

MTN STUDIES

6

PART 5

Agreements Being Negotiated at the
Multilateral Trade Negotiations
in Geneva—U.S. International
Trade Commission
Investigation No. 332-101
Industry/Agriculture Sector Analysis

A Report Prepared at the Request of the
COMMITTEE ON FINANCE
UNITED STATES SENATE
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SUBCOMMITTEE ON INTERNATIONAL TRADE
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FOREWORD

This phase of the United States International Trade Commission's investigation No. 332-101 (Agreements Being Negotiated at the Multilateral Trade Negotiations in Geneva) focuses on the congressional requests for an analysis of the overall impact of the implementation of the MTN tariff reductions, nontariff measure (NTM) agreements, and other commodity agreements on an agricultural/industrial sector-by-sector basis. This evaluation includes impact analyses of selected trade-sensitive industries which are viewed by many as trade areas which are, or could be, affected by changes in the MTN tariff or nontariff measures. The Industry Sector Advisory Committee (ISAC) and Agricultural Technical Advisory Committee (ATAC) sectors, which have been commonly used by Government agencies and industry as the basis for analysis throughout the MTN, were chosen as the basis for the Commission's analysis. In addition, individual analyses are provided for each of the subsectors within the ISAC framework.

The probable effects presented in this report were based on research by the Commission's commodity-industry analysts and economists, information and assistance from other Government agencies such as the Office of the Special Representative for Trade Negotiations and the Departments of Commerce, Labor, and Agriculture, direct contact with industry representatives of the ISAC's and ATAC's, and other industry contacts.

Many sector analyses in this report estimate that the probable economic impact of the MTN will be minor or insignificant, particularly with respect to the NTM agreements. These conclusions reflect both independent Commission research and industry views that, while the NTM agreements could affect the trade-competitive position of U.S. firms to some extent, the impact is not expected to be immediate or significant.

A more complete explanation of the approach employed in developing the sector analyses is included in the User's Guide which accompanies this report.

ATAC GROUP 01: RAW COTTON SECTOR ANALYSIS

I. Sector profile and conditions of competition

Raw cotton is produced on approximately 250,000 farms located in 20 States. ^{1/} The leading cotton producing State has for many years been Texas, which in 1978 accounted for 50 percent of the total harvested cotton acreage and 35 percent of the cotton crop. California, Mississippi, and Arizona were the next largest producing States during 1978. Other important producing States include Alabama, Arkansas, Georgia, Louisiana, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, and Tennessee.

U.S. production of raw cotton during 1978 was about 10.7 million bales (valued at over \$3.0 billion), about 25 percent below the 1977 level of 14.5 million bales, the highest output since 1965. The sharp decline in 1978 can be attributed to the very dry weather conditions in the cotton producing States resulting in a 19-percent decline in the average yield per harvested acre. During the 10-year period ending with 1978, the average annual production of raw cotton amounted to 11.3 million bales.

Fiber consumption by the U.S. textile industry has shown little growth during the 1970's, primarily because of inroads made by imports of textile products into the domestic market. In 1978, the amount of cotton, wool, and manmade fibers consumed by U.S. textile mills amounted to 12.5 billion pounds. Prior to the late 1960's, cotton was the principal fiber used in the manufacture of textile products, but its use has since declined both absolutely and relatively. Consumption of raw cotton declined from 4.7 billion pounds during 1966 to 3.9 billion pounds during 1972, and to an estimated 3.0 billion pounds during 1978. Mill consumption of manmade fibers more than doubled between 1966 and 1978, from less than 4 billion pounds to an estimated 9.3 billion pounds. From the consumer's viewpoint, the success of manmade fibers can be attributed to their durability, performance, wrinkle resistance, and easy-care launderability. Products of manmade fibers can be developed to reflect certain desirable characteristics such as the texture and appearance of wool, fur, or silk. From the textile producers' viewpoint, stability of price and supply as well as consistency of quality and dependability have encouraged the use of manmade fibers. In addition, mills using manmade fibers have fewer problems meeting air quality standards than those using natural fibers.

A large share of U.S. cotton production is exported each year, ranging from 34 percent to 55 percent of production in the years 1973-78. During this same period, annual U.S. exports ranged between 3.3 million and 6.1 million bales (from \$900 million to \$1.8 billion). Japan and the Republic of Korea have been, for many years, the leading purchasers of U.S. cotton. During the 1977/78 crop year, U.S. exports to Japan amounted to 1.1 million bales, while exports to the Republic of Korea amounted to 1.2 million bales. Other countries receiving significant quantities of U.S. exports during crop year

^{1/} Raw cotton is included in SIC 0131.

ATAC GROUP 01: RAW COTTON SECTOR ANALYSIS

1977/78 were Taiwan (514,100 bales), Hong Kong (505,600 bales), People's Republic of China (444,400 bales), Indonesia (234,900 bales), Canada (222,800 bales), Thailand (170,600 bales), Switzerland (110,200 bales), and the Philippines (104,100 bales). Exports to these countries totaled 4.6 million bales during 1977/78, or 84 percent of total exports; during 1966/67, exports to these same countries amounted to 3.1 million bales, or 63 percent of the total. Exports to the 9 countries of the European Economic Community (EEC) during crop year 1977/78 amounted to 327,900 bales, or only 6.0 percent of total exports; during 1966/67, exports to these countries amounted to 873,600 bales, or 18 percent of the total.

All types of raw cotton, except the harsh Asiatic cotton stapling under 3/4 inch, are subject to quantitative import quota restrictions pursuant to the provisions of section 22 of the Agricultural Adjustment Act, as amended. Since 1939, annual imports of short-staple Upland cotton (under 1-1/8 inches) have been limited by a quota of 14.5 million pounds (about 30,000 bales), which has remained basically unchanged over the years. The quota, which is recurrent each year beginning on September 20, is allocated among some 22 countries which now represent virtually the same geographic areas designated in the proclamation of 1939.

The total annual limitation on long-staple cotton, amounting to 45.7 million pounds (about 95,000 bales), has remained the same since its inception in 1939. Application of the quota has, however, been changed periodically. Beginning December 19, 1940, imports of extra-long-staple cotton having a staple length of 1-11/16 inches and longer were excluded from quota restriction; however, beginning May 28, 1956, legislation made such imports once again subject to the quota. Originally, the quota on long-staple cotton was allocated by country of origin, but since 1942, it has been applied on a global basis. The quota year for long-staple cotton originally began each September 20, but was changed in 1950 to February 1 and again in 1956 to August 1, which has since remained unchanged. Since August 1, 1958, the overall limitation on long-staple cotton has been subdivided into three categories--Tanguis cotton, other ordinary-long-staple cotton, and extra-long-staple cotton. Imports represent a small portion of total U.S. consumption of all types of cotton; however, since most imported cotton is of an extra-long-staple variety, imports' share of U.S. consumption of this type is occasionally somewhat larger.

II. MTN import impact

The United States has offered concessions on two cotton items which are identical to a provision already included in current agricultural law. On the single item which is duty free, as well as the dutiable item for cotton, 1-1/8 inches and over but under 1-11/16 inches, the United States has offered certain upward adjustments in the import quota for Upland cotton under certain

ATAC GROUP 01: RAW COTTON SECTOR ANALYSIS

price conditions as set out in the Food and Agriculture Act of 1977. There would be no immediate impact from this concession since it already exists under domestic law; however, some conflict may arise between U.S. law and this concession if the provision is not continued in future agricultural legislation.

On the item which includes cotton 1-1/8 inches and over but under 1-11/16 inches, currently dutiable at 3.5 cents per pound, the United States has offered to reduce the duty to 2 cents per pound. The United States reserves the right to modify or suspend this concession during the period when import quotas are not in effect. The other dutiable item for raw cotton applies to staple lengths of 1-11/16 inches and over, currently dutiable at 1.75 cents per pound. The United States has offered to reduce the duty on this item to 0.7 cent per pound. Since both of these items are subject to import quotas under section 22 of the Agricultural Adjustment Act, duties have virtually no restrictive effect on imports. Thus, the proposed duty reductions would have no effect on the future level of imports of raw cotton and, consequently, no effect on U.S. producers, employment or consumers.

The various agreements on nontariff measures (NTM's) were examined in great detail by the Agricultural Technical Advisory Committee on Cotton. The committee expressed concern over the possible impact that each of the agreements would have on the U.S. textile industry, the best customer for U.S. raw cotton. It emphasized that any adverse impact on the textile industry would be detrimental to sales of raw cotton. The committee expressed concern that the Subsidies/Countervailing Duty Measures Agreement might permit certain developing countries to subsidize exports and felt that items covered by the Multifiber Arrangement should be excluded from this agreement. The committee also felt that the Agreement on Technical Barriers to Trade (Standards Agreement) should clearly indicate that it does not apply to the "Universal Standards" for cotton, as such an interpretation could undermine this vital and proven system of international cotton merchandising. Generally, the committee endorses the overall intent of the NTM agreements, but expressed concern that while the United States would diligently enforce the provisions of the agreements, other countries would probably be lax in their enforcement.

III. NTM export impact

The foreign duty offers will have little or no effect on U.S. exports of raw cotton. Taiwan has offered to bind its already free rate of duty which will not change future levels of exports to that country. The other offers include several which would bind rates at levels above current applicable duties but these would also have no effect on exports.

ATAC GROUP 01: RAW COTTON SECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements**

Factors other than MTN tariffs and NTM agreements which affect U.S. exports are largely dependent on levels of production in various foreign countries and stocks for export in those countries. Various mechanisms are often resorted to when stocks accumulate to unmanageable levels. These conditions are obviously dependent on how rapidly consumption is increasing in foreign textile producing nations. Several foreign exporting countries consistently resort to currency devaluations to promote exports of cotton. Prices of competing fibers, which have recently shown a rising trend in foreign countries, also have an important impact on exports of U.S. raw cotton.

Although world production of cotton is down during the current crop year (1978/79), world cotton consumption is expected to exceed the year earlier level by over 1 million bales. About half of the increase in foreign consumption is being supplied by additional exports from the United States, even though domestic production is down by 3.4 million bales. Moreover, since total offtake exceeded production, significant quantities of U.S. cotton were moved out of carryover stocks. This situation might not have been as favorable for the United States if foreign production and stocks had been larger.

V. Overall impact on sector

The combination of tariff concessions and the NTM agreements will have no impact on U.S. imports and exports of raw cotton. Similarly, there will be no impact on U.S. producers, employment or consumers. As pointed out in section IV, other factors have a much greater impact on U.S. trade in cotton.

ATAC Group 01: Raw Cotton Sector Analysis

U.S. production, imports, exports, consumption, ratios of imports to consumption and exports to production, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Domestic production-----1,000 bales-----	13,300	11,525	8,500	10,650	14,525	10,700
Imports-----do-----	48	34	92	38	5	3
Exports-----do-----	6,149	3,942	3,325	4,804	5,507	6,300
Consumption-----do-----	7,500	5,885	7,300	6,702	6,514	1/ 6,300
Ratio, imports to consumption--percent-----	0.6	0.6	1.3	0.6	0.1	0.1
Ratio, exports to production --do-----	46.2	34.2	39.1	45.1	37.9	54.9
Total producers-----number of farms-----	250,000	NA	NA	NA	NA	NA

1/ Estimated.

NA = Not available.

Source: Compiled from official statistics of the U.S. Department of Agriculture and the International Cotton Advisory Committee, except as noted.

ATAC GROUP 02: DAIRY PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector includes all commonly known dairy products classified in SIC 202 such as milk and cream, butter, cheeses, ice cream, and casein; a few articles of minor importance such as certain edible preparations containing over 5.5 percent of butterfat (SIC 2099) and casein glue (SIC 2891) are also included.

The U.S. dairy sector is the most viable in the world (with the possible exception of that in Australia and New Zealand) as evidenced by the fact that most exports of dairy products to the United States benefit from subsidies. The abundant U.S. supply of feed grains, at favorable prices, has contributed to the well-being of the U.S. dairy industry.

The value of U.S. shipments of dairy products increased from about \$16.6 billion in 1973 to \$29.8 billion in 1978 as domestic production has responded to growing demand. Consumption of cheese has been a mainstay in the expanding demand for dairy products. Employment in the dairy processing industry declined from 186 thousand workers in 1974 to an estimated 160 thousand workers in 1977, indicating that the industry has capitalized on efficiency as output has expanded. During the period 1973-78, the value of U.S. exports of dairy products ranged irregularly from \$60 million in 1973 to \$176 million in 1977 and to \$134 million in 1978. The share of annual domestic output absorbed by exports averaged about 0.5 percent during the period. The bulk of the exports consisted of donations of nonfat dry milk to less-developed countries and small amounts of commercial sales of cheese to Canada and Mexico. The United States is the preferred market for U.S.-produced dairy products because of its size and product prices. Also, the small quantities of U.S.-produced dairy products that are exported face subsidized competition, as well as licensing requirements, quotas, and various other non-tariff measures in many foreign countries.

The value of U.S. imports of dairy products during the period 1973-78 ranged from \$212 million in 1975 to \$353 million in 1978. Imports, which consisted mostly of cheese and casein, supplied from one to two percent of consumption on a milk-equivalent basis. When viewed in terms of individual products, however, imports of casein account for all domestic consumption and cheese imports account for about 6 percent of consumption. Most U.S. imports of the dairy products made from cow's milk of the types that normally enter international trade (except casein and certain high-priced cheeses) are subject to quotas imposed under section 22 of the Agricultural Adjustment Act, as amended.

The dairy products sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MFN tariff or non-tariff trade measures.

ATAC GROUP 02: DAIRY PRODUCTS SECTOR ANALYSIS

II. NTM import impactA. Sector impact of U.S. tariff concessions

Only a few items in the dairy products sector are subject to U.S. tariff concessions. Not only are these concessions small, but nearly all of the articles involved are subject to quotas imposed under section 22 of the Agricultural Adjustment Act, as amended. Therefore, these concessions are not expected to have any effect on the level of imports and will probably have no adverse impact on the U.S. industry or labor. The duty savings are expected to be absorbed by the foreign suppliers and importers and, therefore, they are not expected to benefit the intermediate consumers or the consuming public.

B. Sector impact of U.S. adoption of proposed NTM agreements

Adoption of the proposed NTM agreements for dairy products, including the International Dairy Arrangement (IDA), is not expected to have any significant effect on the U.S. dairy industry, labor, or consumers. 1/

The provisions of the IDA for the exchange of information and consultation will have no effect on the industry. The only economic provisions of significance appearing in the IDA involve the establishment of minimum prices for certain milk powders, milk fat, and certain cheeses; maximum prices have not been agreed upon. Since the minimum prices are about 60 percent to 75 percent below the U.S. support prices for the respective products, it does not appear that these prices would have any foreseeable effect on U.S. commercial exports of dairy products. The minimal exports under the P.L. 480 program of the U.S. Department of Agriculture (USDA) mostly involve food aid and, therefore, would not be affected by the IDA. However, adherence to the arrangement might require some changes in the USDA regulations concerning the limited concessional sales, infrequently made under the P.L. 480 program, at prices that might be below the minimum prices.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of the proposed NTM agreements

The small and limited U.S. tariff concessions on dairy products and the adoption of the NTM agreements, including implementation of the IDA, are not expected to have any effect on the level of imports, will probably have no adverse effects on the industry or labor, and yield no benefits to consumers largely because the section 22 quotas will remain in effect. Any duty savings are expected to be absorbed by the foreign suppliers and importers.

1/ The bilateral arrangements being implemented with regard to cheese, which are not a part of the NTM agreements or the IDA, are discussed in Section IV of this report.

ATAC GROUP 02: DAIRY PRODUCTS SECTOR ANALYSIS

III. NTM export impact

A. Sector impact of foreign tariff concessions

No foreign tariff concessions were made in the dairy products sector.

B. Sector impact of foreign adoption of NTM agreements

Foreign adoption of the NTM agreements for the dairy products sector will have virtually no effect on U.S. exports of dairy products. Moreover, it appears that perhaps the most detrimental NTM to U.S. exports of dairy products--the Common Agricultural Policy (CAP) of the European Economic Community (EEC)--apparently will not be affected by any of the agreements. A few benefits might result from a number of the provisions of the IDA, however, particularly those dealing with the exchange of information and consultation.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Foreign tariff concessions are not involved in the dairy products sector. For the reasons set forth above, foreign adoption of the NTM agreements will have virtually no effect on U.S. exports of dairy products. Adoption of the IDA might facilitate in the exchange of information and consultation, but the existence of these factors is not expected to result in increases in U.S. exports of dairy products.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

The United States has negotiated bilateral cheese arrangements, which enlarge the U.S. quotas on cheeses imposed under section 22 of the Agricultural Adjustment Act, as amended, with many of the principal suppliers of dairy products to the U.S. market including the EEC, the Nordics, Australia, and New Zealand. Also, via bilateral agreements, the 17.0 million-pound chocolate crumb quota has been increased by about 4.4 million pounds, virtually all allocated to Australia, a country that had no share of the existing quota. This small and selective quota increase is not expected to have any significant effect on the U.S. dairy industry, labor, or consumers and, hence, it is not discussed further in this report. The aforementioned arrangements are separate and apart from the NTM agreements and the IDA and would become effective via the NTM implementing legislation. An investigation by the USITC under section 22 would be waived by the legislation which would stipulate that the Congress finds that the criteria of section 22 have been met.

ATAC GROUP 02: DAIRY PRODUCTS SECTOR ANALYSIS

Under the cheese arrangement, about 85 percent of the U.S. imports of cheese would be under absolute quotas, compared with the current 50 percent. Under the arrangement, the "pricebreak" quotas for imports of the three classes of cheese involved therewith, i.e., the quota provisions that allow imports of certain high-priced cheeses to enter quota-free, while the low-priced cheeses are under quota, would be dropped. Substituted would be quotas that allow only a designated quantity of the cheeses to be imported, regardless of price. These absolute quotas, totaling about 243 million pounds for eleven classes of cheese, would be at a level about 30 million pounds higher than total imports in 1978 (a high year of imports). Excepted from the new quotas would be a few specialty-type, soft-cured cheeses presently under the current quota system, such as Camembert and Brie. Also excepted would be a few cheeses not included under the current system, i.e., those made from milk other than cow's milk, packaged for retail sale. It appears that actual imports of "competitive" type cheeses would be permitted to increase by some 30 million pounds under the newly enlarged quotas. (For the most part, the "non-competitive" cheeses, i.e., Camembert, those made from sheep's milk, etc., are not affected by the arrangement.) The increased quotas are to be phased in over a three-year period beginning January 1, 1980.

Under the arrangement, the cheeses exported to the United States and subject to the new quotas could continue to be subsidized, but they would be exempted from countervailing duties so long as their price does not undercut domestic wholesale market prices; such prices are yet to be determined. Should price undercutting exist from the subsidized imports, the President could take remedial action based on certain determinations by the Secretary of Agriculture. Any future changes in the new quotas would be made under the existing section 22 procedures.

U.S. consumption of cheese (3.8 billion pounds in 1978) increased about 20 percent from 1973 to 1978 and it appears that consumption will continue to grow. Imports, both quota and nonquota, supply about 6 percent of domestic consumption. Cheddar cheese, accounting for about half of the domestic production, is purchased by the Department of Agriculture under the price-support program for milk; therefore, U.S. producers of cheese are virtually assured an outlet for their production at the support prices. In view of the above, it does not appear that an increase of 30 million pounds in the imports of the cheeses involved with quotas will adversely affect the domestic dairy industry or labor. Indeed, the arrangement might ultimately benefit the industry because it puts nearly all competitive cheeses under an absolute quota which could very shortly be effective as U.S. cheese consumption is expected to continue to increase. Because the imports under the new quotas are not to undercut minimum prices, in accordance with the Dairy Arrangement, it does not appear that consumers at any level will benefit from the cheese arrangement.

