Between 1977 to 1981, the footwear industries of Korea and Taiwan faced trade restrictions from the United States in the form of OMAs (Orderly Marketing Agreements). Under the same trade restriction, however, the two countries responded quite differently: Taiwanese producers fully utilized their share of regulated exports in all regulated categories; Koreans, on the other hand, were only able to exhaust their share within one category while leaving another category extremely under-filled. How can we explain the different response pattern of two similar countries that were faced with the same trade restriction? This paper shows that despite similar positions within the international division of labor (i.e., international subcontracting), the two countries responded differently because of the different production methods employed in the manufacture of footwear. By employing the concept of asset specificity and the logic of collective action, this paper argues that OMAs created a different incentive structure for Korean and Taiwanese firms, which led to different response patterns.

THE QUESTION: WHY DIFFERENT RESPONSES TO THE SAME TRADE RESTRICTION?

In 1977, the United States International Trade Commission (USITC), in response to numerous petitions from domestic footwear manufacturers and workers, determined that imported footwear, especially those from Korea and Taiwan, were causing “serious injury” to the American footwear industry. The perception that American footwear manufacturers were going out of business due to growing imports was not groundless: in 1968, the nonrubber footwear industry, employing 233,000 workers, produced 642 million pairs of shoes. By 1977, however, employment dropped by 30 percent to 164,000 workers and production dropped by 40 percent to 383 million pairs (USITC 1977, 4).

Import penetration to the United States, on the other hand, had surged from 20 to 50 percent between 1968 and 1977. The bulk of the imports came from Taiwan and Korea. In 1976, Taiwan and Korea exported 156 million and 33 million pairs of shoes respectively, comprising 54 percent of the U.S. imports of nonrubber footwear (United States Department of Commerce 1977, 4).
In response to the Commission’s report, the Carter Administration announced a special footwear program designed to rollback nonrubber footwear imports by the United States from their 1976 level, and hence “revitalize” the declining American footwear industry.¹ This led to the implementation of Orderly Marketing Agreements (OMAs) on imports of non-rubber footwear from Korea and Taiwan for a period of four years (July 1977-July 1981).²

¹ Section 201 of the Trade Act of 1974 is an escape clause which allows a petition to be filed for import relief for the purpose of facilitating orderly adjustment to import competition. Once a petition is filed, the International Trade Commission determines whether there is serious injury due to imports and recommends a duty or other restriction that will ‘prevent or remedy’ such injury (Pearson 1983, 13).

Prior to 1977, there have been numerous instances when the footwear industry could have received some form of protectionism: in 1970, footwear could have been given quantitative restrictions as part of the 1970 Trade Act; in 1971, the U.S. Tariff Commission found that the industry had been injured by imports; in the 1974 Trade Act, footwear was given a promise for protection similar to textiles’ MFA; and in 1976, International Trade Commission recommended some form of presidential action on imports. Yet in each of these instances, the Executive refused to provide the shoe industry with substantive support. Unlike other industries that received protection (e.g. textiles and steel), the footwear industry simply did not have political clout: it lacked organization, money, and a broad political base. For details of this process, see Yoffi (1980).

² According to the definition provided by the US International Trade Commission (USITC), non-rubber footwear is “primarily vinyl and leather footwear provided for in Tariff Schedules of the United States items 700.05 through 700.45 inclusive (leather footwear); 700.56 (athletic footwear); 700.72 through 700.83 inclusive (footwear with uppers of fibers); and 700.95 (other
Quantitative restrictions such as OMAs force exporters to respect the quantity limit. Since producers from restrained countries are unable to export as much as they wish, exporters often respond to OMAs by upgrading their product composition within the restrained category. As expected, Korean and Taiwanese footwear producers responded to the OMAs by upgrading to higher-valued brackets such as footwear made wholly or partially of leather. Accordingly, the average unit value of footwear imports from the two countries increased from $2.24 to $4.88 or 118 percent (USITC 1981).

What has been overlooked by many analysts of OMAs, however, is the drastically different response-pattern by the two countries’ producers. Table 1, compiled by the USITC, reveals that Taiwanese producers fully utilized their share of regulated exports in all categories. This is a normal response—expected by economists—to trade restrictions. Korean producers, on the other hand, responded quite differently from their Taiwanese counterparts. While Koreans completely exhausted their share in the K2 category, the K1 category (‘leather and non-athletic’) was extremely under-filled. In the second year of OMAs, Korean producers were able to fill only 62 percent of their given quota; this figure plunged to 31 percent for 1979-1980.

How can we explain the different response pattern of two similar countries that were faced with the same trade restriction? Or, to rephrase the question, what explains the poor performance of Korean producers in the K1 category?

