Antitrust Policy and
Japan’s International Steel Trade

Mark Tilton

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Introduction

How much has competition among Japanese firms changed? Have the tougher penalties provided under the Antimonopoly Law in 1992 pushed Japanese firms to compete more? A basic assumption behind our understanding of market systems is that firms compete over price to attract customers, spurring them to lower production costs, improve productivity, and provide greater benefits to society. Assumptions about price competition also underlie international trade agreements. Parties to such agreements presume that if governments lower their barriers to trade, that the intrinsic competitiveness of markets will mean that price-competitive foreign firms will be able to sell their goods.

Economists back to Adam Smith have recognized that firms can use their market power to restrict competition. It is true that there are purely political reasons for antitrust policy and some difference of opinion among Western antitrust scholars as to how extensive antitrust policy should be. Political antipathy to the power of trusts was the dominant reason for the adoption of the Sherman Antitrust Act of 1890, and the United States experienced a roll-back in antitrust enforcement in the 1980s. But economists have generally come around to the idea that some government regulation to prevent the abuse of market power is essential in order to maximize economic efficiency.

This broad consensus behind antitrust policy is reflected in a March 1998 OECD “Recommendation” entitled *Effective Action Against Hard Core Cartels*. The Recommendation calls price fixing and anticompetitive agreements “…the most flagrant violations of competition laws.” It argues that it is “…important to take action against
hard core cartels because they distort world trade and create waste and inefficiency in countries where markets otherwise would be competitive.”

The Structural Impediments Initiative of 1989-1991 aimed at changing government policy and the behavior of private firms in order to make the Japanese economy more open to international trade. In these talks the United States and Japan discussed a range of possible antitrust measures. While the Japanese government was unwilling to restrict such institutions as keiretsu, which it declared benign, it did strengthen its antimonopoly policy somewhat.

One would imagine that a strengthened Antimonopoly Law might have reined in Japan's hard core cartels that distort world trade and create waste and inefficiency domestically. Indeed, the Japan Fair Trade Commission (JFTC) did become somewhat more active in the 1990s. But if one looks at markets in which hard core cartels were active in keeping prices high and keeping imports out of the Japanese market, there appears to have been no significant change.

The Japanese steel industry is a useful case for assessing the degree to which change in Japan's Antimonopoly policy has changed firm behavior because the flagrant steel cartel would seem one of the more obvious targets of a JFTC that seriously meant to introduce competition into the Japanese economy. The steel case is also interesting because the Japanese steel market contrasts so sharply with that of the United Sates and this contrast is behind the recent flare-up of trade tensions over steel imports into the U.S. Despite the strengthening of Japan's Antimonopoly Law, Japan's steel industry continues to operate a cartel that fixes production levels and prices. Major Japanese steel producers prevent cheaper imports from undermining the cartel by keeping them out of the domestic
market though threats of refusals to deal against would-be buyers. This cartel does not operate simply through private custom, but operates with the support of MITI and the Construction Ministry and the tolerance of the FTC. Import protection ensures that international steel supplies that would be fully competitive in the Japanese market are instead diverted to more open markets such as the American market. High Japanese cartel prices have maintained domestic capacity at artificially high levels, thus preserving surplus capacity that is available for large volumes of exports at prices as little as half Japan’s domestic price. Though Japan benefits from access to international markets, it does not provide reciprocal access to its own steel market.

The Japanese Steel Price System

As in other nations, the Japanese steel industry is composed of integrated steel makers, which produce steel products from iron ore, and mini-mills, which produce steel products from scrap. The mini-mills have represented an increasing challenge to the integrated producers, though there are a number of products they are not able to make.²

Japan's five major integrated steel producers run a cartel, but they do not sell uniformly at their high cartel prices. Rather, the steel market is segmented into a "big buyer" market, characterized by very high prices, and a spot market, in which prices are closer to international levels. The big buyer price in Japan was originally developed to provide discounted prices to large users, but has become a premium price paid by Japan’s large industrial users. This price is higher than the dealer, or spot price in Japan. Both these prices are higher than the export price, as Chart 1 shows below.
Chart 1. Japanese Domestic and Export Prices: Hot-rolled Coil ($US/ton)

Source: Price data from PaineWebber, World Steel Dynamics, PriceTrack #59, September 30, 1998. Data used with permission.

