Panel Discussion: The Impact of U.S. Trade Law Actions on Business Decisions in Korea

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PANEL DISCUSSION: THE IMPACT OF U.S. TRADE LAW ACTIONS ON BUSINESS DECISIONS IN KOREA

Panelists:

David Laverty, Marks, Murase & White, New York;
Young J. Kim, Managing Director of Corporate Planning and Coordination, Goldstar Co. Ltd.;
S.K. Lee, U.S. Regional Director, Pohang Iron and Steel Co. Ltd.

D. Laverty

As a graduate of this school, it is a special honor for me to be here with two individuals who have played a very important role in some of the most important trade actions that have affected Korea.

Young J. Kim is from Goldstar, Co., Ltd., a member company of the Lucky-Goldstar Group, one of Korea's major chaebols, or conglomerates. S.K. Lee is with POSCO, the Pohang Iron and Steel Company, which is Korea’s premier steel manufacturing company. Before these gentlemen deliver their prepared remarks, I will provide some background on their industries and their companies, as well as a bit of history to set the framework for both of their presentations. This introductory discussion of some of the more important trade actions that have affected consumer electronics in the case of Goldstar, and steel in the case of POSCO, will remind us that we are here to assess the impact of U.S. trade laws on business decision-making, or, as Stanley Lubman characterized it last night, to engage in a form of legal sociology by looking at the impact of law on behavior.

As in the case of Taiwan, there has been a significant history of U.S. trade actions affecting Korean industry. The goal has been to restrain imports coming into the United States, whether through antidumping or countervailing duty proceedings, or through the use of other tools. In our look at the impact of such trade actions, we will be devoting some attention to their effect on export and investment strategy. Trade actions can have an important impact on investment strategy. Both of these companies have diversified and have moved production overseas, including to sites such as the United States, and our panelists will be able to discuss this development.
First, I would like to provide some background on Mr. Kim. The Lucky-Goldstar Group is one of the outstanding companies in Korea. It is one of the main four chaebols; the other three of these diversified conglomerates are presently Samsung, Hyundai, and Daewoo. Samsung has been ranked twentieth in the Fortune International 500 and Daewoo is thirty-fifth. If Lucky-Goldstar were to be ranked on a consolidated basis, it would be in the same league with those two conglomerates. Goldstar Co., Ltd. has been a leader in consumer electronics since its beginnings in the late 1950s. The company was producing radio sets before anyone else in Korea. It began exporting to foreign markets well before most Korean companies, and certainly was a leader in electronics.

As for the historical nutshell that I promised, I would like to take a look at the years 1976 through 1979. The year 1976 saw the first major escape clause actions against the Japanese; the U.S. International Trade Commission recommended very substantial tariff increases on color televisions. President Carter chose to take the path of export restraints and an agreement. Certain themes that were present at that time, I think, were later played out on the Korean side. The Japanese began to invest in the United States. They began to take sub-assemblies from overseas, bringing them here and putting them together. Through this process, they were able to avoid the imposition of quotas. They also began to shift toward higher and higher levels of technology, away from color televisions to VCRs and other more sophisticated products. From Mr. Kim's presentation, we will recognize some of these same developments on the Korean side.

Mr. Kim has been with Goldstar since 1969. He was here in the United States during some key years, from 1983 to 1987. The year 1983 was a time of major antidumping activity against Korean companies. Mr. Kim was then president of Goldstar Electronics International, the United States marketing subsidiary of the company, so he, more than anybody, I think, witnessed directly the impact of U.S. trade actions on the company.

Y.J. Kim

It is a great pleasure to address such a notable group of officials, scholars, businessmen, and attorneys specializing in trade law. I would like to thank the University of Michigan, and especially Mr. Clyde Stoltenberg for the honor. This is my first visit to Ann Arbor, although I have frequently flown to Detroit in the past for business meetings with major retailers in the metropolitan area.
The points of my address are derived mainly from the electronics industry's perspective, in particular from Goldstar's.