ATAC GROUP 02: DAIRY PRODUCTS SECTOR ANALYSIS

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V. Overall impact on sector

Largely because trade in dairy products is regulated and controlled by nearly all countries, dairy products are considered to fall within the trade-sensitive industry covering meat, fish, poultry, and dairy products. U.S. and foreign tariff concessions and adoption of the NTM agreements, including the IDA, will have virtually no effect on the dairy sector. Any benefits that may result therefrom would involve factors such as exchange of information and consultation. It appears that implementation of the bilateral cheese arrangement might result in a modest increase in imports of the cheeses affected by quotas imposed under section 22 of the Agricultural Adjustment Act, as amended, but the imports are not to undercut domestic prices. Such an increase (about 30 million pounds), although notable compared with current quota quantities, is rather insignificant compared with the expanding U.S. consumption of cheeses which currently amounts to about 3.8 billion pounds annually. It is also noted that Cheddar cheese, which accounts for about half of the U.S. production of cheese, is purchased under the price-support program of the Department of Agriculture for milk. Producers of cheese, therefore, are virtually assured an outlet for their production under this program.

In view of the above, it appears that the bilateral cheese arrangement will have virtually no effect on the domestic industry, labor, or consumers.

ATAC Group 02: Dairy Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	16,616	17,847	22,865	25,090	27,269	29,767
Imports-----do-----	346	362	212	266	293	353
Exports-----do-----	60	76	148	142	176	134
Apparent consumption-----do-----	16,902	18,133	22,929	25,174	27,386	29,986
Ratio, imports to consumption--percent-----	2.0	2.0	0.9	1.1	1.1	1.2
Ratio, exports to shipments----do-----	0.4	0.4	0.6	0.6	0.6	0.4
Total employment--1/--1,000 workers-----	186	181	170	164	2/ 160	NA

1/ Includes employment only in dairy processing plants.

2/ Estimated.

NA = Not available.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce, except as noted.

ATAC GROUP 03: FRUIT AND VEGETABLE SECTOR ANALYSIS

I. Sector profile and conditions of competition

The fruit and vegetable sector includes products produced in establishments primarily engaged in the production of vegetables and melons classified under SIC 016; fruits and tree nuts under SIC 017; horticultural specialties under SIC 018(pt); and canned and preserved fruits and vegetables under SIC 203(pt). Also included in the sector are cash grains, not elsewhere classified, under SIC 0119(pt); Irish potatoes under SIC 0134 field crops, except cash grains, not elsewhere enumerated under SIC 0139(pt); beverages under SIC 208(pt); food preparations, not elsewhere classified, under SIC 2099(pt); vegetable glues under SIC 2891(pt); artificial flowers, plants, and articles made therefrom under SIC 3692(pt); peat moss under SIC 1499(pt); seaweeds under SIC 0919(pt); monosodium glutamate under SIC 2869(pt); and essential oils under SIC 2899(pt).

The value of U.S. shipments by industries in the fruit and vegetable sector in 1977 was \$47.3 billion, compared with \$31.8 billion in 1973, nearly a 50 percent increase. Inflation was an important factor contributing to this increase. Production methods or processes vary from highly capital-intensive frozen, concentrated juice operations to fresh-cut-flower and live-plant-growing operations that are labor-intensive. In 1977, there were over 420,000 persons employed in processing the various products produced in the fruit and vegetable sector. 1/

As a percentage of U.S. production, domestic exports of products in this sector increased steadily from 3 percent in 1973 to 4 percent in 1977 (on a value basis). In 1977, the value of exports was \$1.9 billion; fresh and prepared fruits and vegetables, and nuts are the leading category of exports in the sector. In recent years, the leading export markets have been Canada (accounting for about 45 percent of U.S. exports) and the EEC (about 20 percent), but an increasing share of the exports also has been shipped to the Far East, the Middle East, and Latin America. Hong Kong, for example, recently has become the leading offshore market for a number of fresh produce items, including oranges, apples, tomatoes, and peppers.

During 1973-77, the market share of U.S. imports of the same kinds of products that are produced domestically increased irregularly from 3 percent in 1973 to 4 percent in 1977 (on a value basis). In 1977, the value of imports was \$1.9 billion. 2/ Imports consist mostly of fresh and processed fruits and vegetables and wines. Most of the vegetable and fruit imports come from developing countries south of the United States or in East Asia. Most of the U.S. wine imports come from the EEC.

1/ These data cover only those persons engaged in processing the products covered in the fruit and vegetable sector; data are not available on the total number of persons growing fruits and vegetables or otherwise employed in the sector.

2/ These data do not include imports of fresh and processed bananas, which were valued at \$0.3 billion in 1977.

ATAC GROUP 03: FRUIT AND VEGETABLE SECTOR ANALYSIS

Trade in the fruit and vegetable sector is influenced by the availability and efficiency of production, by weather, purchasing power, and competitive conditions, modified by trade controls, such as duties and nontariff barriers.

In general, U.S. imports in this commodity area tend to be of items in which labor is the critical factor of production. Thus, imported items such as hand-harvested fruits and vegetables and canned mushrooms, in which labor is an important input, are very competitive in the U.S. market. U.S. exports, on the other hand, consist primarily of products in which land and capital are the critical factors of production such as fresh and processed fruits and dried legumes.

The general economic health of the fruit and vegetable sector in the United States is believed to be good for the most part, owing to a continued strong domestic demand for food, especially fruits, vegetables, and wines, and to the increasing demand for exports as stimulated in part by increases in per capita incomes in foreign countries.

Within this sector are the following selected industry segments: the fruit, vegetable, and nut industry; the horticultural specialty industry; and the wine industry; these are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or non-tariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of the Fruit and Vegetable Sector.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

The U.S. tariff concessions offered on the fruit and vegetable sector would probably have little or no adverse impact on U.S. industry or labor. Duty savings are expected to be absorbed by the foreign supplier or importer and will not likely benefit the intermediate consumer or the consuming public. The majority of U.S. concessions are on products that are not produced domestically in significant quantities or on products in which the United States has a competitive advantage.

B. Sector impact of U.S. adoption of proposed NIM agreements

Although certain NIM's affect a few imports of products in this sector, the benefit to industries in the sector, as a whole, from all U.S. NIM's is negligible, because of the limited effect of such NIM's in the United States. For example, the valuation methods of the Customs Valuation Agreement are similar to those customs valuation methods currently used in the United States for imports covered by the fruit and vegetable sector; as such, the adoption of the agreement would have little or no impact on U.S. producers and processors. Consumers, similarly, would not be affected by the adoption of the agreements.

ATAC GROUP 03: FRUIT AND VEGETABLE SECTOR ANALYSIS

C. Sector analysis of the combined impact of the U.S. tariff concessions and U.S. adoption of proposed NTM agreements

It is believed that the U.S. adoption of all the presently proposed U.S. duty modifications relating to imports of the fruit and vegetable sector, and of the NTM agreements considered in the aggregate, would probably have little or no adverse impact on the U.S. fruit and vegetable sector and would appear to have no effect on consumers.

III. NTM export impact

A. Sector impact of foreign tariff concessions

The foreign duty offers on products of the fruit and vegetable sector are not expected to improve U.S. export potential. Most of the foreign duty offers are too small and too selective. For example, the offer by the EEC to reduce the duty on fresh grapes from 18 percent to 10 percent ad valorem is for only 2 months (November-December) and the EEC offer on dried grapes (from 4 percent to 3 percent) is not large enough to increase export potential.

B. Sector impact of foreign adoption of proposed NTM agreements

Adoption of all NTM agreements by foreign countries would probably have no more than a modest beneficial impact on the U.S. fruit and vegetable sector. However, the benefits on certain products such as citrus fruit and tomato products could be substantial for U.S. producers and processors of such products. The United States probably could become competitive in European and Middle Eastern markets if subsidies by Mediterranean suppliers were removed. Further, such action could possibly result in a stimulative effect upon other products in the fruit and vegetable sector, thus leading to increased exports of these commodities.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The adoption of the NTM agreements and the duty reductions by major U.S. trading partners would have little beneficial impact on U.S. producers or processors in the fruit and vegetable sector. For example, Japan's quantitative restrictions on certain imports of the fruit and vegetable sector, although they have been relaxed recently, will likely continue. Adoption of the NTM agreements by other trading partners in Asia and Latin America, especially the Agreement on Import Licensing Procedures, probably would result in some expansion of exports.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Preferential tariff rates, plant quarantine and sanitation laws, and quantitative restrictions are important factors that are outside the scope of NTM tariffs and NTM agreements. Trade sources indicate that Japan's elimination of quantitative restrictions on citrus products, for example,

ATAC GROUP 03: FRUIT AND VEGETABLE SECTOR ANALYSIS

would open a market to U.S. citrus producers with great potential. ^{1/} Japan's total output of citrus fruit is presently only about one-fourth of that of the United States, yet Japan's population is about one-half as large as that of the United States. Given the Japanese preference for fresh citrus, the consumption of processed citrus (including juices) in that country is quite low. In the case of fresh oranges, Japan's per capita consumption of about 57 pounds is substantially above the present U.S. per capita consumption level of 17 pounds; 80 percent of Japan's output is consumed fresh while only 20 percent of U.S. production is sold to the fresh market. Trade sources believe that, despite the high level of fresh citrus consumption in Japan at the present time, that country's imports can be increased by at least 200,000 tons with trade liberalization. Increased consumption of processed citrus in Japan can take place only through more imports, inasmuch as Japan's ability to expand production is believed to be limited. U.S. trade sources believe that promotional efforts may also be necessary to increase demand for processed fruits and overcome the Japanese propensity to consume fruit in the fresh state.

Preferential tariff agreements between various countries also limit trade. The preferential tariff rates granted by the EEC to Spain, Portugal, and Greece (potential EEC entrants) limit U.S. exports of fruits, vegetables, and nuts by giving these countries a cost advantage. Also, upon full acceptance into the EEC, these countries will not be hindered by reference prices, protective clauses, and quantitative restrictions that hamper U.S. trade with the EEC.

Many countries also have plant quarantine laws and food sanitation laws that limit U.S. export potential for products covered by this sector, as was indicated above in the case of U.S. export potential for dried prunes to Japan. The United States also has quarantine and food sanitation laws that limit access to the U.S. market.

V. Overall impact on sector

U.S. producers and processors of products covered by the fruit and vegetable sector will face minimal increased competition from imports resulting from U.S. duty modifications. Duty savings are expected to be absorbed by the foreign supplier or importer and will not likely benefit the intermediate consumer or the consuming public. U.S. adoption of the NTM agreements would not affect U.S. producers or processors because no U.S.

^{1/} Currently, the Japanese have an annual import quota on fresh oranges of 45,000 metric tons. It is expected that the quota will be increased in annual increments to nearly double that level by 1983. The orange juice concentrate import quota will also be expanded to 6,500 metric tons in 1983, a three-fold increase from its current level; and the import quota on grapefruit juice concentrate will be raised to 6,000 tons by 1983.

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nontariff trade measure restricts imports covered by the fruit and vegetable sector by more than a negligible amount. Similarly, exports of these products would not significantly benefit from the adoption of duty reductions and the NTM agreements by foreign countries. The duty reductions offered by U.S. trading partners are generally negligible, and are at the most modest. In general, trade factors in conformity with the NTM agreements (e.g., quantitative restrictions, preferential tariff rates, and quarantine and food sanitation laws) will continue to have a significant impact on U.S. exports of fruit and vegetable sector products. Also, even if all the trade restrictions, including NTM's, were removed it is unlikely that international trade would increase significantly, especially in the short run since many of the products in the fruit and vegetable sector require significant lead times (5 to 10 years) before production levels would be able to support sizable exports.

VI. Analysis of selected segments of the fruit and vegetable sector

The U.S. fruit, vegetable, and nut industry; the horticultural specialty industry; and the wine industry are all trade sensitive industries within the fruit and vegetable sector. During 1973-77, the value of U.S. production of fruit, vegetable and nut crops increased from \$7.7 billion to \$10.2 billion, or by over 30 percent. The bulk of these crops is consumed in the fresh state; the remainder is commercially processed. Shipments by firms that process fruits, vegetables, and nuts were estimated to total about \$14 billion in 1977. U.S. exports of fresh and prepared fruits, vegetables, and nuts were valued at \$1.7 billion in 1977, and accounted for over 7 percent of the value of all U.S. agricultural exports in that year. In 1977, the value of U.S. imports of fresh and prepared fruits, vegetables, and nuts was \$1.2 billion and was equivalent to about 9 percent of all U.S. agricultural imports.

U.S. production of horticultural specialties (bulbs, florists' greens, flowers, shrubbery, flower and vegetable plants, and ornamental and nursery plants) increased steadily from \$1.4 billion in 1973 to \$2.4 billion in 1977. Ornamental and nursery plants account for the bulk of U.S. production. During 1973-77, U.S. exports of horticultural specialties increased steadily from \$12 million to \$38 million. Canada is the principal export market for such products. During the same period U.S. imports increased from \$29 million to \$87 million; fresh cut flowers and live plants account for the majority of such imports.

The U.S. wine industry grew rapidly during 1973-77; production increased from \$882 million in 1973 to \$1,195 million in 1977. U.S. imports of wine also expanded rapidly and in 1977 were valued at \$384 million, or about one-third of U.S. consumption. Exports of wines have nearly tripled in recent years and totaled \$8 million in 1977. The major export markets are Canada and the Bahamas. A substantial portion of U.S. imports of wines tend to be high priced consumer-size bottles that are purchased by the consumer on the basis of brand name, whereas U.S. exports tend to compete more on price.

ATAC GROUP 03: FRUIT AND VEGETABLE SECTOR ANALYSIS

The general economic health of the fruit, vegetable and nut industry and the wine industry in the United States is believed to be good. Although the general economic health of the horticultural specialty industries is believed to be good, U.S. producers of fresh cut flowers face significant import competition.

In general, no U.S. tariff concessions or the adoption of the NTM agreements will have more than a negligible adverse impact on these industries in the aggregate. However, segments of these industries may be affected to a greater degree. For example, pineapple juice processors may face an appreciable increase in imports owing to duty concessions of 50 percent on TSUS item 165.44 and 60 percent on item 165.46. The increased imports could have a significant adverse impact on U.S. processors and on labor.

The adoption of the NTM agreements and the tariff concessions by U.S. trading partners are not expected to have a significant beneficial impact on the above-mentioned U.S. trade sensitive industries. Foreign tariff concessions are too small or too selective to be of any importance and in many cases trade factors outside the scope of the NTM agreements limit trade to a greater degree than the NTM's.

The intermediate consumer and the consuming public will not benefit significantly from NTM tariff concessions or from the adoption of the NTM agreements on products in these trade sensitive industries owing to their selectivity.

ATAC Group 03: Fruit and Vegetable Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	31,800	36,800	40,400	42,000	47,300
Imports-----do-----	1,090	1,191	1,161	1,350	1,851
Exports-----do-----	894	1,222	1,423	1,547	1,869
Apparent consumption-----do-----	31,996	36,769	40,138	41,803	47,282
Ratio, imports to consumption--percent-----	3	3	3	3	4
Ratio, exports to shipments----do-----	3	3	4	4	4
Total employment--1/--1,000 workers-----	423	416	408	409	422

1/ Data are for number of employees engaged in processing the various products produced in the fruit and vegetable sectors.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce.

ATAC GROUP 04: GRAINS AND FEED SECTOR ANALYSIS

I. Sector profile and conditions of competition

This sector includes the farmers who grow wheat, rice, and feedgrains (barley, corn, grain sorghum, oats, and rye) and the producers of dried leguminous vegetables (peas, beans, etc.), as well as the grain milling industry (SIC 2041), the prepared feeds industry (SIC 2042), the cereal breakfast foods industry (SIC 2043), the rice milling industry (SIC 2044), the flour mix and refrigerated dough industry (SIC 2045), the corn wet milling industry (SIC 2046), the bread, cake, and related products industry (SIC 2052), the malt industry (SIC 2083), and the macaroni industry (SIC 2098).

The value of U.S. shipments by the grain and feed products sector was an estimated \$35 billion in 1978, compared with \$24 billion in 1973. 1/ Although a part of the increase is accounted for by inflation, a more substantial part is accounted for by increased shipments of further-processed products reflecting the increased sales of prepared convenience foods. Production methods vary from highly capital-intensive operations to highly labor-intensive operations. In 1978, there were approximately 375,000 persons employed in processing these grain and feed products in the United States compared to 352,000 in 1973. 2/

The United States is the world's largest exporter of wheat, corn, and rice. U.S. exports vary with the size of the U.S. crop, the crop in competing exporting countries, and the crops in the importing countries.

Exports of grain and feed products are estimated at \$9.0 billion in 1978, slightly above the \$8.6 billion exported in 1973, and significantly below the \$11.8 billion exported in 1975. The ratio of exports to domestic shipments averaged at about 35 percent during 1973-76 and at about 26 percent during 1977-78. Grains (particularly wheat and corn) are the principal export items in this sector. Although exports go to nearly every country with which the United States trades, Japan and the EEC are the principal markets.

U.S. imports of grain and feed products have been small in comparison to domestic production and exports. In the period 1973-78, they increased from \$159 million in 1973 to \$292 million in 1974, and then decreased irregularly to \$230 million in 1978, equivalent to about 1 percent of domestic consumption. The principal import items have been bakery products (\$90 million in 1978), animal feeds (\$25 million), wheat gluten (\$25 million), and macaroni (\$25 million). In certain years, imports of grain, particularly barley, have been substantial.

1/ These data include only shipments of processed grain products and do not include the value of farm sales.

2/ Does not include farmers and farm workers, data on which are not available.

ATAC GROUP 04: GRAINS AND FEED SECTOR ANALYSIS

The general economic health of the grain and feed sector is relatively good. Export demand for grain and feed products is expected to remain strong owing to increases in per capita incomes in foreign countries. Domestic demand for processed convenience foods has also been growing rapidly in recent years.

Within this sector is the grain and grain products segment, which is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of this segment appears in Section VI, Analysis of Selected Segments of the Grains and Feed Sector, following the overall sector presentation.

II. MTN import impact

A. Sector analysis of impact of U.S. tariff concessions

In the aggregate, the proposed U.S. tariff concessions offered on the grain and feed group would probably have no more than a negligible adverse impact on U.S. industry and labor, and no more than a minimal beneficial effect on consumers. For certain individual items, however, the effects of the proposed concessions could be significant. The proposed concession on barley for malting purposes could result in a slight adverse impact on U.S. barley producers, particularly those producing malting-quality barley. Likewise, the proposed concessions on bakery products, potato starch, macaroni and similar alimentary pastes, and on wheat gluten could result in modest increases in imports and a significant adverse impact on domestic industry and labor.

B. Sector analysis of impact of U.S. adoption of proposed NTM agreements

The United States has very few NTM's affecting U.S. imports of grains and feeds. There is a plant quarantine regulation which effectively precludes the importation of rough or paddy rice from all countries except Mexico. A quota on the imports of wheat and milled wheat products was in effect from 1941 until 1974. This quota, implemented pursuant to section 22 of the Agricultural Adjustment Act, as amended, has been suspended since 1974.

Certain U.S. Government-financed programs to promote exports under Public Law 480 ^{1/} and by the Agency for International Development (AID) might be considered to be export subsidies under the Subsidies/Countervailing Duty Measures Agreement; however, these programs do not involve commercial

^{1/} Public Law 480 (Food for Peace Act) first enacted in 1954, has been the principal legislative authority for channeling U.S. food and fiber to developing countries.

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exports. In 1977, about \$1.0 billion of grains and grain products were exported from the United States under these two programs.

