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Volume Title: Trade with Japan: Has the Door Opened Wider?

Volume Author/Editor: Paul Krugman, editor

Volume Publisher: University of Chicago Press, 1991

Volume ISBN: 0-226-45458-4

Volume URL: <http://www.nber.org/books/krug91-1>

Conference Date: October 19-20, 1989

Publication Date: January 1991

Chapter Title: How Open is Japan?

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Chapter URL: <http://www.nber.org/chapters/c8659>

Chapter pages in book: (p. 9 - 50)

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Few issues in international economics are more contentious than the allegedly closed nature of the Japanese market. In the early 1980s, the issue so vexed the European Community that it sought redress through the General Agreement on Terms of Trade (GATT). Similarly, over the years the United States has conducted an extensive set of bilateral negotiations to open the Japanese market for its firms and products ranging from beef to baseball bats.

Generally, the U.S. focus has been on ensuring equal treatment for foreign firms and products through changes in rules and procedures. In 1985, for example, negotiations focused on Market-Opening, Sector-Specific (MOSS) talks in four sectors—telecommunications, electronics, forest products, and medical equipment and pharmaceuticals. In medical equipment, for example, the major issues were related to improvements in administrative procedures for granting new product approvals and manufacturing licenses and for setting reimbursement prices under Japan's national health insurance program (see U.S. International Trade Commission 1986). Currently the United States is delving even deeper into the structure of the Japanese economy in the so-called Structural Impediments Initiative.

Official U.S. policy has generally sought to avoid setting quantitative import targets for Japan.<sup>1</sup> It continues to try to change the rules of the game so that foreigners can compete equally in Japan. But increasingly, there are calls for the United States to shift its demands from equal opportunity to affirmative action. Some argue that Japan will never play by Western rules. Indeed, given the outstanding performance of the Japanese economy, the outside world has

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1. The sideletter to the 1986 U.S.-Japan semiconductor agreement was a noteworthy exception. It called for semiconductors produced by foreign-owned firms to increase their Japanese market share to 20 percent by 1991.

no right to demand that Japan change the practices that have served it so well. Instead of trying to change Japan, the outside world should simply negotiate quantitative import targets and allow the Japanese government, which best understands its economic system, to ensure these are attained. The new slogan is therefore “results rather than rules.”

In a recent paper, for example, Rudiger Dornbusch (1990) advocated setting quotas for aggregate Japanese imports of manufactured goods from the United States. Dornbusch believes the United States should demand that U.S. manufactured goods exports to Japan maintain an annual growth rate of 10 percent for the next decade. Absent such a response, Dornbusch advocates the imposition of a tariff on Japanese exports to the United States. Others advocate a more detailed sectoral approach to setting import levels. A report issued by the Advisory Committee for Trade Policy and Negotiations (ACTPN), a private-sector advisory group to U.S. Trade Representative Carla Hills, has suggested that the United States should require that the Japanese set quantitative import targets for specific commodities.

These new proposals are being advanced because it is felt that past U.S. policies simply have not worked. The Japanese economy is closed to foreign products and firms and fails to respond to market incentives as do other countries. Advocates of a results-oriented approach to Japanese trade generally agree that a managed trade system is not ideal. They also generally agree that the United States in particular is not well equipped to deal with a system that requires the detailed management of the international economy. But they suggest it is an appropriate second-best approach given the lack of effective alternatives.

But before policy shifts to such an approach, several questions need to be answered. What precisely is an “open” market? Are managed-trade policy approaches likely to achieve it? Is the Japanese market closed? Is it closed and unresponsive to price changes and negotiations over rules? In this paper I will try to answer these questions.

One important distinction is between markets that are open to products and markets that are open to firms. In a world in which multinational corporations dominate trade, it is clearly inappropriate to think only of national production by national firms. Particularly when embarking on a policy that manages *results*, it is important to be clear on precisely what kinds of results are being sought.

Many of the intangible barriers in the Japanese market may inhibit the sale of *products made by foreign firms*, but they need not preclude the sale of products manufactured by foreign subsidiaries of domestic firms. Ford and General Motors may not know how to make and sell an automobile that Japanese consumers will buy, but Toyota and Honda surely do. Japanese firms already have an established reputation with their Japanese customers. They understand how to deal with unusual aspects of Japanese institutions and customs.

Policy initiatives that stress achieving a Japanese market that allows a given quantity of imports equate openness with increased imports. But higher Japanese import volumes need not entail increased participation by foreign firms in the Japanese economy. Dornbusch, for example, emphasizes that what is important, from a U.S. perspective, is “good jobs and good wages” (1990, p. 125). He argues that it is irrelevant whether the employer producing the exports for the Japanese market is American or Japanese.

But, from some perspectives, it is surely not irrelevant. An increased demand by Japan for imports raises the demand for foreign labor. However, if the bulk of the imports are brought in by Japanese firms, the official and private practices that limit the degree to which newcomers can contest the Japanese market could continue. While the Japanese market might have more imported products, these could still be priced to maximize the profits of Japanese firms with monopoly power. Japanese consumers would not necessarily enjoy the full benefits of access to cheaper imported products.

While a results-oriented approach might raise the volume of Japanese trade, it could actually lead to a market with *more* rather than less government and corporate control. In fact, such an approach gives up on the idea that the Japanese economy will ever be genuinely open. It settles for making sure that at least Japan buys a certain amount of imports as a quid pro quo for its exports. By insisting Japan implement such a system, the United States would severely limit Japan’s ability to become a genuinely liberal economy. Sector-by-sector targets can only be enforced if the MITI (Ministry of Trade and Industry) is powerful enough to guide Japanese firm behavior in great detail. The MITI would be forced to organize and monitor numerous buying cartels. Firms would be forced to collude on how imported products are to be handled. Instead of encouraging Japan in the liberal direction urged in its own official Maekawa report, the policies would be driving it back toward precisely the system the world finds so difficult in the first place.<sup>2</sup> Japanese firms would enhance their profits by buying cheaper foreign inputs and producing some products abroad, but they could continue to exercise their power over domestic pricing and marketing practices.

Between 1985 and the first quarter of 1989, according to the Japanese Economic Planning Agency (Government of Japan 1989), the volume of manufactured goods imports by Japan has doubled. In the light of this discussion, it might be important to examine the corporate identity of these imports: Is Japan being opened by Japanese or foreign-owned firms? That is a question I will try to answer below.

On the other hand, barriers at the border against products made in other

2. The discussion presumes such a policy could actually be achieved. But in many sectors, given the nature of the barriers, it would be virtually impossible for the Japanese government in good faith to enforce such an agreement. In consumer goods or goods sold in markets with many firms the proposal is impractical. You can put goods on the shelves but you cannot make people buy them.

countries do not necessarily hinder products made by foreign firms in Japan. It is sometimes assumed that there is a positive relationship between imports and the establishment of foreign firms in Japan. But of course, there is no *necessary* linkage. If foreign-owned firms gain entry in Japan, particularly if import barriers remain, they may decide to produce *more* locally. Thus imports may actually decline rather than increase. A more "open" Japanese market for foreign firms need not lower the Japanese trade surplus or provide the benefits for foreign workers, foreign terms of trade, and spillovers in foreign economies that many seem to expect.

While increased access of foreign firms may bring some benefits to Japanese consumers, these could be limited given the structure of the market. Recently, the Japanese Fair Trade Commission (FTC) contended that a joint venture of Apple (USA) and Canon unfairly maintains higher prices of Apple computers in the Japanese market by various restrictive trade practices. As this example reminds us, once established in Japan, foreign firms may find it in their interest to bolster rather than remove entry barriers.

The U.S.-Japan Semiconductor Trade Agreement is an example of a results-oriented trade policy in which the results that have been negotiated for and the results claimed by advocates of the approach do not necessarily correspond. Laura Tyson (1990), an advocate of managed trade in high-tech industries defends this agreement. She argues that without such managed trade agreements the structure of the U.S. economy will deteriorate.

She argues that in some industries knowledge does not flow easily across national borders. Such knowledge accumulates in firms in the form of skilled workers, proprietary technology, and difficult-to-copy know-how (Tyson 1990, p. 160). "The goal of intervention, therefore, is not simply to improve the trade balance or to address external barriers abroad, but *to secure a share of world production and employment* in such industries with the local knowledge, skills and spillover benefits which they generate" (Tyson 1990, pp. 167-68). That may be the goal of some advocates of managed trade. But it is striking that the sideletter to the Semiconductor Trade Agreement (STA) negotiated between the United States and Japan called for the products of *foreign-owned* companies to achieve 20 percent of the domestic sales by 1991. The semiconductors Texas Instruments produces in Japan or Korea, with Japanese or Korean labor and spillovers, qualify for this quota, but the semiconductors NEC or Fujitsu produce in the United States with U.S. labor and spillovers do not. As it has been implemented, this initiative is certainly not framed in terms of its direct impact on the U.S. structure of production.

A second major recent U.S. initiative also emphasizes corporate participation rather than the U.S. trade deficit or production structure. Robert Reich (1989) has noted that the major U.S. initiative to open the Tokyo market for cellular telephone sales by Motorola will increase the sales of telephones designed and manufactured in Malaysia. Of course, policies may legitimately reflect a variety of objectives. But, particularly when results are being man-

aged, clearly the devil lies in the details. Unless there is a clear rationale for the policy, the specifics could make the results disappointing. For some purposes, for example, enhancing the welfare of U.S. workers, it may suffice to emphasize greater import volumes; for other purposes, for example, enhancing the profits of U.S. firms, it may suffice to seek increased participation by U.S. firms in Japan. But these approaches should not be confused with policies that aim at maximizing global welfare by achieving a market that is open in the most fundamental sense, that is, a market that can be readily contested by new firms, both foreign and domestic, who choose to supply products made at home and abroad.

Finally, it should be stressed that although they are often justified in terms of their impact on the aggregate trade balance, there is no necessary relationship between the size of a nation's trade balance and the openness of its markets. West Germany, for example, has one of the world's most open markets, but it often has a trade surplus that is a higher share of its GNP than Japan's. In general, a nation's trade balance in goods and services is a macroeconomic relationship that reflects in aggregate saving and investment behavior. While there are some channels by which changes in trade barriers may alter saving and investment behavior, the linkages are subtle and unlikely to be robust. After surveying some of these arguments, Richard Clarida has recently concluded "the macroeconomic implications of opening foreign markets with Super 301 are likely to be negligible" (1989, p. 28).

In the rest of this paper, I turn to the evidence. In particular I will examine several facets of the question, "How open is Japan?" Given the importance of the distinctions made in this introductory section, I will, in the first section of this paper, examine the corporate role in Japanese trade using primarily 1986 data. I will present evidence of the unusually strong role played by the intra-firm shipments of Japanese companies in Japanese trade. Japanese trade is distinctive because foreign exports to Japan have, until recently, generally been shipped by the foreign affiliates of Japanese firms. I will argue that this behavior results from unusual market imperfections in Japan that have induced Japanese firms to move *upstream* through international backward vertical integration. I will also argue that these same imperfections led to the unusually low share of intraindustry Japanese trade or, more precisely, to the low share of imports and exports of different varieties of similar products.