1. CHRONOLOGY OF ANTIDUMPING PROCEEDINGS

Since labor unions and Zenith Electronics Corporation filed dumping complaints against Korean and Taiwanese companies for color television sets in 1983, there have been a series of annual investigations and rulings (See Exhibit 1). The investigations were later broadened to include color picture tubes and PCBs, which are main components of color television sets.

2. IMPACT ON KOREAN ELECTRONICS INDUSTRY

The impact of U.S. trade laws, especially antidumping rulings, on the Korean electronics industry can be considered in the following respects.

First, restrictive U.S. trade laws have shifted exports away from the U.S. to non-U.S. markets. The share of exports to the U.S. has decreased from fifty-nine percent in 1983, to thirty-eight percent in 1988 (See Exhibit 2). Korean manufacturers understood the danger of heavy dependence on the U.S. market in the face of mounting protectionism. They have, therefore, actively sought to diversify the market.

However, we cannot overlook other major factors influencing market diversification. Korean manufacturers could accelerate the penetration of European, Asian, and Latin American markets faster than the U.S. market, where competition was much more intense. In conjunction with this, consumer electronic products which were mainly developed for the U.S. market until the mid-eighties were developed for European and Asian markets, which required different specifications (e.g. PAL, SECAM). The establishment of economic ties with communist countries also spurred exports to those countries in recent years, thus reducing the share of exports to the U.S.

Let's consider a special case of the U.S. trade law, namely the antidumping proceeding. The impact of antidumping rulings on color television exports to the U.S. from Korea has been substantial. In 1983, color television exports to the U.S. stood at $303 million, which accounted for seventeen percent of all electronic products. In 1988, they stood at $218 million — a decrease in absolute terms of less than four percent of all electronic products. The decrease in color television exports to the U.S. was accompanied by an increase in production in the United States. In 1981, Goldstar began the construction of a

1. Exhibits 1-4 appear following the full text of the panel discussion.
manufacturing plant in the United States, and Samsung soon followed. One of the casualties of the late antidumping rulings is Daewoo Electronics, which stopped selling color television sets in the U.S. in 1988 due to the levying of a twenty-three percent duty. Daewoo does not have a manufacturing operation in the U.S.

Growing protectionism, together with the globalization of the electronics industry and rising manufacturing costs in Korea, have resulted in the proliferation of Korean-owned production facilities in foreign countries. Major consumer electronic companies, such as Goldstar, Samsung and Daewoo, have established fully- or jointly-owned factories in several countries. The major force behind this trend is the globalization of the industry, in terms of competition as well as cooperation. Companies are competing in multiple markets with products produced in several countries.

There are many challenges facing overseas manufacturing operations. The most serious problem is the lack of local parts suppliers. Other problems include a shortage of skilled workers, local regulations, and cultural differences. It takes time and management skill to operate manufacturing plants in foreign countries. However, it is becoming evident that a local presence — in both sales and manufacturing — is critical to success in foreign markets.

Another consequence of the U.S. trade law proceedings is the establishment of government guidelines on the export price of consumer electronic goods to the United States. Each year, the government revises guidelines for export prices. Items that do not meet the guidelines are not granted an export license by the Electronics Industry Association of Korea. However, it is questionable whether such measures actually influenced dealer costs in the United States. Since the nature of consumer electronics is very competitive, subsidiaries in the U.S. have to compete based on prices dictated by the market. Korean subsidiaries, mostly competing in the promotional segment as followers, felt the greatest pressure to conform to the dealer price dictated by the market forces, when compared with market leaders.

3. Who benefits from the U.S. trade law?

Given the impact of U.S. trade law proceedings on the Korean industry, who actually benefits from them? In the short run, the answer is the industry which the law aims to protect. However, in the long run, benefits are very hard to pin down and controversial at best. As can be seen in consumer electronics, Zenith is the only remaining American-owned producer of color television sets, despite repeated attempts to protect the industry from foreign competition. It does not,
however, mean that there is a dearth of consumer electronics manufacturing in the United States. Foreign companies have actively built new plants or rationalized existing plants. The net impact on employment may not be as serious as described by the media.