<table>
<thead>
<tr>
<th>Country and quota category</th>
<th>1977-78 Quota (million pairs)</th>
<th>Percentage filled</th>
<th>1978-79 Quota (million pairs)</th>
<th>Percentage filled</th>
<th>1979-80 Quota (million pairs)</th>
<th>Percentage filled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leather, non-athletic (K1)</td>
<td>8.5</td>
<td>100 (%)</td>
<td>12.5</td>
<td>62.2 (%)</td>
<td>13.1</td>
<td>31.7 (%)</td>
</tr>
<tr>
<td>Athletic and other (K2)</td>
<td>27.9</td>
<td>100</td>
<td>20.6</td>
<td>100</td>
<td>24.4</td>
<td>95.7</td>
</tr>
<tr>
<td>Taiwan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leather (T1)</td>
<td>10.7</td>
<td>100</td>
<td>11.0</td>
<td>100</td>
<td>11.3</td>
<td>100</td>
</tr>
<tr>
<td>Plastic (T2)</td>
<td>102.7</td>
<td>100</td>
<td>105.1</td>
<td>99.7</td>
<td>107.9</td>
<td>100</td>
</tr>
<tr>
<td>Other (T3)</td>
<td>8.5</td>
<td>100</td>
<td>8.9</td>
<td>100</td>
<td>9.4</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: USITC (1981)

Although the definition of non-rubber is strict, in reality, to be classified as non-rubber, a shoe had to be only less than 50 percent rubber by weight.
The object of this paper is to account for the contrasting adjustment patterns between Korean and Taiwanese footwear exporters who faced the same export-restraints from 1977 to 1981. This paper will show that despite similar positions within the international division of labor (i.e., international subcontracting), the two countries responded differently because of the different production methods employed in the manufacture of footwear. By employing the concept of asset specificity and the logic of collective action, this paper will argue that OMAs created a different incentive structure in terms of susceptibility of assets and the ability to organize.

**OMAs and New Protectionism**

VERs or OMAs are called “new” protectionist measures because they circumvent the compensation and non-discriminatory provisions of Article XIX of the GATT (the ‘escape clause’). Unlike traditional protectionist measures which rely on *ad valorem* import tariffs to restrict imports of foreign goods, “new protectionism” relies on non-tariff barriers (NTBs) such as import quotas (VERs or OMAs) for the same purpose (Suh 1981). Generally, tariffs have greater certainty with regard to the increase in price, whereas quotas have greater certainty with regard to the quantity of imports. A distinctive feature of OMAs is that they are *voluntarily administered* by the exporting country: under the quota scheme of OMAs, the exporting country “agrees” to restrict the shipments of a particular good to a level lower than what might prevail in a competitive market (see Table 2).

The consequences of import quotas such as OMAs have been widely studied by economists, in a range of diverse industries from textiles and apparel to steel and consumer electronics. Generally, economists come to the conclusion that quantitative restrictions are inferior to tariffs and produce more of a detrimental effect than a positive one on the protected domestic

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3 Voluntary export restraints are similar in purpose and function to OMAs. The only difference is that VERs are not backed by formal intergovernmental agreement. A famous case involving VERs was the Japanese car exports to the United States. Faced with the threat of direct Congressional action in 1981 and uncertain of the prospects of President Carter’s veto of such legislation, the Japanese announced a ‘voluntary’ export restraint agreement to preempt harsher trade restrictions (Pearson 1983, 14-16).

Yoffie (1980, 234-247) gives a political reason why OMAs were chosen in favor of tariffs. According to him, OMAs or quantity restrictions on imports was the ideal political compromise that balanced the domestic demands of Congress and American free trade commitments. That is, America no longer wanted to carry all of the burdens of hegemonic responsibility, but neither was it willing to jeopardize freer world trade for the footwear industry.
According to economists (especially neoclassicals), the inefficiency associated with OMAs derives from a combination of three factors: (1) the restraints are quantitative; (2) they are discriminatory; and (3) they are administered by the exporting and not the importing country.

First of all, quantitative trade restrictions such as OMAs encourage product upgrading because exporters attempt to sell higher valued products while respecting the quantitative limit. As the amount of exports is artificially reduced (because exporters must respect the quantitative limit), producers from restrained countries are unable to export as much as they wish. Thus, the scarcity value created by the quota often encourages exporters to upgrade their product composition within the restrained category. A classic case of product upgrading is that of the oil industry studied by Barzel and Hall (1977). According to the authors, the U.S. import controls on oil induced a change in import-mix and hurt the U.S. refining industry. Their argument is that quota premium induces price increase uniformly for all restricted oil; at the same time, the percentage increases in prices would be greater for lower quality than for high quality oils. Therefore, given the similarities between the various oils, it was economically efficient to substitute high quality oils for low quality ones. As a result, there was an increased demand for higher quality oil that required relatively less processing. This situation led to the importation of relatively higher quality oil and a reduction in the over-all level of refining in the U.S. (Barzel and Hall 1977, 43-49).

Secondly, economists maintain that voluntary quotas are ‘regressive’ between consumer groups. The scarcity value of the quota may prevail on all restricted items, driving up the price of low-valued items as much as high-valued ones. Then high-valued items become cheaper relative to low-valued items, causing consumers to shift to the expensive items (Suh 1981).