In the second section of this paper I consider price behavior in Japan. Several empirical studies have tried to answer the question, "Does Japan import too little?" To explore the issue they have been forced to overcome complex methodological obstacles that make it difficult to provide conclusive answers. Some studies have concluded Japanese import levels can be explained by the fundamental attributes of the Japanese economy. Other studies have concluded they cannot. But it has been difficult to pin down precisely the role played by import barriers. I will argue, however, that too little attention has been focused on the more important evidence of barriers: the large and persistent

price differences between Japan and other industrial economies. I will show that these differences persist at the manufacturing level when distribution margins are removed. There is also strong evidence that imported products in Japan are subject to unusually high markups. It appears, therefore, that potential arbitrage opportunities between Japan and the rest of the world are not fully exploited.

The third section examines the adjustment of imports in Japan to the strong yen. It suggests that many of barriers to the Japanese market operate like tariffs rather than quotas. They keep imported products expensive in Japan, but they do not prevent marginal responses to price and cost incentives. I will show that, at the margin, manufactured import flows into Japan are quite normal in their responses to changes in relative costs. The result has been a dramatic increase in the volume of manufactured goods imports into Japan between 1985 and 1989—an increase that actually exceeds what might have been expected on the basis of historical relationships between import volumes, domestic activity, and the real exchange rate. While only preliminary data are available, it appears that intrafirm shipments by Japanese firms continue to account for a substantial imports share. Nonetheless the data also show that the share is declining and the intrafirm shipments of U.S. firms is rising. There is also some evidence that the sectoral approach to opening the Japanese market has worked. In the light of this evidence the Japanese market does appear closed, but there is also considerable evidence it is responding to price changes and sectoral negotiations.

### **1.1 Intrafirm Trade Patterns**

Much of the theory of international trade ignores the role of corporations in the conduct of trade. Trade is presumed to take place in arms-length transactions between buyers located in the importing country and sellers located in the exporting country. Yet, a remarkably high proportion of international trade occurs through intrafirm shipments. This institutional reality underscores the complementarity that frequently exists between foreign trade and direct foreign investment. There appear to be major benefits from international vertical integration.

If the markets for goods or factors were perfect, there would be no multinational companies (MNCs). Market transactions would dominate intrafirm transactions. But where imperfections do exist, they can be internalized when a firm engages in direct foreign investment (see Rugman 1980). As Hymer (1976) first pointed out, when the firm has a specific advantage developed in response to a market imperfection, it will benefit from exploiting its advantage in other national markets. These advantages include acquiring factor inputs at a lower cost than its rivals; better distribution and marketing facilities; and monopoly advantage in information, research, knowledge, or some other aspect of the production process.

These explanations for direct foreign investment suggest that, if market imperfections differ across countries, the degree and nature of international investment could differ as well. Indeed the patterns of international investment could provide clues about differences in market imperfections.

Japan has an unusually small amount of intra-industry trade. Lawrence (1987) estimated, for example, that in 1980 an index of intra-industry trade for Japanese manufactured goods trade measured 30 compared with an average of 70 in other major industrial countries. But what is perhaps less well appreciated about Japanese trade, however, is the large amount of intrafirm trade. Using Department of Commerce Surveys on the trade flows associated with U.S. MNCs and those with the foreign affiliates located in the United States, we can put together the following picture: as reported in table 1.1, in 1986 intrafirm trade accounted for 48.5 percent of U.S. exports to Europe and 42.0 percent of U.S. imports from Europe. But intrafirm shipments accounted for 75.0 percent of U.S. imports from Japan and 72 percent of U.S. exports to Japan.

A striking feature of these numbers is the unusual degree to which *Japanese* MNCs dominate Japanese imports. In U.S. and European exports to each other, the *exporting* country firms dominate the intrafirm sales. In 1986, intrafirm shipments of U.S. exporters accounted for 36.9 percent of U.S. exports to Europe, while intrafirm shipments by European exporters account for 29.8 percent of EC exports to the United States. Similarly, Japanese exports to the United States were dominated by the intrafirm shipments of Japanese exporting firms—their share was 66.1 percent of all U.S. imports from Japan. This suggests typically the international vertical integration process moves *downstream* internationally from producers to their markets. Usually firms that develop a differentiated product in their home market discover they can exploit that advantage by selling it abroad.

The literature suggests several reasons why firms find it preferable to exploit their advantage by an internal rather than an arms-length transaction. Explanations for international integration include preserving firm-specific knowledge in the face of appropriability problems or preserving oligopoly power. Explanations for downstream vertical integration more generally include the advantages conferred in (i) providing information and knowledge to the seller about complex products; (ii) obtaining feedback from customers; (iii) overcoming the risks associated with investment by retailers and wholesalers in highly specific assets; and (iv) internalizing the externalities associated from quality debasement. (Independent distributors may not take account of the full adverse impacts of improper installation and service on reputation).

But the structure of Japanese *imports* is unusual because movements have typically been *upstream*. Intrafirm shipments from Japanese subsidiaries abroad to their parent companies dominate Japanese imports. In 1986, Japanese affiliates in the United States shipped 58.4 percent of all U.S. exports to



**Table 1.1            Intrafirm Trade in 1986 (%)**

	Europe				Japan			
	Total	Foreign Affiliates to/from Foreign Parent	U.S. Affiliates to/from U.S. Parent	Of Which Majority-owned Affiliate	Total	Foreign Parent	U.S. Parent	Of Which Majority-owned Affiliate
U.S. exports	48.5	11.6	36.9	32.8	72.0	58.4	13.6	9.7
U.S. imports	42.0	29.8	12.2	10.5	75.0	66.1	8.9	1.8

*Source: Survey of Current Business* (U.S. Department of Commerce 1989).

Japan back to their Japanese parents. By contrast, U.S. affiliates in Japan imported from their parent companies only 13.6 percent of all Japanese imports from the United States (see table 1.1).

One potential explanation for this unusual corporate involvement could be an unusual commodity composition of Japanese imports. The United States could export commodities in which direct shipments by U.S. firms *typically* play a relatively small role. But this does not explain the small direct U.S. company role. In their 1986 sales to other countries, U.S. companies shipped directly to their affiliates 27.6 percent of the manufactured goods exports that have the same mix as those imported by Japan from the United States. By contrast, they shipped only 9.4 percent of U.S. manufactured exports to Japan. As reported in table 1.2, intrafirm shipments by U.S. companies in their trade with Japan are an unusually small share of U.S. exports to Japan in every major export category. Similarly, the kinds of imports Japan buys from the United States are not typically imported by parent firms in the importing country.

Firms with established positions in the Japanese market find it profitable to invest in production or purchasing entities abroad. Apparently the structure of the Japanese economy provides unusually strong incentives for upstream movement and results in Japan's international trade being conducted by *Japanese* distributors.

These patterns of corporate involvement are actually complementary to the observation that Japan has an unusually small degree of intra-industry trade. Krugman and others have explained *intra-industry* trade as resulting from preferences for variety and economies of scale in production. Krugman (1983) has also shown that, where the fixed cost that yields scale economies is not in production research but in research and development (R&D), firms may prefer to carry out some of the production abroad. When intrafirm shipments of imports are dominated by foreign firms, as they generally are, they are likely to reflect the importation of new product varieties. But intrafirm imports by *do-*

**Table 1.2** Percentage of Total U.S. Exports Shipped by U.S. Multinationals to Their Foreign Affiliates, by Commodity, in 1986

	EC (12)	Japan	World
Total	34.1	13.6	32.8
Petroleum	38.3	4.6	52.2
Total, Manufactures	25.4	9.4	28.4
Food and kindred	13.7	0.2	6.3
Chemicals excluding electric	36.3	13.9	25.0
Machinery	22.4	19.0	14.4
Electric machinery	40.6	24.9	52.3
Transportation	10.0	4.0	69.3
Other	45.3	12.2	30.6

Source: U.S. Department of Commerce (1989).

*mestic* firms are more likely to reflect domestic market imperfections. They are likely to involve shipments of inputs that are cheaper abroad or imports of varieties produced by the domestic firm that can be manufactured more cheaply abroad. Domestic firms are less likely to import directly products that compete directly with those they (or their associates) manufacture at home. Intrafirm shipments by domestic firms are thus less likely to result in the importation of *new varieties* produced abroad.

### 1.1.1 Trading Companies

The majority of intrafirm import shipments in Japan appear to be undertaken by general trading companies. As indicated in table 1.3, the Japanese affiliates reporting extensive shipments of U.S. exports to Japan are concentrated in, but not confined to, wholesale trade—particularly in farm products and metals and minerals. While trading companies are not unknown elsewhere, in no other country have they grown to the extent and size that they have in Japan. It is difficult to obtain data on some of the large foreign companies that are not publicly held, but according to Young (1979), for example, in 1976 only three of the 12 large multiproduct trading companies that existed in other countries had sales above \$1 billion, whereas each of Japan's big 10

**Table 1.3** U.S. Exports to All Countries Shipped by Japanese Affiliates in 1986 and 1987

	1986		1987	
	Exports in Millions of \$U.S.	% of Total Exports	Exports in Millions of \$U.S.	% of Total Exports
All industries	22,693		20,838	
Manufacturing	906	4.0	1,048	5.0
Primary & fabricated metal	15	0.1	29	0.1
Machinery	276	1.2	307	1.5
Excluding electric	188	0.8	243	1.2
Electric	88	0.4	64	0.3
Other manufacturing	292	1.3	356	1.7
Wholesale trade	21,629	95.3	19,673	94.4
Motor vehicles	...	...	...	...
Metals & minerals	9,697	42.7	10,922	52.4
Other durables	828	3.6	...	...
Farm product raw materials	7872	34.7	4,066	19.5
Electrical goods	N.A.	N.A.	483	2.3
Machinery & equipment	N.A.	N.A.	368	1.8
Groceries	N.A.	N.A.	623	3.0

Source: U.S. Department of Commerce (1989).

had sales between \$5 billion and \$33 billion. Total annual sales of the largest non-Japanese trading company (Kooperativa Foroundel of Sweden) were \$2.95 billion—which made it as large as the seventh largest Japanese company.

It is an error to view the trading companies only as purveyors of raw materials imports. They play a major role both as exporters and importers of a wide variety of manufactured goods. They have acted as agents for imports of nuclear plants from Westinghouse and General Electric and aircraft from Boeing and Lockheed. In its business profile, the Nissho Iwai Trading Company notes, for example, that it serves as “the exclusive agent for the Boeing Aircraft Company for sales to airlines, McDonnell Douglas for military aircraft to Japan’s self defense forces and DeHaviland for commuter aircraft” (Nissho Iwai Business Profile).

It is also an error to view these companies simply as brokers or traders. They provide their customers with an extensive set of services, including information and intelligence, medium-term finance, shipping, warehousing, and distribution. Their international and domestic equity relationships extend backward into mining, agriculture, and manufacturing and forward to retailers and shopping centers. The trading companies are firmly rooted in the domestic distribution system, and they have complemented this position with extensive import distribution systems. These include huge complexes—*kombinat*os—for the unloading, warehousing, and distribution of imported products such as food, chemicals, and steel products (for a description, see Kojima and Ozawa 1984). These centers allow the efficient allocation of imports to downstream affiliates and independent customers.

