

VERTICAL TIES ACROSS BORDERS: DO JAPANESE PRODUCTION NETWORKS JEOPARDIZE COMPETITIVE MARKETS IN SOUTHEAST ASIA?

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Although economists and political scientists have shown a growing interest in the problem of market concentration, and in the use of competition policy to address this problem, most academics have confined themselves to the study of single economies, thus ignoring the global or regional context in which multinational corporations (MNCs) operate. Even when academics have stepped outside the domestic context, they have limited their analyses to horizontal agreements¹ between MNCs in developed economies.² As a result, little has been written about vertical restraints that impact developing economies.

In this Article, I strive to fill part of the void in the academic literature by carefully considering the impact of vertical integration and quasi-integration via foreign direct investment (FDI) on markets in developing economies. More specifically, I ask the following question: under what conditions are MNCs able to use vertical restraints—particularly exclusionary supply and distribution arrangements—to raise entry costs for prospective competitors, thereby securing dominant positions in host country markets?

I address this question by examining Japanese manufacturing networks in Southeast Asia.³ In particular, I examine the following two industries: (1) the automobile industry (clearly dominated by Japanese MNCs), and (2) the electronics industry (not dominated by any particular set of MNCs). While not conclusive, the evidence suggests that industry

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1. One notable example of these agreements is the market allocation investment cartel.

2. Economists generally view horizontal cooperation with more suspicion than vertical cooperation because the former tends to undermine efficiency while the latter actually may enhance it. See BERNARD HOEKMAN, *COMPETITION AND THE GLOBAL TRADING SYSTEM: A DEVELOPING COUNTRY PERSPECTIVE 12* (The World Bank, Policy Research Working Paper No. 1735, 1997), available at <http://www.worldbank.org/research/trade/pdf/wp1735.pdf>; UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), *WORLD INVESTMENT REPORT 1997: TRANSNATIONAL CORPORATIONS, MARKET STRUCTURE AND COMPETITION POLICY*, at 192-210 (1997).

3. Unless otherwise defined in the text, “Southeast Asia” refers to the four core members of the Association of Southeast Asian Nations (ASEAN): Indonesia, Thailand, Malaysia, and the Philippines.

characteristics, the national “consciousness” of MNCs, and host as well as home government policies ultimately determine the ability of multinational enterprises to use vertical integration and quasi-integration to acquire market power in developing economies.

I begin by discussing the economic theory behind the process of development, and proceed to summarize empirical studies on MNCs and market power. I then discuss the institution of *keiretsu*, or interfirm groupings, which emerged in Japan after World War II and were partially replicated in Southeast Asia in the 1990s. After summarizing my findings, I conclude by calling for further research on vertical foreclosure and other restrictive business practices that transcend national borders and that have been, until now, woefully underanalyzed.

I. THE DEVELOPMENTAL DIFFERENCE

The current interest in applying Anglo-American competition policy prescriptions to developing economies may be sadly misguided. Such prescriptions flow from neoclassical economic theory, which omits the critical variable of technological change from its otherwise robust model and thus confuses the process of development with the operation of the market in advanced capitalist economies.⁴ Development is a dynamic process through which firms may achieve declining long-run average costs by adopting successively more sophisticated technology.⁵ Without a mechanism to facilitate interfirm collaboration, this process leads to both overinvestment and excess capacity as firms rush to enter those industries characterized by declining costs. By contrast, market operation in advanced capitalist economies typically is more stable. Described quite adequately in most modern economics textbooks, this process is characterized by increasing long-run costs (or diminishing returns), and thus stable equilibria.

Those who encourage developing economies to embrace Anglo-

4. This remains largely correct despite the heroic efforts of “new growth” theorists such as Paul Romer and Robert Lucas, Jr. These scholars move beyond the Solow growth model (which shows how economic growth is driven by increases in the capital stock and labor force, plus increases in a residual that is presumed to be technical knowledge) by explicitly incorporating technological change into a so-called “new growth” model. Unfortunately, however, this approach is still not very useful because it is highly abstract and relies heavily on a number of strong assumptions designed to improve its mathematical tractability. See Robert E. Lucas, Jr., *On the Mechanics of Economic Development*, 22 J. MONETARY ECON. 3, 3-42 (1988); Paul M. Romer, *Increasing Returns and Long-run Growth*, 94 J. POL. ECON. 1002, 1002-37 (1986).

5. YASUSUKE MURAKAMI, AN ANTI-CLASSICAL POLITICAL-ECONOMIC ANALYSIS: A VISION FOR THE NEXT CENTURY 144-82 (Kozo Yamamura trans., 1996).

American competition policy should study history more carefully. In the late nineteenth century, when the United States was undergoing a process of technological “catch-up,” large U.S. firms organized themselves into “trusts” and proceeded to dominate important sectors like the railroad, steel, and chemical industries. In the 1920s and 1930s, financial cliques and manufacturing combines in both Germany and Japan cooperated much in the same way, and in the process propelled those economies toward industrialization. The exercise of market power in these dynamically developing economies came with steep costs, measured most tangibly in the loss of consumer surplus. However, it also created benefits, as producers achieved what has been called “dynamic technological efficiency”⁶ (or “Schumpeterian efficiency”⁷) by adopting successively more sophisticated technology, thereby reducing long-term average production costs and gaining increased competitiveness in domestic and foreign markets.

Back in those days, policymakers in emerging economies made fairly uncomplicated calculations, measuring the costs of collusion against the benefits of concentration. Today, however, with the growing presence of MNCs in developing economies, the calculations are much more difficult because the benefits of concentration are far less likely to remain in the host economy. MNCs are able to internalize many transactions (using, for example, transfer pricing to repatriate profits) and thus siphon off a significant share of those benefits for themselves.

II. MNCs AND MARKET CONCENTRATION

Several studies have found a positive correlation between FDI and high levels of market concentration in developing countries.⁸ For example,

6. “Dynamic technological efficiency” is discussed thoroughly in WALTER HATCH & KOZO YAMAMURA, *ASIA IN JAPAN’S EMBRACE: BUILDING A REGIONAL PRODUCTION ALLIANCE*, at xii-xiii, 21 (1996).

7. “Schumpeterian efficiency” is discussed thoroughly in Giovanni Dosi et al., *Trade, Technologies, and Development: A Framework for Discussing Japan*, in *POLITICS AND PRODUCTIVITY: HOW JAPAN’S DEVELOPMENT STRATEGY WORKS 19* (Chalmers Johnson et al. eds., 1989).

8. See, e.g., Sanjaya Lall, *Multinationals and Market Structure in an Open Developing Economy: The Case of Malaysia*, 115 *WELTWIRTSCHAFTLICHES ARCHIV [REVIEW OF WORLD ECONOMICS]* 325, 325-48 (1979); JOHN M. CONNOR, *THE MARKET POWER OF MULTINATIONALS: A QUANTITATIVE ANALYSIS OF U.S. CORPORATIONS IN BRAZIL AND MEXICO* 65-83 (1977); Magnus Blomström, *Multinationals and Market Structure in Mexico*, 14 *WORLD DEV.* 523, 523-30; Dani Rodrik, *Imperfect Competition, Scale Economies, and Trade Policy in Developing Countries*, in *TRADE POLICY ISSUES AND EMPIRICAL ANALYSIS* 109-43 (Robert E. Baldwin ed., 1988). See generally UNITED NATIONS LIBRARY ON TRANSNATIONAL CORPORATIONS VOL. 1: *THE THEORY OF*

evidence shows that 84% of foreign subsidiaries in Mexico and 83% of foreign subsidiaries in Brazil operated in industries where the four largest firms had a combined market share (i.e., a “four-firm concentration ratio”) of more than 50%, while 21% of the foreign subsidiaries in Mexico and 58% of the subsidiaries in Brazil operated in industries where the four-firm concentration ratio was greater than 90%.⁹

It is possible that the causal arrow runs not from FDI to market concentration but rather from market concentration to FDI. In other words, high levels of market concentration may stimulate entry by foreign MNCs. It also is possible that the observed correlation reflects nothing more than the fact that market concentration and FDI share common characteristics. In developing economies, industries characterized by product differentiation and heavy investment in research and development tend to be oligopolistic and filled with affiliates from foreign firms.¹⁰ However, it seems much more likely that MNCs do in fact contribute to higher levels of market concentration in developing economies. The firm-specific assets such as technology and brand names that, according to Stephen Hymer¹¹ and Richard Caves,¹² allow MNCs to establish international operations may also enable them to dominate the foreign markets into which they enter. The United Nations Conference on Trade and Development (UNCTAD) voiced just such a concern: “[F]oreign investors may often be able to acquire substantial market power in some product markets in developing countries, giving them the possibility of abusing their dominant positions in these markets.”¹³

The difficult question is not whether MNCs dominate markets in many developing economies, but *how* they do so. MNCs may use predation to either drive rivals from a market or simply keep them from entering it, and yet economists indicate that predatory practices are irrational, impose excessively high costs on the predator, and even then do not deter entry because rivals know that the predator cannot maintain such costly price cutting for very long.¹⁴ However, Paul Milgrom, using a model of

TRANSNATIONAL CORPORATIONS (John H. Dunning ed., 1993).