<table>
<thead>
<tr>
<th></th>
<th>Operates Through</th>
<th>Scope</th>
<th>Administering Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price</td>
<td>Quantity</td>
<td>Global</td>
</tr>
<tr>
<td>Tariff</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Import quota</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>OMA/VER</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

Note: Tariff-rate quotas permit a specified quantity to be imported at one tariff-rate, with over-quota imports as a higher duty rate. They have quota and tariff-like properties.
Aw estimated that OMAs resulted in a welfare loss of $66.6 million to American consumers, of which $43.6 million was captured in the form of windfall gain by Taiwan (Aw 1992, 340; Pearson 1983, 50).

Finally, economists argue that OMAs may bring temporary relief, but cannot alter the long-run decline of an industry. The reason is that OMAs are bilateral agreements. Because OMAs are bilaterally negotiated between the relevant importing and exporting country, uncontrolled foreign exporters (i.e., countries that are not subject to OMAs) are free to extend their share of imports, prompting new producers in low-wage countries to easily enter the low-priced market. OMA established in mid-1977 temporarily slowed import penetration of Korean and Taiwanese shoes; however, it failed to reduce total import volume due to import penetration from uncontrolled countries. When OMAs were terminated in 1981, the share of imports in the U.S. market rose from 50.4 to 59.8 percent and 22,000 jobs were lost as a result (ILO 1985, 45).

The economists’ account of OMAs are limited to concerns regarding price-effects that import quotas bear on the importing country. As advocates of the principle of “free markets,” their primary concern seems to be on reaffirming their prejudice about trade restrictions (barriers that curtail the “natural” movement of goods from one country to another). As a result, economists are usually silent when asked about the causes for different quota performance between the two exporting countries, namely Korea and Taiwan. They treat quota performance as trivial.

However, we cannot assume because we know nothing about how quota performance may have differed, that on the average the “trivialities” will cancel out. This is the fallacy of assuming the equiprobability of the unknown, the ceteris paribus assumption frequently found in economic analysis. In the next section, I will attempt to provide a convincing answer that may explain the different quota performances between Korea and Taiwan during the OMAs period.

THE EXPLANATION: ASSET-SPECIFICITY AND COLLECTIVE ACTION

The building block of our analysis stems from two simple facts derived from the characteristics of OMAs: (1) OMAs force exporting countries to curtail their level of exports; and (2) OMAs are voluntarily administered. Export-barriers force exporting countries to marginally curtail their future exports below the level that would prevail in free markets. Because existing producers must artificially reduce their level of exports, I will expect that OMAs, in turn, will alter the exporting country’s existing property rights. A
second characteristic of OMAs is related to the fact that export restraints are administered by the exporting country. Because restraints are ‘voluntarily’ administered, it should be reasonable to expect that each country would have to devise a new set of rules regarding the allocation of reduced export shares among producers.

For both Korea and Taiwan, the responsibility for quota allocation was carried out by their respective trade associations. In Korea, this responsibility was in the hands of the KFEA (Korean Footwear Exporters’ Association), while the TFMA (Taiwan Footwear Manufacturers’ Association) was responsible for carrying out Taiwan’s quota allocation. It was up to these respective trade associations to decide which producer will get its “share” and which will have to “sacrifice.” Recall from Table 1 that the general quota performance for Taiwanese producers far exceeded that of Koreans. Given the fact that the responsibility for allocation was totally in the hands of the trade associations, we now have fairly good evidence - through “circumstantial” at this point - that something must have influenced the distributional mechanism.

This paper makes the assertion that quota allocation is a function of pressures from producers assumed to be divided along product-type and concerned primarily with maximizing their incomes. I propose that these pressures are associated with two qualities of such socioeconomic actors: the readiness to exert pressures (“preference intensity”) and the ability to have those pressures actualized (i.e., ability to organize).

Preference intensity can be sensibly argued as dependent on asset-specificity, defined as the difficulty of a certain asset to have an alternative use. An asset can be called fully specific when it cannot be employed in any other activity; at the other end, an asset is less specific if it can be transferred from one use to another or if it can be used for purposes other than its original use (Frieden 1991, 19-22). From the concept of asset-specificity, we can infer that an owner of a specific asset will have more incentive than an owner of a less specific asset to be more susceptible to policy change or to influence policy toward its favor. For example, the owner of a steel mill that can produce only one type of steel (i.e., asset-specific actor) will be much more sensitive to policy changes than an owner of a steel mill that can produce many different types of steel. In general, industries or production-lines characterized by significant sunk costs (e.g., due to specialized machinery), economies of scale, or other barriers to free entry will, other things being equal, have greater incentive to influence policy towards their interest.