The domestic big buyer price has ranged from 67 to 105 percent over the export price from 1993 to 1998, as shown in Chart 2 below.

Chart 2. Ratio of Japanese Big Buyer to Export Price (for Hot-rolled Coil)

Source: Price data from PaineWebber, World Steel Dynamics, PriceTrack #59, September 30, 1998. Data used with permission.
Chart 3 below shows that the Japanese big buyer price and dealer price have been higher than American spot prices. This chart compares Japanese domestic prices to American West Coast spot prices, which are about 10 percent higher than spot prices east of the Rockies, nearer the major American steel plants.

![Chart 3. Japanese and U.S. Prices: Hot-rolled Coil ($US/ton)](image)

Source: Price data from PaineWebber, World Steel Dynamics, PriceTrack #59, September 30, 1998. Data used with permission.

A better comparison to the big buyer price is the American contract price. Chart 4 compares the Japanese big buyer price for cold-rolled sheet steel with the American contract price for the same commodity. The fluctuations in the Japanese price largely represent changes in the yen/dollar exchange rate.
Japanese prices, in yen terms, have only dropped about 10 percent over the period. During 1993-1995, the Japanese big buyer price averaged approximately 80 percent above the U.S. contract price. Even when the yen was at ¥133/dollar early in 1998, the price was still 18 percent higher than the U.S. price. One might wonder whether the Japanese big buyer price accurately reflects the real prices that are paid. The United States, for example, has a list price that exists on paper, but which is ignored in setting actual prices. In the U.S., the list price is a convenience for not having to publish new prices continually.\(^3\)

In contrast to the U.S. list price, which does not reflect actual prices, the Japanese big buyer price does in fact reflect the approximate price for at least 60 percent of integrated steel makers' sales, or about 40 percent of the total Japanese steel market.\(^4\) This can be verified by comparing the big buyer price with the price that can be calculated from the securities reports of Nippon Steel.\(^5\)
Japanese steel insiders argue that the big price differential between Japanese domestic prices and international prices reflects the superior quality of Japanese steel as well as the high level of service that is provided to big users, such as delivery on “just-in-time” schedules. There is undoubtedly some truth to this argument. Nevertheless, Japanese newspapers have long reported that there are real price differences between Japanese and international prices for identical steel commodities. Many are large enough to tempt Japanese users to purchase imported steel.

In addition to its high prices, the other remarkable feature of the Japanese steel market is its unusually low level of imports. Table 1 shows that Japan has by far the lowest share of steel imports of any of the major steel using nations.

Table 1. Exports and Imports Compared with Apparent Steel Consumption

(metric tons; 1996)