If we assume the purpose of trade laws is to protect domestic ownership of the manufacturing base of an industry, then the results in consumer electronics are disappointing. Furthermore, consumers have periodically suffered by paying higher costs on products due to shortages artificially created by such measures as antidumping proceedings. The DOC and companies involved in the dumping issues incurred substantial legal and administrative expenses which could have been used for more productive purposes.

4. OVERCOMING THE TRADE FRICTIONS

I would like to propose the following in order to overcome the friction in bilateral trade issues.

(1) The U.S. government should reverse its protectionist policies in the international trade area. By escalating protectionism, the actions of the U.S. government are leading the world into a potential trade war. We should all respect the spirit of free trade and promote it continuously.

(2) Mounting pressure on Korea to open markets to foreign goods, especially U.S. agricultural products, should be eased. Unilateral pressure for import liberalization will fuel anti-American feelings in Korea, and may well reduce the options for the Korean government. As a result of the recent GATT meeting, Korea has agreed to eliminate all important restrictions by July, 1997, which clearly demonstrates our commitment to free trade. But the elimination process will take time, since it involves structural changes of affected industries.

(3) The antidumping actions against color television sets should be repealed; instead, both parties should enter into a voluntary restraint agreement (VRA), which should encompass color television sets, picture tubes, and PCBs. At the same time, the U.S. government should enact legislation to encourage investment in manufacturing plants in the U.S. by foreign companies.

D. Laverty

Mr. S.K. Lee will be speaking about the steel industry, which has played a major role in Korea's recent industrialization. POSCO is the largest manufacturing company in Korea, based on sales revenue. Unlike Goldstar and the other major chaebols, or conglomerates, POSCO
Panel: U.S. Trade Law and Korea

does have a government ownership role. POSCO is now one of the largest steel producers in the world and gaining quickly. Also, like Goldstar, POSCO has invested overseas. One of its major investments is with USX in California, in the form of a joint venture that began in April, 1986.

For a brief overview of the U.S. trade actions against Korea affecting steel, I will start with the U.S. overproduction of steel in 1978. A number of factors seriously affected the American steel producers' ability to compete in the global marketplace: high labor costs, ecological concerns, and foreign competition. In 1978, the U.S. implemented the Trigger Price Mechanism, which basically provided that once prices dropped below a certain set amount, an expedited antidumping investigation would be triggered.

From 1978 to 1984, a number of antidumping and countervailing duty investigations were conducted. In 1984, the United States entered into a voluntary restraint agreement involving twenty-nine countries. Mr. Lee will be discussing the VRAs, or voluntary restraint agreements, in quite some detail.

The U.S. International Trade Commission, in a major escape clause proceeding, recommended that quotas be imposed on steel. The President at the time rejected such action, but did negotiate the VRA. Korea was, at that time, allotted 1.9 percent of the U.S. total domestic demand for steel. This VRA remained in effect until July, 1989, and has been extended for another two and one-half years.

Since joining POSCO in 1973, Mr. S.K. Lee has been involved extensively in exports. Most recently, he was executive director in charge of exports and imports of steel. He has worked in Singapore, Los Angeles, Houston, and Washington, D.C. Currently, Mr. Lee is based in Washington, D.C., where he serves as the U.S. regional director for POSCO.

S.K. Lee

As the U.S. representative for POSCO, I have been asked to speak concerning the impact of U.S. Antitrade Actions on the Korean steel industry. This speech is particularly timely since the Bush Administration has just concluded its renegotiation of the Voluntary Restraint Agreements, or VRAs, which will restrict foreign steel exports for at least the next 2 1/2 years.

The VRA program is only the latest in a series of U.S. government programs over the last twenty years designed to protect the U.S. steel industry from foreign competition. U.S. protection first began in 1968.
with the voluntary restraints imposed on steel imports from the EC and Japan, which lasted until 1974.