It is believed that the implementation of the Customs Valuation Agreement, the Agreement on Import Licensing Procedures, and the Subsidies/Countervailing Duty Measures Agreement by the United States would have little effect on U.S. producers and the U.S. industry. Consumers, likewise, would not be affected by the adoption of the agreements. The quota restrictions (currently suspended) on imports of wheat and milled wheat products imposed under section 22 of the Agricultural Adjustment Act, as amended, will be permitted under the proposed agreements. Under the Subsidies/Countervailing Duty Measures Agreement exports of grain under P.L. 480 and AID export assistance may not adversely affect the interests of other signatories as these exports go principally to non-commercial export markets.

C. Sector analysis of the combined impact of the U.S. tariff concessions and U.S. adoption of proposed NTM agreements

It is believed that the U.S. duty modifications relating to imports of the grain and feed products group, and the NTM agreements, in the aggregate, would probably have little or no adverse impact on the U.S. producers or labor and would appear to have no effect on consumers.

III. MTN export impact

A. Sector impact of foreign tariff concessions

The foreign duty offers on products of the grains and feed group are not expected to significantly improve U.S. export potential. ^{1/} Most of the foreign duty offers are too small or too selective to be important. For example, the United States received no significant offer on grain and feed products from Japan, and the offers from Canada will not significantly increase U.S. export grain and feed potential because Canada produces a surplus of many of the same products that are produced in the United States. The Canadian offer on rice is on an item not produced in Canada; however, the United States already supplies nearly all of that market and the amount of the proposed duty cut is slight. Furthermore, most countries use some form of state-trading in their grain transactions. Thus, import duties are not a significant factor in import decisions.

^{1/} Information on offers by the European Economic Community is not available.

ATAC GROUP 04: GRAINS AND FEED SECTOR ANALYSIS

B. Sector impact of foreign adoption of the proposed NTM agreements

Implementation of the agreements by foreign NTM participants could have a favorable impact on U.S. grain and feed product exports, especially to the EEC and Japan. The extent of this impact is impossible to quantify and would vary by country and for individual items.

The principal NTM affecting U.S. grain exports is the EEC's Common Agricultural Policy, with the variable import levy affecting U.S. exports of grain and grain products to the EEC. In addition, the EEC subsidizes its exports of grains (particularly soft wheat and barley) to other countries where they compete with U.S. grain. Japan, in an effort to diversify its sources of supply, has aided the development of grain production in Thailand and Brazil. This action has resulted in somewhat reduced U.S. exports of grains (particularly corn) to Japan.

The removal of all NTM's covered by the agreements would probably have no more than a slight favorable impact on U.S. exports of grains and feed since trade factors other than those covered by the NTM agreements have a greater effect on trade than will the adoption of the NTM agreements.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of the proposed NTM agreements

The adoption of the NTM agreement and the duty reductions by major U.S. trading partners would probably have a slight beneficial impact on the U.S. grain and feed industry. The Office of the Special Trade Representative (STR) estimated that U.S. exports of grains would increase by \$26 million as a result of the concessions and agreements. Even considering the optimistic nature of these estimates, the projected increase is extremely small compared with the U.S. exports of these products.

The United States generally has a competitive advantage in the production of most grain products and any movement toward freer international trade would be beneficial to U.S. exports. Of special importance is the Subsidies/Countervailing Duty Measures Agreement, the implementation of which could be beneficial to U.S. exports if the EEC limits its export subsidies on barley and wheat.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

The European Economic Community's Common Agricultural Policy (CAP) is the most significant factor affecting grain and feed exports. The CAP provides for variable levies on EEC imports and for export subsidies on EEC exports of

ATAC GROUP 04: GRAINS AND FEED SECTOR ANALYSIS

grains, which directly compete with U.S. grain in other markets. The Subsidies/Countervailing Duty Measures Agreement might result in restraint in EEC export subsidies in commercial markets, especially in third markets in which other signatories to the agreement compete.

Nearly every grain exporting and importing country uses some form of state-trading in their grain transactions. The decisions regarding purchases often involve factors other than economics.

There are a number of NTM's which affect U.S. exports of grains and grain products. NTM's in the principal U.S. markets include:

EEC.--The Common Agricultural Policy (and all its ramifications, including variable import levies and export subsidies).

Japan.--State trading and development assistance to competitive suppliers.

Mexico.--State trading and import licensing.

Canada.--State trading (Canadian Wheat Board).

Brazil.--Licensing, state trading, and currency controls.

V. Overall impact on sector

U.S. producers and processors of the grain and feed sector will face minimal increased competition from imports owing to U.S. duty modifications. U.S. adoption of the NTM agreements would not affect U.S. producers or processors, because no U.S. NTM restricts imports covered by the grain and feed products sector by more than a negligible amount.

Domestic grain and feed products sector producers and processors would experience little benefit from the adoption of the NTM agreements or from foreign duty concessions. The duty concessions offered by U.S. trading partners are generally negligible. In general, trade factors outside the scope of the NTM's (e.g., the EEC's Common Agricultural Policy and state trading) will continue to have an impact on U.S. exports of grain and feed products.

VI. Analysis of selected segments of the grains and feed sector

The U.S. grain and grain products industry is a trade sensitive industry within the grain and feed sector. The United States is a major producer and exporter of these products, with the value of production of grains amounting

ATAC GROUP 04: GRAINS AND FEED SECTOR ANALYSIS

to \$21.5 billion and with exports amounting to \$8.7 billion in 1977. U.S. imports of these same products amounted to \$170 million in 1977. Over half of the domestic wheat and rice crops and over a fourth of the corn crop have been exported in recent years. Exports of corn (\$4.1 billion) accounted for 47 percent of the total exports of grains and grain products, and exports of wheat (\$2.7 billion), for 31 percent, in 1977. The U.S. tariff concessions which are expected to have the most adverse impact on this industry are those on malting barley, potato starch, bakery products, and wheat gluten. U.S. adoption of the NTM agreements is not expected to have any significant effect on the U.S. industry.

Foreign tariff concessions and adoption of the NTM agreements by U.S. trading partners are expected to have a negligible beneficial impact on the grain and grain products industry. In general, the foreign duty offers are too small and/or too selective to significantly increase export potential, and in many instances, trade factors other than those covered by the NTM agreements have a greater effect on trade than will the adoption of the NTM agreements.

ATAC Group 04: Grains and Feed Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments <u>1</u> --millions of dollars--	24,314	30,426	32,118	32,987	2/ 34,000	2/ 35,000
Imports-----do-----	159	292	233	239	237	230
Exports-----do-----	8,604	10,483	11,788	11,032	8,871	2/ 9,000
Apparent consumption <u>3</u> /-----do-----	15,869	20,235	20,563	22,694	25,366	26,230
Ratio, imports to consumption--percent-----	1	1	1	1	0.9	0.9
Ratio, exports to shipments----do-----	35	34	37	33	26	26
Total employment <u>4</u> /--1,000 workers-----	352	358	360	365	2/ 370	2/ 375

1/ Includes only processed articles, not unworked grains.

2/ Estimated.

3/ Apparent consumption is under stated because a substantial part of exports reported includes unworked grains, data for which is not included for producers' shipments.

4/ Does not include farm workers.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ATAC GROUP 05: LIVESTOCK AND LIVESTOCK PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector includes live animals classified in SIC 021, 024, 027 and 029 and animal products such as meat, hides and skins (SIC 2011, and 2013), tallow and greases (SIC 2077(pt)) and several byproducts of minor importance such as blood (SIC 2011), certain gelatin products and some chemicals of animal origin (SIC 2899(pt)). This sector does not include birds and bird products (such as poultry and eggs), fish and fish products, or dairy products.

The economic health of the U.S. livestock and livestock products sector is currently strong; profitability in the cattle-beef industry has rebounded after several years of low returns. The competitive strength of the U.S. livestock products sector is reflected by the fact that in most recent years the value of the U.S. exports has nearly equaled the value of U.S. imports, in spite of the fact that the U.S. market is relatively unprotected from imports, while potentially large export markets such as Japan and the EEC are highly protected; also, exports of some meats to the United States benefit from subsidies. The abundant U.S. supply of feed grains at favorable prices has contributed to the well-being of the U.S. livestock industry.

The value of U.S. shipments of livestock products increased from about \$30.4 billion in 1973 to \$53.3 billion in 1978 as domestic production generally responded to growing demand. In 1978, however, prices were sharply higher as beef supplies declined. Employment in the livestock products industry has remained rather stable, averaging about 215,000 workers in recent years, indicating that the industry has capitalized on efficiency as the value of shipments rose. During 1973-78, the value of U.S. exports of livestock and livestock products increased from about \$1.5 billion to about \$2.5 billion. Although exports have accounted for a small part of the total production in the U.S. livestock and livestock products sector, they have absorbed a significant part of the production of some of the individual products. For example, over one-half of the production of hides and skins and about one-fourth of the production of edible offals is exported. Because of price and size, the U.S. is a preferred market for most livestock and livestock products. U.S. exports must compete with subsidized exports especially from the EEC, as well as face import restrictions in most markets.

The value of U.S. imports of livestock and livestock products during 1973-78 ranged from \$1.6 billion in 1975 to \$2.7 billion in 1978. Imports, which consist mostly of beef for manufacturing and canned hams, account for about 5 percent of the value of shipments. When viewed in terms of individual products, however, imports of beef accounted for about 10 percent of U.S. consumption in 1978; canned hams have accounted for about one-half of consumption in recent years. U.S. imports of fresh, chilled, or frozen beef and veal provided for in item 106.10 of the TSUS and of goat and sheep meat (except lambs) provided for in TSUS item 106.20, are subject to the provisions of the Meat Import Act of 1964 (P.L. 88-482). As an adjunct to the act, these meats have also been subject to voluntary restraints negotiated under the authority of section 204 of the Agricultural Act of 1956 in most years since 1964.

ATAC GROUP 05: LIVESTOCK AND LIVESTOCK PRODUCTS SECTOR ANALYSIS

The livestock and livestock products sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in NTM tariff or nontariff trade measures.

II. NTM import impact**A. Sector impact of U.S. tariff concessions**

U.S. tariff concessions in the livestock and livestock products sector will have virtually no effect on the domestic industry or labor. Not only are the concessions small, but some are on items that are not significant in international trade (such as meat items valued not over 30¢ per pound); also, imports of some of the items on which concessions are made are subject to the provisions of the Meat Import Act of 1964 and often to voluntary restraints negotiated under section 204 of the Agricultural Act of 1956. The duty savings that might result from the concessions are expected to be absorbed by the foreign suppliers and importers and, therefore, they are not expected to benefit the industrial or intermediate consumers, or the consuming public.

B. Sector impact of U.S. adoption of proposed NTM agreements

U.S. adoption of the proposed NTM agreements, including the Arrangement Regarding Bovine Meat, is not expected to have any significant impact on the U.S. livestock and livestock products industry, labor, or consumers. This arrangement is primarily an information and consultation agreement with no economic provisions. The long-standing subsidies bestowed on exports of meat by a number of countries, both to the United States and to third country markets (especially on canned hams to the United States), would have to be injurious to U.S. producers for the United States to impose countervailing duties. 1/

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of the proposed NTM agreements

The U.S. tariff concessions on livestock and livestock products and the adoption of the NTM agreements, including the Arrangement Regarding Bovine Meat, are expected to have no significant affect on the level of the imports, only a negligible adverse impact, if any, on industry or labor, and yield no benefits to the consuming public. Any duty savings that might result therefrom are expected to be absorbed by foreign suppliers and importers.

1/ Issues that do not appear to be part of the NTM agreements or the Arrangement Regarding Bovine Meat are discussed in section IV of this report. The issues are the Japanese enlargement of high-quality beef quota, a series of bilateral arrangements negotiated between the United States and supplying countries with regard to a minimum access level or "floor" for U.S. imports of meat, and an exchange of letters concerning U.S.-EEC beef trade.

ATAC GROUP 05: LIVESTOCK AND LIVESTOCK PRODUCTS SECTOR ANALYSIS**III. NTM export impact****A. Sector impact of foreign tariff concessions**

The foreign tariff concessions for the livestock and livestock products sector are so few, so small, and so selective that they will have no overall impact on the U.S. export potential. However, the proposed Canadian duty reduction on live cattle might cause a moderate to appreciable increase in the export potential with a corresponding beneficial impact on U.S. industry and employment. Although the duty reduction is small (1.3 percentage points) price competition between cattle produced in the United States and in Canada is often so keen, especially in border states, that it is believed the reduction might lead to increased exports.

B. Sector impact of foreign adoption of NTM agreements

Foreign adoption of the NTM agreements will have virtually no impact on the export potential for livestock and livestock products because the most detrimental NTM's to such exports, the Common Agricultural policy (CAP) of the EEC and Japanese restrictions on meat imports, apparently will not be significantly affected. If international trade in livestock and livestock products were to be liberalized as a result of adoption of the NTM agreements, there might well be a moderate to appreciable increase in such U.S. exports, particularly in exports of pork and grain-fed beef. The United States is competitive in the production of these livestock and livestock products, due in part, to the competitive advantage of the United States in the production of grain.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Foreign tariff concessions for this sector are so few, so small, and so selective that they will have no impact on the U.S. export potential, except for exports of live cattle to Canada which may show a moderate increase.

Because the CAP of the EEC and the Japanese restrictions on meat imports, the most detrimental of the NTM's to U.S. exports in this sector, apparently will not be significantly affected by the agreements; there will be no effect on U.S. exports of the products included in this sector because of foreign adoption of the proposed NTM agreements, including the Arrangement Regarding Bovine Meat. The combined effect of the above, therefore, will be limited to a possible moderate increase in U.S. exports of live cattle to Canada.

ATAC GROUP 05: LIVESTOCK AND LIVESTOCK PRODUCTS SECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and MTN agreements**

The United States has negotiated a series of bilateral arrangements with supplying countries providing for a minimum access level or "floor" of 1.2 billion pounds for U.S. imports of meat subject to the provisions of the Meat Import Act of 1964. The arrangements appear to require that the act be amended and are apparently separate from the MTN agreements and the Arrangement Regarding Bovine Meat. In view of the fact that the "quota quantities" that would have been required under the act have exceeded 1.2 billion pounds for several years, and in view of the fact that the President has used his authority provided under the act to suspend quotas and have voluntary restraint levels negotiated at higher levels, it is doubtful that the "floor" level of 1.2 billion pounds would result in quantitative limitations being more restrictive than they otherwise would have been. Hence, the negotiated "floor" should not effect the level of U.S. imports, the industry, labor or consumers.

Several trading restrictions that apparently are not affected by the MTN agreements and MTN tariffs appear to limit U.S. exports of meat. A state trading agency in Japan, the Japanese Livestock Industry Promotion Corporation (LIPC), for example, buys meat at the world prices and sells it, on the Japanese market, at the much higher domestic price. The LIPC is able to enforce such higher prices because it is granted about 80 percent of the Japanese license to import meat. (It does not appear, however, that the Japanese licensing requirements are in conflict with the Agreement on Import Licensing Procedures.)

Quotas, especially the Japanese beef import quotas, also act to restrict U.S. exports of beef. As a result of the MTN, but apparently separate from the MTN agreements and the Arrangement Regarding Bovine Meat, the Japanese have agreed to expand their quota for high-quality beef. The Japanese quota for high-quality beef was 16,800 metric tons in Japanese Fiscal Year (JFY) 1978. The Japanese have agreed to increase this quota quantity by 14,000 metric tons, such increase to be phased in during JFY 1980-83 with an increase of 4,000 metric tons coming in JFY 1980. The Japanese quota is global and the United States must compete with Canada, and to a lesser extent Australia and New Zealand, for the market; however, in past years the United States has been competitive in the world market for high-quality beef. The expansion in the quota will result in a negligible increase in U.S. exports and probably be of only a negligible benefit to the domestic industry. There should be no discernible adverse impact on domestic consumers inasmuch as 14,000 metric tons is equivalent to 0.5 percent of domestic beef production.

In an exchange of letters between the EEC and the United States, the EEC agreed to establish a levy-free quota of 10,000 metric tons of high-quality beef and the United States agreed to operate its Meat Import Act in such a manner as to allow access for 5,000 metric tons of EEC beef from member countries free of foot-and-mouth disease (Ireland). In view of the relatively

ATAC GROUP 05: LIVESTOCK AND LIVESTOCK PRODUCTS SECTOR ANALYSIS

small quantities of beef involved (less than 0.5 percent of U.S consumption), the increased imports that might result from this agreement should have no effect on the U.S. industry, labor, or consumers.

Under bilateral arrangements Austria and Switzerland have agreed to quotas (10,000 metric tons for Switzerland and 600 metric tons for Austria) which would allow imports of high-quality beef into their markets. Should the U.S. industry fill these quotas, the quantities are too small to have an effect on U.S. industry, labor, or consumers.

V. Overall impact on sector

U.S. and foreign tariff concessions and U.S. and foreign adoption of the NTM agreements, including adoption of the Arrangement Regarding Bovine Meat will have virtually no effect on the U.S. livestock and livestock products industry, labor, or consumers. Adoption of the bilateral agreements between the United States and supplying countries providing for a minimum access level of 1.2 billion pounds for U.S. imports of quota-type meats is expected to have only a negligible impact, if any, on the sector because imports have exceeded 1.2 billion pounds annually for several years under the Meat Import Act. Also, the quantities of meat involved in the remaining bilateral agreements are too small to have any effect on the U.S. industry, labor, or consumers. The most significant NTM's affecting international trade of U.S. livestock and livestock products, the CAP Of the EEC and the Japanese restrictions on meat imports, are apparently not significantly affected by the MTN.

Livestock and livestock products fall within the trade sensitive industry covering meat, fish, poultry, and dairy products largely because trade in many important livestock products is regulated and controlled by nearly all countries.

ATAC Group 05: Livestock and Livestock Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	30,380	32,682	38,287	41,176	48,034	53,309
Imports-----do-----	2,276	1,841	1,581	2,013	2,005	2,742
Exports-----do-----	1,405	1,562	1,387	1,975	2,178	2,500
Apparent consumption-----do-----	31,251	32,961	38,481	41,214	47,861	53,551
Ratio, imports to consumption--percent-----	7	6	4	5	4	5
Ratio, exports to shipments----do-----	5	5	4	5	5	5
Total employment--1,000 workers-----	205	216	216	214	1/ 214	NA

1/ Estimated

NA = Not available.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce, except as noted.

ATAC GROUP 06: OILSEED SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This agricultural sector includes the oilseed and associated products industry which encompasses oilseed crops (such as soybeans, cottonseed, sunflowerseed, peanuts, and flaxseed), vegetable oils, animal fats and greases, oilseed meals (e.g., soybean meal), and refined vegetable oil products such as shortening. The industrial portions of this sector include cottonseed mills (SIC 2074), soybean oil mills (SIC 2075), vegetable oil mill products, n.e.c. (SIC 2076), animal and marine fats and oils (SIC 2077), and shortening and cooking oils mills (SIC 2078). The non-industrial portions of this sector include farms growing soybeans, cottonseed, flaxseed, sunflowerseed, peanuts, and some other minor oilseed crops such as safflowerseed.

The U.S. oilseed sector between 1973 and 1977 benefited from a rising value of domestic production, generally favorable export markets, and relatively minor import competition in the domestic market. In the period 1973-77, U.S. shipments of oilseeds and associated products rose from \$15.0 billion to \$20.3 billion. Exports rose at an even faster rate, from \$4.6 billion to \$7.1 billion. Imports of oilseeds and oilseed products have been small in comparison to production and exports; however, the import share of the domestic market rose in the period 1973-77 from 3 percent in 1973 to 4 percent in 1977. Imports were valued at \$551 million in 1977.

Employment in the oilseed mills remained relatively unchanged at about 41,000 workers in the years 1974-77, but probably declined on the farms growing oilseed crops. In line with the general decrease in the U.S. farm population, the number of oilseed farms between 1973 and 1977 dropped by at least 10 percent. About one in every five U.S. farms currently grows some kind of oilseed crop.