However, explaining the outcomes of distributional policies merely from
the vantage point of preferences is severely inadequate. To exert effective pressure, socioeconomic actors must organize. Whether a group of actors will be successful in asserting their interest in the distribitional arena depends on the group’s ability to act on a concerted way, overcoming the free-rider problem and regulating defectors. In this regard, the literature on collective action has shown us that the success (the “rent-seeking ability”) of a coalition is a function of the size of the group and its ability to provide selective incentives: generally, we except that the smaller the group and the more selective incentives, the easier for it to act as a collective whole to regulate the free-rider problem (Olson 1965). In large groups where an individual expects that his/her decision cannot affect the other members, collusion may be too difficult to carry out. On the other hand, in groups, composed of few members collusion is easier to carry out since each person can monitor the others. Baumol (1982) illustrates this point from the experience of cartels using actor expectations and their ability to monitor each other.4

I have mentioned that the responsibilities for quota administration in Korea and Taiwan were carried out by the KFEA and TFMA, respectively. Both the KFEA and TFMA were the dominant trade associations composed of footwear manufacturers. The two associations, however, differed in one important aspect: the characteristics of membership. While the KFEA was dominated by the large, mass producing firms that specialized in the production and export of athletic footwear (category K2), TFMA’s membership consisted of producers in diverse categories whose size were relatively small. How did these characteristics affect quota performance? For the answer, we now turn to the story.

THE STORY

Characteristics of the Industry: Export-Oriented and Marketing-Dependent

Shoe manufacturing is well suited to the factor endowment of developing countries. In particular, it is labor-intensive; it does not experience rapid

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4 In a cartel, the “ideal” situation is a restriction of production that would push prices above their market equilibrium level. From the welfare economics point of view, cartelization is not a condition for Pareto optimality. Suboptimal they may be, cartels can still be a stable outcome. Baumol (1982, 137-154) demonstrates this point with the example of the “linked demand curve.” According to him, once a cartel is formed, a member firm will not raise nor lower prices from that of the prevailing price. The reason is that if a firm raises its prices above the prevailing level, it loses a lot of sales (because the others do not follow suit); if a firm lowers its price, it still would not gain sales (because the other will follow suit).
technological innovation and does not offer major economies of scale in production. This means that the minimum scale of operation for an efficient firm is small in comparison with other manufacturing activities. Reflecting such characteristics, there has been a significant shift in production from industrialized to developing countries. During the 1960s, the major footwear exporters to the American market were Italy, Spain, and Japan; Korea and Taiwan began to displace these producers (in volume of exports) by the mid-1970s; and as wages rose in the two countries in the 1980s, the production of footwear has moved to countries with even lower wages such as China and Indonesia.

Although newly industrializing countries are playing prominent roles in the production of footwear, the main source of profits within the footwear business is not at the production stage. Rather the lion’s share of profits within the footwear business are generated in marketing and retailing where core-country firms dominate. According to Gereffi and Korzeniewicz (1990), the successive increase in profits is as follows: factory 55%, wholesaler 70%, and retailer 100%. Because foreign buyers set the prices for shoes, domestic manufacturers’ profits are dependent on how they can control the costs of production.

“Modern” footwear factories came to Korea and Taiwan in the mid-1960s, when Japanese trading companies such as Mitsubishi encouraged the small and medium-sized Japanese manufacturers to relocate their production from Japan to Korea and Taiwan (Levy 1990; Gereffi and Korzeniewicz 1990). By the mid-1970s, the footwear industries of Korea and Taiwan became pivotal production sites within the global division of labor. The market position of these two countries reached its apex in 1987, when Taiwan and Korea were supplying two thirds of U.S. nonrubber footwear

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5 In Germany (F.R.G), the workforce in the footwear industry dropped by about 41.3 percent between 1969, when it employed 92,000 workers, and 1978, when it employed only 54,000. In Britain, total employment in footwear fell by 22.7 percent between 1970 and 1977 (ILO 1979, 11-15). The only Western countries that experienced a substantial expansion of the industry are Italy and Spain which are traditional fashion and design leaders.

6 By the early 1960s Japan was experiencing labor shortages for the first time in her industrial history. The backbone workforce of Japan small and medium-sized enterprises was composed of young, mostly unskilled workers producing labor-intensive products for export. Foreseeing a wage explosion in their own country, Japanese companies placed orders to shoe factories in Korea and Taiwan destined for the US market. The redirection of shoe orders by the Japanese trading companies provided a major “push” effect that led Japanese footwear manufacturers, especially the small and-medium sized, to invest abroad. On the other hand, the major “pull” effect was the outward-looking strategy of economic development by Korean and Taiwanese governmnets eager to encourage the inflow of foreign capital and technology to build export industries (Ozawa 1975).
imports (Gereffi 1992).