In order to understand the historical significance of the protection of the Korean steel industry, consider this: POSCO was not founded until 1968, the construction of POSCO did not commence until 1970, and steel was not produced until 1973. By this time, the U.S. market was already well on its way to being a protected market.

The second wave of protection began in 1978 with the development of the Trigger Price Mechanism. It was at that time that the Korean steel industry began formulating its strategy toward the U.S. market. The U.S. steel industry had made “unfair trade” the focus of their campaign for renewed protection. An antidumping action was filed by a small U.S. manufacturer of carbon steel plate — Gilmore Steel — against plate from Japan.

This was the first case in which the Treasury Department used the sales below cost provision of the antidumping law enacted as part of the 1974 Trade Act. The Treasury Department found dumping margins in the range of twenty-five percent, largely because home market prices in Japan were disregarded when they did not fully recover all costs — including interest, fixed and variable overhead, and expenses — in their home market sales. This case is historically important because it signalled to the U.S. steel industry what a powerful weapon the antidumping law could be.

In 1977, the U.S. steel industry found itself in the midst of a recession and demanded protection. The Carter Administration responded, claiming that the Treasury Department had failed to administer the unfair trade laws and that it would do so if the U.S. steelmakers would only file cases.

The industry took the Administration up on its invitation and filed massive antidumping and countervailing duty actions against all suppliers in the EC. At the same time, the industry began its program of claiming that it could not be expected to compete and raise capital in the face of “unfair” foreign imports. These cases threatened to impose a virtual embargo against steel imports from the EC — much as the Gilmore case had halted imports of carbon steel plate from Japan.

Rather than permit the cases to proceed to a politically unacceptable conclusion, the Administration struck a deal with the U.S. steelmakers — in return for the withdrawal of all actions against the EC, the Administration would implement a set of floor prices — trigger prices — which would apply to imports of all steel products from all sources.

The theoretical basis of the Trigger Price Mechanism, or TPM,
was that the prices themselves would be constructed based on the costs of the Japanese steel industry — which was acknowledged at that time to be the lowest cost producer of steel in the world. Imports which entered below these prices were not prohibited, as such, but they could serve as the basis for the self-initiation of antidumping and countervailing duty investigations by the U.S. authorities.

Initially, the TPM worked rather well since it coincided with the emergence of growth in the market. However, in 1980, when trigger prices started to stabilize, the industry demanded higher trigger prices. When the Administration failed to deliver these higher prices, the industry refiled their antidumping and countervailing duty cases against the EC. Since the underlying conditions which had brought about the necessity of the TPM remained unchanged, the TPM was reinstated after roughly six months with new adjustments that would result in even higher trigger prices.

These more politically sensitive trigger prices sowed the seeds of their own destruction. During the new TPM, the Korean industry's trade strategy toward the U.S. market emerged.

The new TPM lasted about 1 1/2 years, from the end of 1980 through the beginning of 1982. The system finally collapsed because the trigger prices themselves, having no root in the market place or in actual Japanese costs for that matter, got to the point where they were higher than U.S. domestic prices.

The Korean strategy was to demonstrate that the Korean steel industry had supplanted the Japanese as the low cost producer in the world. Korean pipe and tube producers, therefore, filed for permission to export at prices below the trigger prices. In order to do this, they had to prove that they were not subsidized and that the prices and costs in the Korean market were lower than the trigger prices. Previously, only Canadian producers had tried this.

The initiative taken by Korean producers at that time had two important effects for the Korean industry. First, even though the pre-clearance system itself was terminated, cases were not initiated against Korean pipe producers who sold below TPM based upon those applications. Second, and more important for the long run, the de facto success of those applications sent a strong signal to the U.S. Government and steel industry that Korean steel could compete in the U.S. market without the same vulnerabilities to unfair trade actions as EC suppliers.