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<th>Imports</th>
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<th>Imports/Consumption</th>
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<tr>
<td>U.S.</td>
<td>26.6</td>
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<td>106.7</td>
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<td>4%</td>
<td>-21%</td>
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<tr>
<td>Canada</td>
<td>4.8</td>
<td>4.9</td>
<td>13.3</td>
<td>36%</td>
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<td>1%</td>
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<td>Germany</td>
<td>15.4</td>
<td>20.4</td>
<td>31.6</td>
<td>49%</td>
<td>65%</td>
<td>16%</td>
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<tr>
<td>France</td>
<td>11.1</td>
<td>13.1</td>
<td>14.1</td>
<td>79%</td>
<td>93%</td>
<td>14%</td>
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<tr>
<td>Italy</td>
<td>11.1</td>
<td>10.4</td>
<td>23.3</td>
<td>48%</td>
<td>45%</td>
<td>-3%</td>
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<tr>
<td>U.K.</td>
<td>6.3</td>
<td>9.3</td>
<td>13.1</td>
<td>48%</td>
<td>71%</td>
<td>23%</td>
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<tr>
<td>Belg./Lux.</td>
<td>6.1</td>
<td>14.7</td>
<td>3.6</td>
<td>169%</td>
<td>408%</td>
<td>239%</td>
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<tr>
<td>Russia</td>
<td>3.7</td>
<td>27</td>
<td>16.4</td>
<td>23%</td>
<td>165%</td>
<td>142%</td>
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<tr>
<td>Japan</td>
<td>6</td>
<td>19.3</td>
<td>80.6</td>
<td>7%</td>
<td>24%</td>
<td>17%</td>
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In 1996 imports accounted for only 7 percent of Japanese steel consumption. In contrast, all European countries have high shares of both imports and exports, reflecting their geographical proximity to one another and higher levels of trade openness. The United States imported 25 percent of its steel needs. This contrast reflects a long-term pattern of limited imports into Japan and heavy imports into the U.S. In 1973 imports took less than a tenth of a percent of the Japanese steel market, but 15 percent of the American steel market (see Chart 5). Imports into Japan increased to a peak of 8 percent of the market in 1991, substantially lower than the 26 percent reached in the U.S. in 1994, and much less than the estimated 35 percent share in the fall of 1998. The reason for Japan's small volume of imports is not that Japan is too far geographically from the rest of the world to import steel. Indeed Japan managed to export 21 percent of its steel production in the 1990s (see Chart 6). Some of the principal steel exporters to the United States, such as South Korea, are of course closer to Japan than to the U.S.

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<tr>
<td>S. Korea</td>
<td>11.1</td>
<td>10.4</td>
<td>37.6</td>
<td>30%</td>
<td>28%</td>
<td>-2%</td>
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<tr>
<td>China</td>
<td>16.4</td>
<td>7</td>
<td>97.3</td>
<td>17%</td>
<td>7%</td>
<td>-10%</td>
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Source: Data from the American Iron and Steel Institute.
In both countries steel-making capacity has decreased in recent decades (see Chart 7). In the U.S. capacity dropped from a peak of 138 million tons in 1975 to a low of 94...
million tons in 1994, before making a recovery to 108 million tons by 1997. Japanese capacity dropped from a peak of 140 million tons to 112 million tons by 1996. Heavy competition from imports have pushed American steel-making capacity below domestic consumption in recent years (see Chart 8). Japan’s continued heavy exports, limited imports and high prices have meant, however, that it has been able to maintain surplus capacity forty percent above its domestic needs.

Source: Data from PaineWebber, World Steel Dynamics, June 1998. Data used with permission. Effective capacity is estimated by PaineWebber World Steel Dynamics as 92 percent of gross capacity for the U.S., and 87 percent of gross capacity for Japan.
One might argue that the low level of imports into Japan in recent years was due to Japan's surplus capacity and the fact that neighboring Asian nations were using all their own steel to fuel their economic booms. But if simple supply and demand explained Japan's trade patterns, how can we explain Japan's very high prices? Why didn't the glut of supply in Japan bring down prices within Japan to levels below those of the U.S., where there was a steel shortage? And why didn't high prices in Japan attract in imports from other countries, and away from users in the U.S. who were offering low prices? The evidence cited below suggests that the explanation is a combination of a price cartel and import restrictions in Japan.

The Cartel

One of the startling things one finds in talking to people in the Japanese steel industry is how frank and open many are about the existence of a cartel. I asked one Japanese marketing executive of a large Japanese steel firm, who had worked for several
years in the United States, to compare competition in the Japanese and American steel markets. He replied, "Oh, it's totally different. In the US you have free competition. Here it's like we're violating the Antimonopoly Law everyday. The steel companies get together and talk about what the price ought to be." Another steel executive, retired from one of the large Japanese integrated steel firms, told me when I first met him, that the steel industry has an "unseen cartel (miezaru karuteru)."