9. THEODORE H. MORAN, FOREIGN DIRECT INVESTMENT AND DEVELOPMENT: THE NEW POLICY AGENDA FOR DEVELOPING COUNTRIES AND ECONOMICS IN TRANSITION 23 (1999).

10. UNCTAD, *supra* note 2, at 140.

11. See STEPHEN H. HYMER, THE INTERNATIONAL OPERATIONS OF NATIONAL FIRMS 217-29 (1976).

12. See RICHARD E. CAVES, MULTINATIONAL ENTERPRISE AND ECONOMIC ANALYSIS 177-80 (2d ed. 1996).

13. UNCTAD, ASIAN AND PACIFIC DEVELOPING ECONOMIES AND THE FIRST WTO MINISTERIAL CONFERENCE: ISSUES OF CONCERN 241 (1996).

14. See John S. McGee, *Predatory Pricing Revisited*, 23 J.L. & ECON. 289, 289-330 (1980).

asymmetric information, shows that firms operating in multiple markets have an incentive to use restrictive business practices to build a reputation for predation.¹⁵ In other words, predatory behavior by MNCs actually may be quite rational.

UNCTAD has provided a list of other restrictive practices that MNCs may use to dominate markets.¹⁶ These include:

international price fixing, collusive tendering, or market allocation; predatory pricing to break into markets (possibly using transfer pricing mechanisms); discriminatory pricing or resale price maintenance;¹⁷ anticompetitive mergers or joint ventures with local or other foreign enterprises; restraints upon access to information networks or databases; or tie-in requirements of supplementary goods, services or technology.¹⁸

However, even this lengthy list does not include various forms of cross-border integration or quasi-integration that may lead to vertical foreclosure. MNCs can locate different parts of the production process in different economies, thereby creating vertically linked manufacturing networks, or “commodity chains,” that dominate markets.¹⁹ Economists tend to dismiss such concerns, suggesting that often vertical agreements are efficient and hence should not be deemed anticompetitive per se.²⁰ In this Article, I suggest that Japanese MNCs have tried to replicate *keiretsu*-like production networks in Southeast Asia that, in some cases, may indeed undermine competition.

15. Paul Milgrom, *Predation, Reputation, and Entry Deterrence*, 27 J. ECON. THEORY 280, 280-312 (1982).

16. See UNCTAD, *supra* note 13, at 241-42.

17. Resale price maintenance may be facilitated by market segmentation through the use of intellectual property rights to prevent parallel imports, refusals to deal, control of distribution channels, exclusivity restraints or export restraints.

18. UNCTAD, *supra* note 13, at 241-42.

19. See generally GARY GEREFFI & MIGUEL KORZENIEWICZ, *COMMODITY CHAINS AND GLOBAL CAPITALISM* (1994) (providing information relating to the history, organization, and geography of, and consumption related to, commodity chains).

20. See, e.g., W. KIP VISCUSI ET AL., *ECONOMICS OF REGULATION AND ANTITRUST* 219-21 (The MIT Press, 2000) (1992); Shyam Khemani & Mark Dutz, *The Instruments of Competition Policy and Their Relevance for Economic Development*, in *REGULATORY POLICIES AND REFORM: A COMPARATIVE ANALYSIS* (Claudio Frischtak ed., 1995); DENNIS CARLTON & JEFFREY PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 378-95 (3d ed. 2000). See generally JEAN TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* (1988).

III. *KEIRETSU* DEFINED

Although the term *keiretsu* has entered the lexicon of educated Americans who follow public policy issues, its true meaning continues to elude popular understanding both outside and inside Japan. *Keiretsu* (literally, “lineage groups”) neither operate within a hierarchical framework directed by a central power (the “visible hand” of Alfred Chandler’s ideal bureaucratic organization),²¹ nor as autonomously self-regulating and impersonal units (the “invisible hand” of Adam Smith’s ideal market organization).²² Rather, they function as “hands interlocked in complex networks of formal and informal interfirm relationships,”²³ and therefore fall somewhere between hierarchy and market. Members of *keiretsu* networks are legally independent but informally bound together by practices like cross-shareholding, interlocking directorates, and intra-group trade, as well as capital, technology, and personnel transfers.

Keiretsu are most often associated with the giant conglomerates clustered around main banks (“city banks”) that serve as credit lifelines and management monitoring institutions for member firms. Each *keiretsu* tries to maintain one and only one company in every sector of the Japanese economy—a practice that has come to be called *Wan Setto Shugi* (“One Settism”). Thus, each *keiretsu* usually will have one major automaker, one electronics manufacturer, one chemical manufacturer, one life insurance company, one brewery, and so on. In addition, each *keiretsu* always will have a major trading company that serves as the group’s logistics coordinator and international intelligence-gathering unit. Throughout most of the period following World War II, Japan has had six such “horizontal” *keiretsu*. Four of these—Sumitomo, Mitsui, Mitsubishi, and Yasuda (now called Fuyo)—were *zaibatsu*, or “financial cliques,” before the war, and quickly reconstituted themselves as *keiretsu* after the American occupation ended. Two other *keiretsu*—Dai-Ichi Kangyo and Sanwa (all named after their main banks)—eventually followed suit.²⁴

21. See generally ALFRED DUPONT CHANDLER, *THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS* (1977) (stating that the advantages of coordinating multiple units within a single enterprise are only fully realized within a managerial hierarchy, which itself ultimately becomes its own source of growth, power, and permanence).

22. See generally ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* (R.H. Campbell et al. eds., 1976).

23. MICHAEL L. GERLACH, *ALLIANCE CAPITALISM: THE SOCIAL ORGANIZATION OF JAPANESE BUSINESS* 3 (1992).

24. The Dai-Ichi Kangyo group was not actually formed until 1971, when the Dai-Ichi and Kangyo banks merged.

Here I focus on two other institutions of interfirm cooperation, both of which are vertically organized: the supply *keiretsu* and the distribution *keiretsu*. Supply *keiretsu*, which link machinery assemblers and parts suppliers, emerged in the 1960s as manufacturers hoping to reduce transaction costs began to rely more heavily on dedicated subcontractors for parts production. Automakers and electrical appliance manufacturers, in particular, constructed and dominated their own supply clubs. Toyota was one of the first to do so, building a massive pyramid by using a number of first tier subcontractors who called on a larger number of second tier subcontractors, who relied on an even larger number of third tier subcontractors, and so on.

Resources flow in both directions inside a supply *keiretsu*. In most instances, contracting firms (assemblers or upper tier suppliers who contract for the supply of components) provide their trusted subcontractors with capital and technology, as well as a relatively stable market. In exchange, they receive high quality parts “just in time” through the *kanban* system.²⁵ Although based on reciprocal exchange, the relationship between contractor and subcontractor is rarely “equal.” The contractor is generally more technology- and capital-intensive while the subcontractor is more labor-intensive. This inequality manifests itself during periods of economic slowdown, when contractors routinely secure steep price reductions in the parts they procure from their subcontractors. Indeed, parts prices rarely are negotiated upwards.

