PREFACE

This paper is one in a series of four on selected topics on trade in the goods and services of the telecommunications and information industries. Other papers in the series include:

Volume I  "United States Trade in the Merchandise of Information Industries" by Kenneth Leeson;

Volume II  "The Employment Effects of Trade in High Technology Telecommunications and Information Products" by C. Randall Jacobson.

We would like to thank Forrest Chisman and to acknowledge the assistance of those in other offices of the Department of Commerce, in other government agencies and in private industry who have provided helpful information to us and comments on earlier drafts. Of course, we take sole responsibility for any opinions expressed in these papers.
PROMOTING U. S. TRADE IN
TELECOMMUNICATIONS AND INFORMATION PRODUCTS
WITH DEVELOPING COUNTRIES

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ABOUT THE TOPIC

It is becoming increasingly difficult to make anything but very general statements about "The Third World." The danger in trying to discuss "trade with developing countries" or the "telecommunications and information needs in less developed countries" lies in the assumption that developing countries share similar needs, equal ability to pay for imports, an equal willingness to trade with the United States, and a host of other characteristics. This is simply untrue. The developing world is not a homogenous bloc but rather a diverse group of countries with different levels of social, economic, and political development, unique cultures and geographies, as well as different political systems. As a result, each country has a unique set of diplomatic and trade relations with the United States (and other countries).

The purpose of this paper is to examine the potential viability of developing countries as markets for U.S. telecommunications and information products. This will include an analysis of trends in market sizes, an overview of the most important suppliers of developing countries' telecommunications and information goods, a discussion of the problems associated with trading with developing countries, and a survey of U.S. efforts to promote trade with them.

MARKETS IN DEVELOPING COUNTRIES

The markets in developing countries for telecommunications and information products are quite small when compared with those in developed countries. However, there are indications that, for a variety of reasons, demand for certain

The views and conclusions contained in this paper reflect those of the author, and should not be interpreted as necessarily representing the official policies or recommendations of the National Telecommunications and Information Administration, the U.S. Department of Commerce, or the U.S. Government.
products will increase at a rapid rate. In many cases, market growth in these countries will be faster than in developed countries.

Market Size

In an overall view of the world's trade activity, markets in developing countries for telecommunications and information products have been quite small. The global distribution of telephone receivers provides one illustration of this. According to World Bank figures, at the beginning of 1977 the total number of telephones in the world was estimated at about 398 million. The developing countries of Central and South America, Africa, and Asia, which had about 70 per cent of the world population and about 20 per cent of world GNP, had only 7.3 per cent (or about 29 million) of the world's total number of telephones. These figures are startling, certainly, and they probably quite accurately reflect the global distribution of telecommunications and information products in general. However, because developed countries supply a significant portion of their own domestic markets and because less developed countries are so dependent on foreign imports for their communications goods and services, consumption patterns do not accurately reflect international trade patterns.

The following table compares different regions' imports over a period of twelve years to illustrate the relative size and growth of markets in developing countries for telecommunications and information products. The data, drawn from the export statistics of the 24 member countries of the Organization for Economic

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<tbody>
<tr>
<td></td>
<td>Import Value</td>
<td>Per Cent of Total Imports from OECD Countries</td>
<td>Import Value</td>
<td>Per Cent of Total Imports from OECD Countries</td>
</tr>
<tr>
<td>Developed Countries</td>
<td>$9,274,444</td>
<td>82.3%</td>
<td>$28,090,215</td>
<td>84.5%</td>
</tr>
<tr>
<td>United States</td>
<td>$985,186</td>
<td>8.7%</td>
<td>$3,788,156</td>
<td>11.4%</td>
</tr>
<tr>
<td>Canada</td>
<td>$698,040</td>
<td>6.2%</td>
<td>$1,727,767</td>
<td>5.2%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>$6,833,508</td>
<td>60.6%</td>
<td>$20,584,376</td>
<td>61.9%</td>
</tr>
<tr>
<td>Communist Europe</td>
<td>$158,454</td>
<td>1.4%</td>
<td>$619,529</td>
<td>1.9%</td>
</tr>
<tr>
<td>Japan</td>
<td>$235,482</td>
<td>2.1%</td>
<td>$770,455</td>
<td>2.3%</td>
</tr>
<tr>
<td>Australia and New Zealand</td>
<td>$363,774</td>
<td>3.2%</td>
<td>$599,932</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total Developed Countries</td>
<td>$9,274,444</td>
<td>82.3%</td>
<td>$28,090,215</td>
<td>84.5%</td>
</tr>
<tr>
<td>Developing Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Hemisphere excluding Canada &amp; the U.S.</td>
<td>$638,479</td>
<td>5.7%</td>
<td>$1,891,805</td>
<td>5.7%</td>
</tr>
<tr>
<td>Asia excluding Japan</td>
<td>$829,650</td>
<td>7.4%</td>
<td>$2,098,366</td>
<td>6.3%</td>
</tr>
<tr>
<td>Oceania</td>
<td>$30,470</td>
<td>0.3%</td>
<td>$76,216</td>
<td>0.2%</td>
</tr>
<tr>
<td>Africa</td>
<td>$495,936</td>
<td>4.4%</td>
<td>$1,091,549</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total Developing Countries</td>
<td>$1,094,535</td>
<td>17.7%</td>
<td>$5,157,936</td>
<td>15.5%</td>
</tr>
<tr>
<td>Total World</td>
<td>$11,268,979</td>
<td>100.0%</td>
<td>$33,248,151</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1 Based on OECD data on merchandise exports for 27 selected telecommunications and information industries:

- Office Mach.
- Recorded Media
- Typewriters etc.
- Sound Recorders etc.
- Telecom. Equip. n.e.c.
- Elec. Measure & Control Equip.
- Recorded Media
- X-Ray Apparatus
- Optical Elements
- Newspapers & Period.
- Electro-Medical Equip.
- Photo. & Cinema. Equip. n.e.c.
- Cinema. Film
- Radio Receivers
- Statistical Mach.
- Medic. Equip. n.e.c.
- Elec. Mach. etc. n.e.c.
- Cam. & Flashlight Equip.
- Cinema. Equip.
- Books & Pamphs.
- Optical Instruments
- Scienc. Instrumts. n.e.c.
- T.V. Receivers
- Pens & Pencils
- Photo. Film etc.
- Elec. Circuits etc.
- Printg. & Bindg. Mach.
- Science Instrumts. n.e.c.