The footwear industry for Korea and Taiwan is *export-oriented yet marketing-dependent*. In both Korea and Taiwan, over 90 percent of all footwear produced are exported, with more than half destined for the United States. However, most of the exports fall under a typical marketing-dependent arrangement called OEM (Original Equipment Manufacturing) where Korean and Taiwanese factories manufacture commodities according to specifications of foreign buyers which are then marketed under heavily advertised brand names (e.g., Nike, Reebok, L.A. Gear). During the 1980s, Korea and Taiwan produced nearly half of the world’s athletic shoes but neither had an internationally recognizable brand. In short, footwear is an industry where R&D and marketing is controlled by international capital but the shop-floor activity (i.e., production) is controlled entirely by private domestic firms. The similar international factors will allow us to control for the external factors responsible for the different responses of the footwear manufacturers for Korea and Taiwan.

**Organizational Differences**

Despite being major suppliers of footwear to the United States, however, manufacturers in Korea and Taiwan developed very differently in terms of size and organization: in Korea, large firms employing over 500 workers dominated the industry while small and medium-sized firms persisted as the core of the Taiwanese footwear industry.

Footwear exports from Korea and Taiwan rose from $18 million and $40 million in 1970, to over $1.5 billion by 1985. During the period, however, the average export value per Korean firm was over ten times that of Taiwan throughout the period (see Figure 2). This disparity in size widened: by 1980, the average Korean firm engaged in exports was over fifteen times the size of its Taiwanese counterpart.

This contrast between large and small firms is also reflected in Table 4 which compares the value added in production according to firm size. In Korea, firms employing over 500 workers accounted for the majority of the value added in the industry, almost 90 percent in 1976 and 80 percent in 1981. By contrast, large firms accounted for less than 20 percent of value added in Taiwan.

Besides size, another contrast between the footwear manufacturers of

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7 The peak year in terms of exports was in 1988, when each country supplied over 3.5 billion dollars of footwear to the United State’s market. From 1989, footwear exports started to show signs of decline due to rise in wages in both countries.
TABLE 3. FOOTWEAR EXPORTS FROM KOREA AND TAIWAN, 1965-1986 (US$ MILLION)

<table>
<thead>
<tr>
<th>Year</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total export value</td>
<td>Number of exporting firms</td>
</tr>
<tr>
<td>1969</td>
<td>$10</td>
<td>–</td>
</tr>
<tr>
<td>1970</td>
<td>18</td>
<td>–</td>
</tr>
<tr>
<td>1971</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>1972</td>
<td>62</td>
<td>9</td>
</tr>
<tr>
<td>1973</td>
<td>109</td>
<td>11</td>
</tr>
<tr>
<td>1974</td>
<td>182</td>
<td>13</td>
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<tr>
<td>1975</td>
<td>200</td>
<td>16</td>
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<td>1976</td>
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<td>18</td>
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<tr>
<td>1977</td>
<td>515</td>
<td>19</td>
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<td>1978</td>
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<td>19</td>
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<tr>
<td>1979</td>
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<td>1980</td>
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<td>1983</td>
<td>1,270</td>
<td>50</td>
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<td>1984</td>
<td>1,398</td>
<td>58</td>
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<tr>
<td>1985</td>
<td>1,571</td>
<td>68</td>
</tr>
<tr>
<td>1986</td>
<td>2,109</td>
<td>83</td>
</tr>
</tbody>
</table>


FIGURE 2. COMPARISON OF KOREAN AND TAIWANESE FOOTWEAR EXPORTS PER FIRM, 1971-1985
Korea and Taiwan was in the organization of production. Korean producers of footwear tended to be vertically integrated - stitching in-house the uppers of footwear, manufacturing in-house rubber soles, as well as assembling complete shoes. During the 1970s, large manufacturers such as Kukje (I.C.C.), Tae Hwa Co., Chin Yang Chemical Co., and Sam Hwa integrated over 80 percent of the footwear manufacturing process. By contrast, the growth of the Taiwanese footwear industry was achieved by a decentralized production network of small-scale factories, workshops and households interconnected by a subcontracting system. Unlike the vertically integrated Korean manufacturers, Taiwanese producers specialized in footwear assembly, and subdivided the task of upper stitching and sole manufacturing to independent workshops and homeworkers through a myriad of subcontracting networks (Lim 1997).

The Korean approach to integrated manufacturing has given them tremendous advantages in the production of standardized athletic shoes, while the Taiwanese approach has allowed them to make inroads into various subcategories of shoes. On the eve of the implementation of the OMAs, Korean production patterns reflected such concepts as mass production, economies of scale, and hierarchy; Taiwanese footwear production reflected different concepts such as flexible production, economies of scope, and subcontracting.

The Taiwanese Response to OMAs

The OMAs imposed on Taiwan limited the importation of Taiwanese shoes on three categories: leather shoes (T1), plastic shoes (T2), and shoes with mixed uppers of leather and plastic materials (T3). In terms of volume, Taiwan agreed to limit exports to the United States to levels well below their record high of 156 million pairs. During the first restraint year, Taiwan
agreed that its exports would not exceed 122 million pairs; her total growth over the four-years was regulated at 7 percent (as opposed to 15 percent for Korea).