From a transactions cost perspective, these companies’ role in imports derives from some unique attributes of the Japanese economy, in particular, its distance both physically and culturally from the rest of the world. It is costly for Japanese buyers to purchase products directly from abroad. The trading companies are a conduit between Japan and the world, and they provide specialized intermediation services that are obviously subject to economies of scale and scope. Firms buying imports can obtain these services more cheaply from specialized agents than they could obtain them for themselves. On the other hand, as Yamamura (1976) has suggested, “because of linguistic and cultural similarities and geographical proximity among the Western trading partners . . . the absolute costs of information, of negotiation, and of enforcement of contracts . . . were significantly lower than they were for Japan.”

But government policies and other practices also account for the trading companies role. As Kojima and Ozawa (1984, p. 62) have written:

Japan’s major trading companies enjoy monopsonistic positions in securing vital industrial resources and foodstuffs from overseas, partly as a result of the commercial tradition dating back to the Meiji period. The trading companies operate very closely—if not exclusively—with the member companies of their respective industrial groups. These unique features of Japanese

industry enable them to create “*shoken*” or the commercial right to intermediate in trade. Indeed trading companies monopolize the import and distribution channels for iron ore, coking coal and other mineral resources, as well as grains—albeit in a climate of fierce rivalry.

In the nineteenth century, Japan was dependent on foreign merchant trading companies for the conduct of its trade (for historical accounts, see Kojima and Ozawa 1984; Yamamura 1976; and Young 1979). Partly because of conscious government policy, control was handed over to domestic trading companies. Indeed, the role of the trading companies in Japanese trade appears to be a case in which the Japanese comparative advantage was nurtured by policy. Government policies actually granted the trading companies monopolies to trade or *shoken* in commodities such as iron ore and coking coal.

Government nurturing of the trading companies was particularly important when imports and foreign exchange were tightly controlled. During the 1950s and 1960s when foreign exchange was rationed, the trading firms that generated the largest amounts for export revenues were granted lucrative import quotas. According to Tsurumi (1980), “Import licences for such lucrative consumer goods as bananas, whiskey and crude sugar were given to the trading firms which had already met the export targets for ships, rolling-stock and machine tools. The export of ships was particularly subsidized through this linking process. Lasting well into the 1950s, the linking policy naturally precipitated the diversification of goods and services handled by one firm” (p. 21).

The trading companies served as key agents in the Japanese policy of import substitution in the 1950s and 1960s. But government policies were reinforced by the practices of industrial groups. In particular the connections that exist between the companies and the large *keiretsu* groups—themselves descendants of the *zaibatsu*. Today’s large trading companies such as Mitsui Busan and Mitsubishi Shoji expanded as commercial wings of their *zaibatsu* groups with secure sources of income derived from their rights to intermediate group transactions.

Today, the connections between the companies and their groups are not exclusive. Trading companies do not limit their dealings to group firms and affiliates, but group manufacturing firms do provide them with assured, if not captive, customers. Long-term relationships between buyers and sellers are of course pervasive in the Japanese economy. While these relationships do not always entail formal internalization in the form of vertical integration, they frequently entail a complex set of associations through membership in the same industrial group, *keiretsu*, the exchange of equity, and the adoption of deliberate techniques that require a large measure of mutual trust between buyers and sellers. The pervasiveness of these relationships suggest that, particularly within Japan, these organizational relationships offer distinct transactional advantages.

Many of these practices may well be economically rational. Indeed, they

may be more effective than the arm's length practices elsewhere—particularly in a society in which adversarial and litigious responses to contract breaches are deemed particularly costly.

It is noteworthy, for example, that having learned about Japanese methods for relationships with suppliers by observing and participating in joint ventures with Japanese automobile companies who have located assembly operations in the United States, the big three U.S. producers have changed their own supplier relationships. As Schnapp (1988, p. E-4) concluded in his review of the U.S. auto parts industry, "The U.S. components supply structure is evolving into one similar to the Japanese model . . . [which] will involve greatly intensified interdependence between automakers and their first tier suppliers and between those first tier suppliers and their own vendor networks. . . . For original equipment parts makers, it's conform to the Japanese model or die."

But while they may enhance efficiency in some respects, these relationships also increase market power. As Perry has pointed out, vertical integration can be particularly useful for a monopsonist. Vertical integration permits a monopsonist to capture the rents that are enjoyed by intramarginal sellers when the price is driven up by purchases.<sup>3</sup> It is an interesting confirmation of the Perry thesis that Japanese trading companies became more active in direct foreign investment when Japan became a significant purchaser of raw materials. Once their purchases had grown large enough to affect the prices they paid, it paid trading companies to internalize these purchases. But if the system of bringing raw materials inputs into Japan had been competitive, firms in the Japanese distribution system would have been content to buy inputs from a variety of international distributors.

The major role played by Japanese firms abroad in exports to Japan is consistent with the evidence, adduced by Kreinen, that Japanese purchasing behavior in general differs from that of other countries, even where the purchases are made abroad. In particular, Kreinin (1988) finds that Japanese firms abroad have an unusually strong preference to buy from Japanese rather than other foreign suppliers.

In sum, the Japanese economy provides trading companies with major advantages as procurers for Japan. They are extremely efficient providers of intermediation services, which are required by Japanese firms who engage in trade because of the cultural and geographic distance of Japan from its markets. In addition, however, their positions have been bolstered by policy and other practices. In particular, the companies have functioned as the buying and selling arms of industrial groups. The existence of the large array of entry barriers to selling in Japan implies that companies who have already sunk the costs in overcoming them have an inherent advantage as buyers of attractive foreign products.

3. See the discussion of this case in Krugman (1983).

### 1.1.2 Implications

Given the importance of the trading companies in Japanese imports, a key issue is their willingness to import products that compete directly with domestic firms with whom they have close relationships. Gerlach (1989), for example, suggests they do not do this freely. "Whatever price reductions might be passed along to the Japanese buyer of foreign products are at least partially 'absorbed' by the vertical channels through which these products must flow. Japanese firms are as interested in protecting their relationship with domestic suppliers as they are in passing along cost savings to others."

On the other hand, the trading companies do appear willing, indeed eager, to encourage imports in cases where these are in the interests of domestic manufacturing firms. They have not only played a crucial role in providing raw materials for the economy but, according to Kojima and Ozawa (1984), "they have also been instrumental in persuading firms to locate abroad to serve the Japanese market when it appears production is no longer competitive. Kojima and Ozawa describe how the trading companies responded to the decline in Japanese competitiveness in labor-intensive low-skill products in the early 1960s by encouraging Japanese manufacturers to establish overseas manufacturing ventures. Typically they organized ventures with consortiums of companies within their affiliated *keiretsu* (Kojima and Ozawa 1984, p. 83).

As Japanese *manufacturing* firms increase their direct foreign investment abroad, they will become less reliant on the trading companies for their supplies of foreign inputs. But if the trading companies' role in trade diminishes, an alternative source of intra-Japanese-firm shipments of Japanese imports is likely to increase.

### 1.1.3 Foreign Affiliates in Japan

While the intrafirm shipments to Japanese parents from their overseas affiliates are an unusually high share of Japanese imports, the shipments from foreign parents to Japanese affiliates are an unusually small share of foreign exports to Japan. In 1986, U.S. companies shipped 13.6 percent of all U.S. exports to Japan to their Japanese affiliates and just 9.7 percent of these exports to majority-owned affiliates. In manufactured goods the U.S. company role is even smaller. In 1986, U.S. firms shipped just \$947 million to their majority-owned manufacturing affiliates in Japan (and \$1.6 billion to all affiliates). *Japanese* intrafirm trade in U.S. manufactured exports to Japan is as important as U.S. intrafirm trade.

Kenichi Ohmae (as quoted in Bergsten and Cline 1985, pp. 107–8) has made much of the large sales by U.S. owned and affiliated companies in Japan, but in fact these sales are extremely small for a country with an economy the size of Japan. In 1987, for example, sales by nonbank affiliates of U.S. companies in Japan were \$114.7 billion, of which \$23.3 billion were by petroleum companies and \$70 billion by manufacturing companies. However, a sizable share of the manufacturing sales is by companies, such as Mazda, Mitsubishi Motors, Isuzu, and Suzuki Motors, in which U.S. firms have mi-

nority holdings but are not generally regarded as American. Sales by majority-owned U.S. affiliates were \$42.416 billion of which just \$17.6 billion were by manufacturing companies. This is not much larger than the \$14.6 billion sales recorded by U.S. majority-owned manufacturing affiliates in Australia, New Zealand, and South Africa. By contrast, sales by majority-owned U.S. affiliates in European manufacturing were \$228.8 billion.

The total value of owners' equity in U.S. majority-owned affiliates in Japan amounted to \$11.5 billion in 1987, of which just \$6.4 billion was in manufacturing. Thus while there are U.S. companies that have successfully penetrated the Japanese market, they remain the exception rather than the rule. Despite the lifting of formal restrictions on inward direct foreign investment, foreign entry into Japan remains low compared with investment in other major industrial nations.

The result, therefore, is that U.S. exporters to Japan remain highly dependent on Japanese distributors for the sale of their products in Japan. This suggests that the argument that the Japanese market is closed to imports needs to be modified. If foreign goods are directly competitive with domestic products they will have difficulty entering. If imports are complementary with the interests of domestic companies they will not. However, in most cases, corporate control over the trade rests in Japanese hands.

The role of Japanese companies in Japanese trade also has significant political implications. It is striking, for example, that while Japanese and West German manufactured goods exports are of similar magnitudes, Japan encounters obstacles to its exports regularly, while Germany rarely does. Part of the explanation may lie in the speed with which Japanese exports have grown—they represent a new entrant whose presence is disruptive to existing relationships. But I have argued elsewhere (Lawrence 1987) that another reason is Japan's low share of intra-industry trade. The high level of West German exports of a wide variety of products means that when domestic firms complain about German export competition, there are other *domestic* firms that have an important stake in the German market and will tend to counteract them. But since Japanese imports are low, there are rarely such offsetting forces when there are complaints about Japanese exports. The evidence in this section reinforces this explanation: not only are Japanese imports of manufactured goods low, but U.S. firms play an unusually small role in selling the American products Japan does import. Since U.S. firms are generally more politically influential than foreign subsidiaries, Japanese influence in offsetting protectionist actions is even weaker than the low level of its imports would suggest.

## 1.2 Prices

In 1985, according to the OECD, imports accounted for 5.8 percent of Japanese expenditures on manufactured products. By contrast, they were 12.9 percent of U.S. expenditures. While it is clear that Japanese-manufactured



imports are low, the explanation for this level remains controversial. There is an extensive set of anecdotes on Japanese import barriers in specific sectors. But economists mistrust anecdotal evidence because it may be selectively biased (only the losers complain) and not subject to quantitative appraisals. They have, therefore, sought firmer evidence that barriers have had a significant impact on Japan's trade structure.

The problem is that factors other than trade barriers could, in principle, account for Japan's trade structure. Thus some basis is required for determining what import level would be expected if no barriers existed (or if Japanese barriers were no different from those in other countries). While Japan may well have unusually extensive barriers to manufactured goods imports, its low level of imports is undoubtedly also influenced by its distance from its trading partners (physically and culturally) and its relatively poor endowments of natural resources.