2 1965 export data from Australia and New Zealand not available.

Cooperation and Development (OECD),\textsuperscript{2} show the value of each region's imports of a sample of 27 telecommunications and information products from all the OECD countries. These industry categories — listed in the table — are drawn from a whole range of information products, from books and pamphlets to television and telecommunications equipment.\textsuperscript{3} This sample illustrates the portions of exported telecommunications and information goods that go to each region of developed and developing countries.

The OECD Series C export figures for 1965, 1972, 1976, and 1977 were used because it can be reasonably assumed that the bulk of all telecommunications and information exports come from the OECD countries. These figures indicate that developing countries' consumption of the world's telecommunications and information merchandise was commensurate with their share of the world GNP.\textsuperscript{4} The 1977 World Bank figures indicate that the developing countries had 20 per cent of the total world GNP. During the same year, developing country imports accounted for 20.6 per cent of the 27 industry categories shown in Table 1. The region called "Asia, excluding Japan" has shown the most dramatic growth, going from $0.8 billion worth of imports in 1965 to over $8.2 billion worth in 1977. With this level of imports, this region accounted for 10.2 per cent of the world's imports, compared with the United States which accounted for 10.1 per cent.

\textsuperscript{2} The members of the Organization for Economic Cooperation and Development are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

\textsuperscript{3} Please note that these 27 industry categories only include merchandise. Import and export data for information services are not available.

\textsuperscript{4} It should be noted that these figures do not reflect actual consumption of these goods since the figures only show products that are purchased from foreign sources and do not include merchandise produced and consumed domestically.
This trend toward growing developing country imports of communications products is expected to continue for a variety of reasons. These include the fact that many of these nations (especially the oil-producing countries) are rapidly increasing their national incomes as well as their hard currency reserves. This, along with the infrastructure requirements that are essential to further development, should result in a greater emphasis by national planners on promoting the telecommunications and information sectors in their countries. Finally, new developments in the hardware and software areas are making sophisticated equipment more accessible to developing countries in terms of both reduced cost and, in some cases, less complicated operation and maintenance.

U.S. Performance in Developing Country Markets

As we have noted, developing country markets are not insignificant. They currently account for over 20 per cent of the world’s import markets for telecommunications and information goods and can be expected to claim an increasing share. However, while the United States has greatly increased the volume of its exports of telecommunications and information goods to developing countries, its market share is actually declining. The following three tables\(^5\) show the relative shares of American, Japanese, and Western European information merchandise sold in developing country markets.

In Table 2a we see that the United States' share of the total developing country markets for telecommunications and information goods declined slightly from 27.6 per cent in 1965 to 24.1 per cent in 1977. The American industries'\(^5\)

\(^5\) Tables 2a, 2b and 2c use the same 27-industry sample from the OECD Series C data as Table 1.
Table 2a

UNITED STATES EXPORTS AND MARKET SHARES
IN LESS DEVELOPED COUNTRIES (LDCs)\(^1\)
(in thousands of current dollars)

<table>
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<tbody>
<tr>
<td></td>
<td>U.S. Exports as Per Cent of Total OECD Exports</td>
<td>U.S. Exports as Per Cent of Total OECD Exports</td>
<td>U.S. Exports as Per Cent of Total OECD Exports</td>
<td>U.S. Exports as Per Cent of Total OECD Exports</td>
</tr>
<tr>
<td>Western Hemisphere excluding Canada &amp; the U.S.</td>
<td>$285,791</td>
<td>44.8%</td>
<td>$769,881</td>
<td>40.7%</td>
</tr>
<tr>
<td>Asia excluding Japan</td>
<td>188,195</td>
<td>22.7%</td>
<td>410,811</td>
<td>19.6%</td>
</tr>
<tr>
<td>Oceania</td>
<td>2,968</td>
<td>9.7%</td>
<td>2,951</td>
<td>3.9%</td>
</tr>
<tr>
<td>Africa</td>
<td>73,124</td>
<td>14.7%</td>
<td>120,227</td>
<td>11.0%</td>
</tr>
<tr>
<td>Total LDC Imports from the U.S.</td>
<td>$550,078</td>
<td>27.6%</td>
<td>$1,303,870</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

\(^1\)Based on OECD data on merchandise exports for 27 selected telecommunications and information industries:
- Office Mach.
- Recorded Media
- Typewriters etc.
- Sound Recorders etc.
- Telecom. Equip. n.e.c.
- Elec. Measure & Control Equip.
- Cinema. Film
- X-Ray Apparatus
- Optical Elements
- Newspapers & Period
- Electro-Medical Equip.
- Photo. & Cinema.
- Cinema. Equip.
- Radio Receivers
- Statistical Mach.
- Medic. Equip. n.e.c.
- Elec. Mach. etc. n.e.c.
- Scienc. Equip.
- T.V. Receivers
- Books & Pamphs.
- Optical Instruments
- Cam. & Flashlight. Equip.
- Pens & Pencils
- Photo. Film etc.
- Elec. Circuits etc.
- Printg. & Bindg. Mach.
- Scien. Instruments. n.e.c.

\(^2\)1965 export data from Australia and New Zealand not available.