As OMAs were signed on June 14, 1977, an immediate problem for Taiwan was that their existing industry association, the Taiwan Plastic Shoes Exporters’ Association (TPSEA), covered only plastic shoe manufacturers. Leather and rubber footwear manufacturers belonged to the Taiwan Leather Product Industrial Association (TLPIA) and the Taiwan Rubber Products Industrial Association (TRPIA) respectively. To manage the quota efficiently, there was general consensus among the associations of footwear producers of all kinds that a new association must be established immediately. Therefore, in 1978, the Taiwan Footwear Manufacturers’ Association (TFMA), encompassing all footwear manufacturers in Taiwan, replaced TPSEA (Cheng 1996).

TFMA set up a Quota Research Committee consisting of government officials, academics, and representatives of the footwear industry (Cheng 1996, 103). The quota system set by the TFMA’s Quota Research Committee was as follows: the total quota was divided into basic quota (85 percent) and free quota (15 percent); and the primary criterion for quota allocation was based on past performance, measured by firms’ average export volume.8

For the first restraint year, free quota, subject to competition, was set at 15 percent of total quota. From the second year, the marginal increase portion in Taiwan’s quota restriction under the OMAs were all added to the free quota. To allocate the free quota, TFMA upheld two principles. First, TFMA strictly reserved free quotas to new entrants and those firms that used up their basic quota. Second, free quotas were allocated to firms promising the highest valued merchandise. Thus, free quota was subject to bidding and

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8 Taiwan, export capacity was calculated by firms’ average export volume in the three previous years (1974-1976), while Koreans only look into consideration one previous year.
went to firms that held higher unit priced orders. This policy protected new entrants into the market (usually smaller producers) from being discriminated against; consequently, quota flowed to manufacturers who were driven by quality improvement.

To ensure that firms pursued quality, the TFMA, in cooperation with the China Productivity Center, organized a team of quality control experts. These experts conducted on-site visits to evaluate manufacturers’ quality and set up training programs for firms that were eager to upgrade the quality of their shoes. The quality control team established a four-grade scale to determine the level of quality. The frequency of on-site visits differed, ranging from once a year for the highest-graded firms to once a month for the lowest. The quality control level of firms was indicated on the TFMA quota stamp on the export permits (Cheng 1996).

The results of TFMA’s policy is clear from Table 6, which outlines trends in unit value of imported footwear to the United States. We can see that the average unit value of footwear imports from Korea and Taiwan increased much faster compared to unrestrained exporters, due to the scarcity premium imposed by OMAs. We can also confirm that Taiwanese producers were more successful in upgrading their products compared to Koreans. Pearson calculated that as a result of upgrading Taiwan reaped an additional $218 million and Korea $99 million (Pearson 1983, 43).

During a period when cut-throat competition was likely to prevail because of reduced exports, the TFMA was able to free itself from sector interests and manage the quota so that quota flowed to manufacturers who were driven by quality improvement. An important reason why TFMA was able to stand autonomous from sector interest is related to the characteristics of the industry: membership size and organization of production. Because Taiwan’s footwear industry was composed of myriad of small but flexible producers, collusion on the part of these small- to medium-sized firms was difficult to carry out. In the end, the OMAs turned out to be a “blessing” for the Taiwanese footwear industry as import

<table>
<thead>
<tr>
<th></th>
<th>1976 ($)</th>
<th>1980 ($)</th>
<th>Percentage Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>3.87</td>
<td>7.09</td>
<td>+ 83</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1.80</td>
<td>4.31</td>
<td>+ 139</td>
</tr>
<tr>
<td>Competitorsa</td>
<td>2.93</td>
<td>3.34</td>
<td>+ 14</td>
</tr>
<tr>
<td>Unrestrained Exporters</td>
<td>5.92</td>
<td>7.66</td>
<td>+ 29</td>
</tr>
</tbody>
</table>

a China, Singapore and Thailand
restriction reshaped market competition from competing on the basis of price to one based on upgrading to higher-valued exports.

**Institutional Response from Korea**

On July 21, 1977, Korea signed a four year agreement, limiting exports to the U.S. to levels well below the 44 million pairs of 1976. The agreement provided that Korean exports in the first restraint year would not exceed 33 million pairs. The restraint level was allowed to increase in each of the succeeding years to a limit of 38 million pairs in the final year, a regulated growth of 15 percent over four-years (Taiwan’s growth was regulated at 7 percent over four-years). The OMAs with Korea set up two categories for export to the United States: leather, non-athletic (K-1) and athletic and other footwear (K-2). Within the categories, the administering country was allowed to transfer quantities from one category to another within specific percentages (see Table 7).

OMAs allow exporting countries to administer controls “voluntarily.” We have mentioned that the responsibility for administration in Korea was carried out by the KFEA (Korean Footwear Exporters’ Association). The KFEA differed from the TFEA in one large way: the KFEA was a distributional coalition composed of large, mass producing firms.