The collapse of the TPM was brought about by the filing of massive antidumping and countervailing duty cases against all major steel suppliers — including the EC, Japan, and Korea. Many EC suppliers
remained vulnerable to these unfair trade cases so the EC agreed to restrain its steel exports in exchange for the withdrawal of those cases. This VRA, which was entered into on November 1, 1982, became the basis of the VRA's of today.

In the countervailing duty cases initiated against the Korean steel industry, the U.S. steel industry alleged that the Korean industry was subsidized in the range of thirty to forty percent. The Commerce Department determined that, in fact, any actual subsidization was commercially insignificant with findings ranging from zero to 1.88 percent, depending on the product. Most importantly, the Commerce Department agreed that the government investment in POSCO itself did not constitute a subsidy because it was consistent with commercial considerations and principles.

The U.S. industry continued to bring a variety of antidumping and countervailing duty cases. The most serious was filed by U.S. Steel in 1983 which, in essence, called for the reinvestigation of the 1982 countervailing duty determination and again alleged subsidies in the range of fifty percent.

In the end, the results were not markedly different as the Department determined that the subsidy levels were between zero and 3.6 percent. The differences were due, in our judgment, to political decisions concerning some programs which were meant to demonstrate that the Department had taken into account the views of the domestic industry. Even with this marginal increase in the subsidy level, it reconfirmed Korea's basic position that it was a fair trader. Around the same time, in mid-1984, Bethlehem Steel filed a petition under section 201 of the Trade Act of 1974 for quotas on steel imports. The U.S. government refused section 201 relief, but this case ultimately became the vehicle by which the U.S. government imposed the VRA system in 1984.

Korea's strategy during the period that the countervailing duty and 201 cases were pending was to establish itself as a "fair trader" in the public mind. To this end, the Korean steel industry commissioned a pamphlet which was widely disseminated.

This strategy was successful. Even Senator Heinz of Pennsylvania, the Congressional leader of the forces seeking protection for the steel industry, acknowledged that Korea was a "fair trader" along with Japan and Canada. Similar sentiments were echoed by Ambassador Brock in testimony before Congress.

As a result, when the President announced the VRA program on September 18, 1984, Korea had greater negotiating leverage due to its willingness and ability to defend unfair trade cases. Korea needed a
credible basis upon which to base an argument that Korea was unique. The "fair trader" position provided that basis.

The U.S. was willing to provide Korea a quota no greater than 1.7 percent of the market. Korea's final position, prior to settlement, was that it should receive a 2.1 percent market share. On December 17, the day before the deadline established by the President for the conclusion of VRA agreements with the major suppliers, the U.S. and Korea compromised at 1.9% plus an additional 160,000 tons for some special steel products.

The Korean strategy since 1982 has been to affirmatively identify and address the concerns raised by the U.S. industry and U.S. Government regarding Korea's steel trade with the United States. Our own natural efficiencies have served us well in this regard but we have also specifically prepared ourselves for the artificial world of U.S. unfair trade laws. With the assistance of our lawyers, we are constantly assessing our position under these laws so that we can adopt a consistent, long-term export policy with minimal disruption.

It should be pointed out, however, that while POSCO has successfully defended itself in the unfair trade cases, it has spent a lot of time, effort, and money to prove itself innocent. An exporter with less commitment to the U.S. market might have preferred to leave the market rather than make the significant commitment these cases require even if the exporter ultimately could prove that it was not engaging in unfair trade practices. For this reason, I suspect that the U.S. industry frequently uses these cases to drive out small volume exporters and new participants in the U.S. market. This strategy works well with importers who would rather switch suppliers than face the uncertainty of the cases.

POSCO's commitment of time and money in these cases was so great that it is said, only half jokingly, that POSCO's new Kangwong facility was only slightly more expensive. In my view, much of this time and expense is unnecessary if the goal is to identify unfair prices or subsidized sales. The Commerce Department's methodology bears little relationship to actual business practices. Furthermore, the Commerce Department often requests information in a manner that requires a complete restatement of the company's books. Consequently, a company's workload is increased dramatically and the results mostly reflect the artificial nature of the rules. For example, no company in the world sets its prices based on a sale-by-sale analysis of its freight costs. Nevertheless, the Commerce Department frequently requires a company to identify inland freight costs on a sale-by-sale basis.