### Table 2b: Japan Exports and Market Shares in Less Developed Countries (LDCs)

<table>
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<tbody>
<tr>
<td></td>
<td>Japan Exports &amp; Market Shares</td>
<td>OECD Exports &amp; Market Shares</td>
<td>Japan Exports &amp; Market Shares</td>
<td>OECD Exports &amp; Market Shares</td>
</tr>
<tr>
<td></td>
<td>Value of as Per Cent of Total</td>
<td>Value of as Per Cent of Total</td>
<td>Value of as Per Cent of Total</td>
<td>Value of as Per Cent of Total</td>
</tr>
<tr>
<td>Western Hemisphere excluding Canada &amp; the U.S.</td>
<td>$51,560 8.1%</td>
<td>$243,864 12.9%</td>
<td>$637,859 16.4%</td>
<td>$760,430 17.5%</td>
</tr>
<tr>
<td>Asia excluding Japan</td>
<td>189,877 22.9%</td>
<td>771,487 36.8%</td>
<td>2,219,018 32.6%</td>
<td>2,803,093 34.2%</td>
</tr>
<tr>
<td>Oceania</td>
<td>19,676 64.6%</td>
<td>48,067 63.1%</td>
<td>31,822 44.7%</td>
<td>25,370 36.6%</td>
</tr>
<tr>
<td>Africa</td>
<td>29,779 6.0%</td>
<td>99,865 9.1%</td>
<td>326,389 10.2%</td>
<td>477,515 12.2%</td>
</tr>
<tr>
<td>Total LDC imports from Japan</td>
<td>$290,892 14.6%</td>
<td>$1,163,283 22.6%</td>
<td>$3,215,088 23.0%</td>
<td>$4,066,408 24.6%</td>
</tr>
</tbody>
</table>

1. Based on OECD data on merchandise exports for 27 selected telecommunications and information industries:
   - Office Mach.
   - Cinema. Film
   - Cinema. Equip.
   - T.V. Receivers
   - Pens & Pencils
   - Recorded Media
   - X-Ray Apparatus
   - Radio Receivers
   - Books & Pamphs.
   - Photo. Film etc.
   - Typewriters etc.
   - Optical Elements
   - Statistical Mach.
   - Optical Instruments
   - Elec. Circuits etc.
   - Sound Recorders etc.
   - Newspapers & Period.
   - Medic. Equip. n.e.c.
   - Printg. & Bindg. Mach.
   - Telecom. Equip. n.e.c.
   - Electro-Medical Equip.
   - Elec. Mach. etc. n.e.c.
   - Cam. & Flashlight. Equip.
   - Scient. Instrumts. n.e.c.
   - Elec. Measure & Control Equip.
   - Photo. & Cinema. Equip. n.e.c.

2. 1965 export data from Australia and New Zealand not available.

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<tbody>
<tr>
<td></td>
<td>Value of West Europe Exports</td>
<td>West Europe Exports as Per Cent of Total OECD Exports</td>
<td>Value of West Europe Exports</td>
<td>West Europe Exports as Per Cent of Total OECD Exports</td>
<td>Value of West Europe Exports</td>
</tr>
<tr>
<td>Western Hemisphere excluding Canada &amp; the U.S.</td>
<td>$288,563</td>
<td>45.2%</td>
<td>$849,123</td>
<td>44.9%</td>
<td>$1,505,999</td>
</tr>
<tr>
<td>Asia excluding Japan</td>
<td>440,267</td>
<td>53.1%</td>
<td>873,289</td>
<td>41.6%</td>
<td>3,001,972</td>
</tr>
<tr>
<td>Oceania</td>
<td>7,814</td>
<td>25.6%</td>
<td>17,972</td>
<td>23.6%</td>
<td>23,148</td>
</tr>
<tr>
<td>Africa</td>
<td>389,892</td>
<td>78.6%</td>
<td>860,110</td>
<td>78.8%</td>
<td>2,480,424</td>
</tr>
<tr>
<td>Total LDC Imports from West Europe</td>
<td>$1,126,536</td>
<td>56.5%</td>
<td>$2,600,494</td>
<td>50.4%</td>
<td>$7,011,543</td>
</tr>
<tr>
<td></td>
<td>$2,480,424</td>
<td>77.2%</td>
<td>2,903,872</td>
<td>74.2%</td>
<td>2,903,872</td>
</tr>
</tbody>
</table>

1Based on OECD data on merchandise exports for 27 selected telecommunications and information industries:

- Office Mach.
- Recorded Media
- Typewriters etc.
- Sound Recorders etc.
- Telecom. Equip. n.e.c.
- Elec. Measure & Control Equip.
- Cinema. Film
- X-Ray Apparatus
- Optical Elements
- Newspapers & Period
- Electro-Medical Equip.
- Photo. & Cinema.
- Cinema. Equip.
- Radio Receivers
- Statistical Mach.
- Med. Equip. n.e.c.
- Elec. Mach. etc. n.e.c.
- Photo. & Cinema.
- T.V. Receivers
- Books & Pamphs.
- Optical Instruments.
- Cam. & Flashlg. Equip.
- Equip. n.e.c.
- Pens & Pencils
- Photo. Film etc.
- Elec. Circuits etc.
- Printg. & Bindg. Mach.
- Scien. Instruments. n.e.c.

21965 export data from Australia and New Zealand not available.

greatest strength is in the "Western Hemisphere excluding Canada and the U.S." region (primarily Latin America) where, in 1977, we supplied 41.7 per cent of the total imports of telecommunications and information merchandise. During the same year, the United States captured 20.2 per cent of the import market of "Asia excluding Japan."

One should remember, however, that in absolute dollar value this Asian import market was twice the size of the Latin American market — the former accounting for 10.2 per cent and the latter for 5.4 per cent of the global consumption of the OECD countries' exports of this sample of telecommunications and information goods.