The second vertically organized “lineage group” is the distribution *keiretsu*. The distribution *keiretsu* is a legacy of the early postwar years, when Japan’s manufacturing industry grew faster than wholesalers and retailers could move and sell all the newly produced goods. Manufacturers, particularly those producing consumer electronics, automobiles, cosmetics, and pharmaceuticals, overcame this obstacle by setting up and maintaining their own distribution networks. Each one established a complete marketing channel, investing in and providing management and technical support to selected members of its network. Each secured nearly absolute control over that channel, using rebates, territorial sales restrictions, single-outlet-single-account systems, and other mechanisms to exert ongoing pricing authority. Like supply *keiretsu*, distribution *keiretsu* are characterized by cooperation (“reciprocal

25. The *kanban* system is a simple coordination system that ensures the delivery of parts to the production line as and when needed. The system uses standard containers with a single card attached. Work stations located along production lines only produce desired parts when they receive a card and an empty container, thereby indicating that more parts are needed in production.

exchange”), but not by parity in bargaining power. For example, manufacturers may either withhold capital, personnel, and other assistance from wholesalers who try to operate outside established networks, or deny rebates to retailers who do not aggressively market their brands or slavishly follow their pricing guidelines.

At the end of the twentieth century, the institution of *keiretsu* was under enormous pressure to change as globalization forced firms to consider ways to cut fixed costs and become more price competitive—not only in overseas markets but in Japan as well. Main banks merged across *keiretsu* boundaries while manufacturers purchased parts from a streamlined network of suppliers and moved their goods through a more diverse network of wholesalers and distributors. Although these developments are noteworthy, they are not nearly as revolutionary as many observers have suggested. Indeed, one could argue that *keiretsu* in Japan have “re-raveled” more than they have “unraveled.” Consider, for example:

Horizontal *keiretsu*. After Sumitomo Bank and Sakura Bank (Mitsui Group) announced plans to merge, Sumitomo Chemical and Mitsui Chemical indicated they would follow suit. In addition, after Fuji Bank (Fuyo Group) indicated it would merge with Dai-Ichi Kangyo Bank, NKK (Fuyo), a major steel manufacturer, moved to link operations with Kawasaki Steel (DKG).²⁶

Supply *keiretsu*. Manufacturers are reducing the overall number of linkages they maintain with subcontractors but are simultaneously forging tighter ties with those who remain in their networks. For example, in the latter half of the 1990s, Toyota actually increased its equity stake in its largest suppliers and sent more of its representatives to serve on their corporate boards.²⁷

Distribution *keiretsu*. Automakers have loosened ties with some car dealers, but have tightened bonds with others—even after the Japanese Fair Trade Commission (JFTC) launched a major investigation in the early 1990s and pushed the automakers to steer clear of the retail sector. Hiroshi Iyori,²⁸ a former JFTC member,

26. *Japan's Keiretsu: Regrouping*, ECONOMIST, Nov. 25, 2000, at 74.

27. *Kaisha Shikihō [Company Directory]*, Tōyō Keizai Shimpōsha, vol. 3, Summer 1999.

28. See Hiroshi Iyori, *Japanese Cooperation in International Antitrust Enforcement*, in COMPARATIVE COMPETITION LAW: APPROACHING AN INTERNATIONAL SYSTEM OF ANTITRUST LAW 253 (Hanns Ullrich ed., 1998).

expresses disappointment that Japanese vehicle manufacturers were able to maintain these “exclusive dealing arrangements.”²⁹

IV. *KEIRETSU*: EXCLUSIONARY, EFFICIENT, OR BOTH?

Kozo Yamamura argues that *keiretsu* may reduce transaction costs for members and thus enhance efficiency, but he asserts that *keiretsu* are exclusionary because “it is difficult for non-members, particularly foreign firms, to become part of a group of firms maintaining an interfirm relationship.”³⁰ Iyori offers a somewhat different, but equally mixed assessment. He states that “even if competition among *keiretsu* groups helped to spark strong competition in the domestic market,” these groups “may, in fact, contribute to market foreclosure to the extent that they strengthen the unity and cooperation of *keiretsu* participants.”³¹

Consider first the debate over horizontal *keiretsu*. Robert Lawrence provides empirical evidence that these *keiretsu* groups, represented by their general trading companies (GTCs), serve as a private barrier to foreign goods that might otherwise compete with goods produced at home by group members.³² Specifically, Lawrence finds that Japanese imports include an unusually high volume of intrafirm shipments from Japanese affiliates operating overseas to parent firms in Japan.³³ GTCs, he finds, protect their *keiretsu* associates: “If foreign goods are directly competitive with domestic products, they will have difficulty entering” the Japanese market.³⁴ On the other side of this debate, David Weinstein and Yishay Yafeh offer an entirely different explanation for Lawrence’s empirical findings. They argue that *keiretsu* actually intensify competition, which explains why foreign firms have such a hard time breaking into markets supplied by *keiretsu* members.³⁵ The foreign firms simply cannot cope in

29. A 1993 study commissioned by the U.S. Commerce Department and Japan’s Ministry of International Trade and Industry (MITI) found that Japanese manufacturers controlled a majority of the shares in 32% of the members of the Japan Automobile Dealers Association. In the United States, by contrast, the study found that domestic manufacturers held shares (including minority shares) in less than 2% of U.S. automobile dealerships. See Booz, Allen and Hamilton et al., *Final Report for the MOSS Motor Vehicle Study*, at 6-7 (1998).

30. Kozo Yamamura, *Will Japan’s Economic Structure Change? Confessions of a Former Optimist*, in *JAPAN’S ECONOMIC STRUCTURE: SHOULD IT CHANGE?* 22 (Kozo Yamamura ed., 1990).

31. Iyori, *supra* note 28, at 252 (emphasis added).

32. Robert Lawrence, *How Open is Japan?*, in *TRADE WITH JAPAN: HAS THE DOOR OPENED WIDER?* 9-37 (Paul Krugman ed., 1991).

33. *Id.* at 15.

34. *Id.* at 23.

35. David E. Weinstein & Yishay Yafeh, *Japan’s Corporate Groups: Collusive or Competitive? An Empirical Investigation of Keiretsu Behavior*, 43 *J. INDUS. ECON.* 359 (1995).

such a hyper-competitive environment.

Now consider both forms of vertical networking (distribution and supply *keiretsu*), which Paul Sheard³⁶ emphatically states “are not anticompetitive, and have nothing to do with price-fixing.”³⁷ Vertical foreclosure by *keiretsu* members, he argues, is not a serious concern.³⁸ However, there is considerable evidence to suggest that, in the 1960s, Japanese consumer electronics manufacturers, backed by the Japanese government, used their tightly controlled distribution *keiretsu* to seal up the Japanese market. By the mid-1970s, two-thirds of appliance stores were solidly affiliated with a single manufacturer, and three-quarters of consumer electronics products moved through these *keiretsu* outlets.³⁹ Vertical restraints blocked new entrants, enabling manufacturers of electronic products (particularly televisions) to collude on prices. In addition, the United States Trade Representative (USTR), acting on behalf of Kodak Film, alleged that Japanese government officials helped Fuji Film achieve vertical foreclosure in the photographic film and paper market. In its 1996 complaint to the World Trade Organization (WTO), the USTR presented evidence that in the 1970s Fuji, with help from the Ministry of International Trade and Industry (MITI), set up an exclusionary distribution network using rebates and sales promotion payments to exert control over the four major photographic film and paper wholesalers in Japan. According to the complaint, these four wholesalers moved film only for Fuji.⁴⁰

What about supply *keiretsu*? It is conceivable, Sheard writes, that Japanese automakers could achieve vertical foreclosure by restricting access to their parts subcontractors in Japan.⁴¹ However, he quickly

36. Paul Sheard, *Keiretsu, Competition, and Market Access*, in GLOBAL COMPETITION POLICY 541 (Edward M. Graham & J. David Richardson, eds., 1997).

37. Elsewhere, Sheard softens this conclusion by arguing that *keiretsu* ties reflect long-term contracting, which, in turn, is based on commitment. However, commitment itself is simply the flip side of exclusion. “A commitment to honor a long-term contract is a promise to exclude certain actions as possibilities . . . Thus exclusion goes hand in hand with commitment in long-term contracting and enhances the efficiency of organizing economic transactions. In short, the kind of exclusionary behavior associated with Japanese *keiretsu* ties may be of quite a different kind from that connoted by the language and logic of antitrust.” Paul Sheard, *Keiretsu and Market Access: An Economics of Organisation Approach*, in JAPANESE FIRMS, FINANCE, AND MARKETS 42-43 (Paul Sheard ed., 1996).