The U.S. oilseed sector, which had dominated world trade in these products since World War II, began to face competition during the 1973-77 period in both the world market and, to some degree, in the domestic market. The value of U.S. exports of oilseeds and associated products increased from \$4.6 billion in 1973 to \$6.2 billion in 1974, declined to about \$4.8 billion in 1975, then rose to \$7.1 billion in 1977. The export growth from 1973 to 1977 reflected higher foreign demand for oilseed meals and vegetable oils and fats. The emergence of Brazil and Malaysia as competitive exporters during this period has somewhat reduced U.S. dominance in world markets, even though the absolute amount of U.S. oilseed trade increased.

The oilseed sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff measures.

ATAC GROUP 06: OILSEED SECTOR ANALYSIS

II. MTN import impact

U.S. tariff offers should have little or no effect on U.S. industry, labor, or consumers, but potential problems could occur in the future because of certain U.S. tariff cuts. On the basis of data provided by the Office of the Special Representative for Trade Negotiations (STR), U.S. tariff offers are unlikely to result in increased imports from Japan and the EEC because both are substantial net importers of oilseed products. However, U.S. offers may benefit Canadian exports to the United States.

U.S. tariff offers could cause potential problems for the U.S. oilseed sector--those on palm oil, rapeseed oil, and flaxseed. In the United States, palm oil is presently duty free, but bound under GATT at 3 cents per pound. The pending U.S. tariff offer ^{1/} to bind the palm oil duty at 0.5 cents per pound potentially may limit U.S. flexibility to restore unilaterally the previous duty should palm oil imports prove to be injurious in the future. In 1975, U.S. palm oil imports reached a record 960 million pound level (which amounted to about 8 percent of domestic consumption of edible fats and oils in that year), and caused considerable alarm among domestic producers of competitive fats and oils. Should palm oil once again enter the domestic edible fats and oils market in substantial quantities, a binding of the palm oil duty at 0.5 cents per pound would limit the ability of the United States to restore the previous duty without providing compensation to the palm-oil exporting countries under GATT. Malaysia as the principal palm-oil exporting country is the principal country benefiting from this U.S. duty offer.

The U.S. tariff offers on rapeseed oil and flaxseed, which would benefit mainly Canada, may increase competition with certain domestic fats and oils producers. The reduction of the various rapeseed oil duties may under certain conditions increase competition in the domestic edible fats and oils market with Canadian rapeseed oil, though the extent of rapeseed oil's possible entry into the domestic edible fats and oils market is unknown because it has not been approved for edible use by the Food and Drug Administration in the United States at this time. Canada also stands to benefit from the U.S. tariff reduction on flaxseed. These tariff offers pose potential problems for the future rather than immediate ones. But in an aggregate sense, the U.S. tariff offers should result in only a minor increase in U.S. imports, at least within the next few years.

^{1/} The April 4, 1979, U.S. Offers List provided by the Office of the Special Representative for Trade Negotiations (STR) indicates no change in the rate for palm oil; however, the STR advises that a concession may be granted pending Malaysia's approval of the MTN package.

ATAC GROUP 06: OILSEED SECTOR ANALYSIS

Private industry spokesmen in the Oilseed Agricultural Technical Advisory Committee indicated considerable concern about the binding of the palm oil duty and the reduction of the rapeseed oil duties.

The impact of the NTM agreements on the level of U.S. imports will not be significant. The existing U.S. quotas on butter oil and on peanuts will not be affected by the NTM agreements. The quotas are the only significant nontariff measures affecting U.S. imports of oilseeds and associated products. The NTM agreements and tariff reductions, together, should not have a significant adverse effect on the domestic industry in the immediate future.

The impact of both the U.S. duty offers and the NTM agreements on domestic consumers should be minimal. Duty savings are expected to be absorbed largely by industrial users, with little, if any, savings passed on to retail consumers. The NTM agreements should have no effect on domestic consumers at all.

III. NTM export impact

The aggregate effect of the foreign tariff offers and the NTM agreements on U.S. exports should be minimal in its direct impact. Tariff concessions of Japan, the EEC or Canada are not sufficiently significant to U.S. export potential. However, there were some significant bindings of various foreign duties. Japan's binding of duty on soybeans at free is important in terms of maintaining U.S. access to that market, but minimal in terms of increasing U.S. soybean exports since the applied duty is currently free. The adoption of the NTM agreements would also not significantly affect U.S. oilseed and product exports. An important aid to U.S. exports of oilseeds and associated products, government assistance under Public Law 480, might not be affected by the Subsidies/Countervailing Duty Measures Agreement since these exports go mainly to noncommercial export markets. Export-competitive countries might not be significantly restricted by the agreement in their present use of subsidies for oilseed product exports, inasmuch as few, if any, competitive oilseed exporters use extensive subsidies in commercial markets.

IV. Foreign trade factors outside the scope of MTM tariffs and NTM agreements

A number of countries have nontariff barriers which would not be affected by adoption of the NTM agreements. These barriers include special licensing for certain oilseed meals and vegetable oils (EEC and Japan) and special duties, quotas, and/or licensing on peanuts (Japan and certain state trading monopolies (Spain and Iran)).

ATAC GROUP 06: OILSEED SECTOR ANALYSIS

In general, many countries still restrict the importation of vegetable oils and oilseed meals, but permit the entry of the crude oilseed. Thus, the United States will continue to have good market access in many countries for unprocessed oilseeds, which are relatively low-valued, and crude fats and oils, but will still be precluded from most foreign markets for processed oilseed products.

V. Overall impact on sector

There will be little impact on the export-competitive sector resulting from tariff offers and adoption of the NTM agreements. Foreign tariff offers are not sufficient to result in significant increases in U.S. exports of oilseeds and associated products, while U.S. tariff offers will not lead to a significant adverse impact on the domestic industry, nor any measurable impact on domestic consumers. The U.S. oilseed industry, because of its export-competitive position, is a trade-sensitive industry, but the impact of the NTM agreements and the tariff offers will not significantly affect its position. The net impact of the tariff offers and the NTM agreements, while not increasing U.S. access to foreign markets, does not jeopardize the access either. Foreign tariff concessions offered by the principal U.S. market areas, Mexico, Canada, the EEC, and Japan, will not significantly improve access in those areas. U.S. tariff reductions may offer some slight benefits in the future to Canada (on rapeseed oil), and to two developing countries, the Philippines (on coconut oil) and Malaysia (on palm oil). The NTM agreements will probably not significantly affect U.S. imports or U.S. exports of oilseeds and associated products. It is likely that the MTN tariff reductions and the agreements will do little to increase or decrease U.S. trade in these particular agricultural products.

ATAC Group 06: Oilseed Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars ^{1/} --	15,001	20,296	17,532	17,519	2/ 20,322
Imports-----do-----	311	556	547	470	551
Exports-----do-----	4,623	6,239	4,750	5,437	7,107
Apparent consumption-----do-----	10,689	14,613	13,329	12,552	13,766
Ratio, imports to consumption--percent-----	3	4	4	4	4
Ratio, exports to shipments----do-----	31	31	27	31	35
Total employment ^{3/} 1,000 workers-----	43.0	41.0	40.7	40.9	2/ 41.0

^{1/} Represents the value of industry shipments (SIC 207) plus the value of crude oilseeds, exported, but not processed domestically.

^{2/} Estimated.

^{3/} Industrial employment only.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce, except as noted.

ATAC GROUP 07: POULTRY AND EGG SECTOR ANALYSIS**I. Sector profile and conditions of competition**

The poultry and egg sector covers industries engaged in the commercial production of chickens, turkeys, ducks, and geese classified under SIC 025(pt), other birds such as canaries, parakeets, and exotic birds under SIC 0279(pt), and poultry eggs under SIC 025(pt). Also included in the sector group are industries which process and market poultry and poultry products including feathers and downs under SIC 2016, 2017, 5144, 5159(pt), and 5411(pt).

Live poultry are raised for meat and egg production on thousands of farms, but the great bulk of the domestic output comes from a relatively few large-scale producers. For example, in 1977, 49 firms accounted for 80 percent of the broilers slaughtered under Federal inspection. ^{1/} During the mid 1970's, the number of farms producing broilers appeared to be relatively stable, but the number of farms producing eggs and turkeys declined. About 650 plants, employing 100,000 people, slaughter and/or process most of the poultry and poultry products produced in the United States.

Although poultry meat and eggs are produced throughout the United States, the principal areas of production are in the Southeastern and South Central States. Feathers and downs are byproducts of the poultry slaughtering industry.

During the period 1973-78, the value of U.S. shipments of poultry meat, eggs, and poultry products rose by nearly one-third and reached \$10.4 billion in 1978. Poultry meat (largely from broilers) and eggs accounted for virtually all of the value; feathers and downs representing less than 1 percent.

U.S. foreign trade in poultry, eggs, and poultry products is small in relation to domestic shipments. Annual U.S. exports of products produced by the poultry industry have been equivalent to 3 percent or less of domestic shipments. In 1978, such exports were valued at \$322 million and consisted primarily of poultry meat. U.S. imports of poultry, eggs, and poultry products have been negligible in relation to apparent domestic consumption; in 1978, such imports were valued at \$75 million and consisted mostly of water-fowl feathers and downs.

Despite the fact that U.S. exports of poultry and eggs represent only a small share of domestic production, they account for a major part of the international trade in these products. The great bulk of the domestic output comes from large-scale integrated operations. Advances in technology and an abundant supply of U.S. feed grains have, in large part, contributed to the development of the domestic industry as the world's most efficient poultry and egg producer. Other major producers that also export (e.g., member states of the EEC) generally do so with the aid of subsidies.

^{1/} Virtually all broilers are slaughtered under Federal inspection.

ATAC GROUP 07: POULTRY AND EGG SECTOR ANALYSIS

The poultry and egg sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or non-tariff trade measures.

II. MTN import impact

A. Sector impact of U.S. tariff concessions

Crude, sorted, or treated feathers and downs (other than ostrich) are the only articles in the poultry and egg sector subject to a proposed U.S. tariff concession. The rate of duty would be reduced by 50 percent, to 7.5 percent ad valorem. However, since April 1975, imports of most feathers and downs have been temporarily free of duty and will continue to be so until June 30, 1979, pursuant to Public Law 93-480. ^{1/} H.R. 2492 has been introduced in the 96th Congress to, among other things, extend the duty-free treatment accorded feathers and downs until June 30, 1984.

Inasmuch as feathers and downs have been imported free of duty in recent years, and legislation has been introduced to extend such treatment, an MTN duty concession from 15 percent to 7.5 percent ad valorem probably would have no effect on imports and no adverse impact on U.S. industry or labor. Should the 7.5 percent ad valorem duty become effective, the industrial consumer (manufacturers of feather and down filled outdoor wearing apparel, sleeping bags, and bedding) and the consuming public both will likely benefit from the duty savings to be obtained by the reduction from 15 percent ad valorem, but not to the degree they presently enjoy with duty-free imports.

B. Sector impact of U.S. adoption of proposed NTM agreements

The adoption of the NTM agreements will have no effect on this sector.

The health and sanitary restrictions imposed on U.S. imports of poultry products appear to be in conformity with the Agreement on Technical Barriers to Trade (Standards Agreement). In the absence of any other significant import restrictions on poultry products, it would appear that the U.S. adoption of the NTM agreements would have no impact on domestic producers or consumers.

C. Sector analysis of the combined impact on U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined impact of tariff concessions and the adoption of NTM agreements will have no overall impact on this sector. U.S. tariff concessions on crude, sorted, or treated feathers and downs (the only articles in the sector subject to concessions) would not affect U.S. imports, producers,

^{1/} The duty-free status applies to all imports except cleaned feathers and downs which are the products of designated Communist countries.

ATAC GROUP 07: POULTRY AND EGG SECTOR ANALYSIS

or labor but could likely benefit consumers (as discussed above). Owing to the lack of U.S. NTM's on poultry, adoption of the NTM agreements by the United States will not affect domestic producers, labor, or consumers of the products included in this sector.

III. NTM export impact**A. Sector impact of foreign tariff concessions**

The foreign duty offers are too small and/or selective to have a significant impact on U.S. exports of poultry, eggs, and poultry products. Other factors will keep U.S. exports from expanding significantly. For example, Canada is an importer of waterfowl feathers and downs, but its offered duty reduction on feathers in the natural state will not benefit the United States, because U.S. waterfowl feather output is limited. The Mexican offers on live poultry, moreover, are merely bindings of existing rates.

Although Japan has offered a duty reduction on chicken legs and parts thereof from 20 percent to 10 percent ad valorem, this duty reduction will probably not significantly expand U.S. exports of poultry to Japan. Most likely none of the duty reductions will reach the ultimate Japanese consumer and therefore stimulate consumption, owing to the many marketing stages in the Japanese food distribution system. Also, the export potential probably does not justify additional investment for the export market. Besides, rising prices for red meat in the United States have stimulated the demand for poultry at home, thereby reducing further the incentive to increase exports.

B. Sector impact of foreign adoption of proposed NTM agreements

The adoption of the proposed NTM agreements by foreign countries is not expected to improve U.S. export potential for poultry, eggs, and poultry products. Domestic exports might well be increased were it not for longstanding import restrictions and export subsidies employed by U.S. trading partners, especially the EEC, which have hindered U.S. market expansion in potentially significant overseas markets. ^{1/} However, these long-term trade restrictive measures would have to have adverse effects on trade interests of signatories to the subsidies agreement for the Committee of Signatories to recommend any change in the trading practices of a signatory or authorize countermeasures to retaliate against the offensive practices.

^{1/} The Common Agricultural Policy of the EEC is probably the most detrimental foreign barrier facing U.S. agricultural exports, including poultry.

ATAC GROUP 07: POULTRY AND EGG SECTOR ANALYSIS**C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements**

The proposed duty reductions and the adoption of the NTM agreements by the major U.S. trading partners will have little beneficial impact on U.S. producers of poultry, eggs, and poultry products. The foreign duty offers are too small and/or selective to have a significant impact on U.S. exports, and the adoption of the NTM agreements by foreign countries will still allow countries to keep their longstanding import quotas and export subsidies, which are major obstacles to an expansion of U.S. exports of the commodities here considered.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

As indicated above, longstanding import quotas and export subsidy measures employed by foreign countries hinder U.S. producers of poultry, eggs, and poultry products in expanding their overseas markets. U.S. producers, who are the most efficient in the world, face significant trade barriers erected by less efficient producers as well as subsidized exports in third market countries. These factors far outweigh any tariff concessions and agreement adoptions that may result owing to the MTN.

V. Overall impact on sector

U.S. and foreign tariff concessions and U.S. and foreign adoption of the NTM agreements will have no more than a negligible effect on U.S. imports and exports of poultry, eggs, and poultry products. More important to domestic producers are the restrictive trading measures employed by foreign countries, especially the EEC, which will continue to hamper expansion of U.S. export trade.

ATAC Group 07: Poultry and Egg Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	7,942	7,977	8,452	9,190	9,667	10,436
Imports-----do-----	32	35	25	50	74	75
Exports-----do-----	92	112	132	230	277	322
Apparent consumption-----do-----	7,882	7,900	8,345	9,010	9,464	10,187
Ratio, imports to consumption--percent-----	1/	1/	1/	1	1	1
Ratio, exports to shipments----do-----	1	1	2	3	3	3
Total employment--1,000 workers 2/--	96.2	96.0	92.1	97.0	100.7	104.8

1/ Less than 0.5 percent.

2/ Includes employment only in poultry dressing plants and poultry and egg processing plants.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce.

ATAC GROUP 08: TOBACCO SECTOR ANALYSIS 1/

I. Sector profile and conditions of competition

Tobacco is a plant cultivated chiefly for its leaves, which are prepared for use in smoking, chewing, or as snuff. The major producing regions in the United States are the Middle Atlantic States, South Atlantic States, and the Eastern South Central States. The industry involved in the production of unmanufactured tobacco leaf includes many relatively small firms, while considerably fewer but much larger firms produce the manufactured tobacco products. The agricultural production of the unmanufactured tobacco leaf is a labor-intensive operation--the production of the manufactured tobacco product is generally capital intensive.

During 1973-78, total U.S. shipments of tobacco and tobacco products increased steadily from \$6.0 billion in 1973 to an estimated \$9.2 billion in 1978. 2/ Cigarettes accounted for approximately 72 percent of the 1978 value of shipments. The United States is the world's leading tobacco exporter. In recent years, U.S. exports represented about a third of the domestic crop and about a fourth of world unmanufactured tobacco exports. U.S. tobacco and tobacco product exports increased steadily from \$970 million in 1973 to \$2.1 billion in 1978. The 1978 figure includes unmanufactured tobacco valued at \$1.36 billion and tobacco products valued at \$760 million. The KEC and Japan are the major markets for U.S. tobacco. The ratio of tobacco and tobacco product exports to shipments has increased irregularly from 16 percent in 1973 to 23 percent in 1978. Exports in 1979 are expected to remain near last year's high level.

U.S. imports of tobacco and tobacco products increased from \$178 million in 1973 to \$428 million in 1978, with Oriental or Turkish cigarette leaf making up about 57 percent of the value of imports. Turkey and Greece were the chief U.S. suppliers (by value) of tobacco in 1978.

The ratio of imports to consumption increased from 3 percent in 1973 to 6 percent in 1978. During 1973-78, employment in the tobacco sector declined irregularly from 79,000 workers in 1973 to an estimated 62,300 workers in 1978--the decline in employment accelerated after 1976. 3/

The tobacco sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff measures.

1/ The SIC product groups included are 0132(pt), 0211, 0213, and 0214.

2/ These value data include all manufactured tobacco products, but only those unmanufactured tobaccos which are exported. The shipments data for 1978 were estimated by the Industry and Trade Administration of the U.S. Department of Commerce.

3/ These employment data do not include farmers or farm employees. The employment data for 1978 was estimated by the Industry and Trade Administration of the U.S. Department of Commerce.

ATAC GROUP 08: TOBACCO SECTOR ANALYSIS

II. MTN import impactA. Sector impact of U.S. tariff concessions

The proposed U.S. tariff concessions on tobacco would have little or no effect on U.S. imports, producers, and consumers, because there are only two U.S. offers on tobacco and tobacco products, neither of which is significant.

B. Sector impact of U.S. adoption of proposed NTM agreements

Present U.S. import rules and procedures regarding tobacco are very similar to those in the proposed NTM agreements. Therefore, the adoption of the agreements by the United States would have little or no effect on U.S. imports, producers, and consumers.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

Adoption of the proposed U.S. duty reductions on tobacco and tobacco products and the proposed NTM agreements would have little effect on U.S. imports, producers, and consumers because of the reasons listed above.

III. MTN export impactA. Sector impact of foreign tariff concessions

The foreign duty offers on tobacco and tobacco products will not significantly increase export potential because, in general, foreign duty offers are too small, too selective, or they are not currently a significant factor limiting U.S. exports. 1/

B. Sector impact of foreign adoption of proposed NTM agreements

It is believed that foreign implementation of the proposed NTM agreements could have a negligible to moderately favorable impact on U.S. tobacco and tobacco product exports. The extent of this impact is impossible to quantify, but it would not be more than modest and would vary by country and individual tobacco items. The agreement that probably would have the greatest positive effect on U.S. exports would be the Subsidies/Countervailing Duty Measures Agreement. This agreement particularly could benefit cigarette tobacco exports

1/ This analysis does not include the effects of the EEC tariff concessions being negotiated, the details of which are not available in the Apr. 1, 1979 foreign offer listings provided by the Office of the Special Representative for Trade Negotiations.