It is commonly said that the blast furnace sector of the steel industry is very cohesive (matomari ga yoi), both in the sense that firms do not compete with one another over prices and that they speak with a single voice with the bureaucracy, banks, and other firms. Although the steel companies may discuss prices, their ongoing agreements on production appear to be the true bedrock of the cartel. Market shares of the steel producers have been very stable since about 1973. The five integrated steel producers have invited the most troublesome outsider to the cartel, minimill producer Tokyo Steel, to join their cartel, but have never offered enough market share to tempt Tokyo Steel into joining.

**Government Support for the Cartel and for Import Protection**

The above cited retired steel executive told me in 1997 that MITI helps coordinate the production cartel. "Once a quarter, MITI asks each steel company to submit a projection of production. If a company wants to expand production, it has to give MITI a reason. This still happens. MITI provides administrative guidance as to how much steel should be produced. It gives its views on production amounts." MITI of course has considerable experience with helping manage legal cartels, but most of the legal cartels in large industries were abolished in the late 1980s.
The same retired steel executive argued that the steel industry gets MITI involved, not because it needs to help organize the cartel, but to protect itself from the Fair Trade Commission, the agency which is charged with enforcing Japan's Antimonopoly Law. "One of the principles in Japanese government is that one agency can't get involved in another agency's affairs. What the Steel Association does is get MITI involved so that it can avoid an investigation by the FTC." The FTC has in fact obliged by leaving the steel cartel in peace. Leonard Lynn and Timothy McKeown have noted in their 1988 study of trade associations in the American and Japanese steel industries that, while American executives were careful to have lawyers present at meetings between rivals for fear of antitrust suits, Japanese firms were unconcerned. Steel executives still note this contrast between the U.S. and Japan.

The Construction Ministry supports the cartel as well, by refusing to buy goods from outside the cartel for public works projects. Why would the construction industry want to miss out on getting cheaper products for its projects? MITI and JETRO report that under the recent weak yen, construction costs in Japan are 84 percent higher than in the U.S., and civil engineering costs are 2.52 times as expensive as in the U.S. It is well-known that the Construction Ministry has tolerated bid-rigging among construction firms, who reward the government with kick-backs to the Liberal Democratic Party. Steel insiders in Japan report that the Construction Ministry is dead-set against buying even from Japanese outsiders to the steel cartel, much less from importers.

Tokyo Steel complains that, although it has a license from MITI to produce sheet piles, the steel beams that are used to support building foundations, the Construction Ministry refuses to buy from outsiders to the steel cartel. In 1995 Tokyo Steel was selling
its sheet piles for 55,000 yen/ton, much lower than the 87,000 yen demanded by the integrated steel producers. According to Tokyo Steel President Iketani Masanari, construction goods have a standard price, listed in two books put out by groups affiliated with the Construction Ministry. For sheet piles the price is standard nationwide, except in Okinawa where there is a 2,000 yen premium for shipping.

Iketani reports that, while some municipalities and prefectures use his company's sheet piles, when the Construction Ministry is involved Tokyo Steel's sheet piles are never used. According to Iketani, the steel cartel's ability to keep outsiders from selling to the Construction Ministry affects the private market as well. Sheet piles are sometimes pulled up and reused, and therefore are often leased. The large leasing companies won't handle Tokyo Steel's sheet piles because they fear being punished in the public sectors. This leaves only the small leasing and trading companies that will use Tokyo Steel's products.

The above-cited retired executive from an integrated Japanese steel firm told me, "Government construction projects will never buy from the minimills, even though they can supply the products." JETRO and MITI have recently acknowledged that informal barriers are keeping imported steel out of the Japanese construction market.