From its inception in 1971, KFEA exhibited all the necessary preconditions for a successful cartel - small number of affected firms and homogenous products. First of all, it was an organization which kept its size of membership small. Of the more than 500 manufacturers of footwear and its parts, only 13 firms were “invited” to the first membership meeting in 1971.\(^9\) By the late 1970s, KFEA’s membership grew to 30, but those that were added were the powerful trading companies of the chaebol. In essence,

\(^9\) They were: the five were large producers (Kukje Corp., Jinyang, Sam Hwa, Dongyang, and Taihwa), four subsidiary companies of the big-five, and four trading companies that exported footwear.

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**TABLE 7. RESTRAINT LEVELS UNDER OMAs FOR KOREA**

<table>
<thead>
<tr>
<th>Quota Category</th>
<th>Restraint Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 28, 1977</td>
</tr>
<tr>
<td>K1</td>
<td>11.52</td>
</tr>
<tr>
<td>K2</td>
<td>21.48</td>
</tr>
<tr>
<td>Total</td>
<td>33.00</td>
</tr>
</tbody>
</table>

Source: United States Department of Commerce (1978, 31)
KFEA was an exclusive organization in that small to medium-sized firms were restricted from joining.

A second important characteristic of the KFEA was that its member firms were committed to mass production, based on standardized technology. The introduction of mass production in the Korean footwear industry was not an inevitable process; nor was it an efficiency searching process as some economic historians have claimed (Chandler 1977). The production site of early rubber shoe producers resembled that of a workshop, as production operated on a decentralized system of hand labor. By the early 1960s, canvas and athletic shoes were introduced, which posed an organizational challenge to traditional rubber shoe manufacturers unfamiliar with the sophisticated tasks and greater division of labor involved. To accommodate the new technology, firms experimented with various types of labor regimes (Lim 1997, 158-168). The firms that eventually became the core member of the KFEA chose to overcome the multi-task problem by introducing conveyer belts and long assembly lines. The installation of assembly lines increased their production drastically; however, the commitment to standardized technology sacrificed flexibility and the range of products they produced. As their assets became highly specific, the members of the KFEA showed a strong interest in implementing policies to their favor.

As mentioned, large Korean footwear manufacturers were committed to volume production of athletic shoes. Prior to OMAs, the exports share of four largest firms in the athletic shoes category was 73 percent. Using their clout within the KFEA, these mass producing firms were able to influence the quota allocation in their favor.

KFEA established three general allocation rules to “ensure full usage of quotas”: (1) Quotas will be allocated among individual firms based on past performance, measured by quantity of exports; (2) When a firm fails to exhaust the allocated quotas, they will be penalized; and (3) Quotas can be transferred between firms (Suh 1981, 42). As we will see, such allocation scheme was closely associated with the interest of large athletic footwear exporters in category K2.

For the first restraint year (1977-78), the KFEA allocated quotas to individual firms in proportion to their past year’s performance. The period from April 4, 1976 to April 3, 1977, was used as a base period, and each firm received quotas in proportion to its share of the total nonrubber footwear exports to the U.S. during this period. Obviously, such rule favored existing exporters—the large firms—who already were enjoying a lion’s share of exports. This system of quota distribution was maintained for the subsequent three restraint years of the OMA period, with only slight
In contrast to the privileged, large-firms of the KFEA, the small firms were under a serious disadvantage. Rather than having assurance to guaranteed quotas, small and medium-sized firms that were aspiring to export had to vie for ‘open quotas.’ The OMAs allowed Korean manufacturers to marginally increase in the restraint level for each of the quota years, by approximately 4 percent for each year. This increased portion in the restraint level and unused quotas were called ‘open quotas,’ subject to free competition. The so-called ‘open quotas’ were available to all exporters. Two principles were applied in distributing open quotas, however. Half of the open quotas were reserved for existing exporters only on the basis of quota shares in the previous year. The other half of the open quota was distributed to everyone, including newcomers (e.g. firms with no past experience of exports to U.S.) and firms excluded from the first half of open quotas. Newcomers, however, had to show an irrevocable L/C (letter of credit) while existing firms should have used more than 50 percent of their allocated quotas by the end of September.

Another strategy the mass producers adopted was to influence the allocation mechanism and ensure that category K2 (athletic shoes) be given more priority. In this way, athletic shoes producers could maintain their volume of shipments in the K2 category, while leaving the cheaper K1 category to other exporters. Committed to mass production and unwilling (or unable) to change their production methods, the large Korean producers were inflexible in adjusting to the OMAs. Such inflexibility is reflected in the following tactic that athletic footwear manufacturers utilized: change the composition of shoes.