Back-of-the-envelope calculations indicate the quantity of Japanese manufactured goods imports are unusually low. Krugman (1987), for example, suggests Japan might be expected to have an import share of manufactured goods at least as large as the extra-EC imports of the European Community. While it has fewer natural resource endowments, which would lead to lower manufactured goods imports, Japan is smaller than Europe, which should lead it to import more. In fact, in 1984, Japanese-manufactured imports of 2.9 percent were less half the 6.5 percent share of GNP accounted for by extra-EC manufactured goods imports. Similarly Krugman has compared German and Japanese imports of U.S. manufactured goods exports to reach a similar conclusion. Srinivasan and Hamada apply parameters to some analytic models of trade under imperfect competition and conclude that the total Japanese import penetration ratio would be expected to be between 30 and 60 percent higher than that in the United States, while the expected import penetration ratio in manufacturing would be 24 percent higher than in the United States.

More extensive studies of Japan's trade structure have reached different conclusions. Saxonhouse (1988) (with the exception of several agricultural sectors), Leamer (1987), Bergsten and Cline (1985), Noland (1987), and Balassa and Noland (1988) have run tests that conclude that Japanese import levels are "normal" given the other attributes of its economy. Lawrence (1987) and Balassa and Noland (1988), on the other hand, find evidence that Japanese—manufactured imports are unusually low.

Srinivasan and Hamada (1989) have appraised these studies and (with the exception of Leamer) found methodological weaknesses in all of them. The empirical tests of the models do not appear to be precise specifications of the theories on which they are based. Saxonhouse is criticized for using a theory that requires assuming the same number of products as factors, using the inappropriate forecast interval for his test, and running a test in which the coefficients may also be subject to simultaneity bias (because protection may systematically affect factor prices). In fact, as Saxonhouse has pointed out

(although not noted by Srinivasan and Hamada) Leamer's tests are subject to the same simultaneity problem.<sup>4</sup> My own work (Lawrence 1987) is criticized for misspecification of my estimation equation due to the use of an additive distance variable, independent variables that are not exogenous, and expressing the variables in logarithms rather than levels. Balassa and Noland (1988) fall short for not using a model that is clearly derived from theory.

It appears, therefore, that these empirical tests do not settle the issue. The problem with all these tests is that they do not explicitly test for the presence of trade barriers. They are tests for determining if Japanese imports are unusually low. But even if Japanese imports are unusually low, other facts that do not appear in the model, such as unusual preferences or technology, rather than trade barriers, might be the reason. To provide a flawless test, it appears the barriers must be explicitly modeled. But this is rather difficult when, by their very nature, they are "intangible" or even invisible.

### 1.2.1 Prices

But perhaps all the tests discussed above are not asking the most relevant question. They focus too much attention on the question of quantities or trade structure and not enough on the question of prices. Perhaps the important question is not "Does Japan import too little?" but "Are imports too expensive in Japan?" Before we descend into the knotty issues of national differences in taste and factor endowments, it seems necessary to clear up the earlier question of whether consumers in Japan are given the same choices. The direct observation of price behavior may be a more accurate measure of openness than tests of quantities that test on elaborate statistical models.

Actual trade flows may be low for fundamental economic reasons such as factor endowments and the competitiveness of Japanese products, but if the Japanese market is contestable, we should see the potential for entry keeping Japanese prices in line with those in other markets. If the same product sells for different prices in different locations over long periods of time, however, it seems reasonable to infer the existence of barriers to arbitrage.

It is, of course difficult empirically to isolate precisely equivalent products. A one-pound bag of Colombian coffee sold by a grocer in Tokyo is not the same product as a one-pound bag of Colombian coffee sold by a grocer in New York. The products differ in the cost required for transportation and distribution to different locations. In addition, they may be associated with a different degree of service by the store that is selling them. Nonetheless if there are no (or equivalent) barriers in both markets we would expect them to sell for the same price or for their prices to differ by no more than the costs of arbitrage between them.

There is considerable evidence that the prices of goods are much higher in Japan than in most other countries. Table 1.4 compares the dollar prices of

4. See the Saxonhouse comment on this paper below.

major expenditure categories in Japan with those in the United States and the EC as estimated on a purchasing-power-parity basis by the OECD. A summary measure of goods prices in general is the purchasing-power-parity estimates used for deflating measures of inventories (of both consumer and producer goods). In 1985, by this indicator, goods prices in Japan were 25 percent higher than they were in the United States and 42 percent higher than those in the European Community (OECD 1987).

Table 1.4 reports the results of calculations updating this estimate using 1987 exchange rates and inflation rates in the United States and Japan. Given the decline of the dollar from 200.5 yen in 1985 to an average of 123 yen in 1987, this implies, measured in U.S. dollars, goods prices (as represented in inventories) in Japan were 75 percent higher than in the United States.

In 1987, these calculations indicate that, compared with the United States, the cost of food, clothing, and fixed capital formation was 85, 62, and 76 percent higher in Japan. As reported in table 1.4, purchasing-power estimates for all goods and services shows that in 1985, a year in which the dollar was strong, the overall Japanese price level for all goods and services was 7 percent lower than in the United States. But even in 1985, the Japanese price level was 26 percent higher than in the European Community. In 1988, the OECD estimates the prices of goods and services in Japan are 60 percent higher than in the United States.

But these comparisons at the *retail* level are plagued with problems, partic-

**Table 1.4** Comparative Dollar Price Levels of Final Expenditure on GDP, United States = 100

	1985		1987
	EC	Japan	Japan <sup>a</sup>
Private final consumption expenditure	77	91	141
Food, beverages, & tobacco	76	123	185
Clothing and footwear	83	100	162
Gross rent, fuel, and power	57	66	103
Household equipment & operations	87	103	158
Medical and health care	52	45	70
Transport & communication	113	117	188
Education, recreation, & culture	96	122	194
Miscellaneous goods and services	87	106	161
Net purchases abroad	59	91	81
Government final consumption expenditure	61	72	113
Gross fixed capital formation	81	115	176
Increase in stocks	88	125	175
Gross domestic product	74	93	147

Source: OECD (1987), pp. 52-53.

<sup>a</sup>Author's calculations are based on data from OECD National Accounts, vol. 2, 1987 series.

**Table 1.5 Wholesale and Retail Trade Margins**

	Japan, 1985		United States, 1983	
	Value (in Trillions of Yen)	Share	Value (in Billions of U.S.\$)	Share
Intermediate inputs	20.122	.33	194.347	.34
Real estate	2.815	.046	27.609	.048
Value added	41.024	.67	378.355	.66
Total output	61.146		572.702	
Final sales of good ( $C + I + G + X$ )	160.052		1,667	
Whole and retail margin	.256		.227	
Distribution margin	.38		.34	

Sources: For United States: *Survey of Current Business* (February 1989), Input-output table 1; Department of Commerce, U.S. National Income Accounts. For Japan: *Economic Statistics Annual* (March 1989), Input-output table; Economic Planning Agency Annual Report on National Accounts (1989), p. 174.

ularly because distribution margins could, in principle, differ across countries. Assume, for example, that the Japanese distribution sector is extremely inefficient.<sup>5</sup> The market could be completely open, but both foreign and domestic products could be subject to the same, extremely high costs of distribution. It could also be the case that the distribution system for these markets is highly competitive and markups *have* to be more expensive in Japan because of higher real estate costs; Japanese retail prices could be higher, but this would simply reflect the underlying economic costs of distribution. Moreover, in this case, making the distribution system more “efficient”—through large stores and other changes in rules—might improve Japanese living standards tremendously but do little to raise the level of imports.

I have therefore analyzed distribution margins using input-output tables in Japan and the United States. As reported in table 1.5, the payments by the retail and wholesale trade for indirect inputs in both countries are remarkably similar—around one-third of total output of these sectors. The payments by these sectors to the real estate sector are also remarkably similar shares of their output. Overall, as a share of total goods sales (domestic absorption plus merchandise exports), value added in wholesale and retail trade is 25.6 percent in Japan in 1985 and 22.7 percent in the United States in 1983. In 1987 the ratios for Japan and the United States were 26 and 24 percent respectively (Government of Japan 1989; U.S. Department of Commerce 1989). The more extensive analysis undertaken for this conference by Ito and Maruyama (in this volume) comes to similar conclusions about Japanese margins in the distribution sector.

5. Ahearn (1989) has argued, e.g., that the multitiered distribution system in Japan raises markups on goods.

The similarity in distribution margins should not be taken as evidence of similarities in efficiency. If distribution margins are the same in Japan and the United States, but final goods are much higher in Japan, this implies higher prices are being paid *both* for manufacturing services and for distribution services. Indeed, using purchasing power estimates, according to the OECD (1988), output per worker in Japanese distribution was 72 percent of the U.S. level. The inefficiency in the Japanese distribution system is thus partly to blame for higher Japanese retail prices. But it is not the full story. Japanese manufacturers appear (on average) to charge prices in Japan that are higher than those in world markets. This confirms, in aggregate, the anecdotal evidence, discovered by many Japanese tourists, of what James Fallows has called the 47th Street photo phenomenon: some Japanese goods cost less in other countries than they do in Japan. A survey of the prices of the same products in Japan and the United States was conducted jointly by the U.S. Department of Commerce and the Japanese Ministry of Trade and Industry in 1989. Of the Japanese products studied, 21 of 50 were cheaper in the United States than in Japan (by contrast, only four of 35 U.S. products studied were cheaper in Japan than in the United States; see table 1.6).<sup>6</sup>

The comparative data on profit rates in manufacturing, as calculated by the OECD, lend further support to the notion that Japanese manufacturers have considerable market power. According to Chan-Lee and Sutch (1985), rates of return in Japanese manufacturing have typically been twice as high as those in the United States and other industrial countries.<sup>7</sup> Similarly, the share of profits in value added in Japanese manufacturing (48.7 percent) in 1987 was much higher than in the United States (28.8 percent). See table 1.7.

But while distribution margins on products in Japan in general appear similar to those in the United States, this does not hold for margins on imported products. As reported in a survey conducted by the Ministry of Trade and Industry, the prices of *imported* brand name goods in Japan are 30–60 percent higher than those in the USA and Europe. The study, conducted in November 1988, compared prices of products in 11 categories such as perfume, handbags, fountain pens, and golf clubs in five overseas cities and 41 Japanese cities. The survey showed that prices in New York, Paris, and Dusseldorf were 38, 29, and 27 percent lower than those in Tokyo.

Similarly, Ahearn (1989) cites a study by the Economic Planning Agency that found that unregulated consumer goods (goods not subject to any restrictions in Japan) were 36 percent more expensive in Japan in 1987 than in New York. Consumer goods that were subject to restrictions in Japan (e.g., food, liquor, and energy) were 92 percent more expensive.

6. In his comments on this paper, Gary Saxonhouse interprets the evidence from this survey as indicating that Japanese goods are typically not sold for higher prices in Japan. This ignores the more pervasive evidence in the purchasing-power-parity studies.

7. Contrary to the assertion in Saxonhouse's comment on this paper (see below), the OECD *does* adjust its measures of profits to take account of the self-employed. See, e.g., OECD (1990).

**Table 1.6 U.S.-Japan Product Price Comparison**

Product	Lower/Japan	Lower/United States	Total	% Lower in United States
Capital goods	7	15	22	68.18
Food	1	22	23	95.65
Miscellaneous	5	19	24	79.17
Auto parts	2	9	11	81.82
Autos	2	5	7	71.43
Electronics	21	14	35	40.00
Total	38	84	122	68.85

Source: Joint Survey of U.S. Department of Commerce and Ministry of International Trade and Industry (MITI).