Cost-based Pricing

In order to understand the politics of the Japanese steel market, it is important to understand that, paradoxically, many users support the cartel that keeps their inputs expensive. Prices for big users are in principle to be based on cost, rather than supply and demand. Supply and demand is understood to influence price rather than determine it. Negotiations take place between the lead users, at one time the shipbuilding industry, but
for the last two decades the automobile industry, and the steel industry over price. Once
the auto industry establishes the base price, other user industries follow their lead with
minor adjustments. Prices do not float, but are negotiated on an industry-to-industry basis
once a year or less often if markets are relatively stable. Japan's basic steel price is
negotiated between the two price leaders, Nippon Steel and Toyota. Although steel
companies are careful not to be too quick to copy the Nippon Steel price for fear of being
accused of joint sales increases by the FTC, in fact they follow Nippon Steel's lead. Steel
companies are disciplined enough in their cartel that they all charge exactly same price.
Although the cost of the steel makers is the basic determinant of the price, the financial
situation of the users is also taken into account. Because of this, for instance, the hard-
pressed shipbuilding industry receives discounts on its steel.

Nationalism and Concern with Security of Supply: "Steel is the State"

Though in recent years the weaker yen has narrowed the gap between Japanese steel
prices and international prices, between 1986 and 1997 a strong yen made Japanese steel
very expensive. Nevertheless, domestic steel users largely did not defect and buy imports.
Imported steel rose to a peak of only 9 percent of the domestic market in 1991 and dropped
back to 7 percent in 1992, a level at which it has remained.

It is hard to think of an industry harder pressed to cut costs than shipbuilding, an
industry dependent on exports for 60 percent of its sales, and competing with Korea, whose
costs are as much as 25 percent below Japan's. From 1987 until at least 1994 Japanese
firms were paying 40 percent more for steel than their Korean competitors. In 1994 the cost
of Japanese steel alone put Japanese shipbuilders at an eight million dollar cost disadvantage per oil tanker.\textsuperscript{22}

Interviews with steel users made clear that the reason steel users pay high prices for Japanese steel and resist switching to imports is partly that they are committed to their relationships with particular Japanese suppliers but also that they choose to honor their larger commitment to the Japanese steel industry as a whole. Prices, as we have seen, are supported by the steel industry cartel, but they are also supported by buyers’ willingness to pay what it costs to keep the domestic steel industry going.

It does not appear that the price gap between domestic and international prices is due solely to quality differences between Japanese and foreign steel. Fine gradations of quality are not important for the ordinary grade steel used in construction, which accounts for 43 percent of Japanese steel demand.\textsuperscript{23} 75 percent of the steel shipbuilders use is thick plate, a basically standardized commodity. Two shipbuilders I interviewed said there was no quality problem with ordinary grade Korean steel. One of them pointed out that the steel from Korea’s Posco steel was essentially the same as Japanese steel since it was made with equipment supplied by Mitsubishi Heavy Industries.\textsuperscript{24} It is true that Japanese steel makers produced steel plate in some four hundred different sizes for their various customers, and that shipbuilders valued this variety. By 1994, however, the shipbuilders were begging the steel companies to standardize these sizes but to give them some price relief in return. Though the large number of sizes was supposed to simplify shipbuilding, some argued that fewer sizes would actually increase shipbuilders’ efficiency and save them more money in building costs than the steel companies would save by standardizing sizes.\textsuperscript{25} If this is true,
it suggests that the proliferation of sizes in the steel market has acted more as a barrier to imports than as a genuine contribution to production efficiency.

I asked one shipbuilder, whom one would expect to represent the epitome of internationalized Japanese business, having spent many years selling ships in the West, why his firm didn’t buy cheaper Korean steel given the competitive pressures from Korean shipbuilding companies. Although he acknowledged that imports were of sufficient quality to provide most of the ordinary quality steel the industry needed, he said that it was important to have a domestic industry for the sake of security of supply. He went on to say, “People often say, ‘Steel is the state’ (tetsu wa kokka nari), or ‘Steel is the rice of industry’. It’s true. If steel gets weak all of industry will get weak. If we switch to imported steel, the country will stop developing.”26 That is, the shipbuilder believes that his company should support steel because it is important for the economy as a whole. An executive at one of Japan's largest electronics firms echoed the shipbuilder's nationalist insistence on remaining loyal to domestic suppliers in order to maintain Japan's manufacturing base.