38. Sheard, *supra* note 36, at 541.

39. Kozo Yamamura & Jan Vandenberg, *Japan’s Rapid-Growth Policy on Trial: The Television Case*, in LAW AND TRADE ISSUES OF THE JAPANESE ECONOMY: AMERICAN AND JAPANESE PERSPECTIVES 253 (Gary Saxonhouse & Kozo Yamamura eds., 1986).

40. The WTO dismissed the case on December 5, 1997, saying it could find no evidence that the Japanese government itself had engaged in any illegal conduct.

41. Sheard, *supra* note 36, at 523.

dismisses this possibility, noting that “it has not been raised as a serious issue. U.S. automakers are not complaining that Toyota, Nissan, and other Japanese automakers are limiting their ability to compete by discouraging their affiliated suppliers from supplying them.”⁴² This may be a function of Japan’s developmental stage. *Keiretsu* ties would appear to create more costs (opportunity costs due to “information impactedness”) than benefits (reduced transaction costs from implicit, long-term contracting) in a developed or mature economy. On the other hand, in a developing economy where firms are still adopting technology from the global supply of existing technical knowledge, such ties would seem to create more benefits than costs. With this in mind, it is intriguing to note that U.S. automakers struggling to compete in Southeast Asia have alleged exactly what Sheard correctly suggests they have not alleged in Japan: Japanese automakers are restricting their ability to compete in Southeast Asia by discouraging *keiretsu* subcontractors from supplying them.

V. JAPANESE AUTOMOTIVE MNCs IN SOUTHEAST ASIA

Japanese automakers have been assembling vehicles in Southeast Asia since the 1960s, when import substitution policies first drew them to the region. By the mid-1990s, however, a handful of Japanese firms dominated virtually every one of these markets.⁴³ As Table One demonstrates, five Japanese firms—Toyota, Isuzu, Nissan, Mitsubishi Motors, and Honda—accounted for more than 85% of sales in Thailand during the first half of 1997.⁴⁴ As Table Two shows, during about the same time period, another five Japanese firms—Toyota, Mitsubishi Motors, Suzuki, Isuzu, and Daihatsu—accounted for nearly 83% of sales in Indonesia.⁴⁵ This was despite an aggressive campaign by the Indonesian government to promote sales of its “national automobile,” the Timor.

Although comparative data on concentration levels in different Southeast Asian economies are rare, Kelly Bird produced an index of such

42. *Id.*

43. In the rest of Asia, Japanese automakers have experienced mixed results. While they gained market power in Taiwan, they did not in South Korea, where the government imposed tight restrictions on both direct investment by foreign manufacturers and the export of CBU (completely built-up, or finished) vehicles from Japan. For all of its supposed independence, however, the auto industry in South Korea is deeply dependent on Japan for technology. China is the only Asian country that does not depend on Japan for either capital or technology.

44. This percentage includes imports and domestically produced vehicles. See Table 1, *infra* at 259.

45. See Table 2, *infra* at 259.

levels in different Indonesian industries.⁴⁶ According to Bird's study, the automotive sector is Indonesia's most highly concentrated industry, with a four-firm ratio of 100%.⁴⁷ It is one of only a handful of industries that has not experienced *any* reduction in concentration levels since 1975, when Indonesia began to liberalize its trade policies.⁴⁸

One reason Japanese MNCs managed to acquire such tremendous control over automobile markets throughout Southeast Asia is that they, more than their American and European rivals, were willing and able to forge tight bonds with political and business elites in host countries. As Jochen Legewie notes, Japanese automakers made "extensive use of informal networks including the sometimes extra-legal accommodation" of politicians and bureaucrats.⁴⁹ Kineko Kamo notes further that they complied with government requirements to enter into equity tie-ups with local capitalists, even though they sometimes ended up with minority positions in these joint ventures.⁵⁰ In addition, Japanese automakers remained in these markets during the late 1970s and 1980s, while U.S. automakers retreated from Asia and refocused resources on threatened positions in the domestic market.

One other explanation warrants consideration. Japanese MNCs consolidated their control over Southeast Asian automobile markets partly by replicating the long-term and mutually reinforcing ties they had carefully forged with suppliers at home. These *keiretsu* ties allowed them to raise entry costs for rival assemblers, thereby achieving vertical foreclosure by locking up the market for higher value-added parts produced in the host economy. This, in turn, allowed Japanese automakers in Southeast Asia to strengthen ties of horizontal cooperation. For example:

In 1995, Toyota, Nissan, and Isuzu agreed to jointly establish casting plants and other facilities in Thailand to produce cylinder heads, cylinder blocks, connecting rods, camshafts, and crankshafts

46. See Kelly Bird, *Concentration in Indonesian Manufacturing*, 35 BULLETIN OF INDON. ECON. STUD. 43, 43-73 (1999).

47. *Id.* at 60. Two other industries—wheat flour and alcoholic liquors—share that dubious honor.

48. *Id.*

49. Jochen Legewie, *Driving Regional Integration: Japanese Firms and the Development of the ASEAN Automobile Industry*, in *FACING ASIA: JAPAN'S ROLE IN THE POLITICAL AND ECONOMIC DYNAMISM OF REGIONAL COOPERATION* 4-5 (Verena Blechinger & Jochen Legewie eds., 2000).

50. Kineko Kamo, *Nihon Jidōsha Kigyō no Gurōbaru Senryaku to Ajia Keizaiken* [*The Global Strategies of Japanese Automobile Companies and the Asian Economic Sphere*], in *AJIA NO JIDŌSHA SANGYŌ* 43, 46-50 (Murayama Yoshinari ed., 1997).

used in the assembly of pickup trucks there.⁵¹ “To compete against American and European producers, we needed to find a way to reduce costs even further,” explained Tezuka Hiroyuki, president of Siam Toyota Motors, which produces cylinder blocks for the three automakers.⁵²

In 1994, Mitsubishi Motors Corp. and Suzuki Motor Corp. teamed up to use common components for the passenger trucks that they independently—and competitively—assembled in Indonesia: Mitsubishi agreed to contribute left-side doors while Suzuki agreed to contribute the roof and right-side doors.⁵³

In 1993, Honda and Isuzu reached an agreement to compensate for each other’s weaknesses in their respective lines of automobiles. In Thailand, this meant that Honda sold a repackaged Isuzu pickup called the Tourmaster while Isuzu offered a born-again Honda Civic called the Vertex.⁵⁴

Horizontal cooperation between nominally competitive Japanese automakers has occurred not only within individual countries in Southeast Asia, but also regionally. For example, the Japan Automobile Manufacturers Association (JAMA), prodded by MITI, organized a regionwide trade association—the Association of Southeast Asian Nations (ASEAN) Automotive Federation (AAF)—“with a view of enhancing the intra-regional cooperation of automobile industries.”⁵⁵ The AAF, according to industry representatives, is JAMA’s surrogate in Southeast Asia.⁵⁶

It is important to trace the process by which Japanese automakers expanded the geographic locus of their vertical *keiretsu*, thereby affording them greater opportunity to cooperate with one another. In the 1990s, Japanese assemblers operating in places like Jakarta and Bangkok pressured their domestic suppliers to follow them into Southeast Asia.

51. ASAHI SHINBUN, Jan. 4, 1995, at 9.

52. *Id.*

53. See Toru Hirose, *Southeast Asia: From Cheap Labor to Rich Markets*, NIKKEI WKLY., June 20, 1994, at 24.

54. Siam Future Development Co., Ltd., *The World in Thailand: Isuzu Motors*, at <http://www.siamfuture.com/WorldInThai/isuzu.asp> (last visited Dec. 8, 2001).

55. Chairman’s Summary of the 4th Automobile Experts Meeting from ASEAN, CLM, and Japan 2 (Mar. 21, 1997) (unpublished manuscript, on file with the Washington University Global Studies Law Review).