The Japanese have shown a steady growth in their share of developing countries' import markets in this sector, from 14.6 per cent in 1965 to 24.6 per cent in 1977. They have made dramatic inroads in the large Asian import market and now supply 34.2 per cent of this region's imports of our sample group of telecommunications and information merchandise. While this may be ascribed to their proximity to and influence in this region, the business acumen and marketing aggressiveness of Japanese manufacturers cannot be discounted. This is clearly evidenced by their growing influence in Latin America — historically regarded as primarily a United States market — which grew from an 8.1 per cent market share in 1965 to a 17.5 per cent share in 1977.

The combined efforts of Western Europe's telecommunications and information merchandise exporters give them by far the largest share of the markets in developing countries. This is often attributed in part to the strong financial, cultural, and diplomatic ties that European countries have maintained with their former colonies. These links act as effective conduits to promote and facilitate trade. Furthermore, European countries direct a very large volume of
foreign aid to developing nations.\textsuperscript{6} Like the United States, however, the Western European nations have shown a gradual decline in their share of developing country markets, falling from 56.5 per cent in 1965 to 50.1 per cent in 1977.

BARRIERS TO U. S. PRODUCTS IN DEVELOPING COUNTRY MARKETS

Exporters of U. S. telecommunications and information merchandise face many difficulties in trying to do business with developing countries. For the purposes of this discussion these difficulties will be divided into four categories:

1) Difficulties Posed by Developing Countries;
2) U. S. Government Disincentives to Trade;
3) Difficulties Posed by U. S. Industries; and
4) Difficulties Posed by Competition from Other Countries.

Each type of obstacle will be examined separately below.

Difficulties Posed by Developing Countries

Obstacles to trade in developing country markets are, in many cases, a result of the inevitable political and economic conditions associated with underdevelopment. The majority of the obstacles to trade described in this section pose problems for other exporting countries as well as for the United States — and indeed, for exports of products other than those in the telecommunications and information sector. This section will examine the impact of these barriers on U.S. telecommunications and information exports as specifically as possible.

\textsuperscript{6} According to OECD estimates, the European members of the OECD gave a total of $13.3 billion in foreign aid in 1979 compared with the U.S. spending of $4.6 billion.
A high-risk environment for investment. In general, economic and political conditions in developing countries make investment a riskier undertaking than in wealthier more industrialized countries. Exporting high cost, high technology products such as telecommunications systems is made particularly difficult in such an environment for reasons which are further discussed below.

A lack of resources. U. S. exporters of high-technology goods and services are conditioned to selling their products in markets where organizational and physical infrastructures are already in place. Developing countries pose many problems in this respect. At the national planning level — where most decisions to procure telecommunications and information products are taken and implemented — the authority for selecting the system and awarding the contract, financing the purchase, and ultimately running the system is often divided among several ministries. This can cause delays and uncertainties for companies not used to dealing with developing countries.

The availability of physical facilities and infrastructure is also an important "given" that U.S. exporters have come to expect through their long experience trading in developed markets. On the other hand, most developing areas — particularly in remote rural regions — lack reliable sources of electricity, have not established even the most basic internal and external telecommunications networks, and in many cases don't have the transportation network necessary to establish and maintain a national communications system.

Finally, in countries where illiteracy and even linguistic differences frequently pose barriers to innovation, there is an inevitable dearth of trained manpower to install, operate, and maintain communications facilities.
Conscious political decisions. Many developing nations fear dependence on foreign companies and have instituted policies to ensure that some economic benefits and political control rest in local hands. For this reason, exporters of telecommunications and information systems must often include management and maintenance training programs in sales to developing countries. In recent years, several developing countries have passed laws requiring partial (and sometimes majority) local ownership in all foreign companies setting up subsidiaries within their borders. Among other things, these policies are intended to ensure that technical know-how is passed on to local entrepreneurs, thereby raising the local level of skills and improving future potential for national development. However, from the point of view of the U. S. exporter they also add to the time, energy, and money companies must expend to establish operations in a developing country.

A final group of barriers has been increasingly used by the more advanced developing countries such as Brazil and India. These countries have some manufacturing capacity of their own, and encourage establishment of local industry through direct investment by foreign companies and by restricting imports of finished products. Brazil, for example, imposed a one-year, non-interest-bearing, 100 per cent prior deposit requirement on imports in 1975. Advanced developing countries, because they have greater telecommunications and information product needs than other developing countries, offer some of the richest markets (along with OPEC countries) to foreign companies, while at the same time their markets are in some ways the most restricted.

U. S. Government Disincentives to Trade

While the U. S. Government recognizes the need for exports and runs several programs to promote exports, many critics point out that in many cases it also limits these efforts with several types of export control legislation and other
regulation of exports. Although the intent of these laws was to promote other
economic and political goals, many claim that the general effect of this class of barriers is to damage the competitive position of U. S. companies vis-à-vis companies of other developed countries. This section will provide a background discussion and examples (rather than quantitative evidence) of the effect that these restricting measures have on telecommunications and information exports to the developing world.

Antitrust. Originally, antitrust legislation was passed to ensure against monopoly in the domestic market. However, the application of these laws as they pertain to exporting companies is stricter in the U. S. than in other developed countries. Some relief, however, was provided by the Webb-Pomerene Act (1918) which was designed to exempt "Export Trade Associations," or combinations of firms or banks for exporting purposes, from some of the prohibitions of the Sherman and Clayton Antitrust Acts so that American exporters could compete better with foreign cartels. Because of the vagueness of the Webb-Pomerene Act, however, export trade associations have repeatedly been challenged by the Justice Department, and companies are reluctant to form associations since it is likely that they will be investigated for antitrust violations while they have no clear idea what activities are permissible. As a result there are very few — in 1979 there were only 28 associations, accounting for less than 3 per cent of total U. S. exports.

8 U. S. Export Policy, p. 18.
9 U. S. Export Policy, p. 18.
The Edge Act, a 1919 amendment to the Federal Reserve Act, allows banks to combine into larger corporations in order to engage in international banking and export financing. Because of large reserve requirements and other restrictions, however, Edge Act corporations have been used primarily for international banking rather than for export financing activities. Several 1978 amendments to the Edge Act are expected to encourage this latter activity to increase significantly.