As I mentioned earlier, the VRAs negotiated in 1984-1985 in large
part reflected each country’s ability to defend the unfair trade cases so Korea did quite well. However, the VRAs also reflected, like all good cartels, the historical market shares of the major suppliers. In the case of steel, these suppliers were Japan and the EC. The VRAs froze for five years the 1981-1983 market shares of these suppliers. Japan and the EC not only benefited from their historical shares but also from the fact that they had a diverse product mix. The VRAs specifically restricted countries from varying their product mix from the products they were selling to the U.S. prior to the VRAs. The U.S. virtually has a unilateral right to impose a quota limit at a minimal level on any new product shipped.

Therefore, the VRAs locked in the products and the levels of shipment each country was allowed. Thereafter, market forces had very little to do with steel import patterns. New producers are also prevented from entering the U.S. market since each country internally distributes the quota among traditional suppliers.

In conclusion, my company looks at the unfair trade cases as a cost of doing business in the United States. Fortunately, our successful approach to unfair trade cases has assured us of an important presence in the U.S. market and we have not had to search out other markets, diversify our products, or invest in the U.S. in order to recover from the effects of such cases. We have, however, sought to diversify our markets and products because that is the policy that any dynamic company should naturally follow. For example, POSCO’s U.S. investment in a joint-venture project with USX (UPI in Pittsburgh and California) is a testament to POSCO’s success in the U.S. market and is based solely on our assessment of the economic viability of that project.

The VRAs that were recently renegotiated are basically a rollover of the prior VRAs for another two and one-half years. Therefore, negative aspects of the VRAs will continue to impact the Korean steel industry for the next two and one-half years. I hope we will see a real end to U.S. protection of steel in March, 1992.
Panel: U.S. Trade Law and Korea

Exhibit 1
Chronology of Antidumping on U.S. Bound Color Television Sets

May 2, 1983  Labor union and Zenith Electronics Corporation file dumping complaints against Korean and Taiwanese manufacturers of color television sets

Mar. 1, 1984  Department of Commerce (DOC) releases final results of 735 Review
Goldstar  14.77%
Samsung  15.95%
KEC (later Daewoo)  16.57%

Dec. 28, 1984  DOC releases final results of the 1st Annual Review
Goldstar  7.47%
Samsung  12.23%
Daewoo  14.88%

Jan. 9, 1986  Suspension of customs liquidation on color picture tubes and PCB from Korea

Nov. 14, 1986  DOC releases final results of the 2nd Annual Review
Goldstar  1.37%
Samsung  2.06%
Daewoo  3.49%

July 1, 1988  DOC releases final results of the 3rd Annual Review
Goldstar  2.34%
Samsung  3.21%
Daewoo  23.30%

Exhibit 2
Electronic Goods Exports

<table>
<thead>
<tr>
<th>Exports of Electronic Goods (A)</th>
<th>'83</th>
<th>'84</th>
<th>'85</th>
<th>'86</th>
<th>'87</th>
<th>'88 (JAN-JUN)</th>
<th>'89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports to USA (B)</td>
<td>1,802</td>
<td>2,491</td>
<td>2,271</td>
<td>3,959</td>
<td>4,647</td>
<td>6,005</td>
<td>3,052</td>
</tr>
<tr>
<td>B/A (%)</td>
<td>59.1</td>
<td>59.3</td>
<td>52.6</td>
<td>53.8</td>
<td>42.9</td>
<td>38.2</td>
<td>38.9</td>
</tr>
<tr>
<td>Color TV Exports to USA (C)</td>
<td>303</td>
<td>296</td>
<td>234</td>
<td>395</td>
<td>264</td>
<td>218</td>
<td>88</td>
</tr>
<tr>
<td>C/B (%)</td>
<td>16.8</td>
<td>11.9</td>
<td>10.3</td>
<td>10.0</td>
<td>5.7</td>
<td>3.6</td>
<td>2.9</td>
</tr>
</tbody>
</table>