56. Numerous interviews conducted with Japanese automobile industry representatives in Bangkok, Thailand and Jakarta, Indonesia. (Sept. 1997).

This pressure yielded dramatic results: in just six years (1991 through 1996), Japanese autoparts manufacturers made 223 investments in the ASEAN-4 countries (Indonesia, Thailand, Malaysia, and the Philippines). Previously, it took manufacturers twenty-nine years (1962 through 1990) to make only 182 investments in those countries.⁵⁷

Just as they did at home in an earlier period, Japanese automakers moved quickly in the 1990s to establish cohesive supply groups in each Asian country in which they operated. These groups, managed by representatives of key suppliers but which meet regularly under the auspices of the assembler, even carry the same name as the vertical *keiretsu* in Japan after which they are patterned. Thus, in Thailand, Nissan has its Thai “Takara-kai,” dominated by local affiliates of its most trusted Japanese subcontractors; Mitsubishi Motors has its Thai “Kashiwa-kai;” Toyota has its Thai “Kyôhō-kai;” and so on.

Due to the limited size of the automobile markets in each host country in Southeast Asia, Japanese subcontractors who invested in the region would never have been able to achieve economies of scale by supplying only their main *keiretsu* customer. Thus, by necessity, they initially supplied multiple customers. However, by the mid-1990s, when automobile markets in host countries began to expand quite rapidly, transaction patterns long established in Japan began to take shape in Asia. Tadashi Nishioka, focusing on ASEAN, concluded “with the exception of those cases in which an established supplier has stayed home, we find very few examples of Japanese automakers [in Southeast Asia] engaging in transactions outside their established *keiretsu* groups.”⁵⁸ This trend was particularly evident in Thailand, Southeast Asia’s fastest growing automobile market. Thus, Hiroyuki Kasahara argues that Japanese automakers in Thailand are seeking to capture “relational quasi-rents” by conducting almost all of their business with Japanese subcontractors who belong to their parent firm’s *keiretsu* network.⁵⁹

Consider the case of Siam Nissan Motors (SNM), the Thai affiliate of the prominent Japanese (now French-Japanese) automaker. All of Nissan’s leading *keiretsu* suppliers in Japan have either established parts

57. Legewie, *supra* note 49, at 9.

58. Tadashi Nishioka, *ASEAN ni okeru Jidōsha Sangyō no Dōkō to Wagakuni Chūshō Buhin Mēkâ e no Eikyō ni tsuite [The State of the Automobile Industry in ASEAN, and its Influence on Japanese SME Parts Producers]*, CHŪSHŌ KŌKO REPŌTO NO. 98-1, at 66 (Japan Finance Corporation for Small Business 1998) (emphasis added).

59. Hiroyuki Kasahara, *Transfer and Adaptation of Manufacturer-Supplier Relationships from Japan to Thailand: A Case of the Automobile Industry* 23 (July 28, 1997) (unpublished manuscript, on file with author).

manufacturing facilities in Thailand or forged technology licensing agreements with local Thai firms. The only automobile part that SNM buys from a wholly unaffiliated firm is the muffler and tail pipe unit.⁶⁰ In addition, consider Toyota Motors Thailand, which relies almost exclusively on parts manufactured by either Toyota's *keiretsu* suppliers in Japan or by the transplants of those suppliers in Thailand. Table Three provides a list of the thirty-two Japanese members of the Toyota supply club in Thailand as of 1997.⁶¹ The list includes the affiliates of most of Toyota's major subcontractors in Japan. In fact, the parent companies of all but four of these Thailand-based affiliates belong to Toyota's supply club in Japan.

For outsiders attempting to set up competing assembly plants in Southeast Asia, these strong business ties between Japanese assemblers and *keiretsu* suppliers represent a barrier to entry. In the first half of the 1990s, Chrysler (now DaimlerChrysler) labored to break into Southeast Asia's growing automobile market by establishing major production facilities in several locations.⁶² However, it was stymied repeatedly in its efforts to negotiate solid contracts for parts with leading suppliers, all of which happened to be Japanese transplants belonging to various *keiretsu*. Tim Suchyta, then director of Chrysler's regional operations, tells the story: "We had some outright rejections that made absolutely no business sense at all. In Malaysia, for example, we had an AC [air conditioning] supplier who simply refused to have anything to do with us. It seemed pretty clear that he had been instructed to just say no."⁶³

General Motors (GM) encountered a similar problem when it tried to break into the Thai market. "A number of suppliers said they could not do business with us," recalls Ronald Frizzell, president of GM Thailand.⁶⁴ Thus, the U.S. manufacturer approached Thailand's Board of Investment and asked it to waive its domestic content requirement for passenger cars assembled in Thailand. The Thai government, eager to enhance the competitiveness of its automobile industry, granted GM's request. To some, this decision came as a surprise; until then, leading Japanese automakers had wielded almost absolute influence over Thailand's auto

60. Interview with Sasaki Kunihiro, Representative, Nissan Motors, in Atsugi, Japan (July 8, 1997).

61. See Table 3, *infra* at 260-61.

62. For more on Chrysler's unhappy experience in Southeast Asia, see Kozo Yamamura & Walter Hatch, *A Looming Entry Barrier: Japan's Production Networks in Asia*, in *ANALYSIS*, Feb. 1997, at 15-16.

63. *Id.* at 16.

64. Telephone interview with Ronald Frizzell, President, GM Thailand (Sept. 23, 1997).

industrialization policies.⁶⁵ For instance, a senior managing director of Toyota Motors Thailand, Ninnart Chaithirapinya, was at that time the chairman of the Thai Automotive Industry Association. Similarly, Nattavat Praepriwngam, a key advisor to the Toyota Cooperation Club, the automaker's supply *keiretsu* in Thailand, was also the president of the Thai Auto Parts Manufacturers Association.⁶⁶ It therefore seemed highly unlikely that the Thai government would do anything drastic to jeopardize the market power of the Toyota-led Japanese automakers.

However, Thai government officials had become both increasingly upset about their country's growing trade deficit with Japan and frustrated over what they viewed as the slow pace of technology transfer by Japanese firms. In a profile of the Thai automobile industry that was written in the hope of luring prospective investors, particularly non-Japanese investors, the Thai Board of Investment (BOI) voiced this frustration: "The Japanese have never been keen on transferring design and engineering expertise to their Thai counterparts." The BOI pragmatically suggested that "[in] both component and supporting industry segments, the most efficient way for many foreign firms to enter the market is through joint ventures with wholly owned Thai companies with minimal *keiretsu* ties."⁶⁷

It should be noted that Japanese automobile assemblers in Southeast Asia also have established strong business ties with automobile distributors throughout the region. In at least one case, such ties may have led to a different form of vertical foreclosure, but one with virtually the same result: unreasonably high entry costs.⁶⁸ In the mid-1990s, General Motors Indonesia found that it could not expand production of passenger cars in Indonesia because it could not secure additional dealer outlets. Len Brownfield, a former GM executive, tells the story:

I had seven well-established guys lined up to be new Chevy-Opel dealers. But one by one, they mysteriously fell out. In the end, none

65. For those paying attention to multilateral trade negotiations, this decision by the Thai government likely did not come as a surprise. Under the WTO's 1995 Agreement On Trade-Related Investment Measures (TRIMs), member countries pledged to end such domestic content requirements by January 1, 2000. Agreement on Trade-Related Investment Measures, Apr. 15, 1994, art. 2 & Annex, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 1 (1994), 33 I.L.M. 1125 (1994).

66. Yamamura & Hatch, *supra* note 62, at 15.

67. Thai Board of Investment, *Investment Opportunities Study: Automotive and Autoparts Industries in Thailand* (1995), available at <http://www.boi.go.th/english/execsummary/f7a.html> (last visited Jan. 30, 2002).

68. Yamamura & Hatch, *supra* note 62, at 15.

of them would agree to work with us. They told me privately that [a Japanese manufacturer for whom they do almost all of their business] had threatened to cut off their supply if they did.⁶⁹

Southeast Asia is not the only overseas location in which Japanese automakers have faced criticism for replicating homegrown, exclusionary *keiretsu* ties. In the 1980s, U.S. auto parts manufacturers pressed similar charges, alleging that they could not secure supply contracts with Japanese assemblers operating in the United States. The chief obstacle, they told investigators from the U.S. General Accounting Office, was created by “preexisting relationships between Japanese automakers and their suppliers.”⁷⁰ However, these complaints did not persist for long. U.S. parts suppliers soon reported that they had managed to negotiate a growing number of business deals with Japanese automakers.⁷¹ This result is not surprising, for with both Congress and the U.S. International Trade Commission conducting investigations, the political fire could not have gotten much hotter for Japanese automakers in the United States.