Under OMAs, “nonrubber” footwear imports were limited, while imports of “rubber” footwear were not. Certain athletic shoes (e.g., nylon joggers) can be classified as non-rubber if at least 50 percent (by value) of the exterior surface of the uppers is leather; they are classified as rubber footwear if less than 50 percent. The K-2 category of the Korean OMAs only applied to leather athletic shoes. Taking advantage of such dubious classification system, the inflexible Korean manufacturers increased “flexibility” by adding more nylon or changing the size and material of ornamental stripes

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10 From the second-year on, firms were entitled to receive quotas equal to their exports in the previous quota-year, minus the amount of penalties. Penalties applied to firms that failed to exhaust their allocated quota.

11 Eligible firms, however, were limited to those whose average value of exports exceeded the average value of non-rubber footwear exported to the U.S. by all firms. In short, eligible firms were those in the more expensive category of footwear.
and logos on the uppers, effectively switching from “leather” to “rubber”
shoes (Pearson 1983). As we can see from Table 8, imports of rubber
footwear from Korea and Taiwan increased substantially in the first restraint
year; during the subsequent years, however, Taiwan was able to adjust to
OMAs and bring its exports of rubber footwear down. By contrast, Korean
producers kept relying on exports of unrestricted rubber footwear.

Accommodating the interest of large producers, the allocation of Korean
footwear quota lacked flexibility and did not provide firms with any extra
incentive to upgrade the quality of exported footwear. Instead, it helped
existing exporters capture the windfall profits created by the quotas within
category K2 while suffocating producers within the K1 category.

CONCLUSION: KOREA AND TAIWAN FROM A COMPARATIVE
PERSPECTIVE

This comparative study of the footwear producers has shown that Korean
and Taiwanese footwear industries devised two different solutions to the
same trade restriction. I have shown that large Korean footwear producers
organized their production according to the principle of mass production:
this was a strategy to make huge initial investments, standardize
production as soon as possible, then reap the economies of scale effect.
Although it was an effective strategy that allowed Korean firms to capture a
substantial share in the export market in a short period, this strategy proved
fatal when faced with challenges such as the OMAs. Being asset-specific and
able to resolve the “problem” of collective action, these producers were
unable—or, “unwilling,” to be precise—to diversify. As a result, they had
shifted their production to non-restricted items.

During the OMAs, quality upgrading was rather limited for those large-
scale firms. These indirect but negative effects of quotas were apparently
serious for large Korean firms, a fact which led the Korean government to
oppose the extension of the footwear quotas. For Taiwanese footwear
manufacturers, OMAs had provided many advantages, including windfall

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>61.0</td>
<td>94.7</td>
<td>53.8</td>
<td>58.9</td>
</tr>
<tr>
<td>Korea</td>
<td>24.7</td>
<td>59.4</td>
<td>41.8</td>
<td>42.6</td>
</tr>
</tbody>
</table>

Sources: compiled from USITC (1979; 1981).
a Provided for under TSUS (Tariff Schedule of the United States) 700.60; such footwear is not subject
to quota.
profits, reduced competition of a cut-throat type, and increased production planning ability. The role of the TFMA, as we have seen, was crucial. Because these advantages have more than offset the disadvantages of quantity reductions, the Taiwan Board of Trade announced a footwear export quota—even after the OMA lapsed—which the United States promptly asked to be removed (Pearson 1983, 27).

The experience of OMAs and the footwear industry may be a partial one to draw sweeping conclusions on the general characteristics of the economies of Korea and Taiwan. Yet, in as far as industrialization is concerned, Korea and Taiwan produced quite different ‘industrial orders’¹² that resemble the pattern found in the footwear industries: the Korean success was achieved via large-firms, while small-to medium-sized firms fueled Taiwan’s development. Regardless of the kind of product or industry compared, there seems to be a strong tendency that firms are larger in size and more concentrated in industries in Korea than in Taiwan.

It is beyond this paper’s boundary to argue which method of organizing production is more “efficient” or “modern” since societies address the problem of what to produce and how to organize production in different ways. If industrial performance is understood as a process of moving up the ladder of international division of labor, then we must conclude that Korea, in general, did a much better job than Taiwan. On the other hand, if we compare the two economies’ ability to adjust to demand cycles and withstand economic crisis, then we must conclude the opposite.

REFERENCES


¹² The reasons why I use the concept of industrial orders, rather than terms more familiar to us (e.g., industrial structure or industrial organization), is because of the sheer fact that *industrialization cannot simply be analyzed as a matter of achieving efficiency,* constrained by factor endowments, be they productive or social. Industrial orders are the sum of ideas, practices, rules, and institutions that constitute and shape the way in which the production of goods and its administration take place. Often created during the turbulent organizational and strategic ambiguity of the formation of an industry, industrial orders provide ground rules for acceptable transactional practice, which, in turn, give rise to particular kinds of firms and governance mechanisms, such as market and hierarchy. In short, and industrial order is the politically and socially constructed framework that creates the background conditions under which particular repertories of governance mechanisms (markets, hierarchies, or networks) emerge (Herrigel 1994, 97-99).


Basic Books.

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