**Table 1.7 Profit Share and Rates of Return in Manufacturing (%)**

	1960s Average		1970s Average		1980/ 1984	1986	1987
	Profit Share	Rate of Return	Profit Share	Rate of Return	Profit Share	Profit Share	Profit Share
Japan	58.3	36.5 <sup>a</sup>	50.8	26.4	48.4	47.9	48.7
United States	31.1	22.2	27.8	16.8	25.7	39.1	28.8
Germany	45.8	20.9	36.9	15.7	32.9	36.6	36.9
France	41.6	15.6	31.9	16.0	37.4	32.1	32.1

Sources: "Underlying Data for Indexes of Output per Hour, Hourly Compensation, and Unit Labor Costs in Manufacturing Twelve Industrial Countries, 1950-1988," U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, June 1989. Also, Chan-Lee and Sutch 1985.

Note: Profit share = gross operating surplus as a percentage of value added. Calculated from data from Department of Labor. Rate of return = gross operating surplus as a ratio of the gross capital stock. From Chan-Lee and Sutch.

<sup>a</sup>1965-69.

In its survey, the OECD (1988, p. 81) found car prices (net of sales taxes) of German autos to be significantly more expensive in Japan than in the United States or France. The OECD suggests part of the explanation is the toleration of sole-agent contracts that allow the importer and/or the producer to restrict supply and earn monopoly profits. Finally, as reported in table 1.5 above, the joint survey by MITI and the U.S. Department of Commerce in 1989, which examined 122 products found 84 priced higher in Japan than the United States. Accordingly, it appears that many *imported* products in Japan *are* subject to higher markups than other Japanese products. According to Christelow (1985-86), "A [1985 Japanese] Government survey of distribution markups for domestic and imported products found that for whiskeys, candies, edible

oils, men's overcoats and footwear, markups on imports were double those on domestic products."

It is hard to understand, in the face of this evidence, how Japan could exhibit "normal" import behavior when the evidence on differential pricing is so strong. In principle, in an open market, over long periods of time, there should be major opportunities for arbitrage.

### 1.2.2 Prices Responses

Price levels can differ, but since it is difficult to isolate these, useful information can be obtained from the responses of prices to shocks. That is, if the marginal costs of producing a product change, in open markets, one would expect similar price responses. If markets are fragmented and producers capable of pricing to market, one might see very different responses. As Marston (in this volume) and others have shown, Japanese export prices are characterized by this type of behavior.

In his comments on this paper, Gary Saxonhouse argues that these higher prices on imports reflect the marketing strategies of *foreign* oligopolistic firms. However, as I have demonstrated above, foreign goods in Japan are overwhelmingly marketed not by foreign firms but by Japanese distributors. This is why, contrary to his assertions, it is significant that Japanese importers take title to their goods in the United States. If they are bringing in the goods, they are earning the rents from the higher markups, and the Japanese distribution system operates like a privately administered set of tariffs.

## 1.3 Adjustment

Some of the barriers that allegedly inhibit the entry of imported products in Japan will function like quotas. In particular, administrative guidance or buying cartels may not be responsive to price changes. Other barriers may lead to high domestic products (as do tariffs) but may nonetheless be compatible with adjustments to price changes. Indeed, if an imported product is sold by an agent with a monopoly over its distribution, the agent will generally apply a higher markup on that product than if distribution was competitive. Nonetheless, if the agent's costs declined (in the face of a constant elasticity of demand), we would expect a proportional decline in the price charged to consumers. Similarly, as Becker (1971) has noted in his theory of discrimination, if consumers have a preference for buying domestic products, *ceteris paribus*, they will not necessarily be less responsive at the margin to changes in relative price of imported products.

A major reason given for the adoption of dramatically new U.S. policies toward Japan is the assertion that the Japanese economy fails to respond to relative price changes. Support for this view is derived from the apparent lack of adjustment in the U.S.–Japan bilateral trade deficit—measured in U.S. dollars. But it should be stressed that since the devaluation of the dollar has taken

place from a position of substantial initial imbalance, the failure of the trade deficit to decline in dollars is not necessarily indicative of a lack of adjustment in Japan. If the U.S. import demand elasticity is close to unity, as it appears to be, measured in dollars, imports from Japan will not be affected by changes in the exchange rate. This means that *all* of the decline in the Japanese surplus has to come from a rise in the value of U.S. exports to Japan. Since, in 1985, when U.S. exports to Japan (of \$22.6 billion) were 31.3 percent of U.S. imports from Japan (\$72.4 billion), exports have to grow over three times as fast as imports, simply to stay even. The fact that the nominal trade deficit has remained fairly constant actually indicates a dramatic increase in the value of U.S. exports to Japan.

Indeed, between 1985 and 1988, according to the U.S. Department of Commerce (1989), U.S. exports to Japan increased from \$22.6 billion to \$37.7 billion. Similarly, U.S. manufactured goods imports increased from \$12.3 billion to \$22 billion—a rise of 79 percent in a period of relative price stability. Over this same period, according to the Economic Planning Agency of Japan, the volume of Japanese imports increased by 39.4 percent and the overall volume of Japanese imports of manufactured goods increased by 78.3 percent.

In 1987 I wrote a paper that suggested that Japanese imports of manufactured goods were “unusually” low by about 40 percent *in 1980*. This number has now been subject to considerable abuse. Since the volume of Japanese manufactured imports has increased by over this amount since 1985, some have used this result to suggest that the levels of Japanese manufactured goods are now “normal” (see, e.g., Japan–U.S. Business Council 1989). But an application of the methodology I used in that paper would not endorse this conclusion. Since the study was cross-sectional it used nominal data measured in *domestic currencies*. In 1980, as measured by the OECD, imports accounted for 5.8 percent of Japanese expenditures on manufactured products. In 1985 they accounted for 5.3 percent. Using Japanese National Income Accounts data (Government of Japan 1989), I estimate, on a similar basis, that the share in 1987 was actually 7.5 percent lower than in 1985. Measured on the OECD basis this would entail a share of roughly 4.9 percent. The reason is that, for purposes of this calculation, the yen value of manufactured imports is relevant.

Nonetheless, as the Japanese trade data indicate, it would be inappropriate to argue that there has been no response in manufactured imports into Japan. In fact, measured in 1980 prices, data from the National Income Accounts suggest that the share of imported manufactured goods products spending in Japan increased by 36 percent from 6.0 to 8.2 percent of domestic absorption.

In my 1987 paper, I also observed that imports into Japan were as responsive to relative price changes as imports in other industrial countries. Table 1.8 reports a set of regressions that indicate that the response in Japanese manufactured goods to the rise in the yen and the rapid expansion in domestic



**Table 1.8 Japanese Manufactured Import Equations (Volume), Annual Data**  
(*t*-statistics in parentheses)

	Constant	LIP	LDD	LREX	LRPM	D86	D87	D88	R <sup>2</sup>	SE	D-W	ρ
1970/85, Eq. 1	1.77 (1.5)	2.02 (16.5)		1.004 (4.2)		.14 (2.4)	.07 (.94)	.11 (1.3)	.994	.0507	1.4	.58
1971/85, Eq. 2	4.3 (6.4)	1.54 (8.2)			1.02 (4.1)	.07 (1.1)	.05 (.8)	.16 (1.9)	.993	.053	1.7	.46
1970/85, Eq. 3	-14.6 (5.1)		2.08 (10.9)	.89 (2.1)		.06 (.5)	.001 (.06)	.09 (.6)	.977	.097	1.9	.31
1970/85, Eq. 4	-9.5 (2.9)		1.76 (4.4)		.71 (1.4)	.02 (.14)	.05 (.41)	.17 (1.2)	.973	.101	1.9	.21
1970/85, Eq. 5	.2 (.05)	1.86 (5.2)	.18 (.48)	1.004 (4.0)		.13 (2.0)	.06 (.69)	.1 (1.1)	.994	.053	1.44	.52
1971/85, Eq. 6	11.3 (3.1)	2.1 (6.4)	-.88 (-2.03)		1.34 (5.04)	.097 (1.6)	.07 (1.1)	.18 (2.3)	.995	.046	1.7	.53
1970/88, Eq. 7	-2.4 (4.7)	1.72 (4.7)	.42 (1.1)	1.08 (4.7)					.991	.056	1.8	.46

*Sources:* OECD Economic Outlook Database and JP Morgan (real exchange rate).

*Note:* IP = industrial production; DD = final domestic demand (C + I + G); REX = real exchange rate; RPM = ratio of wholesale prices to manufactured import prices; D86 = dummy variable for 1986; D87 = dummy variable for 1987; D88 = dummy variable for 1988; L = logarithms.

demand between 1985 and 1988 was actually somewhat faster than might have been expected on the basis of the historic relationship (a similar conclusion is reached by Corker 1989). The regressions, specified in logarithms so the coefficients may be interpreted as elasticities, explain the volume of Japanese manufactured goods imports as a function of an activity and relative price/cost variable. Because of endogeneity problems, there are well-known problems associated with providing structural interpretations to such regressions, but they are nonetheless interesting as statistical summaries of the historic relationships between the variables. I have experimented using two proxies for activity: industrial production and domestic final demand. The former will capture the role of imports as inputs into industrial production, the latter as components of domestic absorption. Generally, the industrial production variable provided a better fit (compare, e.g., eqq. [1] and [3]). When both variables are inserted in the equation, the coefficient on final demand is not significant (eq. [5]). However, when estimated with the period 1986–88, the coefficient on domestic demand increases from .18 to .42 although it is still not significant.

The real exchange-rate variable (the ratio of Japanese to foreign manufactured goods prices in yen) estimated with a current and one year lag has coefficients that sum to about unity (see eqq. [1], [3], and [5]). This cost formulation is less subject to simultaneity bias than the price variable and also provides a slightly more robust coefficient and a smaller standard error. But the specifications are all interesting in showing not only that Japanese manufactured imports are responsive to changes in relative prices and real exchange rates but also that the recent rise in manufactured imports is higher than might have been expected, given this historic relationship. An out-of-sample forecast of the volume of manufactured imports given the actual behavior of domestic activity and relative prices underpredicts the volume of manufactured imports in 1988 by between 9 and 18 percent (see the coefficients on the dummy variables for 1988).

### 1.3.1 Corporate Role

Judged by the volume of products being sold, the Japanese economy is becoming more open. But what about the corporate role? There is considerable anecdotal evidence that Japanese investment in foreign beef stockyards in the United States and Australia has increased in response to the anticipated opening of the beef market. Similarly, that Japanese investment in citrus orchards has increased in response to the potential in that market. But what does the aggregate data indicate?