In sharp contrast, the bargaining position of host regimes in Southeast Asia is relatively weak. Unlike U.S. suppliers, local suppliers in Southeast Asia often are unable to meet the stringent technical requirements set by Japanese automakers. In addition, unlike the U.S. market, which is by far the world’s largest, automobile markets in Thailand, Indonesia, Malaysia, and the Philippines are still relatively small. Therefore, threats to limit Japanese access to any one of those markets would seem hollow, if not laughable. In fact, as long as Japanese automakers continue to produce high levels of employment for local workers and high profit rates for local joint venture partners, host regimes probably will resign themselves to the status quo. Despite the exclusionary behavior of leading firms and the lack of competitiveness of Southeast Asia’s automobile industry in global markets, host regimes are unlikely to turn up the political heat and risk losing tangible benefits for their constituents.

69. *Id.*

70. UNITED STATES GENERAL ACCOUNTING OFFICE, FOREIGN INVESTMENT: GROWING JAPANESE PRESENCE IN THE U.S. AUTO INDUSTRY, REP. NO. GAO/NSIAD-88-111, at 36 (1988).

71. See Ulrike Wassmann & Kozo Yamamura, *Do Japanese Firms Behave Differently? The Effects of Keiretsu in the United States*, in JAPANESE INVESTMENT IN THE UNITED STATES: SHOULD WE BE CONCERNED? (Kozo Yamamura ed., 1989).

VI. JAPANESE ELECTRONICS MNCs IN SOUTHEAST ASIA

Japanese electronic manufacturers moved aggressively into both Southeast Asia and China in the 1990s.⁷² Like the automakers, the electronics manufacturers tried to replicate their domestic *keiretsu* networks throughout the region. In a study conducted for the Thai government, the Foreign Investment Advisory Service (FIAS) concluded that Japanese affiliates in Asia's electronics industry "tend to bring their own subcontractors from Japan or create their own satellite subcontractors, neither of which generates significant backward linkages with domestic firms."⁷³ From an industry survey, Toru Sunada, Michiko Kiji, and Makoto Chigira discovered that 70% of the "local" suppliers used by Japanese electrical and electronic machinery assemblers in the region actually are Japanese parts producers operating in host economies.⁷⁴ Furthermore, in a sophisticated econometric study, Rene Belderbos found that *keiretsu* linkages drive Japanese electronics firms to invest in Southeast Asia, while more traditional determinants (i.e., firm-specific assets such as research and development capability and marketing expertise) lead them to invest in North America and Europe.⁷⁵ However, despite having built their own regional supply networks, Japanese electronics manufacturers, unlike Japanese automobile manufacturers, do not completely dominate Southeast Asian markets. In Thailand, for example, the leading disk drive producer is a U.S. MNC, Seagate Technology, that employed thirty thousand Thai workers in the mid-1990s. In Malaysia, three U.S. MNCs—Intel, Texas Instruments, and Motorola—have emerged as leading semiconductor manufacturers.

In some subsectors of this broad industry (particularly consumer electronics), Japanese firms enjoy market power in Southeast Asia, just as they do in many other parts of the world. For this reason, MITI was able to broker a rather loose wage cartel among Japanese consumer electronics

72. "Electronics" is an ill-defined and thus broad industrial class that covers everything from electrical appliances (including refrigerators and rice cookers) to office automation equipment (including computer peripherals and copy machines).

73. FOREIGN INVESTMENT ADVISORY SERVICE, IMPEDIMENTS TO BACKWARD LINKAGES AND BUILD: THAILAND'S NATIONAL LINKAGE PROGRAM 41 (1991).

74. TORU SUNADA ET AL., JAPAN'S FOREIGN DIRECT INVESTMENT IN EAST ASIA: CHANGING DIVISION OF LABOR AND TECHNOLOGY TRANSFER IN THE HOUSEHOLD ELECTRONIC APPLIANCE INDUSTRY 64 (MITI Research Institute, Discussion Paper No. 10, 1993).

75. Belderbos uses a multinomial logit model to study the factors that caused 204 Japanese electronics and precision machinery manufacturers to either invest or not invest in different regions of the world before June 1989. See RENE A. BELDERBOS, JAPANESE ELECTRONICS MULTINATIONALS AND STRATEGIC TRADE POLICIES 201-29 (1997).

manufacturers in Malaysia in the early 1990s. The agreement on wage guidelines was reached after Sony upset the industry by using a relatively attractive salary schedule to lure skilled technicians to its new plant near Penang and away from other Japanese facilities in the area.⁷⁶

Overall, the electronics industry in Southeast Asia is far more competitive than the automobile industry, and evidence suggests it has become increasingly so over time. In Indonesia, for example, Kelly Bird estimates that the industry's four-firm concentration ratio was 43% in 1993—a sharp decline from its 85% ratio in 1975, and well below the automobile industry's persistently high ratio of 100%.⁷⁷

Why are Japanese electronics firms in Southeast Asia unable to achieve the kind of market power that Japanese automakers in the region have enjoyed? One reason relates to a fundamental difference in the nature of these two industries. While a piece of electrical machinery may include dozens of parts, an automobile is made up of thousands of parts. Thus, an automaker can achieve vertical foreclosure more easily by building an exclusionary supply network. An additional, more important reason pertains to a difference in the amount of government support and protection received by the two industries. In Southeast Asia, the electronics industry is generally less coddled than the automobile industry, and thus MNCs using flexible and global sourcing strategies to secure parts in this industry are able to reduce production costs and compete effectively against other MNCs that use more stable supply networks. Michael Borrus argues that, by the early 1990s, U.S. producers of industrial electronics (like computers and communications equipment) found themselves dangerously dependent on “a closed oligopoly” of Japanese rivals for essential components such as memory chips and displays: “The only alternative . . . was to make the supply architecture more open and competitive: In conjunction with government policies and local private investors in Asia, U.S. firms gradually turned their Asian production networks into a flexible supply base alternative to Japanese firms.”⁷⁸

Although Mr. Borrus may be guilty of hyperbole, the logic of his analysis is compelling. Far from being able to exercise vertical foreclosure, Japanese electronics manufacturers in Asia have been forced

76. Doug Tsuruoka, *Gathering of the Clan*, FAR E. ECON. REV., Mar. 28, 1991, at 52.

77. Bird, *supra* note 46, at 60.

78. Michael Borrus, *Left for Dead: Asian Production Networks and the Revival of U.S. Electronics*, in THE CHINA CIRCLE: ECONOMICS AND ELECTRONICS IN THE PRC, TAIWAN, AND HONG KONG 139, 145 (Barry Naughton ed., 1997).

to revise their strategies just to remain competitive in the market. Thus, Mr. Nishioka notes that Japanese consumer electronics firms in Asia now routinely purchase parts from sources outside their own established *keiretsu* groups—behavior that remains relatively rare in the automobile industry.⁷⁹ Moreover, confidential interviews I conducted in 1997 indicated that Japanese MNCs in Southeast Asia are moving to internalize (*naiseika*) the production of some parts, and are beginning to subcontract with non-Japanese producers (especially Taiwanese firms) for sub-assembly work on other parts. In other words, these once dominant MNCs are now playing a game of catchup in Asia.

VII. IMPLICATIONS OF THE CASE STUDIES

A. *Industry Characteristics Matter*

While Matsushita builds a VCR with fewer than one hundred parts, Toyota uses up to three thousand parts to assemble a passenger car. Given its parts-intensive nature, the automobile industry tends naturally toward vertical integration or, in the Japanese case, quasi-integration through *keiretsu* ties. As a result, assemblers who move quickly to build cohesive supply networks in any given market have a built-in edge over latecomers. This certainly has proved to be the case in Southeast Asia, where Japanese automakers have forged new ties with indigenous suppliers and have replicated longstanding ties with *keiretsu* suppliers transplanted from Japan. As can be seen, these ties are becoming increasingly exclusionary.

