market. European assemblers active locally include Fiat, Mercedes-Benz, BMW, and MAN. Total vehicle production was 129,000 units in 1996 and had been expected to reach 200,000

[49] Domestic production is largely based on the importation of vehicles completely knocked-down (CKD). Government policy towards the automotive industry is intended to promote the assembly and parts manufacture sectors.

units by the year 2000. However, the sharp depreciation in the Philippine peso has left local assemblers questioning those assessments. From 1988 to 1995, automotive sales grew about 45 percent annually. In the first half of 1997, more than 200 vehicles were sold each day -- 1,000 percent higher than just a decade ago. Due to the Asian financial crisis, however, sales were hit hard both for commercial vehicles and passenger cars. In 1998 sales dropped to 80,231 units. In 1999, monthly car sales reached a level of about 2,000 cars, which was three to four times less than in the first half of 1997.

The American presence in Philippines is mainly through Ford Motor Company. Ford broke ground on its assembly plant after a long and torturous fight that highlighted the importance of non-market strategies in the Asian markets. Its traditional suppliers have followed it there. General Motors explored the opportunity of establishing new manufacturing facilities in the Philippines. However, during 1996 it decided to set up its regional operations hub in Thailand and, as noted above, planned to export vehicles from assembly plants in China to the Philippines. Chrysler has a joint venture in the Philippines with Transfarm, producing a limited number of Chrysler-badged Jeep Cherokees. The chart below shows the increase in US sales since the Asian financial crisis



South Korea

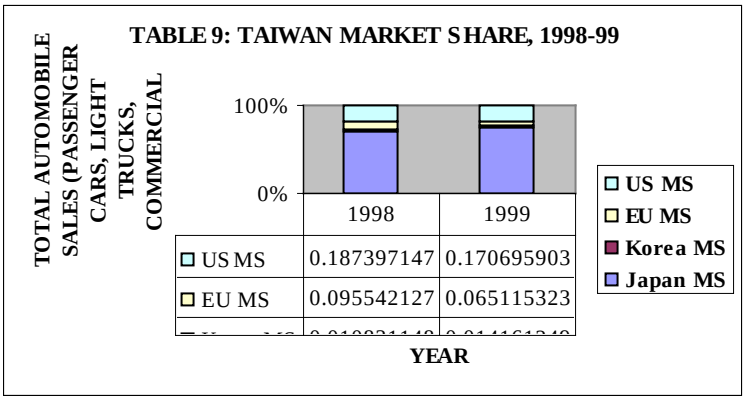
Korea's automotive industry has been designated a "strategic industry" since 1962 when the Auto Industry Law was passed to promote the development of domestic industry. Korean manufacturers initially limited themselves to low volume, CKD (Complete Knock-Down) vehicle assembly, based on overseas technology. Since then, the Korean automotive industry has developed, behind high import barriers, into the world's fifth largest motor vehicle manufacturer. In 1993, production volumes for the first time exceeded 2 million vehicles, having increased from just over 1 million in 1990. The three major manufacturers (Hyundai, Kia, Daewoo) intended to double capacity by the end of the decade. In addition, capacity further increased due to the market entry of Ssangyong and Samsung. As domestic sales grew only slowly most of the expanded production was absorbed by export markets.

As discussed above, in South Korea, American firms have exerted pressure in the non-market environment for market access. More importantly, they have engaged in active

acquisitions, such as Ford's equity participation in Kia Motors and General Motors acquisition of a 42 per cent stake in Daewoo.

Taiwan

Taiwan has been Ford's most successful market penetration story. Its early participation in the market, especially in an era when Japanese participation was prohibited until the early 1990s by the Taiwanese state, has paid off with a market share over 20%. General Motors has been in Taiwan with a wholly owned subsidiary since 1989 and has used Taiwan as a spring-board for its Saturn model. The table below shows a strong US presence in Taiwan even with incursions by the Japanese in the late 1990s.