Despite measures like the Webb-Pomerene and Edge Acts, antitrust laws still hamper the competitive position of U. S. firms trying to compete in the international arena. Japanese companies bidding on a major foreign project, for instance, can present a single, combined bid. U. S. firms would probably face legal constraints in making such a bid. Many telecommunications projects in developing countries are divided among several specialized companies, but because of antitrust laws, American firms are constrained from bidding on large projects in conjunction with foreign firms.

Tax laws. The United States is the only major developed country that generally taxes its non-resident citizens for personal income earned outside its borders. These laws were passed with the intent of providing equitable taxation for all U. S. citizens. However, one result may have been to hurt the U. S. competitive position abroad. The tax legislation makes it much more expensive for U. S. firms to keep Americans abroad. As a result, U. S. companies are either reducing their work forces overseas, hiring foreign nationals, or losing business to foreign rivals who can afford to bid less because of lower personnel costs.10 Marketing is also much more difficult because personal representation is very

important in many non-Western cultures, particularly in the Orient. U. S. firms are also less willing to leave representatives in a foreign country after a construction project, which limits after-sale service. European and Japanese companies are sometimes able to win contracts on the basis of their reputations for providing better after-sale service than U. S. companies. For instance, Ericsson of Sweden and Nippon Electric Company of Japan station qualified engineers in Bangkok, which clearly has the effect of making the Thai government more confident about buying their products.11

The Foreign Corrupt Practices Act. U.S. exports may be limited by the Foreign Corrupt Practices Act, passed in 1977, which makes bribery of foreign government officials illegal.12 The Act reflects the U.S. attitude that "bribery of foreign officials is reprehensible and can affect U.S. foreign relations and that U.S. companies have to forego exports that can be attained only by illicit payments."13

The major export-limiting factors are: 1) that other countries competing with the U.S. for exports do not have laws prohibiting illicit payments to foreign officials; and 2) that U.S. exporters are, because of vague wording, uncertain as to specifically what actions are prohibited by the Act. The U.S. has sought international agreement on this issue, but negotiations have proceeded very slowly and success in reaching an agreement in the near future is improbable.


12 The Act defines the unlawful action as "corruptly in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of any value to" a foreign government official, political party official, or candidate for political office.

The Justice Department has attempted to clarify the provisions of the Act by publishing "prosecution priorities" and by setting up a review procedure. Many ambiguities remain, however, and U.S. exporters may be deterred from entering markets for this reason.

Other export limiting regulations. Several types of export-restricting legislation limit U.S. exports to certain developing countries. These include human rights, weapons restriction, anti-boycott, and environmental legislation.

Under the human rights provisions of the Hawkins Amendments, provisos are attached to loans from the Eximbank and to investment guarantees from the Overseas Private Investment Corporation (OPIC). How much these provisions have limited American telecommunications exports is unknown. In fact, U.S. corporations have been very successful in marketing their products in some countries, such as South Korea, considered in violation of human rights.

Weapons restriction legislation affects telecommunications exports to the developing countries by limiting the sales of radar apparatus and other sophisticated equipment.

Anti-boycott legislation affects telecommunications and information exports to Arab nations. Under this legislation, U.S. companies are required "to refuse to take actions, including furnishing information or entering into or implementing agreements, which have the effect of furthering or supporting the restrictive trade practices or boycotts fostered or imposed by any foreign country against a country friendly to the United States." Companies are thus forbidden to make lists of

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15 "Export Administration Amendments of 1977," PL 95-52, Sec. 3(5).
employees and other information available to Arab governments. A recent example of how anti-boycott legislation may limit U. S. exports is the tender offer for the Arabsat satellite, made by 22 Arab nations. Hughes Aircraft of the U. S. made a bid, but the bid was rejected because Hughes was on the Arab boycott blacklist for having ties with Israel. The Arab consortium cancelled the tender because there was only one other qualified bid. Hughes has since been removed from the blacklist, and the Arab countries have decided that if they do reissue the tender, even blacklisted companies may bid if they guarantee that "no components, capital, facilities or employees from Israel will be used in any way."¹⁶ Such a guarantee, however, would violate the U. S. anti-boycott laws, thus cutting out any blacklisted American companies from the competition for the contract. Although some larger companies have learned to work within the boycott and anti-boycott procedures and laws, this is an instance in which small U. S. companies may be discouraged from even trying to export.

A final government barrier to exports is the trade embargo, which has been applied to various developing countries at different times, such as Cuba, Vietnam, and Iran.

**Difficulties Posed by U.S. Industries**

While the U. S. Government disincentives clearly have a negative impact on U. S. efforts to sell abroad, they are not the sole cause of declining U. S. shares of developing country markets. In the opinion of many analysts, it is the failure of U. S. industries to adapt their marketing behavior, products, and services to the needs of prospective customers in developing countries that contributes to the declining U.S. share of these markets.

At a recent conference on telecommunications markets for the 80s (LATCOM 80) Latin American buyers of telecommunications and information equipment complained about certain characteristics of U. S. products, which they feel needlessly disqualify U. S. goods from their markets. One complaint is that U. S. products obsolesce very quickly so that pieces of equipment purchased from the same company several years apart may not be compatible. This is particularly troublesome to developing country buyers, who must give higher priority to expanding capabilities by better use of systems they have than to keeping up with the very latest technology. Some developing country buyers have voiced the related complaint that the U. S. market is so competitive that products may be marketed before they have been sufficiently tested.17

One reason that is put forward for rapid obsolescence is that American industry has traditionally concentrated on innovativeness. This focus is a logical one for industries producing for markets in wealthy developed countries; however, this aspect of U. S. products blocks exports to developing country markets. It is not so much a conscious choice between alternatives, but an inherent emphasis of the U. S. market.