ATAC GROUP 08: TOBACCO SECTOR ANALYSIS

to the EEC, should developing countries become signatories to the agreement and subject their export subsidies on tobacco to international agreements.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Implementation of the NTM agreements and all presently proposed foreign duty modifications by NTM participants, considered in the aggregate, would probably have a negligible to moderately favorable impact on U.S. exports of tobacco and tobacco products. Implementation of the agreements probably would have a greater beneficial impact on U.S. exports than the proposed duty modifications.

IV. Foreign trade factors outside the scope of the NTM tariffs and NTM agreements

In many countries, especially the EEC and Japan, U.S. exports of tobacco and tobacco products are hindered by high excise taxes, border taxes, and preferential tariff rates. Other problem areas include government monopolies for cigars and cigarettes in western European countries and Japan, and state trading and trade diverting aids, such as the EEC's "buyers-premium," which is a subsidy given to users of Community-grown tobacco to enable them to buy Community leaf below the price of "comparable" imported tobacco. The EEC's Common Agricultural Policy (CAP) guarantees minimum prices to domestic producers of tobacco and allows all excess unsold tobacco accumulated in Government stocks to be sold at public auction for export to the world market only.

V. Overall impact on sector

U.S. tobacco and tobacco product producers will not face increased import competition from imported tobaccos and tobacco products because U.S. offers are few and relatively insignificant. Likewise, U.S. consumers will receive little or no benefit. U.S. adoption of the NTM agreements would not significantly affect the U.S. tobacco industry since present U.S. rules, procedures, and regulations concerning tobacco are very similar to those proposed in the NTM agreements. The proposed foreign tariff concessions will probably not significantly affect U.S. export potential because they are either too small, too selective, or they are not currently a significant factor limiting U.S. exports. 1/ Foreign adoption of the NTM agreements could result in a negligible to modest increase in export of cigarette tobacco,

1/ Does not include the EEC offers.

ATAC GROUP 08: TOBACCO SECTOR ANALYSIS

especially to the EEC. Trade factors outside the scope of the MTN (e.g., longstanding restrictive import measures, excise taxes, state trading monopolies, and preferential tariff rates) will continue to have a significant impact on U.S. producers of tobacco and tobacco products.

ATAC Group 08: Tobacco Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	6,040	6,709	7,596	8,177	8,655	1/ 9,165
Imports-----do-----	178	216	294	317	373	428
Exports-----do-----	970	1,192	1,233	1,457	1,731	2,104
Apparent consumption-----do-----	5,248	5,733	6,657	7,037	7,297	7,489
Ratio, imports to consumption--percent-----	3.4	3.8	4.4	4.5	5.0	5.7
Ratio, exports to shipments----do-----	16.1	17.8	16.2	17.8	20.0	23.0
Total employment--1,000 workers 2/-----	79.0	79.5	78.3	76.4	70.0	1/ 62.3

1/ Estimated by the Industry and Trade Administration of the U.S. Department of Commerce.

2/ Does not include farmers or farm employees.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 01: FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS

I. Sector profile and conditions of competition

This broad agricultural products sector covers virtually all industries engaged in the production of raw and processed agricultural products and seafood. 1/ Thus, the coverage of this sector includes domestic producers of farm produce such as livestock and poultry and their products (e.g., milk and fresh eggs), grains, fruits, vegetables, and tobacco, as well as commercial fishermen and their output of edible seafood. The agricultural products sector also includes industries engaged in the processing of farm products. The processed articles include meat, dairy products, prepared or preserved fruits and vegetables, grain mill products, refined sugar and confectionery, animal and vegetable fats and oils, beverages of all kinds, seafood, and a miscellaneous group of various food products (e.g., bakery products, roasted coffee, and alimentary pastes), as well as tobacco manufactures.

The value of U.S. producers' shipments of agricultural products was \$229 billion in 1977, compared with \$152 billion in 1973. The increase in dollar value during the period was due in part to an expansion in output and in part to inflation. The production of agricultural products in the United States, which is generally capital intensive rather than labor intensive, involves above 4.2 million farm workers (including farmers), 160,000 commercial fishermen, and 1.6 million processing workers. During 1973-77, the number of farm workers continued on a long-term decline, but the number of workers employed by processors remained nearly unchanged. 2/ Most agricultural products are processed in varying ways and degrees between farm and retail consumer, although some food products, such as fresh eggs and fresh fruits and vegetables, undergo little preparation before ultimate consumption.

The United States is a substantial net exporter of agricultural products. During 1973-77, annual U.S. exports of such products rose from \$17 billion to \$23 billion. During the period, exports accounted for 10-12 percent of producers' shipments. Somewhat more than two-thirds of exports consisted of grain and feed and oilseeds and oilseed products. In 1977, U.S. imports of agricultural products were valued at nearly \$13 billion, compared with \$9 billion in 1973. Imports also were stable relative to domestic consumption during 1973-77, equivalent to 5-6 percent of consumption. Green coffee, meat, sugar, and fruits and vegetables were the principal products imported in 1977.

1/ For convenience, the terms "agricultural products sector" and "agricultural products," as used herein, apply to articles in ISAC 01 (food and kindred products) and ATAC's 02-08 (covering dairy (ATAC 02), fruit and vegetables (ATAC 03), grain and feed (ATAC 04), livestock and livestock products (ATAC 05), oilseeds and products (ATAC 06), poultry and eggs (ATAC 07), and tobacco (ATAC 08)). Discussions on each of the ATAC's and on articles outside the scope of the ATAC's but within ISAC 01 follow this summary statement. Leather and leather products are not included in ISAC 01, nor in ATAC 05; they are discussed separately in ISAC 09.

2/ The number of commercial fishermen is believed to have increased in recent years.

ISAC GROUP 01: FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS

The general economic health of the industries producing agricultural products in the United States is believed to be good for the most part, owing to a continued strong domestic demand and to the increasing demand abroad for U.S. products as stimulated in part by increases in per capita incomes in foreign countries.

II. MTN import impact

Tariff concessions granted by the United States in the MTN are, in the aggregate, quite modest and their effects on U.S. producers, and labor probably will be minimal. Likewise, the consuming public likely will not benefit from the duty reductions. U.S. imports of agricultural products have traditionally faced few nontariff trade barriers. Inasmuch as the U.S. NTM's are selective, non-discriminatory in nature, and of longstanding duration, the adoption of the NTM agreements by the United States would have little or no impact on imports, domestic producers, labor, or consumers.

According to the Office of the Special Representative for Trade Negotiations (STR), U.S. agricultural imports would be expanded by about \$100 million (on the basis of 1978 trade) following the full implementation of the MTN. About one-half of the increase in imports could take place in dairy products owing to new bilateral agreements the United States negotiated with its principal foreign suppliers. These agreements, in effect, will enlarge the existing import quotas for some cheeses and chocolate crumb. The anticipated aggregate increase in imports of \$100 million is equivalent to less than 1 percent of all agricultural imports in 1978. The increase to be realized in dairy products, totaling an estimated \$56 million, is equivalent to about 16 percent of U.S. imports of these products in 1978. The increase in dairy imports, however, is small in relation to domestic output. The combined impact of U.S. tariff concessions and the adoption of the proposed NTM agreements will probably be negligible for the sector as a whole.

III. MTN export impact

The U.S. agricultural sector can look forward to a modest increase in export trade. According to the STR, tariff concessions granted by foreign countries and their adoption of the NTM agreements could lead to an expansion in U.S. exports of agricultural products of \$500 million or more by 1983 (based on 1978 trade). The bulk of the increase is anticipated by the STR to be in the livestock sector (primarily high-quality beef). Smaller increases in exports are expected in other sectors such as tobacco and in fruits and vegetables. The additional \$500 million in trade amounts to somewhat less than 2 percent of the value of all agricultural exports in 1978.

Domestic consumers probably will not be adversely impacted by the expansion in trade owing to the relatively small increase anticipated, which will be spread over a period of several years.

ISAC GROUP 01: FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements**

Most countries maintain a system of nontariff measures to control at least part of their agricultural trade. Generally, these measures will be in conformity with the NTM agreements and thus will continue to hamper the flow of trade. Included in these measures are preferential tariff rates, variable levies, quantitative limitations, and state-trading monopolies. These factors can, for individual products, far outweigh any of the effects of tariff concessions and NTM agreements.

V. Overall impact on sector

On balance, U.S. agriculture should benefit modestly if the tariff concessions and NTM agreements are implemented by the United States and its trading partners. U.S. exports of agricultural products are expected to increase by \$500 million or more. The STR estimates U.S. imports will rise by about \$100 million as a result of the MTN--equivalent to less than 1 percent of all agricultural imports in 1978. About one-half of the increase could take place in dairy products due to new bilateral trade agreements between the United States and its principal foreign suppliers. Domestic consumers probably will not benefit from the MTN owing to the relatively small increases anticipated in imports and exports over an extended period of time.

ISAC Group 01: Food and Kindred Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	151,582	178,978	193,926	204,738	228,755	NA
Imports-----do-----	8,803	9,742	8,870	10,205	12,518	14,804
Exports-----do-----	17,063	21,391	21,585	22,567	23,201	29,395
Apparent consumption-----do-----	143,322	167,329	181,211	192,376	218,072	NA
Ratio, imports to consumption--percent-----	6	6	5	5	6	NA
Ratio, exports to shipments----do-----	11	12	11	11	10	NA
Total employment--1,000 workers ^{1/} -----	1,589	1,586	1,556	1,565	1,578	NA

^{1/} Includes employment only in industrial establishments.

NA = Not available.

Source: Compiled from official statistics of the U.S. Departments of Agriculture and Commerce.

ISAC GROUP 01(pt): MISCELLANEOUS FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This discussion covers those commodities in the Food and Kindred Products Sector (ISAC 01) that are not covered in the following ATAC groups: dairy products (ATAC 02); fruit and vegetables (ATAC 03); grains and feed (ATAC 04); livestock and livestock products (ATAC 05); oilseeds (ATAC 06); poultry and eggs (ATAC 07); and tobacco (ATAC 08). Included herein are commercial fishing under SIC 091(pt); sugar and confectionery under SIC 206; brandy and spirits under SIC 2084(pt); distilled liquor, except brandy under SIC 2085; flavoring extracts, sirups, n.e.c. under SIC 2087; and an assortment of miscellaneous food preparations and kindred products under SIC 209(pt). These products collectively will be referred to as the Miscellaneous Food and Kindred Products Sector.

The value of U.S. shipments by the Miscellaneous Food and Kindred Products Sector in 1977 was \$33.5 billion, compared with \$19.5 billion in 1973, an increase of over 70 percent. Sugar and confectionery products accounted for one-third of such shipments in 1977. Production methods vary from highly capital-intensive cane-sugar-refining operations to labor intensive tuna-canning operations. In 1977, there were approximately 200,000 persons employed in processing the various products of the Miscellaneous Food and Kindred Products Sector. 1/

As a percentage of U.S. production (on a value basis), domestic exports by the miscellaneous group during 1973-77 showed an upward trend, from 2 percent in 1973 to 3 percent in 1977. In 1977, the value of exports was \$992 million, more than double that in 1973; fish and seafood products were the leading category. Japan and the EEC are the principal markets for fish and seafood. Exports of sugar and confectionery are also important; Canada is the principal export market. Most U.S. exports consist of products for which land (or fisheries) and capital are the critical factors of production.

During 1973-77, the value of U.S. imports ranged from \$5.8 billion (1973) to \$9.2 billion (1977). As a share of consumption, such imports were 23 percent in 1973, decreased to 19 percent by 1975 and then rose thereafter, reaching 22 percent in 1977. Imports consist mostly of green coffee, sugar, and distilled spirits. In general, U.S. imports tend to be of items for which labor is the critical factor of production (cane sugar) or commodities that the United States does not produce (coffee and Canadian, Irish, and Scotch whiskies, and cocoa beans).

1/ These data cover only those persons engaged in processing the products covered in the Miscellaneous Food and Kindred Products Sector; data are not available on the total number of persons growing raw products or otherwise employed in this group.

ISAC GROUP 01(pt): MISCELLANEOUS FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS

The general economic health of the Miscellaneous Food and Kindred Products Sector in the United States, in the aggregate, is believed to be good for the most part, owing to a continued strong demand for such commodities and to an increasing demand for exports as stimulated in part by increases in per capita income in foreign countries.

Within this sector are the following industry segments which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariffs or nontariff trade measures: distilled spirits, fish, and sugar. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of the Miscellaneous Food and Kindred Products Sector.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

The proposed U.S. tariff concessions offered on commodities of the Miscellaneous Food and Kindred Products Sector would probably have a negligible adverse impact on U.S. industry and labor and little beneficial effect on the intermediate consumer or consuming public. The majority of U.S. concessions are on products that are not produced domestically in substantial quantities or on products in which the United States is not competitive or cannot produce. However, an appreciable adverse impact on U.S. chocolate manufacturers could result from the concession on retail-size chocolate bars without similar concessions on the intermediate chocolate products. The U.S. producers or processors would have to pay duty on their intermediate products while the final product would be able to enter duty free.

B. Sector impact on U.S. adoption of proposed NTM agreements

Although there are NTM's affecting a few imports of certain products of the miscellaneous sector, the benefit to the industries in this sector as a whole, from all U.S. NTM's, is negligible owing to the relative scarcity of U.S. NTM's. Some of the more important NTM's are the U.S. requirements for commercial import permits for the importation of alcoholic beverages and specific alcoholic beverage bottle-size requirements. ^{1/} Each State also has its own rules and regulations regarding the sale of alcoholic beverages.

^{1/} The wine-gallon/proof-gallon method of excise tax and duty assessment is considered a nontariff trade measure by numerous foreign suppliers because they believe it discriminates against bottled goods. The internal excise tax is applicable to all distilled spirits entering the channels of trade in the United States, whether the spirits are domestic or imported. The proposed U.S. concession to eliminate the wine-gallon method of excise tax and duty assessment could significantly affect parts of the U.S. distilled spirits industry; this concession is discussed in Section VI.

ISAC GROUP 01(pt): MISCELLANEOUS FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS

Another U.S. NTM is the global quota of 6.9 million short tons, raw value, on sugar. This quota is not intended to be restrictive of U.S. sugar imports, which have always been well below this level. Quotas on sugar have also been established to limit sugar imports from non-member countries of the International Sugar Agreement, as required pursuant to the 1977 Agreement.

Given the fact that U.S. NTM's are so selective (affecting only specified products) and non-discriminatory in nature (affecting both domestic and imported products), the adoption of the agreements would have little or no impact on U.S. producers and processors or laborers. The intermediate consumer and the consuming public, likewise, would not be affected by the adoption of the agreements.

C. Sector analysis of the combined impact of the U.S. tariff concessions and U.S. adoption of proposed NTM agreements

It is believed that the U.S. adoption of all the proposed U.S. duty modifications relating to imports of the miscellaneous Food and Kindred Products Sector and of the NTM agreements considered in the aggregate would probably have little or no adverse impact on the U.S. producers or labor and would appear to have no effect on the consuming public.

III. NTM export impact

A. Sector impact of foreign tariff concessions

The foreign duty offers on products of the miscellaneous food sector are not expected to improve U.S. export potential. Most of the foreign duty offers are too small or too selective to be important. For example, the United States received offers from Japan and Hungary on several semiprocessed cocoa products; however, the offers will not significantly affect the U.S. industry since these cocoa products are available from other suppliers of the basic raw material cocoa beans at cheaper prices than they can be supplied by the United States. Likewise, the Canadian offers on various types of fish will not increase export potential for the U.S. fish industry because the U.S. demand for fish greatly exceeds domestic production.

B. Sector impact of foreign adoption of the proposed NTM agreements

Adoption of all NTM agreements by foreign countries would probably have a negligible to a modest beneficial impact on exports of products of the miscellaneous food sector, although there are a considerable number and variety of foreign NTM's which affect U.S. exports. For example, U.S. exports of distilled spirits are affected by foreign excise taxes that are more onerous for imported products than for domestic products; exports are also affected by licensing procedures, mixing and blending requirements, state

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trading practices, subsidies to domestic producers, customs valuation procedures, and advertising restrictions. The removal of all of these NTM's would probably have no more than a modest favorable impact on U.S. exports of distilled spirits since trade factors other than those covered by the NTM agreements have a greater effect on trade than will the adoption of the NTM agreements.

C. Sector analysis of combined impact of foreign tariff concessions and foreign adoption of the proposed NTM agreements

The adoption of the NTM agreements and the duty reductions by major U.S. trading partners would have little beneficial impact on U.S. producers or processors in the Miscellaneous Food and Kindred Products Sector. If all of the NTM agreements were adopted, U.S. exports of distilled spirits would increase somewhat, especially to Canada, the EEC, and possibly to Japan. The U.S. sugar industry could also benefit from the adoption of the subsidies agreement by the EEC. European sugar exports are the beneficiary of subsidies nearly twice as high as the world sugar price, and because of overproduction, the EEC has substantial quantities of sugar to be exported with the benefit of these subsidies. On the other hand, U.S. exports of fish probably would not change from the adoption of the NTM agreements since foreign NTM's currently have little effect on exports.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Quarantine and sanitation laws and quantitative restrictions are important factors that are outside the scope of NTM tariffs and NTM agreements. Elimination of quantitative restrictions on alcoholic beverages could open potential markets to U.S. alcoholic beverage producers. Argentina, Jamaica, Mexico, and Spain are several U.S. trading partners that maintain quantitative restrictions.

Most countries maintain quarantine and sanitation laws that limit U.S. export potential for products covered by this sector. These laws may be applied by some countries in such a manner that they restrict trade rather than providing for the health and safety of the consumer.

V. Overall impact on group

U.S. producers and processors of products covered by the Miscellaneous Food and Kindred Products Sector will face minimal increased competition from imports owing to U.S. duty modifications. U.S. adoption of the NTM agreements would not affect U.S. producers or processors because no U.S. NTM restricts imports covered by the miscellaneous sector by more than a negligible amount.

ISAC GROUP 01(pt): MISCELLANEOUS FOOD AND KINDRED PRODUCTS SECTOR ANALYSIS

Domestic producers and processors of commodities in this miscellaneous sector would see little benefit from the adoption of the NTM agreements or from foreign duty concessions. The duty concessions offered by U.S. trading partners are generally negligible. In general, trade factors outside the scope of the NTM's (e.g., quantitative restrictions and quarantine and food sanitation laws) will continue to have the greatest impact on U.S. exports of products covered by the Miscellaneous Food and Kindred Products Sector.

With the exception of the distilled spirits importer in the miscellaneous products group, the intermediate consumer and the consuming public will not significantly benefit from NTM tariff concessions or from the adoption of the NTM agreements owing to their selectivity. The elimination of the wine-gallon method of assessment for internal revenue and import duty calculations will benefit the importers of bottled distilled spirits. However, the final consumer will not benefit as the savings will not be passed along owing to the price inelasticity of distilled spirits.

VI. Analysis of selected segments of the miscellaneous food and kindred products sector

The U.S. fish industry, distilled spirits industry, and sugar industry are all trade-sensitive industries within the miscellaneous sector as here considered. U.S. distilled spirits production, considered in the aggregate, has been growing slowly in recent years; it was valued at about \$2.4 billion in 1977, up from \$1.9 billion in 1973. Total U.S. imports of these distilled spirits have been growing at a rate faster than domestic production; in 1977, imports were valued at \$729 million or about 30 percent of the value of domestic production. Principal U.S. suppliers are the EEC,

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Canada, and Mexico. U.S. exports have been increasing slowly in recent years; in 1977, they amounted to \$39 million. Major markets include the EEC, Australia, and Canada.

In 1977, U.S. production of sugar was 6.37 million short tons, raw value, U.S. imports were 6.14 million short tons, but U.S. exports were only 0.03 million short tons. U.S. consumption was about 11.42 million short tons. Most of the U.S. imports come from developing countries south of the United States. The United States is the world's largest importer and consumer of sugar, and is among the world's largest producers. In 1977, U.S. imports of sugar accounted for about 20 percent of all world trade in sugar and about 25 percent of "free market" trade in sugar, that is, world sugar trade not subject to preferential prices pursuant to special arrangements such as Cuban sales to the Soviet Union and EEC sugar imports under the Lome' Convention and similar arrangements.