**Steel Industry Refusal-to-Deal Threats**

In addition to users’ interest in security of supply and overall national economic vitality, they also avoid imports because they fear retaliation from steel makers. Threats of industry-wide boycotts are strongly suggested by a *Nikkei Sangyō Shimbun* article on Mitsubishi Heavy Industries' (MHI) first purchases of imported steel, from Pohang Steel in Korea. Based on an interview with an official of the Materials Division of MHI, the article reports that the company had wanted to buy Korean sheet steel for some time because Japanese steel, at 80,000 yen per ton, cost 60 percent more than Korean steel. Although
MHI was concerned that Korean steel might be somewhat inferior to Japanese steel and delivery less convenient, the quality of the Pohang steel was "quite sufficient" for all but the most exacting uses. However, the article reports that "Mitsubishi Heavy Industries has been unable to [buy Korean steel] because it has been concerned with the fact that [Japanese] steel manufacturers were both its suppliers and among its principal customers." That is, MHI feared that buying Korean steel would endanger both its sales of steel making machinery and its supplies of steel from the Japanese steel industry. It is crucial to note that MHI was not simply concerned with a relational contract with a specific individual firm, but was afraid that it might be shut out of dealings with the entire steel industry.

The article quoted a Nippon Steel official as saying, "There is no mistake that [MHI] is importing steel in Nagasaki. ... What we'd like to tell them is, 'Fine. In return we will not supply you with any of the high quality steel that Korea can't produce.'" Thus, Japan's largest steel manufacturer thinks of its sales relationships as a broad, all-encompassing commitment rather than simply an agreement to buy specific products, and considers a customer's decision to switch to another buyer for one product a betrayal which should be retaliated against by withholding other products it alone can provide. And Mitsubishi Heavy Industries, the steel buyer and one of Japan's largest manufacturing firms, also seems to think in terms of inter-industry relational contracts which are enforceable with refusals to deal.

However, much as Nippon Steel would have liked to use a-refusal-to-deal threat to keep MHI from buying Korean steel, it demurred because it feared that making MHI's imports an issue might lead other buyers to push harder for price cuts and possibly desert domestic suppliers altogether in favor of imports. Therefore the company officially treated
MHI's imports as a matter of little importance, both because the purchase was small in volume and because MHI had been asked to buy the steel by Pohang under special circumstances in exchange for Pohang's purchase of steel making machinery from MHI. Mitsubishi never increased the percentage of imports over 10 percent and Japan's other shipbuilders have remained completely loyal to the domestic industry. In interviews, two shipbuilders and a retired steel executive confirmed that the threat of retaliation was an important factor deterring shipbuilder plans to buy imports. In describing the relationship between steel and shipbuilding companies no one used such strong terms as “retaliation,” but rather used language of “mutual obligation” and “power” on the part of steel companies to make sure shipbuilders don’t abandon them. This power is also used to make sure buyers don’t try to play domestic steel companies off against another to get lower prices.

For most of the major shipbuilders, such as Mitsubishi Heavy Industries, Ishikawajima Harima, or Sumitomo Heavy Industries, shipbuilding is only a small part of their larger operations in industrial machine production. The retaliatory power of the steel companies vis-à-vis these firms is to cut off purchases of new manufacturing equipment or to tell the shipping companies which handle their raw materials imports and steel exports to stop buying ships from particular firms. As one shipbuilder put it, “The shipbuilding industry can’t do much about getting the steel industry to lower its prices. If we increase purchases from one steel company to try to get lower prices, then the steel company whose purchases were cut wouldn’t have its shipping company buy ships from our firm.” A retired steel executive also acknowledged the “power” the steel industry had to oblige shipbuilders to reject imports, and added that steel companies had some similar power over construction companies, whose services they used when they built new production facilities.
He noted, however, that the industry’s recent stagnation had weakened its ability to coerce these industries.\(^{31}\)