Another complaint that developing country buyers make, this time about U. S. marketing rather than about U. S. products, is that the process of arranging to finance a project takes much longer than for non-U. S. companies. This is allegedly due to the relative lack of industry-industry and industry-government cooperation in the U. S.. The U. S. bank approached by a company to arrange financing must, according to this complaint, hire a consultant to investigate the

17 A member of the U.S. private sector said that the obsolescence and testing problems are not exclusively U.S. industry problems. He further noted that it is general practice in U.S. industry to maintain a stack of spares for ten years after a product has been improved.
project (since it might not have a representative in a developing country), which may be a very time-consuming and expensive process. European and Japanese competitors, however, may be able to work much faster and less expensively because of greater cooperation from their national banks. How much actual business is lost because of the nature of the U. S. market and marketing procedures cannot even be estimated, but it is important to mention these problems in a general discussion of barriers to U. S. exports to developing countries.

Difficulties Posed by Competition from other Countries

In the last several years, the European and Japanese governments have taken strong measures to develop their domestic telecommunications and information industries both to reduce dependence on American industry and to take advantage of a large and continually expanding market for these products. These goals have been realized to a large degree, through government subsidization of research and the restructuring of domestic industry to larger and more modern firms to compete with American companies; and through providing a protected domestic market for the growing industries.

Most developed countries have also given greater attention to export promotion in the last several years, since rising prices began to create severe balance of payments problems. Efforts to promote exports have included the telecommunications and information industries, and also have focused on markets in developing countries. Table 2b gives an indication of Japanese efforts to expand exports in telecommunications and information in Latin America, Asia and Africa, and of continued European dominance of the African market. The European Community countries will push exports to developing countries even harder as they have set a goal for their industries of supplying one third of the world
telecommunications and information market. This section will examine the various ways in which European and Japanese governments promote exports to meet their export goals by improving their companies' chances of winning contracts in developing country markets.

**Export promotion financing institutions.** All the major developed countries have export promotion institutions which offer financing and insurance to companies exporting their products to developing nations. In the United States, such institutions, like the Export-Import Bank (Eximbank), the Foreign Credit Insurance Association (FCIA), and the Overseas Private Investment Corporation (OPIC) offer insurance against political risk (e.g. revolution, expropriation), currency exchange inconvertibility, and commercial risk (buyer default on payments) as well as below-market-rate financing to qualifying companies. While most foreign institutions receive appropriations from their governments, the Eximbank is financially self-sufficient. In other developed countries that compete with U. S. firms for developing country markets (France, Japan, and Britain), government support of their financing and insurance institutions through budgetary outlays is very important in that it enables foreign competitors to offer lower interest rates than those made possible by Eximbank, which must take into account the average cost of its funds. As a result, the interest rates offered by U. S.

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19 For more information on the U. S. Export Promotion Financing Institutions and programs, see "The Role of the U.S. Government in Financing of Exports of Major Telecommunications and Information Products."

20 The Eximbank does not receive appropriated funds but may borrow up to a certain ceiling (determined by congressional appropriations committees) from the Treasury and the Federal Financing Bank at below market rates.
companies in bids on telecommunications or information projects in developing
countries are often higher than those of foreign competitors. Eximbank is also
more limited than foreign institutions in the number of loans it can make (because
of the self-sufficiency requirement), with the final result that often U. S. loans
are neither as available nor as attractive as those of competitors for projects in
developing areas.

Subsidization also enables foreign export promotion institutions to offer, in
addition to the types of insurance already mentioned, insurance against losses due
to inflation (France and the U. K.) or due to fluctuations in the exchange rate of
buyer-country currencies (France, Japan, West Germany and Italy). In France, for
instance, this insurance covers risk of loss if the currency fluctuates more than
2.25 per cent. Given the economic instability in many developing countries and the
fact that many telecommunications projects take several years to complete, such
insurance coverage may be important to telecommunications companies exporting
to these countries. Japan and the U. K. now also offer performance bond
insurance, which covers losses attributable to "unfair calling of performance bonds
by the foreign buyer."21

Export insurance authorizations by foreign countries have been much larger
than U. S. authorizations, thus aiding foreign exports by lessening exporter
risks. For instance, total insurance authorizations in 1976 for all types of exports
amounted to $22 billion in France, $32 billion in Japan, $10 billion in W. Germany
and $5 billion in the U. S.22 Actual usage of special insurance facilities for tele-
communications projects is unknown, but it could be important in specific cases.

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21 Export Stimulation Programs in the Major Industrial Countries: the United
States and Eight Major Competitors, prepared by the Congressional Research
Service for the Committee on International Relations, U. S. House of
46.

22 Export Stimulation Programs, p. 47.
Other foreign government export promotion practices. Foreign governments promote exports by many means other than financing institutions. These include combining foreign aid with export financing, tax incentives to exporters, market research efforts and close government-industry coordination. U. S. government efforts in these areas generally have been either less extensive or less effective than those of its major competitors, so that foreign companies are often in better positions than American companies.

Foreign aid, including both training programs and governmental grants and loans, is often coordinated with bids by foreign companies on contracts in developing countries so that an attractive financial package can be presented to the buyer. France in particular sends a large number of technicians to developing countries for the purpose of training of local citizens. The French and Japanese governments also sponsor training fellowships with developing countries. While large numbers of students from developing countries study Engineering and other technical subjects in U. S. universities, these foreign student exchange programs are not so tightly tied to government or industrial strategies to establish future trade links. A good example of export promotion combined with foreign aid is the French sale of radio and TV networks to the Ivory Coast — "contracts under negotiation were valued at FF 6 billion, the French government agreed to finance FF 1.5 billion for proposals from French companies and to provide technical assistance in the form of some 2000 technicians."23

In 1976, the governments of all major developed countries agreed to set "minimum standards to bring official financing practices closer to market norms." 24 This international export credit "Arrangement," also called the "Gentleman's Agreement," represents an effort by the United States and others to avoid an export financing race with major competitors. Contrary to the spirit of the Arrangement, however, European and Japanese governments have continued to frequently offer the minimum permissible interest rates and maximum repayment periods, particularly when developing countries are involved. There are also "a number of important exceptions and waivers woven into the initial consensus agreement which allow countries to make significant departures from the general standards in specific situations." 25 France, Japan, and to a lesser degree, West Germany sometimes go a step further by offering "mixed credits" to finance exports. By combining long-term, very low-interest loans (or "aid credits") with other export financing arrangements, these governments can offer average financing terms below the minimums set by the Arrangement to accompany the bids of companies from their countries.