U.S. seafood shipments have been growing in recent years; in 1977, shipments totaled \$3.5 billion, up from \$2.2 billion in 1973. Total U.S. imports of seafood have been growing at a slower rate than U.S. shipments; in 1977, imports were valued at \$2.3 billion or about two-thirds the value of U.S. shipments. U.S. imports of seafood consist mostly of frozen shrimp from Mexico, lobsters, cod, and codlike species from Canada, and tuna from Japan. U.S. exports of seafood were valued at nearly \$500 million or about 15 percent of U.S. shipments. U.S. exports consist mostly of frozen and canned salmon to the EEC and frozen shrimp and crabs to Japan.

Trade flows in the distilled spirits industry and sugar industry are influenced by various factors discussed above. In addition, many of the U.S. distilled spirits producers are manufacturer-importers who produce a variety of products and operate import divisions for the importation and sales of imported distilled spirit beverages.

Most international trade in sugar is subject to the International Sugar Agreement of 1977. The agreement seeks to stabilize world sugar prices through a system of export quotas for exporting countries and a buffer stock arrangement. Also, the United States supports sugar prices for domestic producers through a price-support program.

The general economic health of the distilled spirits industry and seafood industry is believed to be good for the most part, owing to continued strong demand for food and increased advertising, and the introduction of new products by the distilled spirits industry. The general economic health of the U.S. sugar industry is not nearly as good. The domestic industry is under pressure from rising costs while trying to sell a product at a profit in a surplus market. Neither U.S. tariff concessions nor the adoption of the NTM agreements is expected to have more than a modest adverse impact on the sugar or fish industries individually. Likewise, individual tariff concessions and

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the adoption of the NTM agreements will have no more than a modest adverse impact on the distilled spirits industry. For example, the most important individual U.S. tariff concession on products produced by the distilled spirits industry was on TSUS item 168.52, certain distilled spirits, i.e., the duty was reduced from \$1.25 per gallon to \$0.50 per gallon. Imports are not expected to increase more than modestly because U.S. consumption of distilled spirits is price inelastic and because the duty is only a minor part of the retail price of distilled beverages. However, the U.S. proposal to eliminate the wine-gallon method of assessment of the internal revenue taxes and the import duties on distilled spirits would result in approximately a \$120 million reduction in the taxes and duties paid on bottled imported distilled spirits (on the basis of 1977 trade). Since most of the largest U.S. producers are also importers, this would substantially benefit these producer/importers. Some of the bottling operations of these firms may be closed, however, thus adversely affecting the workers whose jobs would be eliminated (the bottling would be done in foreign countries). It is doubtful if much, or any, of the reduced costs would be passed on to the final consumer since the demand for these products tends to be relatively price inelastic. The importers would, however, probably use a part of these savings to increase advertising and thus gain a larger share of the market. The firms which would thereby be adversely affected would be the smaller independent producers of American whiskey, the least efficient of which may be forced out of business as a result.

Foreign tariff concessions and adoption of the NTM agreements by U.S. trading partners are expected to have a negligible beneficial impact on the U.S. distilled spirits, fish, and sugar industries individually. In general, the foreign duty offers are too small and/or too selective to significantly increase export potential, and in many cases trade factors other than those covered by the NTM agreements have a greater effect on trade than will the adoption of the NTM agreements.

The intermediate consumer and the consuming public will not benefit significantly from NTM tariff concessions or from the adoption of the NTM agreements on products of these trade-sensitive industries owing to their selectivity.

ISAC Subgroup 01(pt): Miscellaneous Food and Kindred Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	19,489	26,241	26,676	28,699	33,508
Imports-----do-----	5,809	6,744	6,184	7,417	9,212
Exports-----do-----	1/ 415	505	724	747	992
Apparent consumption-----do-----	1/ 24,883	32,480	32,136	35,369	41,728
Ratio, imports to consumption--percent-----	23	21	19	21	22
Ratio, exports to shipments----do-----	2	2	3	3	3
Total employment--1,000 workers-----	205	199	191	199	1/ 200

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 02: TEXTILES AND APPAREL SECTOR ANALYSIS**I. Sector profile and conditions of competition**

The textile and apparel sector consists of three dissimilar but economically interrelated industries: (1) the manmade-fiber industry, which makes polyester, rayon, and other manmade fibers; (2) the textile industry, which processes these and other fibers into yarns, fabrics, and certain finished products such as sheets; and (3) the apparel industry, which consists of cut and sew shops making clothing from purchased fabrics and knitting mills making hosiery, underwear, and certain outerwear such as sweaters directly from yarn or from fabrics knitted in the same mill. ^{1/} Establishments engaged in related activities such as producing cotton are included in ATAC 01 (cotton); wool, ATAC 05 (livestock and livestock products); and leather apparel, ISAC 09 (leather and leather products).

The textile and apparel sector continues to be a major factor in the U.S. economy, but its relative importance has been declining over the years. Although the sector's value of producers' shipments rose 32 percent from 1973 to about \$87 billion in 1978, its relative share of the Nation's industrial activity fell from 7.3 percent to about 6 percent during the same period. Moreover, employment in the sector, which is one of the Nation's largest employers, declined from nearly 2.5 million employees, or 13 percent of total employment for all manufacturing industries, in 1973, to about 2.2 million employees, or 11.4 percent of the total, in 1978.

The relative decline of this sector is reflected, in large part, by its growing trade deficit. In 1978, the deficit amounted to \$4 billion, more than double the 1973 deficit of \$1.9 billion. Although the sector's exports increased 82 percent from 1973 to \$3.1 billion in 1978, imports rose 100 percent to nearly \$7.2 billion in the same period. The increased imports came primarily from Hong Kong, Taiwan, and Korea, whose combined shipments in 1978 amounted to more than \$3.1 billion, 186 percent above the 1973 level.

To control the level of imports, the United States negotiated import-restraint agreements under the Multifiber Arrangement (MFA) with 18 textile/apparel supplying countries. The MFA, which went into effect in 1974 and was recently extended for 4 more years through 1981, provides a framework sanctioned by the General Agreement on Tariffs and Trade (GATT) within which bilateral agreements establishing import quotas can be negotiated.

During the first 4 years of the MFA, the agreements negotiated by the United States emphasized aggregate levels of control but, in practice, these levels were seldom filled. When these agreements were renewed in 1977-78, greater concern was given to specific import levels within the approximately 100 product categories. However, only a few of the categories have since been filled and, therefore, considerable room is available for increased growth. Thus, if duty reductions encourage import growth, the agreements would not, in many cases, restrain such growth to current levels. About three-fourths of textile and apparel imports come from countries whose shipments are under restraint.

^{1/} These products are included in SIC Nos. 22, 23, 2823, and 2824.

ISAC GROUP 02: TEXTILES AND APPAREL SECTOR ANALYSIS

In March 1979, the Administration announced a new program to assist the textile and apparel sector in adjusting to the problems caused by the rapid growth of imports. The Administration will attempt to tighten import controls in existing bilateral agreements to prevent surges in imports and undue concentrations and to hold import growth in the years 1980-82 to no more than the growth rate of the domestic market. With new suppliers like China, it will seek to negotiate restraint levels that are as close as possible to the most recent trade levels for heavily impacted product categories. Moreover, if in 1982 the MFA is not renewed, or if a suitable substitute is not found, a "snapback" clause established at the Multilateral Trade Negotiations (MTN) will allow apparel and textile tariffs to revert to their pre-MTN levels during the still undecided 6- or 8-year staging period of tariff reductions. In addition, the Administration will seek legislation to permit it to unilaterally control imports of textiles and apparel.

Other facets of the Administration's new program include the continuation of the ban on the Defense Department's purchases of textiles and apparel from foreign sources, expansion of a pilot program to improve productivity in the men's tailored clothing industry to include the ladies' apparel industry, and the establishment of a high-level policy group appointed by the President to bring attention to the problems affecting the sector's competitiveness. On the export side, the sector, with the full support of the Administration, will launch a major export drive. The sector will, in turn, try to become more competitive and support the Administration's anti-inflation program and MTN trade bill.

The textile and apparel sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures. The difficulties being experienced by the sector, however, emanate primarily from the labor-intensive apparel industry, which has incurred trade deficits since at least 1960. In fact, in 1978 the value of apparel imports was more than 8 times greater than that of exports. In contrast, the capital-intensive manmade-fiber industry has traditionally been a net exporter, as has the textile industry for the most part. Nevertheless, in 1973 and more recently in 1978, trade deficits were incurred by the textile industry, which is neither as capital intensive as the manmade-fiber industry (its largest supplier), nor as labor intensive as the apparel industry (its largest customer). Because of these and other major differences, the three industries are separately profiled below.

Manmade-fiber industry.--The manmade-fiber industry consists of less than 100 firms, many of which are large, publicly-owned chemical companies. The industry is highly capital intensive, with capital spending in 1976 averaging \$6,695 for each employee, compared with \$2,293 for all manufacturing industries. The increase in productivity taking place in the industry, coupled with plant closings, explains the 17-percent drop in employment from 1973 to a total of 81,000 employees in 1978. The industry's value of shipments increased 44 percent from 1973 to a total of nearly \$7.8 billion in 1978, while exports increased 63 percent to a total of \$515 million. Exports represent a relatively small but growing share of the industry's shipments, increasing from 5.9 percent of the total in 1973 to about 6.6 percent in 1978.

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For the most part, the cost of producing manmade fibers, both here and abroad, is similar. Thus, when duty and other import charges are added to the cost of foreign shipments, the imported product offers little or no price advantage. This largely explains why imports represent only about 2 percent of the U.S. market. Moreover, the value of imports actually declined between 1973 and 1978, from \$142 million to \$132 million.

Apparel industry.--The apparel industry is one of the nation's largest employers, with about 7 percent of all industrial production workers. Average employment in the industry showed a decline of 10 percent from 1973 to a total of 1.24 million employees in 1978. The value of the industry's shipments in 1978 amounted to an estimated \$36 billion, 28 percent above the 1973 level of \$28 billion. The value of the industry's exports, which historically average less than 2 percent of its annual shipments, more than doubled from 1973 to a total of \$551 million in 1978; however, much of the increased exports included cut up parts of apparel, not finished apparel, reflecting the industry's growing use of TSUS item 807.00 1/ to reduce assembly (labor) costs. In 1978, apparel parts valued at an estimated \$250 million, or about 45 percent of total apparel exports, were sent offshore to be sewn together and then shipped back to the United States as finished garments under the 807 provision. These assembly operations are located primarily in Mexico and to a lesser extent other Latin American countries, owing to their available labor, low wage rates and proximity to U.S. markets.

The number of establishments in the industry in 1976 totaled 18,100, or 8 percent fewer establishments than in 1972. Only 20 percent of the establishments had at least 100 employees each. Although the industry is still concentrated in the Northeastern States, with New York and Pennsylvania ranked first and second, respectively, a southward shift has been taking place since the late 1950's. This shift was largely an attempt to lower labor costs, which represent approximately one-third of the industry's total costs, since wage rates were usually lower in the South than elsewhere in the nation. Other incentives were the South's lower tax level and heavy concentration of textile plants, the industry's largest suppliers.

Utilization of capital-intensive technology in the apparel industry has been on a much smaller scale than that of industry in general. In 1976, capital expenditures in the industry averaged \$323 for each employee, compared with \$2,293 for all manufacturing industries. Moreover, the industry's labor intensity, as measured by the ratio of payrolls to value added by manufacture, was 58 percent compared with just under 50 percent for all manufacturing. The industry will likely remain labor intensive because many manual operations are involved, limp fabrics cannot be handled by machines alone, and fashion and seasonal changes dictate small production runs.

1/ Item 807.00 of the Tariff Schedules of the United States (TSUS) provides that duty on articles assembled abroad of U.S.-fabricated components be applied to the full value of the imported article less the value of the U.S.-made components.

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A major problem confronting the apparel industry is competition from the low-wage countries. Although the hourly wage in the U.S. apparel industry in 1978 averaged \$3.90, versus the all-manufacturing hourly wage of \$6, it is, nevertheless, considerably higher than those of Asian countries, the principal foreign apparel suppliers. U.S. apparel imports increased about 140 percent from 1973 to a total of \$4.8 billion in 1978, and about three-fourths of that total came from six Asian countries. Three of the countries--Hong Kong, Taiwan, and Korea--together supplied 58 percent of the total. In terms of value, imports' share of the U.S. market in 1978 averaged 13 percent, but this considerably understates imports' true market share. When duty, freight, insurance, and importers' markup are added to the foreign value, imports' market share would approximate 20 percent. This figure, however, represents imports' share of the overall apparel industry, in which their penetration differs considerably by individual products, ranging from a negligible level for underwear to about 50 percent for sweaters.

Textile industry.--The value of the textile industry's shipments increased 32 percent from 1973 to a total estimated at \$43.2 billion. The industry's value of exports rose at a faster rate during this period, increasing 75 percent to a total of nearly \$2.1 billion. Exports, however, remain a relatively small part of the industry's total shipments, averaging about 5 percent or less of the total in the years 1973-78.

Despite exports reaching record levels in 1978, the textile industry incurred a trade deficit of \$139 million, compared with favorable balances in the 4 previous years averaging \$187 million annually, and a deficit in 1973 of \$377 million. Imports of textiles during 1978 amounted to \$2.2 billion, an increase of 22 percent over the 1977 level of nearly \$1.8 billion and 47 percent above the 1973 level of \$1.5 billion. Imports' share of the U.S. textile market, in terms of value, amounted to 5.1 percent in 1978, up from 4.7 percent in 1973.

Average employment in the textile industry declined 13 percent from 1973 to a total of 851,000 employees in 1978. The number of textile mills (excluding apparel knitting mills) also declined recently, from 5,126 in 1972 to 4,963 in 1976. About two-thirds of the mills in 1976 had less than 100 employees each. In addition, there were another 5,762 textile fabricating establishments, many of which cut and sew purchased fabric into curtains, draperies, and other housefurnishings, textile bags, and canvas and related products, while others make certain pleating, stitching, trimmings, and embroidery. About 94 percent of these separate establishments had less than 100 employees each.

II. MTN import impact

There will likely be no significant adverse effect on the sector as a result of U.S. tariff concessions, implementation of which will be deferred until 1982. In addition, duty savings will likely benefit importers and retailers, but the consuming public is not expected to benefit from the duty savings.

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On the basis of information supplied by the Office of the Special Representative for Trade Negotiations (STR), the average depth of cut for this ISAC will be 21 percent, compared with 31 percent for all imports. More importantly, the resulting average tariff will remain at a relatively high level of 18.3 percent ad valorem, compared with 5.8 percent for all imports.

Moreover, in recognition of the import problem confronting the apparel industry, the average tariff on apparel was reduced approximately 15 percent, compared with about 27 percent for textiles and most fibers, to a level of 24.5 percent ad valorem. In addition, little or no reductions in tariffs were made on many import-sensitive items, such as certain sweaters, shirts, blouses, jeans, coats, and suits. Thus, tariff cuts made on apparel should not result in significant increases in imports, including those entering under TSUS item 807.00.

The STR data indicate that the average depth of cut on imports in this ISAC from less developed countries, which supplied about two-thirds of the total import value in 1977, was 19 percent versus 27 to 29 percent on imports from the European Economic Community (EEC), Japan, and Canada, which together accounted for about one-fourth of total imports in 1977. The difference in the depth of cuts primarily reflects the greater proportion of apparel imports from less developed countries than from developed countries. As previously mentioned, the average tariff on apparel was cut by 15 percent compared with 27 percent for textiles and most fibers. Thus, since tariffs on apparel are considerably higher than those on most fibers and textiles, the resulting tariff on imports from less developed countries will average 20.0 percent ad valorem, compared with 10.8 percent for Canada, 13.8 percent for the EEC, and 16.9 percent for Japan.

Although U.S. tariff concessions will probably not adversely affect the overall sector, concessions on a few products will likely result in an adverse effect on the producing establishments. The affected products were for the most part subject to the maximum duty reductions allowable. They include woven fabrics of silk, sewing thread of manmade fibers, certain knit headwear, gloves of textile fibers, and children's playsuits, sunsuits, and other similar playclothes. These products, however, in 1977 accounted for less than 2 percent of the sector's value of producers' shipments and 3 percent of imports.

U.S. adoption of the proposed NTM agreements will probably not affect the sector, primarily because there currently are no U.S. barriers that significantly affect it. Individually, however, the adoption of the Subsidies/Countervailing Duty Measures Agreement (S/CDMA) will now place the burden of proving injury on the complainant which, in itself, may prove to be a financial burden. Currently, the U.S. countervailing duty law does not require injury to an industry to impose countervailing duties on dutiable

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imports. In fiscal 1978, the majority of the approximately 25 petitions filed with Treasury involved apparel and textile items. Treasury determined in 1978 that certain Governments in Latin America had given benefits which constitute bounties or grants within the U.S. countervailing duty law.

Textiles and apparel will, for all practical purposes, be exempt from the Agreement on Government Procurement, because certain legislative restrictions on foreign procurement will be retained. The most important of these restrictions is the Berry Amendment, which has been attached to all Department of Defense (DOD) appropriation acts since 1954, requiring it to purchase textiles, apparel, and certain other items only from domestic sources. DOD accounts for about 85 percent of the more than 500 million dollars' worth of textiles and apparel procured annually by the U.S. Government. The remaining 15 percent of Government procurement is done primarily by the General Services Administration (GSA), owing to its role of purchasing and distributing common supplies among Federal agencies. Many of GSA's purchases of textiles and apparel, estimated at \$75 million in fiscal 1978, will also be exempt from the agreement, because the set-aside programs under the Buy American Act will be retained for small and minority businesses. Many of the firms that provide textiles and apparel to the government are typically small businesses.

The combined impact on the sector of U.S. tariff concessions and adoption of proposed NTM agreements will not be adverse. The sector does not currently benefit from any U.S. nontariff barriers that would be affected by the agreements, while the new tariffs resulting from U.S. concessions will remain relatively high. Moreover, little or no tariff reductions were made on many import-sensitive items.

III. NTM export impact

Foreign tariff concessions will have little overall impact on the sector, particularly the apparel industry, which is not export competitive. Based on information supplied by STR on this ISAC, the average depth of cut in tariffs of Canada will be 11 percent; Japan, 6 percent; and the EEC, 25 percent. Little or no tariff concessions were made by Canada and Japan on most of the principal items, and those concessions made are usually only a few percentage points, an insufficient margin to effect an increase in U.S. exports. On the other hand, the tariff concessions made by the EEC offer the U.S. textile industry opportunities for expanding exports. Although the U.S. manmade-fiber industry is competitive in world markets, its export potential is limited because of a current worldwide oversupply. In addition, several U.S. fiber producers are multinational firms with plants overseas to meet local demand.

On the basis of the approximately \$400 million value of U.S. exports of cotton and manmade-fiber broadwoven fabrics to the EEC in 1976, the EEC made tariff cuts averaging nearly 25 percent, with the resulting trade-weighted average tariff declining to about 11 percent ad valorem. The tariff cuts of the EEC should increase the potential for greater exports of these fabrics by

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the U.S. textile industry, since it already has a firm foothold in the EEC market. In 1976, the industry accounted for more than 20 percent of the EEC's value of imports of such fabrics. Textile mills likely to benefit from EEC concessions include those that make broadwoven fabrics of cotton (SIC 2211) and of manmade fibers (SIC 2221). Since many of these fabrics sent abroad are bleached, dyed, printed or, otherwise mechanically finished, the finishers of the cotton fabrics (SIC 2261) and manmade-fiber fabrics (SIC 2262) will also benefit.