B. *Nationality Matters*

In every developing country in Southeast Asia, one can find numerous Chambers of Commerce, each representing firms with a particular nationality. Sharing a common culture and language, these MNCs generally may be inclined to cooperate with one another as they struggle to overcome the obstacles of operating in a foreign land. Japanese MNCs, however, appear to cooperate on this basis far more frequently than non-Japanese MNCs. “We are perhaps a little clannish,” acknowledges one company executive.⁸⁰ For example, in production centers like Shah Alam, an industrial suburb of Kuala Lumpur, and Navanakorn, a manufacturing estate outside of Bangkok, local Japanese manufacturers meet monthly to

79. See *supra* note 58 and accompanying text.

80. Confidential Interview, in Bangkok, Thailand. (Apr. 20, 1993).

discuss common problems. They do not forge binding agreements, but rather reach a “mutual understanding,” according to numerous participants of these meetings.⁸¹

Preliminary evidence suggests that Japanese automakers likely cooperated in a bid to keep non-Japanese automakers from gaining a foothold in Southeast Asian markets. Organized around groups such as the Thai Automotive Industry Association and the Association of Indonesian Automotive Industries, Japanese automakers lobbied to maintain restrictive measures such as a relatively high tariff on imports from outside ASEAN and domestic content requirements that impede market entry.⁸² Vertical restraint through quasi-integration—both at the supply and distribution ends—seems to have made it easier for these Japanese MNCs to collude.

If confirmed, such collusive behavior would not be unprecedented. Documents seized by the JFTC show that Japanese television manufacturers began colluding in the late 1950s to capture high profits on domestic sales and use them to subsidize cheap exports to the United States. Collusion in the domestic market was carried out through a clandestine web of organizations led by the so-called Okura Group, an informal council made up of the highest executives of the six major consumer electronics manufacturers in Japan who met monthly at Tokyo’s Hotel Okura. To hang onto these horizontal ties, the manufacturers had to maintain strict control of their individual distribution networks.⁸³ In their meetings, Japanese business executives “openly discussed and agreed upon bottom prices for each type of receiver, as well as wholesale and retail profit margins and rebate levels to *keiretsu* outlets.”⁸⁴ At the same time, collusion in the U.S. market was carried out through the TV Export Council and its umbrella organization, the Japan Machinery Exporters Association, which required that each exporter specify five U.S. companies as its exclusive customers.

Obviously, past behavior does not necessarily foreshadow future behavior, especially in an entirely different sector. However, the example of the TV industry demonstrates that no matter how much they may compete against one another under conditions of autarky, Japanese manufacturers may use extraordinary measures to collude in the face of

81. Numerous interviews, in Bangkok, Thailand, and Jakarta, Indonesia. (Sept. 1997).

82. *Id.* As noted earlier, Japanese automakers have not always been successful in their efforts to maintain barriers to entry. See *supra* Part V.

83. See Yamamura & Vandenberg, *supra* note 39, at 255.

84. *Id.*

competition from foreign rivals. For them, nationality appears to matter a great deal.

C. Government Matters

As students of developmental history in newly industrializing countries such as South Korea and Brazil, host governments in Southeast Asia have sought to build their own domestic automobile industry. This goal has been imbued with patriotic pride, especially in Malaysia. To further their goal of automotive industrialization, these host regimes have established tariff barriers and domestic content requirements that give important competitive advantages to established vehicle manufacturers who have their own local supply networks (i.e. Japanese MNCs). In the process, they effectively aided Japanese automakers in their efforts to acquire and expand market power in these countries. Other industries in Southeast Asia—including the electronics industry—did not receive as much support and protection.

Consider first host country tariffs on automobiles:

In Thailand, the import tariff on most fully-assembled passenger vehicles was 80%⁸⁵ until January 1, 2000, when it was cut to between 42.5% and 68.5% (depending on engine size).⁸⁶ On knocked-down vehicles (to be assembled as a “kit”), the tariff is 20% (this does not include the 50% excise tax and 10% surcharge levied on all such kits).⁸⁷ Automotive parts are subjected to a tariff of up to 42%.⁸⁸ These rates easily exceed those levied against other machinery imports like computers (5%) and electronic components (1%).⁸⁹

In Indonesia, the import tariff on most fully assembled passenger cars was 200%⁹⁰ until June 1999, when it was reduced to between 65% and 80% (depending on engine size).⁹¹ For knocked down-vehicles, the tariff is now between 35% and 50% (depending on

85. TradePort, *Thailand: Trade Regulations and Standards*, para. 3 (1999), at <http://www.tradeport.org/ts/countries/thailand/regs.html> (last visited Dec. 8, 2001).

86. U.S. Department of Commerce, International Trade Administration, “Thailand,” at <http://www.ita.doc.gov/td/auto/thaiprofile.html>.

87. *Id.*

88. *Id.*

89. Tradeport, *supra* note 85.

90. U.S. Embassy, Jakarta, “Indonesia: New Automotive Industrial Policy,” at <http://www.usembassyjakarta.org/econ/autoaugst99.htm>.

91. *Id.*

engine size).⁹² In addition, the tariff on automotive parts used in local assembly has been reduced to 15%.⁹³ However, the Indonesian government has been moving much more aggressively to reduce tariffs on other products (including electronic products) to a maximum of 5–10%.⁹⁴

Next consider domestic content requirements for automakers:

Until January 1, 2000, Thailand had required assemblers to maintain a local content ratio of at least 54%.⁹⁵

To secure tariff and tax breaks, Indonesia required assemblers to maintain a local (ASEAN) content ratio of at least 60%.⁹⁶

These and other public policies designed to promote local automobile manufacturing raised barriers for outsiders trying to break into host markets and, as a result, created profit havens for established producers.

On top of such policies implemented by host governments in Southeast Asia, note the considerable efforts undertaken by Japan to aid Japanese MNCs manufacturing vehicles throughout the region. For example, MITI has sponsored an annual meeting of “automobile experts” from Japan and ASEAN countries to discuss promotional policies for this industry.⁹⁷ In addition, MITI has both financed studies on the region’s supporting industries and dispatched Japanese advisers to help government officials in Southeast Asia devise measures to foster the growth of auto parts suppliers (including both Japanese transplants and indigenous firms). Thus, Japan has been an influential source of industrial policies for automobile manufacturing throughout Southeast Asia.

VIII. CONCLUSION

The two case studies presented herein suggest that MNCs may be able to use strong *keiretsu* ties as a vertical restraint, thereby limiting competition in developing state markets. However, this will happen only

92. *Id.*

93. U.S. Trade Representative, *Foreign Trade Barriers*, at 176, at www.ustr.gov/pdf/2000_indonesi.pdf.

94. Tradeport, *Indonesia: Trade Regulations and Standards*, para. 2, at <http://www.tradeport.org/ts/countries/indonesia/regs.html>.

95. U.S. Department of Commerce, *supra* note 86.

96. U.S. Embassy, Jakarta, *supra* note 90.

97. *See supra* note 55.

under limited conditions. First, the industry must be relatively parts-intensive. An automobile manufacturer who assembles thousands of parts is better positioned to achieve vertical restraint via exclusionary ties with suppliers than an electronics manufacturer who assembles dozens of parts. Second, MNCs from the same home country must be willing to cooperate with each other. Japanese automakers in Southeast Asia have found it useful to collude with one another to keep foreign rivals out of these markets. Finally, the industry must be protected by the host government and supported by both the host and the home government of participating MNCs. Southeast Asian countries have built high tariff walls around their automobile industries and, along with the Japanese government, have offered cheap credit and other forms of support to Japanese manufacturers. These practices have made it easier for automakers to maintain exclusionary supply and distribution networks, and thus easier to collude horizontally.

This third condition is perhaps the most critical. When host countries eliminate or reduce government support or protection for a particular industry, they may also undermine the ability of foreign manufacturers to use long-term, mutually reinforcing supply and distribution networks to deter entry by rivals. Liberalization of the automobile industry in economies like Thailand and Indonesia may jeopardize the market power of Japanese producers in those markets, just as the liberalization of the electronics industry did.