Thailand

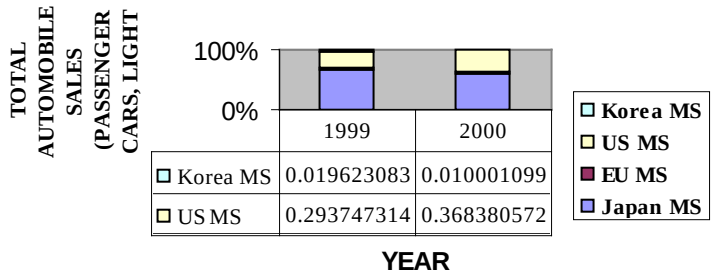
Before the financial crisis, Thailand was Asia's third-largest auto maker, the ASEAN regions largest passenger car market, and the worlds second largest market for both motorcycles and pickup trucks (after the United States). It had the worlds fastest expanding automotive

industry (between 1990 and 1994, Thailand's domestic market expanded at an average annual rate of about 20%). Unit sales had tripled since 1989, reaching 570,000 units in 1996, more than 90% assembled in country. Unit sales were projected to reach 1 million by 2000.. But since the Asian Financial crisis, its domestic market shrink dramatically with a huge 38% drop in vehicle sales in 1997 to 360,000 units (passenger cars and other vehicles). In 1998 domestic production and sales were decreased by 60%, with sales falling to 144,000 vehicles.

But due to the devaluation of the Bhat, Thai exports of completely built-up cars surged by far over 100% in value and units in 1998. In the first quarter 1999 a further 84% increase led to exports of more than 20,000 units worth more than 200 million US$. Almost all exported vehicles are pickups produced by Japanese and American manufacturers. 1999 saw a sales recovery. Thailand's new vehicle sales jumped from a monthly average of 10.000 vehicles in the second half of 1998 to about 15.000 per month and finally to more than 20.000 in November 1999. Passenger cars and commercial vehicles show increasing sales volumes.

For American firms, Thailand became increasingly attractive. The Thai government offered a more liberal trading regime than Malaysia, more growth potential than Taiwan, less corruption than Indonesia and less uncertainty than the Philippines. General Motors has had a major plant in operation since the fall of 1999. Ford began production in its own facility in 2000. Its joint venture (50/50 split) with Mazda has a capacity of 130,000 Mazda-designed light trucks. Much like GM, Ford has brought with it a significant number of parts suppliers and it has engaged in building a product infrastructure that allows it to compete for the long run. More importantly, both firms have brought their financing firms with them. As the table below suggests, American firms have made significant inroads into the Thai market after 1999.

TABLE 10: THAILAND AUTOMOBILE SALES 1999-2000



	1999	2000
Korea MS	0.019623083	0.010001099
US MS	0.293747314	0.368380572

YEAR

References

Abdulsomad, Kamaruding. 1999, "Promoting Industrial and Technological Development under Contrasting Industrial Policies: The Automobile Industries in Malaysia and Indonesia," Paper presented at the Second International Malaysian Studies Conference.

Aggarwal, Vinod, ed. 2001. Winning in Asia, European Style (New York: Palgrave Press).

American Automobile Manufacturers' Association. 1991-1998. World Motor Vehicle Data.

APEC Automotive Committee. 2002. Automotive Profile of China (Singapore: APEC Automotive Committee).

----------. 2002. Automotive Profile of China (Taipei) (Singapore: APEC Automotive Committee).

----------. 2002. Automotive Profile of Indonesia (Singapore: APEC Automotive Committee).

----------. 2002. Automotive Profile of Japan (Singapore: APEC Automotive Committee).

----------. 2002. Automotive Profile of Korea (Singapore: APEC Automotive Committee).

APEC Automotive Dialogue. 2001. Joint Industry Report for APEC Automotive Dialogue: "Effective Automotive Policies and Barriers to Growth (Singapore: APEC Automotive Dialogue).

APEC Automotive Group. 1999. Report of the First Automotive Dialogue Meeting (Bali, Indonesia: APEC Automotive Group).

APEC Supplier Group. 1999. APEC Supplier Group Report (Singapore: APEC Supplier Group).

Autonews. 1996-2001. DataCenter .

Berry, Steven, James Levinsohn and Ariel Pakes. 1995. "Voluntary Export Restraints on Automobiles: Evaluating a Strategic Trade Policy," NBER Working Paper No. 5235, (Cambridge: National Bureau of Economic Research).

Biziouras, Nick and Beverly Crawford. 2001. "The Fast Lane to Asia: European Auto Firms in China," in Vinod Aggarwal, ed., Winning in Asia, European Style, pp. 159-186.

Buckley, Christine. 2002. "General Motors finalises Daewoo stake deal," *The London Times*, 5/1/2002.