Since 1976, the United States has tried in several rounds of negotiations to persuade major competitor governments to limit their use of export financing practices. These efforts generally have been unsuccessful and negotiations in December, 1980 failed to finalize any agreement. As long as foreign governments continue to offer concessionary financing terms while the U. S. offers financing terms closer to market rates, American companies' competitive position in developing country markets will suffer.

Cooperation between government and business is generally stronger in Europe and Japan than in the United States, as there is more planning of economic.

24 Export Stimulation Programs, p. 63.
25 Export Stimulation Programs, p. 64.
activities. In some cases, telecommunications (especially satellites) enterprises are government-owned or controlled. The U. S. is considered to be as effective as its competitors in conducting trade fairs for display of products abroad, but other countries (Germany, France, Italy) also subsidize overseas chambers of commerce, which the U. S. does not. The Japanese Export Trade Organization (JETRO) maintains 30 per cent of its staff, or about 170 personnel, in developing country offices, including employees of local governments, the national government, and trading companies. Canada and the U. K. maintain governmental centers to coordinate bidding on foreign projects, and coordination is also carried out by the Japanese government. Through these government efforts, the competitive positions of foreign telecommunications and information companies are improved, making it more difficult for U. S. companies to sell their goods in developing country markets.

European and Japanese corporate and individual tax laws also increase the competitiveness of their companies in developing countries and provide incentives to export. As has already been mentioned, all developed countries except the U. S. exempt foreign-earned income from personal income tax, making it less expensive for European and Japanese firms to send their nationals to live abroad. Corporate tax incentives to export vary greatly from country to country, but most do include specific measures to encourage exports to or direct investment in developing countries. Japanese firms may deduct a percentage of their export profits from taxable income under special allowances for overseas market development. Almost no tax is levied on the dividends earned by a foreign subsidiary of a German corporation located in a developing country.

26 Export Stimulation Programs, p. 201.
28 Export Stimulation Programs, p. 152.
French firms may deduct the foreign losses of subsidiaries from domestic profits and are permitted "special tax-deductible reserves to absorb export credit risks, operational losses and promotional costs\(^{29}\) of exporting. Small and medium-sized companies can negotiate special tax agreements with the French government when they form joint ventures for exporting. These are only a few examples, but they give an idea of how other countries encourage exports. The U.S. government offers exporters the Domestic International Sales Corporation (DISC) program which, although it does offer some tax relief to exporters and is widely used by large companies, is subject to severe limitations (see section on United States Export Promotion Institutions).

**Possible U.S. responses.** It can be argued that many of the export promotion practices mentioned above are contrary to the traditional general U.S. attitude that government and business activities should be separate. In addition, it has not been clearly established that the increased penetration of developing countries' markets by Japanese and European telecommunications and information industries is worth the enormous sums spent by their governments to promote trade in these regions. On the other hand, the practices of the United States' major competitors threaten to drive U.S. telecommunications and information firms out of developing country markets. The U.S. government has attempted to persuade its competitors to change their practices (as in the case of "mixed credits"), but these efforts have not been very successful. This being the case, the U.S. government has the option of implementing those export promotion practices, such as removal of tax disincentives, offering more training opportunities to citizens in developing countries, etc., which are not contrary to general U.S. attitudes and which would help to break down the competitive barriers which U.S. telecommunications and information firms face in attempting to export to developing nations.

\(^{29}\) Franko and Stephenson, p. 29.
U. S. EXPORT PROMOTION

This section will examine the export promotion programs which the U. S. government currently sponsors, and will discuss legislation now in Congress which would either provide for export promotion or would remove current disincentives to exports.

U. S. Government Programs

The U. S. Government promotes exports through several types of programs. It aids exporters in financing through the Eximbank and the Domestic International Sales Corporation Program, by providing market information and other assistance through the Commerce Department and the Small Business Administration, and in international trade negotiations through the U. S. Trade Representative.

Financing. The general offerings of the Eximbank have been described in the section on competitive barriers. This section pointed out which services foreign export-financing institutions offer that Eximbank does not, including the low financing terms they are able to offer by "mixing" export credits with aid credits. In 1978, the Heinz Amendment to the Eximbank charter charged the Bank to provide financing competitive with that provided by foreign government institutions. The Heinz Amendment did not, however, change Eximbank's status as a self-sustaining institution. Despite this requirement of self-sufficiency, Eximbank has been successful in offering financing terms which allow U. S. companies in competition with "mixed credit" package bids to win contracts in developing countries in a limited number of cases. For instance, in December 1978, Eximbank helped an American exporter win a contract for the sale of $3.86 million worth of telecommunications equipment in Cyprus by covering up to 85 per cent of the sale (instead of the usual 65 per cent) with fixed-rate financing and by bringing

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its interest rate down to 6 per cent.\footnote{"Exim is Matching the Competition" \textit{Business America}, June 18, 1979, p. 4.} As long as Eximbank must also realize a reasonable return on its loans and credits, however, matching the terms offered by its competition will be possible in only a very limited number of cases.