Unfortunately, the data that are available are limited. *But they do suggest that the Japanese corporate role in Japanese imports is declining.* As reported in table 1.9, in 1985 almost 70 percent of U.S. exports to Japan was shipped by a Japanese affiliate in the United States to its Japanese parent. In 1986 the share of Japanese affiliates was 58.4 percent and in 1987 the share was 39.6

**Table 1.9** Percentage of U.S. Exports and Imports with Affiliates of Foreign Multinational Corporations, by Area of Affiliates, for 1983–87

	Exports			Imports		
	EC	Japan	World	EC	Japan	World
1981	11.9	75.1	11.5	37.7	69.4	20.0
1982	16.1	65.5	11.8	37.1	71.4	21.3
1983	12.2	63.9	11.3	35.4	68.8	21.2
1984	15.0	66.9	12.4	30.8	67.7	21.6
1985	13.7	69.7	12.2	29.5	69.6	23.7
1986	11.6	58.4	11.6	29.8	66.1	25.4
1987	7.5	39.6	7.7	31.5	67.3	26.2

*Source:* Survey of Current Business, Department of Commerce, various issues.

percent. Between 1986 and 1987, U.S. exports to Japan increased from \$26.9 billion to \$28.2 billion. The decline in the share of U.S. exports shipped by Japanese foreign affiliates indicates that the dollar value of their sales actually declined quite considerably. The hold of the general trading companies appears to be slipping. And, indeed, there are reports of them seeking a variety of new business opportunities (see Choy 1988).

The trading companies' role is particularly conspicuous, for Japanese data show and U.S. data suggest that, while the overall share of intrafirm shipments by Japanese firms in Japanese imports has declined, the share shipped by the foreign affiliates of Japanese manufacturing companies—so-called reverse imports—is growing. According to a survey conducted by MITI (1989) of the overseas activities of Japanese businesses, reverse imports accounted for 5.3 percent of all Japanese imports and 11.5 percent of all manufactured goods imports in fiscal year 1987. While this share was relatively low, it has been rising rapidly. The 1987 total of ¥ 1.18 trillion was a 45 percent increase over the total for fiscal year 1986, when reverse imports accounted for 9.2 percent of all Japanese manufactured imports.

On the other hand, as reported in table 1.10, the intrafirm trade from parents in the U.S. to their affiliates located in Japan has increased steadily, from 11.0 percent in 1983 to 14.8 percent in 1985 and 17.3 percent in 1987.<sup>8</sup>

Finally, it is noteworthy that U.S. exports have surged in sectors in which negotiations to change the rules have been concluded. According to the ACTPN (1989) report, after 10 years of pressure, it concludes that virtually all barriers to the importation of tobacco into Japan have fallen. The four sectors that were singled out for negotiation under the maligned Market-Opening, Sector-Specific (MOSS) talks in the mid-1980s have shown impres-

8. The major rise in U.S. exports to Japan actually came between 1987 and 1988. During this period, U.S. manufacturing exports to Japan increased from \$16.3 to \$21.96 billion while the total value of exports increased from \$28.2 to \$37.7 billion. Unfortunately, data on the corporate involvement in trade was not available when this paper was compiled.

**Table 1.10** Percentage of U.S. Exports and Imports with Affiliates of U.S. Multinational Corporations, by Area of Affiliates, for 1983–87

	Exports			Imports		
	EC (12)	Japan	World	EC (12)	Japan	World
1983	39.5	11.0	28.7	15.1	9.4	20.6
1984	38.2	12.3	30.4	13.7	7.2	19.2
1985	39.7	14.8	32.7	14.7	9.2	19.7
1986	36.9	13.6	32.8	12.2	8.9	17.7
1987	36.3	17.3	31.0	14.5	10.9	18.6

*Source: Survey of Current Business, Department of Commerce, various issues.*

sive growth in Japanese imports. According to the report, from 1985 to 1987, U.S. exports to Japan in the four product categories, combined, increased by 46.5 percent, well above the 24.8 percent increase in total U.S. exports to Japan over the same period. The report dismisses this performance because the total increase in exports of the products (of \$1.3 billion) was small relative to the entire bilateral trade imbalance. But no one expected negotiations in a few sectors to turn the entire imbalance around. The problem may not be the approach, that is, emphasizing rules, but the limited resources and narrow focus of the number of sectors brought into consideration. We need not only tough, persistent negotiations but enough patience to let the results begin to build.

### 1.3.2 Concluding Remarks

Traditionally, U.S. policy has sought a more open Japanese market for foreign firms and products by negotiating rules that would remove barriers. But demands are growing for the United States to seek managed trade agreements that ensure results. Some results-oriented approaches might open the Japanese market in the sense of increasing the demand for U.S. products; others might increase the profits of U.S. firms. But they are unlikely to open the market in the crucial sense of making Japanese markets genuinely contestable by foreigners. Indeed, a results-oriented approach is likely to lead to a market with more rather than less Japanese government and corporate control.

How open is Japan? Several noteworthy features have emerged from the data, and three point to the role still left to play by the removal of barriers: (1) Imports continue to account for an unusually small share of Japanese expenditures on manufactured products. (2) Barriers continue to inhibit the international arbitrage of price differences between Japan and other markets. And (3) the intrafirm shipments of Japanese firms continue to account for an unusually high share of Japanese imports.

But there are also signs that, since 1985, the Japanese economy has made major adjustments. (1) the Japanese economy has undergone a major adjust-

ment in response to the strengthening of the yen. According to the Japanese Economic Planning Agency, in the first quarter of 1989, Japan imported twice the volume of manufactured goods it imported in 1985. (2) Japanese manufacturing firms are playing an increasing role in "reverse imports." (3) U.S. affiliates based in Japan are raising their share of U.S. exports. And (4) the intra-firm shipments of Japanese trading companies has declined conspicuously. Those who claim exchange rates do not change Japanese buying patterns have simply not examined the data.

In the light of this evidence, it is not surprising that the trade disputes between Japan and the United States about the closed nature of the Japanese market continue. But it *is* surprising, given the major shifts in Japanese behavior that have taken place over the past few years, that some Americans feel so exasperated that they are driven to advocate an entirely new approach that emphasizes results rather than rules.

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## Comment Gary R. Saxonhouse

Robert Lawrence reviews once again an issue that has been much debated throughout the 1980s. He asks whether Japan, either by government action or by the private exercise of market power, interferes with the access of foreign products and/or foreign firms to its domestic markets.

Lawrence makes a special effort to emphasize the distinction between access to the Japanese market for foreign products and access for foreign firms. Foreign firms may have access to the Japanese market, but they might exploit this access by marketing goods produced largely in Japan. Alternatively, foreign goods may gain access to Japan as the by-product of intrafirm transactions between Japan and its overseas affiliates without foreign firms necessarily having access at all. Lawrence argues persuasively that the type of access foreigners have to the Japanese market has important implications for the economic welfare and income distribution of both Japan and its trading partners.

Japanese trade is distinctive, Lawrence finds, because foreign exports to Japan have generally been shipped by foreign affiliates of Japanese firms. Whereas international vertical integration generally proceeds forward from producers to markets, in Japan it appears to proceed backward from control of markets to sources of supply.

Lawrence thinks that this distinctive pattern of backward vertical integration in turn may be responsible for Japan's distinctively meager participation in intra-industry trade. When intrafirm imports are dominated by foreign firms, new varieties of products presently produced domestically will be imported. If intrafirm imports are dominated by domestic firms, such imports, Lawrence argues, will consist primarily of inputs that are found to be cheaper abroad or imports of varieties produced by the domestic firms that can be manufactured more cheaply abroad. Intrafirm shipments by domestic firms are much less likely to result in the importation of new varieties produced abroad, which compete directly with domestic production.

While in Japan vertical integration moves distinctively backward from sales in domestic market to foreign suppliers, it also proceeds forward from domestic producer to overseas market. Like Japanese imports, Lawrence finds that Japanese exports are also heavily dominated by intrafirm transactions. Such evidence, Lawrence notes, is consistent with well-known survey evidence by Mordechai Kreinin, which finds that Japanese purchasing behavior, in general, differs from that of other countries even where the purchases are made abroad. Kreinin finds that Japanese firms abroad have an unusually strong preference to buy from other Japanese rather than from foreign suppliers.

Lawrence believes that not only do foreign firms play a distinctively small role in Japan's international trade, he also believes that foreign products have a distinctively low share of Japan's domestic market. Citing a paper by T. N. Srinivasan and Koichi Hamada, Lawrence finds the econometric evidence to

be inconclusive on whether, after allowance is made for Japan's distinctive national endowments, particularly its lack of natural resources, there is really anything distinctive about Japan's trade structure.

Lawrence prefers to look directly at cross-national price differences to uncover whether or not foreign products' access to the Japanese market is restricted. While it is often difficult to assemble comparable price data across countries, Lawrence feels enough evidence is available to conclude that there are large and persistent price differences between Japan and other countries that cannot be accounted for by higher distribution margins or real estate costs. He concludes that Japanese manufacturers charge higher prices for the goods they sell in Japan than for the goods they sell in the rest of the world. In consequence, Lawrence notes that it is not surprising that the profits of Japanese manufacturers as a proportion of value added are unduly large by international standards. Potential arbitrage opportunities between the Japanese market and the rest of the world are not being fully exploited.

While Lawrence finds considerable evidence that leads him to conclude that Japanese markets are not genuinely contestable by foreign products or foreign markets, he appears to be impressed by the capacity for change within the Japanese economy. He finds that many of the barriers to the Japanese market operate like tariffs rather than quotas. They keep imported products expensive in Japan, but they do not prevent marginal responses to price and costs incentives. The exchange rate changes in the mid-1980s have resulted in a dramatic increase in the total volume of manufactured goods imported into Japan over the past four years. At a sectoral level, where tangible barriers have been removed as a result of negotiations, significant increases in imports have resulted. Given the major shifts in Japanese behavior that have taken place over the past few years, Lawrence finds it surprising that some Americans feel so exasperated as to advocate an entirely new approach to dealing with U.S.-Japan economic relations.

### **Intrafirm Transactions**

While Lawrence's analysis is full of good insight and is highly plausible, it is possible also to disagree with some of the inferences he draws from the evidence he has assembled and, indeed, with some of the evidence itself. While an unusually large share of Japanese imports are the result of intrafirm transactions, it is not at all clear that these transactions represent backward vertical integration in the way that term is normally understood. These intrafirm transactions, by and large, are neither the purchases of Japanese manufacturing firms, nor of Japan retailers, nor the sale of goods produced by their overseas subsidiaries and affiliates. While this may change in the 1990s, by comparison with firms in other major industrialized countries, firms with established positions in the Japanese market have only rarely found it profitable to integrate backward into production entities abroad. In 1987 only 5.3% of Japanese imports were intrafirm transactions of goods produced by Japanese



entities abroad. By contrast, for the United States in 1987, no less than 18.4% of all imports were the result of intrafirm transactions of goods produced abroad by American subsidiaries and affiliates.<sup>1</sup>

Intrafirm transactions dominate Japanese imports only because Japanese importers are taking title to their goods abroad rather than when they reach Japanese ports. That Japanese importers happen to take title to their goods via separately incorporated subsidiaries in Los Angeles rather than directly in Yokohama is by itself, not very significant at all. While issues may remain about the volume and composition of Japanese imports, a distinctively high proportion of the imports that do reach the Japanese market are produced by foreign-owned firms.