Chung, Myeong-Kee. 1997, "Globalization Strategies of the Korean Motor Industry," *Actes of the Gerpisa*, No. 22.

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

----------. 1997, "Japan in East Asia: Institutions and Regional Leadership," in Peter J. Katzenstein and Takashi Shiraishi, eds., Network Power: Japan and Asia, (Ithaca: Cornell University Press).

Dunne, Nancy. 1997. "US urged to act on S Korean car trade," *Financial Times*, 9/23/1997, p. 7.

European Union. 1999. Market Access Sectoral and Trade Barriers Database (Brussels: The Commission) Available online at the following address: http://mkaccdb.eu.int/mkdb/.

Freyssent, Michel and Yannick Lung. 1996, "Between Globalization and Regionalization: What is the future of the Automobile Industry?," *Actes du Gerpisa*, No. 18.

Hirschman, Albert. 1970. Exit, voice, and loyalty: Responses to decline in firms, organizations, and states (Cambridge: Harvard University Press).

Interagency Encorcement Team. 1997-1999. Report to President William Jefferson Clinton of the Interagency Enforcement Team Regarding the U.S.-Japan Agreement on Autos and Autos Parts (Washington, D.C.: U.S. Department of Commerce and the Office of the U.S. Trade Representative).

International Labor Organization. 2000. The Social and Labor Impact of Globalization in the Manufacture of Transport Equipment. Report for discussion at the Tripartite Meeting on the Social and Labour Impact of Globalization in the Manufacture of Transport Equipment in Geneva, 8 - 12 May 2000. (Geneva: International Labour Office).

Karmokolias, Yiannis. 1994. Radical reform in the automotive industry : policies in emerging markets (Washington, D.C. : World Bank).

Levinsohn. John. 1995, "Carwars: Trying to Make Sense of U.S.-Japan Trade Frictions in the Automobile and Automobile Parts Markets," NBER Working Paper 5349, (Cambridge: National Bureau of Economic Research).

Maxton, Graeme and John Wormland. 1995. Driving over a cliff? : business lessons from the world's car industry (London: Economist Intelligence Unit).

Miller, Randall. 1999. The Road Ahead for the U.S. Auto Industry (Washington, D.C.: Office of Automotive Affairs, International Trade Administration).

Ministry of Industry, Office of Industrial Economics. 2002. Automotive Industry in Thailand (Bangkok: Ministry of Industry).

Office of Automotive Affairs. 1999. Monitoring Report on the US-Japan Automotive Trade Agreement (Washington: Office of Automotive Affairs, International Trade Administration, US Department of Commerce).

----------. 1998. US-Korea Memorandum of Understanding: Market Access for Foreign Motor Vehicles (Washington: Office of Automotive Affairs, International Trade Administration, US Department of Commerce).

----------. 1996. US-Korea Automotive Trade Agreement (Washington: Office of Automotive Affairs, International Trade Administration, US Department of Commerce).

----------. 1995. Report of the Office of Automotive Affairs on the Japan-US Automotive Trade Agreement ((Washington: Office of Automotive Affairs, International Trade Administration, US Department of Commerce).

Porter, Michael. 1980. Competitive Strategy (New York: Free Press).

Sako, Mari and Fiona Murray. 2000, "Modules in Design, Production and Use: Implications for the Global Automotive Industry," Paper presented at the International Motor Vehicle Program (IMVP) Annual Sponsors Meeting.

Shari, Michael. 1996. "A Furious Flap Over Favoritism," *BusinessWeek*, 7/8/1996, pp. 14-16.

Shimokawa, Koichi. 1997, "Global Strategy and Global Sourcing in the World Auto Industry and the Japanese Presence, with some case study of Mitsibushi Motors and Nippon Denso, " *Actes of the Gerpisa,* No. 22.

United States Trade Representative, Office of. 1998. U.S.-Korea Memorandum of Understanding in Market Access for Foreign Motor Vehicles (Washington, D.C.: USTR).

Ward's Communications. 1998-2001. World Motor Vehicle Data (Southfield, MI: Ward's Communications).

Womack, James, Dennis Roos and Daniel Jones. 1991. The machine that changed the world (New York, N.Y. : HarperPerennial).

Yoshimatsu, Hidetaka. 1999, "The State, MNCs, and the Car Industry in Asia, " *Journal of*

Contemporary Asia, Vol. 29, No. 4, pp. 495-510.