(Unit: US$ million)
Exhibit 3

ESTIMATED HOUSEHOLD PENETRATION BY PRODUCT
(AS OF JUNE 1989)

FIGURE 13

<table>
<thead>
<tr>
<th>Product</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Television</td>
<td>98%</td>
</tr>
<tr>
<td>Color TV</td>
<td>96%</td>
</tr>
<tr>
<td>Color TV with MTS</td>
<td>17%</td>
</tr>
<tr>
<td>LCD TV</td>
<td>3%</td>
</tr>
<tr>
<td>Monochrome TV</td>
<td>58%</td>
</tr>
<tr>
<td>Projection TV</td>
<td>5%</td>
</tr>
<tr>
<td>VCRs</td>
<td>64%</td>
</tr>
<tr>
<td>Camcorders</td>
<td>8%</td>
</tr>
<tr>
<td>Home Satellite Earth Stations</td>
<td>3%</td>
</tr>
<tr>
<td>Audio Systems</td>
<td>91%</td>
</tr>
<tr>
<td>Compact Audio Systems</td>
<td>57%</td>
</tr>
<tr>
<td>Component Audio Systems</td>
<td>49%</td>
</tr>
<tr>
<td>Home Radios</td>
<td>98%</td>
</tr>
<tr>
<td>Home Compact Disc Players</td>
<td>16%</td>
</tr>
<tr>
<td>Cordless Telephones</td>
<td>23%</td>
</tr>
<tr>
<td>Telephone Answering Devices</td>
<td>28%</td>
</tr>
<tr>
<td>Home Computers</td>
<td>22%</td>
</tr>
<tr>
<td>Home Security Systems</td>
<td>12%</td>
</tr>
<tr>
<td>Prerecorded Videocassettes</td>
<td>49%</td>
</tr>
</tbody>
</table>

Note: Percentages are based on a current estimate of 90.7 million U.S. households.
**Exhibit 4**

Overseas Manufacturing Operations of Korean Electronics Companies

<table>
<thead>
<tr>
<th>United States</th>
<th>Goldstar</th>
<th>Color TV, Microwave Oven, Video Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Samsung</td>
<td>Color TV</td>
</tr>
<tr>
<td>West Germany</td>
<td>Goldstar</td>
<td>Color TV, VCR</td>
</tr>
<tr>
<td>Spain</td>
<td>Samsung (JV)</td>
<td>Color TV, VCR</td>
</tr>
<tr>
<td>Portugal</td>
<td>Samsung (JV)</td>
<td>Color TV</td>
</tr>
<tr>
<td>France</td>
<td>Daewoo (JV)</td>
<td>Microwave Oven</td>
</tr>
<tr>
<td>U.K.</td>
<td>Goldstar</td>
<td>Microwave Oven</td>
</tr>
<tr>
<td></td>
<td>Daewoo</td>
<td>VCR</td>
</tr>
<tr>
<td></td>
<td>Samsung</td>
<td>Color TV, VCR, Microwave Oven</td>
</tr>
<tr>
<td>Mexico</td>
<td>Goldstar</td>
<td>Color TV</td>
</tr>
<tr>
<td></td>
<td>Samsung</td>
<td>Color TV</td>
</tr>
<tr>
<td>Turkey</td>
<td>Goldstar (JV)</td>
<td>Microwave Oven</td>
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<td></td>
<td>Samsung</td>
<td>Color TV</td>
</tr>
<tr>
<td>Thailand</td>
<td>Goldstar (JV)</td>
<td>Color TV, B/W TV, Audio, Washer</td>
</tr>
<tr>
<td></td>
<td>Samsung (JV)</td>
<td>Color TV, VCR</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Daewoo</td>
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NOTE: JV ... Joint Venture, C ... Consignment