The threat of retaliation also appears to affect the small intermediary shearing and coil center firms that cut and process steel, as well as the large trading firms that buy and sell steel. The *Nihon Keizai Shimbun* reported that, “[i]t is common knowledge that the domestic steel makers use tacit pressure to keep out imports and support the price structure. The ... shearing and coil center firms haven’t spoken openly about using imported steel because of fear of reaction from the blast steel makers. The big trading firms haven’t handled imports openly.”\(^{32}\) The article doesn’t specify what retaliatory measures steel firms threaten, though presumably it would be to withhold supplies or business.

A previously cited retired executive of one of Japan's large integrated steel companies told me, "There is pressure on the coil companies by the steel companies in Japan not to buy imports. ... The coil companies worry about whether they will be able to get supplies of high quality steel." He noted in contrast that in the U.S. nobody pressures small distributors not to buy imports. Coil companies do to some degree find ways to trick the Japanese steel companies by going through intermediaries to buy imports indirectly: "But there are ways to avoid having to comply with the steel companies' demands. Small importers buy from Korea, and then sell domestically to domestic firms. This way the coil center is not directly buying imports.”\(^{33}\)

An electronics maker I spoke with said that his company’s fear of the reaction of steel companies to imports was much less in 1994 than it had been twenty years ago. He said that although his firm was reluctant to buy any imported steel itself, it did arrange for some of its subcontractors to buy imported steel. Although steel companies would have
protested before, now they accept small subcontractors’ buying imports. And although his large electronics firm does not actually buy any imported steel directly, he thought it could if it gave domestic steel makers advance warning and gave them a chance to match import prices. He said that the threat of buying imports can persuade steel makers to provide discounts on the portion of steel the user might have bought from overseas. In this way, although users buy the vast majority of their steel at standard big buyer prices, they may get discounts on five percent or so of the steel they tell steel companies they are tempted to buy from abroad.\textsuperscript{34}

Iketani Masanari of Tokyo Steel commented that the integrated steel companies have in fact retaliated for a challenge to their cartel in the Chinese market. According to Iketani, Japan's five big steel companies have handled their exports as a cartel. In China for instance, the five companies negotiated a single price with Min Metal, the state trading company handling most of China’s steel imports, and allocated sales among both among themselves and among the Japanese trading companies which served as intermediaries. In 1993 the Mitsubishi Corporation, one of the trading companies, offered Tokyo Steel a contract to sell 20,000 tons of hot rolled coil to Min Metal. Though Tokyo Steel had been selling bar steel in China, its hot coil sales were seen as a threat to the Japanese cartel. The five major steel companies retaliated against the Mitsubishi Corporation by excluding it from rail sales to China. Joint sales negotiations by the five companies with Min Metal were officially stopped as of 1995, but Iketani thinks that in fact they still continue.\textsuperscript{35}

Minimill steel producers also charge that the integrated steel makers have harassed them by exporting scrap and refusing to sell it in the domestic market. This is
apparently part of the reason for the rise of Japanese scrap prices in the 1990s and a reason that Tokyo Steel lost money in 1996 and 1997. The minimills’ trade association has demanded that the scrap produced by domestic integrated producers which is currently being exported, instead be sold to domestic minimills. According to the Tekkō Shimbun domestic steel producers have long exported their scrap instead of selling it domestically, despite the fact that domestic prices are higher than export prices.

**Conclusion**

In September Japan Iron and Steel Federation chairman Akira Chihaya told MITI Ministry Yosano Kaoru that, in response to American concerns about the export surge, Japanese steel firms would voluntarily curb exports to the United States. "Each company will act in a manner that will not cause trade friction." Chihaya seems to be acknowledging that Japan has a domestic steel cartel capable of manipulating international trade levels at will.