Foreign adoption of NTM agreements will have little overall impact on the sector, primarily because the nontariff barriers covered by these agreements have had little effect on its trade. However, the adoption by Italy of the Customs Valuation Agreement could help alleviate the sector's problem with that country's "uplift" practice. Essentially, the dutiable value of Italy's imports of manmade fibers, textiles, and apparel is increased or "uplifted" above the stated invoice value, thereby, raising the duty assessment. In October 1977, Italy began requiring that imports of these items subject to its automatic import licensing program be reviewed by the Industry Technical Consulting Committee, which includes Italian textile industry representatives. The committee's advice usually forms the basis on which Italy's Customs appraises the value for duty assessment. U.S. exports have been subject to uplifts in dutiable value of up to 50 percent. Although the uplift practice is sometimes applied to first-quality goods, it is primarily used on remnants and textiles marked "substandard." According to data developed by the State Department, the value of U.S. exports of textiles and apparel to Italy declined 19 percent from January-September 1977 to \$61 million in January-September 1978, while exports to all other EEC countries rose 7 percent in the period to \$377 million. On the other hand, exports of used clothing, remnants, rags, and scrap cordage to Italy increased 29 percent to \$16 million, and to all other EEC members, 1 percent to less than \$8 million.

The Subsidies/Countervailing Duty Measures Agreement is the only other agreement that may benefit the sector. The agreement should reduce the relatively small but growing problem of subsidized shipments to the United States. Although the agreement will permit less developed country signatories to continue to subsidize their exports under phaseout agreements, the agreement would not interfere with the operation of the countervailing duty law in cases in which an industry in the United States was injured.

The sector's exports will not materially increase as a result of foreign tariff concessions or adoption of the nontariff measure agreements. Japan and Canada made little or no tariff reductions on many principal items, and the

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nontariff barriers covered by the agreements have not significantly impacted U.S. trade to any great extent. Probably the only beneficiary in the sector will be the textile industry through increased export potential to the EEC.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Although foreign trade impediments other than those covered by the NTM agreements occasionally arise to hinder the sector's trade, they are usually either resolved before any significant harmful effect can occur or are not adversely affecting U.S. exports such as Australia's tariff quotas. However, the one significant foreign trade barrier not covered by the NTM agreements is the "rules of origin" of the EEC, its preferential trading partners, and the European Free Trade Association (EFTA). These rules, which primarily affect the textile and, to a lesser extent, the manmade-fiber industries, were designed to prevent the United States and other non-member countries from evading some duty on a product which was exported to a preferential country with a low rate of duty and, subsequently, shipped free of duty to the ultimate trading partner with a higher tariff. The rules, however, do not apply to trade between EEC members, since the EEC is a customs union with a common external tariff. The rules apply only to trade between the EEC and its preferential trading partners or EFTA and between EFTA countries.

The rules apply only when parts or materials are shipped from a non-member country (e.g., the United States) to an "origin" country and, subsequently, transformed into a more advanced or finished article for export to another preferential country. For products covered in this ISAC, the rules specifically state the minimum manufacturing stages that must occur in an origin country for the finished product to be dutiable at the favorable or zero preferential rate. In essence, the rules require that the last two manufacturing processes take place in an origin country. Thus, for apparel to be eligible for origin status, the manufacture of the garment and its component fabric must have taken place in an origin country.

Consequently, the U.S. textile industry has claimed that these rules have adversely affected their fabric sales to apparel and other finished product producers in origin countries. Often, these producers in origin countries will not know the final destination of their products and, therefore, may be influenced by the rules to purchase fabrics only from "origin" members to assure themselves of the preferential rate were they to export their products to another preferential country.

In terms of exports of apparel by all origin countries in 1977, 32 percent of the \$3.3 billion total was subject to the rules of origin and, if qualified, eligible for the favorable tariff treatment. Only 15 percent of EEC's \$2.6 billion in apparel exports was subject to the rules, because the rules do not apply to exports between EEC countries, which accounted for about three-fourths of their total exports. On the other hand, the rules were applicable to 97 percent of EFTA's \$534 million in apparel exports and 87 percent of EEC preferential trading partners' \$194 million in exports. Thus, the rules may partly explain why the U.S. textile industry ships considerably

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more mill products to EEC countries, which export apparel primarily to one another and, therefore, not subject to the rules, than to EEC's preferential trading partners or EFTA. In 1977, U.S. exports of textiles to the EEC totaled \$554 million, compared with only \$64 million to EFTA and \$79 million to EEC's preferential trading partners.

Another area of concern to the sector is Japan. Although Japan currently has no NTM's restricting imports of fibers, textiles, and apparel and its duties on such products are relatively low, U.S. exports to that country are small. Japan's trading companies, many of which are global in scope, handle about 80 percent of that nation's imports and 70 percent of its exports. Thus, any future growth in U.S. exports to Japan depend, in large part, on decisions made by these trading companies. The Japanese apparel industry purchases its fabric from these trading companies and, in turn, sells its output to these firms primarily because the industry's production is fragmented among many small producers. Thus, trading companies not only control the flow of raw materials to the garment makers, but also the output for distribution to the retail industry.

V. Overall impact on sector

The overall economic impact on the sector stemming from the reduction in tariffs, the adoption of the NTM agreements, and the continuation of existing trade barriers outside the scope of the NTM will neither be significantly beneficial in terms of export potential nor adverse in terms of import impact. U.S. tariffs were cut by a trade-weighted average of 21 percent compared with 31 percent for all imports. Moreover, duty reductions on apparel amounted to about 15 percent. Despite what may appear to be rather significant cuts in textile and apparel tariffs, the resulting average tariff remains at a relatively high 18.3 percent ad valorem versus 5.8 percent for all imports. The adoption of the NTM agreements will not significantly affect the sector, primarily because the agreements will not affect the MFA or government procurement of domestically made textiles and apparel. Moreover, the Administration recently committed itself to tighten import-restraint controls in the existing bilateral agreements and to attempt to hold import growth in the years 1980-82 to no greater than the growth of the U.S. market.

ISAC Group 02: Textiles and Apparel Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments—millions of dollars	66,373	68,825	67,983	77,139	1/ 82,230	1/ 86,983
Imports-----do-----	3,639	3,841	3,620	5,014	5,554	7,177
Exports-----do-----	1,709	2,468	2,159	2,649	2,750	3,139
Apparent consumption-----do-----	68,303	70,198	69,444	79,504	1/ 85,034	1/ 91,021
Ratio, imports to consumption—percent	5.3	5.5	5.2	6.3	1/ 6.5	1/ 7.9
Ratio, exports to shipments—do	2.6	3.6	3.2	3.4	1/ 3.3	1/ 3.6
Total employment—1,000 workers	2,461	2,329	2,117	2,213	1/ 2,214	1/ 2,172

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.—Producers' shipments represent the value of all products sold by the manmade-fiber, textile, and apparel industries. In 1975, about 95 percent of the total value represented shipments of manmade fibers, textiles, and apparel.

ISAC Subgroup 02(pt): Manmade-fiber Industry Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	5,393	5,642	5,770	6,251	1/ 7,185	1/ 7,780
Imports-----do-----	142	149	90	132	139	132
Exports-----do-----	316	431	285	360	369	515
Apparent consumption-----do-----	5,219	5,360	5,575	6,023	1/ 6,955	1/ 7,397
Ratio, imports to consumption--percent-----	2.7	2.8	1.6	2.2	1/ 2.0	1/ 1.8
Ratio, exports to shipments--do-----	5.9	7.6	4.9	5.8	1/ 5.1	1/ 6.6
Total employment--1,000 workers-----	98	101	86	86	1/ 83	1/ 81

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Producers' shipments represent the value of all products sold by the industry. In 1976, about 84 percent of the total value represented shipments of manmade fibers.

ISAC Subgroup 02(pt): Apparel Industry Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars---	28,312	28,896	29,581	32,255	1/ 34,287	1/ 36,000
Imports-----do-----	1,956	2,095	2,318	3,256	3,650	4,833
Exports-----do-----	229	333	341	434	524	551
Apparent consumption-----do-----	30,039	30,658	31,558	35,077	1/ 37,413	1/ 40,282
Ratio, imports to consumption--percent-----	6.5	6.8	7.3	9.3	1/ 9.8	1/ 12.0
Ratio, exports to shipments----do-----	.8	1.2	1.2	1.3	1.5	1.5
Total employment--1,000 workers-----	1,381	1,297	1,195	1,248	1/ 1,241	1/ 1,240

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Producers' shipments represent the value of all products sold by the industry. In 1976, about 95 percent of the total value represented shipments of apparel.

ISAC Subgroup 02(pt): Textile Industry Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	32,668	34,287	32,632	38,633	1/ 40,758	1/ 43,203
Imports-----do-----	1,541	1,597	1,212	1,626	1,765	2,212
Exports-----do-----	1,164	1,704	1,533	1,855	1,857	2,073
Apparent consumption-----do-----	33,045	34,180	32,311	38,404	40,666	43,342
Ratio, imports to consumption--percent-----	4.7	4.7	3.8	4.2	4.3	5.1
Ratio, exports to shipments----do-----	3.6	5.0	4.7	4.8	1/ 4.6	1/ 4.8
Total employment--1,000 workers-----	982	931	836	879	1/ 890	1/ 851

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Producers' shipments represent the value of all products sold by the industry. In 1976, about 96 percent of the total value represented shipments of textiles (excluding knitted apparel).

ISAC GROUP 03: LUMBER AND WOOD PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

The lumber and wood products industry classified under SIC 24 and 26(pt) 1/ covers a broad range of products including logs, lumber, millwork, plywood, building components, prefabricated buildings, and many varied specialty wood products used in industry and in households. These items are produced in approximately 30,000 establishments, and while some of these are highly automated, production is for the most part labor intensive. These establishments are generally small, with 80 percent having 20 or fewer employees. The large number of producing firms, the relative ease of entry into the industry, and the availability of nonwood substitutes for many of these products results in a high degree of competition based primarily on price and service. Logging, sawmilling, millwork and plywood establishments account for approximately 70 percent of all the establishments in this sector, 60 percent of the employment, and slightly over 65 percent of the value of shipments.

Demand for most of the products covered in this sector is strongly influenced by the rate of residential building construction in both domestic and foreign markets. Closely following the level of domestic building construction, U.S. shipments fell from a high of \$27.2 billion in 1973 to \$25.1 billion in 1975, but thereafter rose to approximately \$40.0 billion in 1978. Employment in the sector fell from 722,000 in 1973 to 588,000 in 1975, then increased continuously to an estimated 640,000 in 1978.

Imports have followed the trend in domestic shipments, decreasing from \$2.4 billion in 1973 to \$1.5 billion in 1975, then increasing steadily to an estimated \$4.5 billion in 1978. During 1973-78, annual imports ranged from a low of 6 percent of U.S. consumption in 1975 to a high of 11 percent in 1978. Canada is the leading foreign supplier, accounting for approximately 70 percent of U.S. imports, followed by the Republic of Korea, Taiwan, and Japan. These four countries and Western Europe supplied about 90 percent of U.S. imports in 1977. Over 65 percent of U.S. imports in 1977 were of rough wood products, including logs and lumber. Softwood lumber alone accounted for about 60 percent of U.S. imports.

The value of U.S. exports has risen slowly from approximately \$1.6 billion in 1973 to about \$2.4 billion in 1978, but has remained at approximately 6 percent of shipments throughout the period. Over half of U.S. exports in 1977 went to Japan. These consisted principally of softwood logs and lumber, valued at \$811 million and \$105 million, respectively. Significant quantities of hardwood and softwood lumber, as well as a variety of finished products, are also exported to Canada and the EEC.

1/ ISAC 03 includes insulating board producers under SIC 2661(pt).

ISAC GROUP 03: LUMBER AND WOOD PRODUCTS SECTOR ANALYSIS

The overall U.S. industry is in a healthy competitive position. Although periodic downturns in residential construction result in some mill closings and unemployment, they also dampen demand for imports (principally of softwood from Canada). The small subsector of manufacturers of specialty items characterized by labor-intensive production, however, is generally underpriced by imports and have been experiencing long term declines in sales and profits.

In foreign markets, the United States and Canada compete on similar terms, particularly for softwood logs and softwood manufactures. With a few exceptions, U.S. exports of hardwood manufactures meet strong competition from exports of Southeast Asia, Africa, and South America. Products from these areas generally are priced lower than comparable U.S. articles.

The lumber and wood products sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures.

II. MTN import impact

The average AVE tariff rate (based on 1976 data) of dutiable U.S. imports of lumber and wood products, as reported by the Office of the Special Representative for Trade Negotiations (STR), is 11.5 percent. The proposed rate reductions would reduce this AVE to 5.5 percent. Most imports of items covered by this sector enter duty free. In 1976, for example, only \$675 million or 28 percent of total imports were dutiable. Of these imports, \$640 million or 95 percent consisted of semifinished and finished wood manufactures such as wooden containers, small industrial and household articles, prefabricated buildings and building materials, and plywood and other building boards. The remaining dutiable imports, consisting of some kinds of lumber and other rough and semimanufactured wood products, accounted for approximately \$35 million or 5 percent of the total.

The proposed U.S. tariff reductions will likely have minimal effect on the overall sector. Most of the articles are imported because of strong domestic demand and limited supplies of domestic materials during peak demand periods. The duty reductions are mostly on the semifinished and finished products. Producers of many of these products, such as clothespins, toothpicks, coat hangers, and other small wooden household articles, could be adversely affected to a significant extent by increased imports resulting from duty reductions. Similarly, marginally efficient producers of hardwood plywood and, to a lesser extent, softwood plywood could be adversely affected by the proposed reductions of as much as 12 percentage points for certain important species.

Duty savings resulting from U.S. tariff concessions will likely benefit primarily the industrial and intermediate consumer and, to a lesser extent, the consuming public. This benefit is expected to be in the form of lower prices.

ISAC GROUP 03: LUMBER AND WOOD PRODUCTS SECTOR ANALYSIS

The adoption of the NTM agreements is not likely to have a significant effect on U.S. trade in lumber and wood products, and only a negligible effect on U.S. industry and labor. Nontariff measures do not currently significantly limit U.S. imports. U.S. Government procurement practices are believed to be the only nontariff measures that limit U.S. imports of lumber and wood products. However, total Government purchases of lumber and wood products amount to an insignificant portion of U.S. consumption of such products. The combined effect of the adoption of the NTM agreements and the U.S. tariff concessions is not expected to be significantly adverse for this sector as a whole. As noted above, producers of certain finished products, however, could be adversely affected by tariff concessions.

III. MTN export impact

Based on information provided by the STR, tariff concessions proposed by Canada would reduce the average AVE rate on dutiable imports from the United States from 13.0 to 7.0 percent and those proposed by the EEC, from 11.0 to 8.6 percent. Japan's concessions would reduce the average AVE tariff rate on dutiable imports from the United States from 6.3 to 5.3 percent.

Foreign tariff concessions are generally too small or too selective to significantly improve the trading position of the U.S. industry. U.S. exports of softwood lumber and softwood products must compete with similar products from Canada, which will also benefit from the same foreign tariff concessions. For certain specialty items such as hardwood lumber and manufactures of walnut and oak, the U.S. industry is already competitive in world markets, and foreign tariffs are not a significant barrier to trade.

Adoption of the NTM agreements probably will not significantly improve the competitive position of the U.S. industry. Some slight benefits could be expected from certain agreements, but these benefits will accrue to all exporting countries and leave the competitive situation relatively unchanged.

The overall effect of the adoption of the NTM agreements and the foreign tariff concessions is expected to result in slight benefits to the U.S. industry. The benefits are likely to be greatest for specialty products for which there are already good foreign markets.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no known factors outside of tariffs or NTM agreement that are currently having a significant impact on U.S. producers or exporters of lumber and wood products.

ISAC GROUP 03: LUMBER AND WOOD PRODUCTS SECTOR ANALYSIS**V. Overall impact on sector**

The adoption of the NTM agreements and the tariff concessions is likely to have a neutral or slightly adverse effect on the sector. Increased imports will, for the most part, supplement domestic production. For producers of certain products such as hardwood and softwood plywood, some lost sales could be expected as a result of increased import competition. For a relatively small group of manufacturers of specialty wood products such as tools and utensils used by households and industry, the impact could be substantial with mill closings and unemployment the result.

Benefits to consumers in the form of lower prices, almost entirely the result of tariff concessions, will accrue principally to industrial and intermediate consumers and, to a lesser extent, to the consuming public.

Some increased export sales are likely to result from the acceptance of the agreements and foreign tariff concessions. These increased sales are likely to be limited to markets in which the United States already is competitive.

Overall, the United States will continue to be a net importer of items included in this sector. Strong domestic markets will attract imports and foreign producers, with their relatively low wage rates, will be able to increase their share of the U.S. market through lower prices, particularly in the market for articles characterized by a labor-intensive manufacture.

ISAC Group 03: Lumber and Wood Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	27,239.7	26,817.6	25,094.5	31,239.4	1/ 35,000.0	1/ 40,000.0
Imports-----do-----	1/ 2,400.0	1,886.0	1,486.0	2,437.5	3,322.8	1/ 4,500.0
Exports-----do-----	1/ 1,600.0	1,650.1	1,671.0	2,162.1	2,152.9	1/ 2,400.0
Apparent consumption-----do-----	1/ 28,000.0	27,053.5	24,909.5	31,514.8	1/ 33,000.0	1/ 42,000.0
Ratio, imports to consumption--percent-----	1/ 9	7	6	8	1/ 10	1/ 11
Ratio, exports to shipments---do-----	1/ 6	6	7	7	1/ 6	1/ 6
Total employment--1,000 workers-----	722.4	674.7	588.1	628.1	1/ 635.0	1/ 640.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 04: PAPER AND PAPER PRODUCTS SECTOR ANALYSIS

I. Sector profile and conditions of competition

The paper and paper products industry ^{1/} consists of pulp mill at produce fibrous raw materials (pulp) for other manufacturing processes, paper and paperboard mills that use pulp to make basic paper and paperboard products, and converting establishments that convert pulp, basic paper and paperboard, and other materials into a variety of products. The host of products produced by the industry include such diverse articles as wood pulp, printing and writing papers, packaging papers and boards and products thereof, sanitary paper products, wallpaper, building papers, doilies, tags, shelf paper, molded pulp products such as egg cartons and fiber drainage pipe, and disposable paper gowns and diapers. The industry also produces such articles as polyethylene and foil bags and pressure sensitive tape.

The U.S. paper and paper products industry employed an estimated 645,000 people in 1978, compared with 610,000 in 1976 and 640,000 in 1973. Approximately two-thirds of the employment is accounted for by converting establishments, with paper and paperboard mills accounting for most of the remainder (pulp mills employed an estimated 2.5 percent of the total).

The value of product shipments of the paper and paper products industry rose from \$31.6 billion in 1973 to an estimated \$51.5 billion in 1978. Of the total value of shipments in 1978, \$28.6 billion came from the converting establishments; \$20.3 billion from the paper and paperboard mills (including building papers); and \$2.6 billion, from the pulp mills. The increase in the value of U.S. consumption of paper and paper products trended similar to that of domestic shipments, rising from \$32.3 billion in 1973 to an estimated \$52.8 billion in 1978.

The value of U.S. exports of paper and paper products increased from \$1.4 billion in 1973 to \$2.7 billion in 1978. During this period, the ratio of exports to shipments ranged from 4 to 6 percent annually, and, in 1978, was estimated at about 5 percent. U.S. exports are mostly of basic paper and paperboard products and of wood pulp (\$1.1 billion and \$0.9 billion, respectively, in 1978). Basic paper and paperboard exports are principally to Latin American countries, the EEC, and Canada, and exports of wood pulp are predominantly to the EEC.