It does not necessarily follow that these governments should move quickly to lift tariff barriers and eliminate subsidies for automakers. The timing of such policy shifts is critical, a fact recognized in the Auckland Declaration adopted by APEC economic leaders on September 13, 1999.⁹⁸ The Declaration urges member countries to “[c]onsider issues of timing and sequencing involved in introducing competition mechanisms and reform measures, taking into account the circumstances of individual economies.”⁹⁹

As noted at the outset, developing economies face a different set of opportunities and constraints than developed economies. Firms in developing economies are often able to adopt successively more sophisticated technology from the global reservoir of knowledge and, as a result, are able to enjoy declining long-run average costs. An “investment

98. APEC Economic Leaders’ Declaration, adopted at the Seventh APEC Economic Leaders Meeting, Auckland, N.Z. (Sept. 13, 1999), available at <http://www.apecsec.org.sg/virtualib/econlead/nz.html>.

99. *Id.*

race” is inevitable as firms rush to enter industries characterized by declining costs or, if they already have invested in such industries, to expand output. Without some mechanism to coordinate this “investment race,” overinvestment and excess capacity occur, triggering bankruptcies and unemployment. Cooperation between firms, and with the government, may be necessary to guard against such a destabilizing outcome as well as to maintain progress toward development.

Until the fiscal crisis of 1997, Thailand had the strongest automobile industry in Southeast Asia, in part because it solidly supported Japanese MNCs in their plans to recreate their vertical *keiretsu* and use Thailand as the hub of their regional production networks.¹⁰⁰ Tariffs on competing imports were high, domestic content requirements were stiff, and industrial policies were used to promote the development of a Japanese-dominated assembly industry and supply base. Between 1951 and 1997, Japanese automakers responded enthusiastically, pumping 136 billion yen (nearly \$1.2 billion) into Thailand’s automotive industry. That was equivalent to 36% of the total Japanese FDI in the automotive industries of the ASEAN-4 countries.¹⁰¹ Japanese automobile parts manufacturers (suppliers for Japanese assemblers) focused even more narrowly on Thailand, choosing it for nearly half (208 out of 422) of their ASEAN-4 investment projects.¹⁰² As the regional center for Japanese automobile production, Thailand is now leading ASEAN in its effort to gradually liberalize this industry. However, if it had moved in this direction earlier, it might not have been able to attract the capital and technology needed to quickly build a successful assembly industry and supply base.

Of course, there is a trade-off here: in building the region’s strongest automobile industry—an industry dominated by Japanese MNCs—Thailand has given up some of its autonomy and control. Public and private decisions regarding this industry are more often made in Tokyo or Nagoya than in Bangkok. Profits from auto production are routinely repatriated to Japan. In addition, the current market structure of the automobile industry in Thailand is resistant to change. Protection and subsidies have nurtured Japanese “insiders” who likely will dominate the market for some time. However, Thai policymakers themselves are

100. See Legewie, *supra* note 49, at 3. In 1996, Thailand produced 559,000 vehicles, including imported CKD kits, which was 39% of the ASEAN-4 total. However, in 1997, when a fiscal crisis rocked its economy, Thailand fell behind Malaysia in automobile production in Southeast Asia.

101. Ōkurashō [Ministry of Finance], *Zaisei Kin’yū Tōkei Geppō* [Ministry of Finance Statistics Monthly] (July 1998).

102. Legewie, *supra* note 49, at 9.

responsible for calculating the costs and benefits of this trade-off as well as choosing their own course of action.

Hence, this study concludes with only one recommendation: scholars must take a closer look at the problem of vertical restraints used by MNCs in developing countries. Approaches based on neoclassical economic theory and Anglo-American legal doctrine have obscured as much as they have revealed.

Table 1

Thai Automobile Sales (January-June 1997)

<i>Maker</i>	<i>Passenger Vehicles</i>	<i>Commercial Vehicles</i>	<i>One-ton Pick-ups</i>	<i>Total Vehicles</i>	<i>Percentage of Market</i>
Toyota	35,35	5,299	37,022	77,556	31.2
Isuzu	595	6,861	46,628	54,084	21.8
Nissan	6,760	2,469	22,011	31,240	12.6
Mitsubishi	6,842	2,272	16,132	25,246	10.2
Honda	21,002	n/a	719	23,084	9.3
Mazda	1,142	1,502	6,968	9,612	3.9
All Others	16,191	11,079	1,456	27,363	11.0
Total	87,767	29,482	130,936	248,185	100.00

Source: Compiled by the author using data from Automotive Resources Asia (Bangkok) and the Thai Automotive Industry Association.

Table 2

Indonesian Automobile Sales (January-July 1997)

<i>Maker</i>	<i>Passenger Vehicles</i>	<i>Commercial Vehicles</i>	<i>Total Vehicles</i>	<i>Percentage of Market</i>
Toyota	4,711	52,760	57,471	23.5
Mitsubishi	1,029	44,271	45,300	18.5
Suzuki	5,904	37,601	43,505	17.8
Isuzu	None	31,889	31,889	13.0
Daihatsu	5	24,420	24,425	10.0
Timor	11,785	None	11,785	4.8
All Others	16,191	11,079	27,363	12.4
Total	42,015	202,637	244,652	100.00

Source: Compiled by the author using data from Automotive Resources Asia (Bangkok) and Gaikindo (Indonesian Automobile Manufacturers Association).

Table 3

Japanese Members of Toyota Supply Club in Thailand

<i>Name of Thai Affiliate</i>	<i>Parts Produced</i>	<i>Year Established in Thailand</i>	<i>Name of Japanese Parent</i>	<i>Does Parent Belong to Toyota keiretsu</i>
Aoyoma Thai	metal fasteners	1965	Aoyama	Y
Bangkok Foam	interior trim	1971	Inoac Corporation	Y
Thai Bridgestone	tires, tubes	1969	Bridgestone	Y
CI-Hayashi	Carpeting	1993	Hayashi	Y
Denso Thailand	Alternators, regulators	1974	Denso	Y
Enkei Thai	Aluminum wheels	1987	Enkei	N
Siam GS Battery	Batteries	1970	Nihon Denchi	Y
Inoue Rubber	Industrial rubber parts	1970	Inoac Corporation	Y
Kallawis Autoparts	Wheels	1973	Chuo Hatsujo	Y
NHK Spring Thailand	seats, springs	1963	Nihon Hatsujo	Y
Nippon Paint Thailand	paint	1968	Nippon Paint	Y
National Thai Co.	car radios	1961	Matsushita	Y
Ogihara Thailand	pressed parts	1990	Ogihara	N
Pioneer Electronics	Car stereos	1991	Pioneer	Y
Sunstar Chemical	Pressed parts	1989	Sunstar Engineering	N
Siam Aishin	brake drums	1996	Aishin	Y
Siam Furukawa	battery	1992	Furukawa Denchi	Y
Siam Kayaba	shock absorbers	1996	Kayaba	Y
SNC Soundproof	soundproofing	1994	Nihon Tokushu Toryo	Y

Table 3 (continued)

<i>Name of Thai Affiliate</i>	<i>Parts Produced</i>	<i>Year Established in Thailand</i>	<i>Name of Japanese Parent</i>	<i>Does Parent Belong to Toyota keiretsu</i>
Thai Auto Works	body parts	1988	Toyota Autobody	Y
Thai Arrow Products	wire harness	1963	Yazaki	Y
TCH Suminoe	upholstery	1995	Suminoe Orimono	Y
TG Pongpara	Steering wheels	1995	Toyoda Gosei	Y
Thai Koito	headlamps	1986	Koito	Y
Thai Kansai Paint	paint	1970	Kansai Paint	Y
Thai Parkerizing	metal coating	1979	Nihon Parkerizing	N
Thai Seat Belt	seat belts	1994	Tokai Rika Denki	Y
Thai Steel Cable	Control cables	1981	Nihon Cable Systems	Y
Thai Stanley Electric	Signal lamps	1981	Stanley	Y
Thai Safety Glass	windshield, windows	1988	Asahi	Y
Toa Shinto	Paint	1989	Shinto Toryo	Y
Yuasa Battery	batteries	1963	Yuasa	Y