There is an informal threshold of $5 million for direct credits and financial guarantees, but this figure has been treated by Eximbank as a rough guideline only. Several telecommunications projects of $1-2 million have been guaranteed or financed in the past. As money grows tight, however, the $5 million threshold will be adhered to more closely for fixed-rate financing, which may cut down on the number of small telecommunications export projects Exim will finance.

There are many different views about how well Eximbank is working and what changes might be effected to make it work better. As the only lending institution through which American exporters can obtain long-term, fixed-rate financing, it plays an important part in the U. S. export promotion program.\footnote{For a more complete discussion of Eximbank activities, see "The Role of the U. S. Government in the Financing of Exports of Major Telecommunications and Information Products."}

The Domestic International Sales Corporation (DISC), established in the Revenue Act of 1971, has been widely used by large U. S. exporting firms. Under the program, qualifying exporters may form DISCs, which allow these firms to defer payment on 50 per cent of taxes on export income and to use this money to invest in their export businesses, to extend financing to foreign customers, or to participate in Eximbank programs. Although apparently useful for large firms, the "legal and accounting costs of complying with the complex DISC legislation inhibited small company participation in the tax benefits,"\footnote{\textit{U. S. Export Policy}, p. 19.} according to an
analysis of the program carried out by the Treasury Department. Furthermore, DISC funds have been used mostly for internal corporate investment rather than for financing or in conjunction with Eximbank programs. The latter two uses would have more effect on the competitiveness of U. S. firms in developing country markets. Eximbank is currently encouraging Exim-DISC combinations,\(^{33}\) but in how many cases this has aided U. S. companies to win contracts is unknown.

**Market information and other assistance.** For most overseas markets, U. S. exporters can obtain information from many sources, including trade associations, company representatives, trade journals, banks, and the International Trade Administration (ITA) of the Department of Commerce. For many of the "emerging markets," however, the ITA is the only source of market information.

The ITA provides several different types of market information to U. S. exporters. It has targeted "telecommunications" and "computers and peripheral equipment" as two of fifteen industries to be the major focus of promotional efforts. Long-term market studies of these industries in selected countries, including several developing countries, have been carried out and are available to exporters researching a market.

Commerce Department commercial officers stationed in U. S. embassies worldwide are responsible for monitoring the local media and contacting local businessmen about possible U. S. export opportunities and for communicating these leads to ITA. The effectiveness of commercial officers varies from country to country, but, as mentioned above, in many developing countries they are the major source of market information. The recent move of commercial officers to the Commerce Department from the State Department Foreign Service may lead to an overall

\(^{33}\)"Exim is Matching the Competition," *Business America*, June 18, 1979, p. 4.
improvement in the performance of market information collection. In addition to gathering export leads, commercial officers also collect names of possible agents and distributors for American companies and reference data on individual foreign firms with which American firms may do business.

ITA distributes export information leads to interested American companies. For small sales leads (under $5 million), ITA runs a Trade Opportunities Program to which U. S. companies can subscribe. Sales leads and companies are matched by computer and the lead, with all pertinent information, is sent to the company. The Trade Opportunities Program is scheduled to be upgraded by a much more comprehensive computerized market information system called the Worldwide Information and Trade System (WITS), which is now in the pilot stage.

The Major Projects Program handles large project leads (over $5 million, with special attention to those over $100 million) by alerting interested companies to potential sales, requesting further information and intercession for them through commercial officers and embassy officials, and helping companies if necessary to request Eximbank financing to comply with other departments' regulations. The telecommunications desk in the Major Projects Program reports that almost all of its leads are for projects in Latin America, Africa, and Southeast Asia. They further report that American companies win bids infrequently against competing companies from other countries, and that often American companies will not even bid on projects when they know that European or Japanese companies are planning bids.

ITA also provides a variety of different types of overseas exhibition opportunities for American manufacturers. A Commerce Department Task Force report found that "there are certain less developed areas of the world where there
simply are no suitable trade show vehicles unless ITA provides one.\textsuperscript{34} Trade shows are an important means of advertising U. S. telecommunications and information products, particularly in less developed countries where trade journals are not well distributed. Other ITA promotion of American products is limited to new products through a Commerce Department magazine and Voice of America broadcasts.\textsuperscript{35}

A final type of export promotion program which ITA sponsors is "how-to-export" training. ITA offers a library of material, seminars through its district offices and in conjunction with the Small Business Administration, and a limited amount of special counseling to businesses interested in exporting their products.

International trade negotiations. The Office of the United States Trade Representative (USTR) has responsibility for negotiating both multilateral trade agreements like the "Gentlemen's Agreement" discussed in the competitive barriers section above, and bilateral trade agreements. Bilateral trade agreements with the developing countries are particularly important to U. S. exporters because many developing countries, particularly the most advanced, erect high import tariffs. Companies confronted with unfair trade practices on the part of other countries according to trade agreements may contact the USTR, which may intercede for them and resolve the question with the country involved.

Current Legislation

Legislation on a number of trade issues was introduced in the 96th Congress. Passage of these bills would remove several severe disincentives to U. S. exports.

\textsuperscript{34} Export Promotion Strategy and Programs, Commerce Department Task Force Report, February 14, 1978, p. 139.

\textsuperscript{35} Export Promotion Strategy and Programs, p. 328.
Senator John Chafee (R-RI) introduced legislation to clarify uncertainties in the Foreign Corrupt Practices Act of 1977. President Carter also spoke in favor of clarification of this act. Senator Adlai Stevenson of Illinois introduced two bills, the first of which would have set criteria which the President must consider before imposing export controls for foreign policy purposes. Stevenson's second bill would have made federal loans and loan guarantees available to "export trading companies," which he saw as management companies large enough to handle the entire export marketing process. The future of these bills is uncertain, but the fact that they have been introduced indicates that Congressmen see the export-disincentive effects of other U. S. legislation as harmful to the export promotion effort.

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36 Senate Bill 2763


38 Senate Bill 1663
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