### Japanese *keiretsu*

Intrafirm transactions play such a large role in Japan's foreign trade because of Japan's giant general trading companies. In 1986, Japan's nine largest trading companies handled 66% of all Japanese imports. Is it possible that Japanese trading companies restrict what they import, not so much to protect their own domestic production, of which they do little, but rather to protect the interests of other firms to which they are tied through their *keiretsu* affiliation? In considering this possibility, it is important to keep some perspective on the strength of *keiretsu* ties. Japan has many *keiretsu* of one type or another, but currently the six best known are Mitsui, Mitsubishi, Sumitomo, Fuyo, Dai-Ichi Kangyo, and Sanwa. Mitsui, Mitsubishi, and Sumitomo are directly descended from the prewar *zaibatsu*, which SCAP (Supreme Command of the Allied Powers) tried to break up during the American Occupation of Japan. By contrast, the Fuyo, Dai-Ichi Kangyo, and Sanwa *keiretsu*, were formed largely in the years after 1945. Members of all six *keiretsu* are much less closely tied than is generally realized. The member firms in *keiretsu* with strong prewar roots purchase only 14.8% of their procurement from fellow *keiretsu* members. For the more recently organized *keiretsu*, procurement from fellow *keiretsu* members is still less important. Only 8.9% of procurement is purchased from affiliated firms.<sup>2</sup>

While reciprocal purchasing seems to be too weak to tie *keiretsu* together, it is often suggested that cross-shareholding among member firms does allow the *keiretsu* as a whole effective control over any individual-member firm. In fact, cross-shareholding is not nearly as pervasive or so exclusive among *keiretsu* members as is commonly believed. Among the six best-known *keiretsu*,

1. Gary R. Saxonhouse, "Kawase reeto, kozo chousei to Taiheiyo chiiki ni okeru sankaku boeki" (Exchange rates, structural change and triangular trade in the Pacific region), *Keizai shakei seisaku* (Economy, society and policy) no. 205 (May 1989).

2. Kosei torihiki iinkai (Fair Trade Commission), *Kigyo shudan no jittai ni tsuite* (The structure of enterprise groups) (Tokyo: Kosei torihiki kyokai, 1983), pp. 39–42.

the average of a member firm's equity held by all other members of its *keiretsu* is 17.9%.<sup>3</sup> While this may be a relatively small amount of cross-shareholding, if ownership of the firm's remaining equity is widely dispersed, this may be sufficient to give the *keiretsu* control of the member firm. In fact, for the typical member firm, the main holders of equity outside of the *keiretsu* are characteristically members of other *keiretsu*.<sup>4</sup> These holdings, if exercised in concert, are sufficient to block *keiretsu* control of member firms.

*Keiretsu* ties have substance where member firms are dependent on the *keiretsu* main bank for their finance. Dependence on these main banks has declined dramatically over the past fifteen years. Between 1972 and 1983, over one-quarter of the companies listed on the first section of the Tokyo Stock Exchange changed their main bank.<sup>5</sup> This weakening of *keiretsu* ties goes hand in hand with the declining dependence of large Japanese firms on *keiretsu* banks. In 1974, Japanese firms, capitalized at more than one billion yen, relied on banks for 46.7% of their new financing. Just 10 years later no more than 2.6% of new investment by these large Japanese firms was financed by bank borrowing.<sup>6</sup>

If *keiretsu* ties are relatively weak, if such ties have been made still weaker by financial deregulation, and if reciprocal purchasing by *keiretsu* member firms is a relatively minor matter, it is hard to believe that Japan's distinctive trade structure can be explained by Japan's trading companies exercising what market power they have to protect their fellow *keiretsu* members by discriminating in their purchases against competitive imports. As noted, Lawrence does cite Mordechai Kreinin's case study of foreign investment in Australia as persuasive evidence in support of discriminatory purchasing of goods and services by Japanese companies. Unfortunately, not only does Kreinin's study not square with what is known about *keiretsu* behavior in the 1980s, it does not square with Lawrence's own study of Japanese foreign investment in the U.S. In this study, Lawrence notes

Although it is widely perceived that Japanese-affiliated automakers depend overwhelmingly on parts bought from Japanese-affiliated suppliers, a detailed GAO survey calls this perception into question. It found, for example, that of the 119 U.S.-based suppliers used by Honda, only 28 had Japanese affiliations. Similarly 15 of Nissan's 121 suppliers were Japanese-affiliated and 8 of the 60 suppliers used by Toyota were Japanese affiliated.<sup>7</sup>

3. Toyo keizai (Oriental Economist), *Kigyo keiretsu soran* (Handbook of industrial groups) (Tokyo, 1989).

4. Ken-ichi Imai, "Kigyo gurupu" (Enterprise groups), in *Nihon no kigyo* (The Japanese firm), ed. Ken-ichi Imai and Ryutaro Komiya (Tokyo: Tokyo daigaku shuppankai, 1989).

5. *Kigyo keiretsu soran*.

6. Nihon ginko (Bank of Japan) "Shuyo kigyo keiei bunseki" (Analysis of the performance of major companies), *Keizai tokei nenkan* (Economic statistics yearbook) (Tokyo, 1989).

7. Robert Z. Lawrence, "Japanese Affiliated Automakers in the United States: An Appraisal" (October 1989).

Not only does Lawrence find, contrary to Kreinin, that Japanese firms do not rely primarily on Japanese suppliers, he also finds, again contrary to Kreinin, that (1) value added by Japanese firms in the United States is high; (2) Japanese firms do considerable research and development and design work in the United States, and (3) Japanese firms rely heavily on American managers.

In general, findings such as Kreinin's can be explained on grounds that have little to do with discriminatory or restrictive practices by Japanese firms and groups. Most Japanese manufacturing investments in Australia are of quite recent origin and are designed to produce substitutes for products that were recently exported (and indeed continue to be exported) to Australia from Japan. Japan continues to retain (or until recently retained) a comparative advantage in most of what it is producing in Australia. Japanese manufacturing in Australia is an effort to put more value added into the Australian economy. By contrast, much of the European and American direct investments in Australia with which Kreinin compares Japanese practices were made a decade or more (in some instances six or seven decades) ago. While originally substitutes for exports, many of these investments are in product lines where the home country of the firm making the investment has long since lost much of its comparative advantage. It is hardly surprising that, unlike the Australian subsidiaries of Japanese firms, the Australian subsidiaries of European and American firms should have to source broadly in order to retain their local market share.

Kreinin's findings for Australia are entirely consistent with the traditional histories of multinational corporations and overseas direct investment and do not suggest truly distinctive Japanese practices.<sup>8</sup> The early history of Ford and General Motors, among other American enterprises in Japan, is hardly different from the Japanese experience. More generally, this issue comes up so often in the experience of so many firms and host countries that it is hardly surprising that there are hundreds of local content laws on national statute books throughout the world.

### **Econometric Studies on Japanese Trade Volume and Trade Structure**

If *keiretsu* ties are weaker and Japanese firm procurement behavior appear to be far less discriminatory than is generally supposed, it may not be so surprising to find that there are now quite a few econometric studies (including a number by me) that show, after allowance is made for Japan's distinctive national endowments, particularly its lack of natural resources, that there is relatively little that is really distinctive about Japan's trade structure. While it is certainly true that there are studies (including one in 1987 by Lawrence himself) that come up with contrary findings, it is not entirely fair to argue that since some econometric issues can be raised about all of these studies, they

8. Mira Wilkins, *The Maturing of Multinational Enterprise: American Business Abroad, 1914-1970* (Cambridge, Mass.: Harvard University Press, 1975).

should all be discounted. Some econometric issues are more important than others. The Srinivasan and Hamada survey, which Lawrence cites, certainly does not view all these studies as equally flawed. After noting that "except for the study by Leamer [which like my study is dubious about the extent of Japanese underimporting] and arguably by Saxonhouse, the others are subject to a number of estimation biases." They conclude that "the empirical support in favor or against the hypothesis that Japanese are underimporting is subject to criticisms which are most damaging particularly to studies in favor of the hypothesis."<sup>9</sup>

Lawrence may find this conclusion surprising, but only because he may be misinterpreting the Srinivasan and Hamada comments on my work. While Srinivasan and Hamada are uneasy about my cavalierly assuming away the consequences of leaving out, because of the unavailability of data, those factor endowments that would allow my Heckscher-Ohlin specification to have the same number of goods as factors (Leamer also assumes away this problem), they reserve most of their attention to my use of forecast intervals. It is clear I should be using tolerance intervals rather than forecast intervals when conducting my tests on the distinctiveness of Japanese trade behavior. Given my findings, however, my failure to use tolerance intervals should make no difference at all. Except for the case when the sample size is infinite, for any given probability, the forecast interval will always be smaller than the tolerance interval.<sup>10</sup> Since I find Japan to fall within the forecast interval, it will also fall within the tolerance interval. In neither case will Japan be the outlier.

### Price Differentials

While weak *keiretsu* ties make studies that find little evidence of Japanese underimporting all the more plausible, Lawrence is entirely correct to argue that if there are persistent price differentials between Japan and other countries for comparable products the credibility of such studies is weakened. It has long been appreciated that cross-national price differentials are a good way to measure the impact of nontariff barriers.<sup>11</sup> Unhappily, the absence of strictly comparable cross-national price data has made it difficult to use this approach.

For example, during the past year, much has been made of the so-called "Forty-Seventh Street Photo phenomenon," which claims that Japanese products, in general, and cameras, in particular, are sold abroad at lower prices than at home.<sup>12</sup> Many Japanese government officials have vehemently rejected

9. T. N. Srinivasan and Koichi Hamada, "The U.S.-Japan Trade Problem" (Yale University, mimeograph), pp. 3, 36.

10. Carl Christ, *Econometric Models and Methods* (New York: Wiley), pp. 549-65.

11. Alan V. Deardorff and Robert N. Stern, "Methods of Measurement of Non-Tariff Barriers," University of Michigan Institute of Public Policy Studies Discussion Paper no. 203 (June 1984); Gary R. Saxonhouse, "What's Wrong with Japanese Trade Structure?" *Pacific Economic Papers* (July 1986):1-36.

12. James M. Fallows, "Containing Japan," *Atlantic Monthly* (May 1989).

this claim, arguing that the products being priced cross-nationally are simply not comparable. For example, they argue that Forty-Seventh Street Photo charges low prices only because it is selling older models of cameras no longer desired by the Japanese consumer. This controversy bubbled over in the U.S.-Japan Structural Impediments Initiative discussions in the fall of 1989. As an outcome of this controversy, the U.S. Department of Commerce and Japan's Ministry of International Trade and Industry (MITI) agreed to undertake a detailed joint price survey that would take special pains to price comparable products in the United States and Japan.

The survey actually conducted appears to have been scrupulous in its efforts to obtain comparable retail price data. Considerable effort has been extended to insure that comparable products are being priced in comparable retail locations. Price observations have been segregated according to whether they have been taken in speciality shops, discount houses, or department stores. Unfortunately, the products included in this survey are in no sense a random sample of the universe of comparable products available in the U.S. and Japanese markets. Rather they are the outcome of weeks of acrimonious negotiation between the Department of Commerce and MITI. Indeed, the final list could not be agreed upon until the day before the survey started.