If Japan had lived up to its previous international trade commitments, it would have genuinely opened its markets to steel imports in the 1980s and its Fair Trade Commission would have dismantled the steel cartel. Imports would have pushed prices in Japan downward toward world levels, just as they did in the United States. Japan would have absorbed its share of steel imports from around the world and, like the United States, would have been forced to shut down a much greater proportion of its production capacity.

The steel case suggests that changes in Japan's Antimonopoly Law have done little to rein in Japan's hard-core cartels. Instead, the continued combination of a
domestic cartel with informal private and public restraints on imports have kept imports out of Japan and given the Japanese steel industry an unfair advantage over other nation's steel industries. High prices and a protected market have enabled Japan to maintain higher levels of capacity than it otherwise would have. A disciplined cartel combined with import restraints means that at times of economic downturn the Japanese steel industry can cover its fixed costs in its sanctuary market while selling more cheaply overseas to cover marginal costs to keep capacity running that otherwise would have to be shut down. Japanese consumer have also lost out by having to pay higher prices for steel.

While the steel industry is not representative of all of Japanese industry, it is representative of the basic materials sector, which accounts for one-third of Japan's value added in manufacturing. And it illustrates the gross violations of Japan's Antimonopoly Law which the JFTC continues to tolerate. The egregious steel case suggests that government policy has done little to prevent firms from using their market power to avoid competition.

In order to achieve fairness in their trading relationships with Japan, the United States and Japan's other trading partners need Japan to adopt and enforce more stringent antitrust measures. Japanese leaders also argue that Japan needs tougher antimonopoly policy. Shogo Itoda, an official at the Japan Fair Trade Commission (JFTC), has said that one problem is that the JFTC is understaffed. "The United States has about 1,800 regulators at the Department of Justice's Antitrust Division and the Federal Trade Commission together. That is more than three times as many as the 550 at Japan's FTC. I envy them." Sakamoto Yoshihiro, formerly MITI vice-minister for International
Affairs and currently an advisor to the president of the Bank of Tokyo-Mitsubishi, argues that Japanese antitrust policy is weak compared to that of Europe and the U.S. "In light of international levels, or perhaps I should say the dynamism of international activity, however, Japan's Anti-monopoly Law and its implementation are still lagging behind, and quite frankly need much more revision." Sakamoto argues that Japan should supplement enforcement by the JFTC with channels for private parties to seek redress directly through the courts, and should enter into discussions with the U.S. Department of Justice and Europe's DG4 to "work toward the future convergence of its Anti-monopoly Law with an emerging international norm." Until such policy changes are adopted we are unlikely to see any move away from cartel behavior in major Japanese industries such as steel.
ENDNOTES

3 Personal interview with retired executive from major integrated steel firm, March 1997.
5 See Restrained Trade, p. 176.
7 Personal interview with marketing executive at large Japanese steel firm, Tokyo, October 1996.
8 Interview, retired steel company executive, March 1997.
10 See, for example, the production figures published for 1995 and 1996 in Tekkō shim bun (Steel newspaper), March 12, 1997. Also see chart from Japan Fair Trade Commission figures published by Nikkei Business, July 4, 1994.
11 Personal interview with Iketani Masanari, President of Tokyo Steel, Tokyo, November 1995.
15 The two books are Kensetsu bukka and Sekisan shiryō.
18 Interview, electronics executive, Tokyo, 1994.
19 Interview, retired steel executive, Tokyo, 1994.
21 Restrained Trade, p. 171.
24 Interviews with two executives of shipbuilding companies (one of them retired), Tokyo, 1994.
26 Interview, shipbuilding executive, Tokyo, 1994.
28 Ibid.
29 Ibid.
30 Interview, shipbuilding executive, Tokyo, 1994.
31 Interview, retired steel executive, Tokyo, 1994.
33 Personal interview with executive retired from a large Japanese steel company, Tokyo, March 1997.
34 Personal interview with electronics executive, Tokyo, 1994.
35 Personal interview, November 1995.
37 Tekkō Shimbun, February 23, 1990.