The actual survey results contain some surprises. While there are certainly many instances of Japanese goods having lower prices in the United States than in Japan, the Forty-Seventh Street Photo phenomenon is not pervasive even at Forty-Seventh Street Photo. Of 14 Japanese-produced cameras and video-camera-related products, six are cheaper in the United States. Overall, 26 of 57 Japanese products have been found to be cheaper in the United States than in Japan. By striking contrast, only four of 35 U.S. products and only two of 21 European products are cheaper in Japan than in the United States.<sup>13</sup>

Simply counting up observations of what, in any event, is not a randomly drawn sample may yield a misleading impression. William R. Cline of the Institute for International Economics has analyzed the determinants of the U.S. and Japanese price differences found in this sample.<sup>14</sup> Cline rejects the Forty-Seventh Street Photo phenomenon and finds that there is no statistically significant difference between U.S. and Japanese retail prices for goods produced in Japan. By contrast, the hypothesis that there are no statistically significant differences between U.S. and Japanese retail prices for goods produced in the United States and Europe cannot be accepted.

Cline's results present a problem for those who would argue that the Japanese market for manufactured products is highly protected. If the Japanese market is highly protected, both Japanese and foreign products should have much higher prices in Japan than abroad. That only foreign products have high

13. U.S. Department of Commerce and Japan Ministry of International Trade and Industry, *Joint Survey on United States and Japanese Retail Prices* (Washington, D.C., November 1989).

14. William R. Cline, "Japan's Trade Policies" (paper delivered to Ministry of International Trade and Industry Research Institute, Tokyo, May 1990).

prices in Japan suggests a different interpretation. The high prices for U.S. and European products in Japan may reflect the marketing strategies of oligopolistic firms. As Cline notes, U.S. and European firms appear to have concluded that they can maximize profits in the Japanese market through low-volume, high-price sales.

It is not at all surprising that, in the absence of trade barriers, U.S. and European firms can successfully maintain price differentials in excess of transport costs. For example, if it is assumed that demand for many of these products is relatively price inelastic, and if it is further assumed that there are fixed costs (perhaps because of economies of scale in transportation) in the arbitrage of the kinds of differentiated final products examined in the Department of Commerce/MITI price survey, such price differentials are not at all implausible.

The absence of statistically significantly different prices in U.S. and Japanese markets for Japanese products is largely consistent with Lawrence's finding that both distribution margins and the cost of distribution as a proportion of final goods prices are more or less the same in both Japan and the United States. It may not be consistent, however, with Lawrence's findings on the very high rates of return for capital invested and the very high share in value added of profit for Japanese manufacturing. The relatively high profit rates compared to other major industrialized countries, which Lawrence cites, however, may be a statistical mirage. Relative to all other major industrialized countries, save possibly Italy, Japan's manufacturing sector includes disproportionate numbers of self-employed. The profit numbers Lawrence cites include self-employment income as part of operating surplus and therefore overstates the Japanese (and the Italian) rates of return. Japanese profit rates are likely to be high relative to most other countries not because Japanese market power allegedly keeps prices high and goods out, but because the rates include a substantial chunk of labor income.

### **The Japanese Adjustment Mechanism and the Structural Impediments Initiative**

While I may disagree with some of the details of Lawrence's analysis, I certainly share his conclusion that there is little in the character of the Japanese market for manufactured goods that prevents marginal responses to price and cost incentives. The dramatic increase in the total volume of manufactured goods entering Japan during the past four years, largely in response to exchange rate changes, persuades Lawrence that there is little necessity for an entirely new approach to trade relations with Japan. Lawrence intends his conclusion as a rejection of the "managed trade" approach advocated by many critics of Japan's economic practices. Though he does not develop the theme, his conclusions are also an interesting commentary on the U.S.-Japan Structural Impediments Initiative (SII) discussions.

The SII talks link current account adjustment with access to the Japanese

market.<sup>15</sup> This linkage reflects long-standing thinking in the OECD and in some quarters of the U.S. Treasury (the U.S. government agency that took the initiative in the spring of 1989 in proposing the SII talks) that structural factors in many of the major industrialized economies (but particularly Japan) prevent the exchange rate mechanism from playing its traditional role in the international adjustment process. The SII is very useful in reassuring both the American and Japanese electorate about the terms of foreign access to the Japanese market. Lawrence's work reminds us, however, that the empirical underpinnings of the conventional OECD and Treasury analysis remain, at best, an open issue.

## Comment      Marcus Noland

Robert Lawrence has written a very good paper. Its strength lies in going beyond the now-sterile exercise of running regressions on cross-national data to determine if Japan imports enough, to analyzing the institutions and incentives that condition Japanese importing behavior.

The argument of the beginning of the paper questioning the links between goals and measures is quite useful in delineating these issues. The most important part of the paper is its exploration of the role of intrafirm trade and, more specifically, the trading houses. Japan's uniqueness lies in the importance of domestic firms in importation, and given the degree of concentration in the Japanese economy (and the trading sector in particular), there is the obvious potential for the exercise of market power by firms or the facilitation of administrative guidance by the government. Thus the existing institutional framework provides both the incentives and the mechanisms for impeding the penetration of directly competing imports.

Such behavior has in fact been described by employees of major trading companies and is consistent with the observation that Japan engages in little intra-industry trade. A note of caution may be warranted though. Lawrence's interpretation of intrafirm trade may or may not be consistent with evidence on Japan's trade with the NICs presented in the Park and Park paper (in this volume). Moreover, as Peter Petri observes in his paper (in this volume), European manufactured exports to Japan have grown faster than those of the United States, though one would expect them to encounter similar types of market impediments. So there are still some unanswered questions here. Some attempts to estimate the rent transfers implied by the oligosonistic market structures would be desirable. These firms are not for the most part mon-

15. Interim Report and Assessment of the U.S.-Japan Working Group on the Structural Impediments Initiative (Washington, D.C., 5 April 1990).

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opsonists, and what is needed are some very micro-oriented investigations into the sort of noncompetitive behavior Lawrence has intimated.

A second implication of Lawrence's analysis is that manufactured products will find their way into Japan if they are inputs for goods produced by the major firms. Again, this would be consistent with recent increases in manufactured imports from the NICs, which have grown faster manufactured imports overall, although Park and Park appear to suggest that intrafirm trade has not been so important. One theme that Lawrence does not develop is the extent to which this restructuring has been actively supported by government policy, especially foreign aid policy. This is especially important given the rapid growth in Japan's development assistance programs, which are concentrated on surrounding Asian countries.

To a great extent, current Japanese thinking on development assistance is driven by visions of restructuring and a furthering of the vertical division of labor. Historically, one of the main priorities of economic policy has been the need to assure access to supplies of imported raw materials, much of which have come from surrounding Asian countries. In the 1960s and 1970s development assistance and the trading companies both played roles in this policy. Now, under the high yen, the Japan-as-processing-country analysis has been pushed one step further to Japan-as-high-value-added processor, which means that Japan must secure access to low-cost intermediate inputs. Policy still supports Japan's access to the required inputs, except now these are increasingly manufactures. Two examples may be made that illustrate the point.

The first is a 1988 study by the Economic Planning Agency. It explicitly calls for the coordination, by Tokyo, of the industrial policies of the Asian countries by something called "the Asian brain." (If the geography is any guide, Korea would be the right hand. You can fill in the rest of the body parts yourselves.) The "Asian brain" would coordinate industrial investment and the supporting industrial policies throughout the region, much as MITI did in the Japanese economy of the 1950s and 1960s.

Farfetched as this sounds, this kind of thinking does inform Japanese development assistance. An example is JAIDO (the Japan International Development Corporation), a recently formed organization to promote public- and private-sector joint development projects. To support Japanese strategic interests, JAIDO has made the Philippines the focus of its efforts to date. There, JAIDO is supporting four projects: (1) the development of a copper refining industry (this is the old-style secure-access-to-raw-materials strategy); (2) the development of an industrial park (this is the new-style facilitate-Japanese-FDI-and-secure-access-to-low-cost-manufactured-inputs strategy); (3) a project to produce and export papayas to Japan (this one is quite interesting since it runs directly counter to agricultural protectionism. When I asked a JAIDO official about this he admitted that, yes, as yet they had been unable to export any of the papayas because of the quarantine, but they were still trying). The fourth project is my favorite: to teach Filipino computer software engineers



Japanese, so that they can write Japanese language computer software, and thus help ease the software shortage in Japan.

The point of this is that the Japanese market may be becoming more open to some manufactured imports, while remaining inhospitable to others. To use the distance metaphor, if you are producing inputs for major producers, Japan may be close, but if you are producing competing products (or even worse, products that the government has targeted for development) Japan may be very far away.

Finally, though I largely agree with Lawrence the economist, I am much less comfortable with Lawrence the political analyst or trade negotiation strategist. Lawrence expresses surprise that increasing numbers of Americans are exasperated with the apparent lack of substantive progress in America's long-running trade negotiations with Japan. I cannot help but believe that this is a tad disingenuous (especially from someone who made *Newsweek's* top 10 Japan-bashers list, a distinction that no other participant in the conference that produced this volume can claim).

Lawrence takes the position that all we need to do is increase the number of sectors under negotiation from four to 40, then wait for the imports to start rolling in. To support his contention, Lawrence cites the examples of cigarettes, and the four original MOSS-talk sectors, as success stories. By his own admission, it took nearly 10 years of pressure to get liberalization of the cigarette market, longer than it took to negotiate SALT I, SALT II, or the INF treaties with the Soviets. As for the MOSS talks, conducted at the undersecretary level, there has been some progress, but at the cost of tremendous expenditures of human and material resources, as made clear by Amelia Porges (in this volume). Moreover, the U.S. Trade Representative's 1989 report on the foreign trade barrier includes many of the sectors previously negotiated—including all four of the MOSS categories. In fact, the three Japanese practices under Super 301 investigation are all issues left unresolved by the MOSS talks.

The question is, have the narrow gains been worth the expenditures of real resources and political capital necessary to bring sufficient pressure to bear on Japan to enter into and abide by market opening agreements? In the case of the United States, where the government is obligated under U.S. trade law to investigate producer-initiated complaints, to ask the question is to answer it: the U.S. government will be under considerable pressure to pursue further market-opening initiatives for the foreseeable future. The question then is, is a fundamentally new strategy needed? Lawrence says no, just do more of the same stuff.

If one believes Lawrence's analysis (which I generally do) that an important part of market access problems stem from noncompetitive markets, not Japanese government policy per se, there is a real policy problem. Probably the only thing that could really address the situation is a comprehensive, proactive policy undertaken across a number of the ministries of the Japanese govern-

ment. Unfortunately, I suspect that neither Lawrence nor I can offer much advice on how to go about encouraging this. Perhaps the Structural Impediments Initiative (SII) will encourage it; perhaps exchange-rate appreciation will loosen up the system, as some of Lawrence's results suggest. In the meantime, my prognosis is for increasing prominence of "monitored trade"—careful surveillance of practices and outcomes combined with explicit and credible threats of retaliation, as in the cases of cellular telephones and the Schumer amendment on the government bond market. As Masahiro Okuno-Fujiwara (in this volume) indicates, industrial policy in Japan is an insider's game—threats of retaliation, complete with preannounced "hit lists" may be useful in mobilizing domestic insider support in the target country (Japan) to support liberalization in the face of possible loss of exports markets in the United States.

But as Koichi Hamada has pointed out, there is a fine line between beating someone over the head with a stick to encourage liberalization, and beating them over the head with an aluminum baseball bat and provoking a trade war. The only thing I can say with much certainty is that the future looks good for trade lobbyists who will probably earn rates of return higher than those who participated in this U.S.-Japan trade conference.

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