The value of U.S. imports of paper and paper products rose from \$2.1 billion in 1973 to \$4.0 billion in 1978. During this period, the ratio of imports to consumption increased from about 6 percent in 1973 to nearly 8 percent in 1978. U.S. imports consist principally of newsprint (a basic paper product) and wood pulp (\$2.1 billion and \$1.1 billion, respectively, in 1978), both duty-free items, which come mostly from Canada.

The economic health of the U.S. paper and paper products industry is generally good. Demand recently has risen substantially for many commodities, and production levels were at or near record highs in 1978. This increased demand created spot supply shortages in 1978 which put upward pressure on prices and encouraged imports.

^{1/} ISAC 04 includes firms covered by SIC 26 except insulating board producers (SIC 2661 pt).

ISAC GROUP 04: PAPER AND PAPER PRODUCTS SECTOR ANALYSIS

The United States is the leading producer and consumer of paper and paper products, accounting for about half of the world's production and consumption. Generally, the U.S. industry is competitive worldwide and provides strong competition in foreign markets for certain products; however, there is strong competition in U.S. markets for some converted products. Continued access to an abundant supply of fibrous raw materials accompanied by increased utilization of more efficient processing methods will probably enable U.S. producers to maintain their competitiveness in world markets in the future. The paper and paper products industry sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures.

II. MTN import impact

Based on information supplied by the Office of the Special Representative for Trade Negotiations (STR), the average depth of cut in U.S. tariffs on dutiable imports of paper and paper products is about 60 percent. U.S. imports of these dutiable articles in 1978 totaled almost \$750 million, less than one-fifth of all imported paper and paper products. These dutiable imports accounted for an estimated 1.4 percent of the value of U.S. consumption of all paper and paper products in 1978. The bulk of U.S. imports of these products consists of standard newsprint and wood pulp (\$2.1 billion and \$1.1 billion, respectively, in 1978), which enters the United States duty free.

Generally, U.S. tariff reductions are expected to result in minimal problems for the U.S. paper and paper products industry as the industry is quite competitive worldwide. Duty savings on the bulk of the offers will likely benefit the industrial consumer, but the consuming public is not expected, in all cases, to benefit from these offers. Producers of wallpaper and certain pressure sensitive tape (i.e., both filament reinforced and nonelectrical plastic-backed), however, may be significantly adversely affected by increased imports of such commodities. Foreign competition has been increasing in U.S. markets for these products, and tariff reductions as proposed will likely exacerbate the situation.

U.S. adoption of the proposed agreements on nontariff measures (NTM's) is not expected to affect significantly U.S. import trade in paper and paper products, since the great bulk of these imports are not currently affected by nontariff barriers. Thus, the overall impact on the paper and paper products industry from implementation of both the proposed U.S. tariff concessions and the NTM agreements is expected to be minor.

III. MTN export impact

Based on STR information, the EEC, Japan, and Canada are expected to reduce their average tariff rates on dutiable imports from the United States by about 30 to 45 percent. Their resulting average tariff levels would still be higher than U.S. rates on similar imports from each of those countries.

ISAC GROUP 04: PAPER AND PAPER PRODUCTS SECTOR ANALYSIS

Generally, the proposed foreign tariff offers on paper and paper products are too selective or too small to provide significant overall benefits to the U.S. industry. However, a few offers are likely to improve the U.S. export position in selected countries for certain commodities (e.g., a reduction from 12.5 to 6.5 percent ad valorem by Canada on printing paper).

Foreign adoption of the NTM agreements is not expected to improve significantly the overall export position of the U.S. paper and paper products industry. However, certain agreements may enhance the industry's competitiveness in foreign markets for certain commodities. For example, foreign adoption of the Agreement on Technical Barriers to Trade (Standards Agreement) could significantly enhance the ability of U.S. producers of linerboard, a major export article of U.S. industry, to export that product to the EEC. Currently, two members of the EEC apply a standard that reportedly discriminates against imports of linerboard from the United States.

The overall effect of the foreign tariff concessions and adoption of the NTM agreements on U.S. export levels is expected to be positive, but only a limited number of products will be significantly affected.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

No foreign trade factors outside the scope of MTN tariffs and the NTM agreements are known that currently affect, or potentially could affect, to a significant extent the economic health of the U.S. paper and paper products industry.

V. Overall impact on sector

The overall effect on the U.S. paper and paper products industry of the proposed tariff concessions and the NTM agreements will likely be minor. However, U.S. producers of certain paper products probably will be somewhat adversely affected by increased imports, while producers of certain products, such as printing paper and linerboard, will likely benefit from the expansion of export sales. Duty savings on the bulk of the U.S. offers probably will benefit the industrial consumer, but the consuming public is not expected to benefit significantly.

ISAC Group 04: Paper and Paper Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars	31,604	39,898	39,873	46,105	1/ 49,900	1/ 51,500
Imports-----do-----	2,084	2,914	2,680	3,307	3,581	4,008
Exports-----do-----	1,383	2,493	2,399	2,580	2,522	2,669
Apparent consumption-----do-----	32,305	40,319	40,154	46,832	1/ 51,000	1/ 52,800
Ratio, imports to consumption--percent	6	7	7	7	1/ 7	1/ 8
Ratio, exports to shipments--do-----	4	6	6	6	1/ 5	1/ 5
Total employment 1/ 1,000 workers	640	640	585	610	610	645

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 05: INDUSTRIAL CHEMICALS AND FERTILIZERS SECTOR ANALYSIS**1. Sector profile and conditions of competition**

The United States industrial chemicals and fertilizers industries are the major component of SIC 28, chemicals and allied products. This sector comprises a group of 10 chemical product groups which employed 301,900 people in 1978 and which make a large variety of chemicals used in the manufacture of more advanced chemicals and chemical products, in addition to finished chemical products and agricultural chemicals such as pesticides and fertilizers. In 1978, product shipments by the estimated 900 companies in this sector amounted to \$46.6 billion, 36 percent of the \$130 billion sales by the chemicals and allied products category. The growth in the value of shipments between 1973 and 1978 averaged 18 percent per year, most of which is price inflation. The weighted-average BLS price index for ISAC 05 products increased 17 percent per year in 1973-78, suggesting that real growth was probably only 1 to 3 percent per year.

The most important segment of this group of industries, in terms of sales, is industrial organic chemicals, n.e.c. (SIC 2869), which accounted for 48 percent (\$28 billion) of the 1977 sector sales. The next largest industries in this sector are industrial inorganic chemicals, n.e.c. (SIC 2819), which accounted for 16 percent of the 1977 sales, and cyclic crudes and intermediates (SIC 2865), 11 percent of the sales. These three industries and the pesticides and agricultural chemicals, n.e.c., industry (SIC 2879) together accounted for 80 percent of 1977 sales and are the industries in this sector on which the MTN could have an economic impact.

In 1978, exports accounted for 18 percent of the value of product shipments and imports accounted for 9 percent of U.S. apparent consumption. The ratio of exports to imports in 1978 was approximately 2 to 1, a ratio which has remained relatively stable since 1973. The foreign trade in this sector, in order of importance, includes industrial inorganic chemicals (SIC 2819), industrial organic chemicals (SIC 2869), cyclic (including benzenoid) intermediates (SIC 2865), and pesticides and other agricultural chemicals (SIC 2879).

The value of exports increased from \$3.1 billion in 1973 to \$8.2 billion in 1978, an average growth of about 21 percent per year. As in the case of shipments, most of the apparent growth reflects price inflation. Imports increased from \$1.3 billion in 1973 to \$3.7 billion in 1978, or about 24 percent per year.

The conditions of competition in this sector are generally the same as those for all segments of the overall chemicals and allied products industry. For a number of years, demand for chemical products has not been keeping pace with the industry's capacity to produce. Operating costs, including raw material costs and costs necessary for environmental control, are increasing,

ISAC GROUP 05: INDUSTRIAL CHEMICALS AND FERTILIZERS SECTOR ANALYSIS

but selling prices, because of the keen competition, have not been increasing at the same rate. Although a temporary surge in worldwide chemical demand occurred in late 1978 and early 1979 as a result of the oil shortage that followed the Iranian shutdown, this is not expected to affect the overall long-term conclusions. The industry's world markets are becoming more mature and more competitive as producers in the Communist-bloc nations and in the developing countries compete more vigorously with the United States and its principal trading partners, the EEC, Japan, and Canada.

Except for the dyes and the synthetic organic pigments industries, the ISAC 05 sector is competitive with our principal trading partners in both domestic and foreign markets. About 50 percent of ISAC 05 exports are industrial organic chemicals, almost all of which are derived from petroleum, i.e., petrochemicals. Economically and in terms of raw material supplies, petrochemicals must compete with gasoline and fuel oil for their share of the barrel of crude oil. Although the cost of some basic petrochemicals, namely the aromatics (benzene, toluene and xylene) which are used as raw materials for synthetic organic chemicals, will rise as a result of increased demand for these items as octane improvers in unleaded gasoline, these increased costs should not put U.S. chemical producers at a disadvantage vis-a-vis foreign producers. Western Europe has been receiving from the United States about 10 percent of its supply of aromatics, but this supply may decline in the future. This decrease in raw material supply (because of diversion to unleaded gasoline) plus the newly developed competition in European markets from low-priced imports from the Communist bloc countries of Eastern Europe are expected to limit Western European chemical producers in marketing their comparatively more expensive products. Japan is even more limited in petrochemical raw materials, resulting in increased competition to Japan in its prime Southeast Asia export market by U.S. and European chemical companies. According to trade sources, Japan recently has been paying 30 percent more than its foreign competitors for petroleum naphtha, the raw material on which much of its petrochemical industry is based. These developments in petrochemical raw material availability have increased the already-formidable competitiveness of U.S. industrial organic chemicals.

On the other hand, two industries in the ISAC 05 sector, the synthetic dyes and the organic pigments industries (and their precursor chemical intermediates) are vulnerable to import competition, primarily from Europe. Future competition, however, could also be coming from less developed countries. India reportedly is capable of producing dyes, organic pigments, and their intermediates at a cost substantially lower than those of other producing countries. This source of low-cost benzenoids, plus the loss of ASP and the valuation of imports for duty purposes on a transaction value basis, will make the U.S. benzenoid dyes and synthetic pigments industries less competitive in domestic and foreign markets in the future. Also, some industry sources believe that in dyes and pigments, Europe and, to a lesser degree, Japan are presently the world leaders in technology.

ISAC GROUP 05: INDUSTRIAL CHEMICALS AND FERTILIZERS SECTOR ANALYSIS

Within this sector there are certain industrial organic chemical groups (cyclic intermediates and dyes and pigments) that are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of these areas appears in Section VI, following the full sector presentation.

II. MTN import impact

The U.S. rates of duty (1976 basis) proposed to be reduced on products of the industrial chemicals and fertilizers sector range from 0.2 percent (ad valorem equivalent) on certain inorganic chemicals (potassium aluminum sulfate, ammonium perchlorate and sodium borate) to 58.8 percent for benzyl acetate. Based on STR information, the average depth of cut (dutiable imports) for the ISAC 05 sector is 36 percent by the United States. U.S. imports of these dutiable products totaled \$2.9 billion in 1977, about 50 percent of the value of all imports of products of the industrial chemicals and fertilizers subsector. Duty savings are expected to be absorbed by the foreign supplier and/or importer and will not likely benefit the industrial consumer or the consuming public.

The U.S. industrial chemicals and fertilizers sector is competitive with imports in the U.S. market on a price basis, and has certain marketing advantages due to its proximity to industrial consumers. Furthermore, all of the leading chemical companies have extensive multinational operations in foreign countries; imports from their foreign subsidiaries and other sources are not dependent on the duty rates. With the exception of certain specialty areas, such as dyes, organic pigments, and certain benzenoid intermediates, the proposed duty reductions will have only a modest effect on the level of U.S. imports and, therefore, little effect on industry and labor.

With respect to the NTM agreements the products of this sector are affected with respect to standards, subsidies, and customs valuation. The standards on U.S. chemicals are regulations to reduce safety and health hazards on the job and in the home. However, these regulations are unaffected by the proposed standards agreements.

The NTM agreement assessing import duties based on transaction value rather than on the American selling price (ASP) will reduce tariff protection from imports of dyes, organic pigments and benzenoid intermediates. Because of rising costs it is likely that U.S. prices of these benzenoid products

ISAC GROUP 05: INDUSTRIAL CHEMICALS AND FERTILIZERS SECTOR ANALYSIS

will rise more rapidly than those of the exporting nations. The effect of the adoption of all the NTM agreements should, therefore, result in a modest increase in imports on ISAC 05 products, and have a slight adverse impact.

Although the combined effects of the proposed tariff reductions and NTM agreements on the industrial chemicals and fertilizers sector will be negligible, the effects on the dyes, organic pigments and benzenoid intermediates areas could be substantial.

III. NTM export impact

Based on information supplied by the STR, the proposed reductions in the average AVE tariff rates on U.S. exports of products of the industrial chemicals and fertilizers sector (based on 1976 data) are reported by the STR to be about 34 percent for the EEC, 24 percent for Japan and 30 percent for Canada. In general, tariff reductions offered by other countries are too selective or too small to provide significant benefits to the U.S. industry. Even at their present levels, the foreign duties are not a major factor limiting U.S. exports of chemicals. In addition, as within the United States, foreign producers enjoy advantages in their domestic markets (i.e., familiarity with local customs and legislation favorable to the domestic industry) which tend to limit import trade.

The foreign NTM's which affect U.S. exports are primarily in the area of subsidies. As discussed below, the subsidies agreement will not alleviate the principal problem, but will yield benefits from the elimination of minor subsidies. The adoption of the agreements on standards, government procurement, and import licensing will have a very small but positive effect on U.S. exports. Although adoption of the NTM agreements will have a very slightly positive economic effect on U.S. imports, the overall impact of the proposed tariff reductions and the NTM agreements on U.S. exports is expected to be negligible or very slightly positive.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

The principal complaint of the U.S. chemical industry on NTM's, particularly the companies in the ISAC 05 sector, is the value-added tax of many countries. U.S. chemical exports pay all U.S. taxes and then are subject to a reported 15 to 25 percent border tax (value-added tax) upon arrival in a typical European country. When that country exports to the United States or to a third country, the value-added tax is remitted to the foreign manufacturer. This GATT-approved subsidy is unaffected by the NTM negotiations. It

ISAC GROUP 05: INDUSTRIAL CHEMICALS AND FERTILIZERS SECTOR ANALYSIS

will continue to give the foreign exports a price advantage in their countries and will tend to increase exports to the United States.

V. Overall impact on sector

The overall impact of the proposed MTN tariff concessions and the NTM agreements on the industrial chemicals and fertilizer sector is expected to be negligible. The magnitudes of the tariff reductions proposed by the United States and other countries are not believed to be great enough to result in significant shifts in international trade, but on balance are viewed as slightly negative from the U.S. viewpoint. The adoption of the agreement to assess tariffs on U.S. imports of benzenoid chemicals on a transaction value basis instead of the ASP basis will, as explained below, adversely affect the U.S. dyes, pigments and intermediates industries. Duty savings from tariff reductions are likely to be absorbed in the trade and will, therefore, not benefit the consuming public. Neither are the proposed NTM agreements expected to have significant effects on international trade, but the effects should be slightly positive to the United States. Therefore, the negotiated concessions will result in a number of small positive effects being balanced by what appears to be an equal magnitude of small negative effects.

VI. Analysis of selected segments of ISAC 05

Cyclic (especially benzenoid) intermediates, synthetic dyes, and organic pigments (SIC 2865) are expected to be the industries most sensitive to increases in imports as a result of MTN tariff reductions and nontariff measures adopted in the Tokyo Round trade agreements.

This industrial group (SIC 2865) has lost the tariff protection of the ASP valuation system by the adoption of the agreement to assess tariffs on imports on the usually lower transaction value basis. U.S. import-transaction values will probably increase more slowly than the American selling price of these chemicals. United States imports of competitive products may now capture a larger share of the U.S. market, which is due in part to lower prices. In addition, domestic manufacturers, which incur more costs than most foreign manufacturers for pollution abatement and for compliance with such measures as the Toxic Substances Control Act, may not be able to lower prices to meet the competition.

The loss of ASP and the increasing costs for pollution and toxicity control are factors which are expected to seriously impact marginal producers of products included in SIC 2865 in future years.

ISAC Group 05: Industrial Chemicals and Fertilizers Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	20,779	29,975	33,435	38,204	39,743
Imports-----do-----	1,269	2,036	2,132	2,549	2,922
Exports-----do-----	3,120	4,883	5,303	5,527	7,196
Apparent consumption-----do-----	18,428	27,128	30,264	35,226	35,469
Ratio, imports to consumption--percent-----	6.9	7.5	7.0	7.2	8.2
Ratio, exports to shipments---do-----	15.4	16.2	15.9	14.5	18.1
Total employment--1,000 workers 1/ -----	278.0	285.7	293.3	297.7	300.5

1/ The number of production workers in 1973-77 is estimated to range from 62.5% to 65% of the total workforce.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 06: DRUGS, SOAPS, AND RELATED ARTICLES SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector includes establishments classified under SIC Nos. 283 and 284. Establishments in SIC 283 are primarily engaged in manufacturing, fabricating, or processing medicinal chemicals and pharmaceutical products and grading, grinding, and milling of botanicals. Establishments in SIC 284 are primarily engaged in manufacturing soap and other detergents and in producing glycerine from vegetable and animal fats and oils; speciality cleaning, polishing, and sanitation preparations; and surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations.

The value of U.S. producers' shipments increased from \$19 billion in 1973 to nearly \$28 billion in 1976, then declined to \$26 billion in 1977. The value of U.S. exports increased from \$919 million in 1973 to \$1.7 billion in 1977; the ratio of exports to producers' shipments increased from 5 percent annually in 1973-76 to 7 percent in 1977. The value of U.S. imports more than doubled from \$353 million in 1973 to \$719 million in 1977; the ratio of imports to domestic consumption increased from 2 percent annually in 1973-76 to 3 percent in 1977. Total employment in this industrial sector increased from 254,000 in 1973 to 265,000 in 1977.

This sector is composed of several unrelated chemical industries with different products and growth rates. For example, the value of shipments of soaps and detergents has been increasing at a rate of about 10 percent per year, with inflation accounting for about half of that. Soaps and detergents are produced in about 650 establishments, which in 1977 employed about 30,000 people and shipped products valued at about \$6 billion. In contrast, the drug industry has continued to resist inflationary price pressures. In 1977, the producer price index for pharmaceutical preparations amounted to 127 (base period is 1967) versus 170 for soaps and detergents. The value of drug product shipments accounts for over half of the total value of shipments in this sector. The number of establishments manufacturing pharmaceutical preparations is about 2,900, of which 1,100 produce prescription drugs and 1,800 produce mostly over-the-counter drug formulations.

The only other significant industry in this sector is cosmetics, with product shipments valued at about \$6.5 billion in 1977. The market for most cosmetics is reportedly growing more rapidly overseas than domestically, thus, increasing export opportunities for U.S. producers. The opportunities for expansion of export markets are probably better in developing countries than in developed countries, such as Japan and those in Europe which already have a competitive chemical industry.

Within ISAC sector 06, SIC 283 (drugs) is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or non-tariff trade measures. A brief analysis of this segment appears in Section VI, Analysis of Selected Segments of ISAC Sector 06, following the full sector presentation.

ISAC GROUP 06: DRUGS, SOAPS, AND RELATED ARTICLES SECTOR ANALYSIS**II. MTM import impact**

Based on STR information, the average depth of cut by the United States on dutiable imports in this ISAC sector is 43 percent.

The overall effect of U.S. duty modifications on this sector will probably be a moderate increase in imports, with only a negligible to small adverse impact on U.S. industry and labor. For the most part, either U.S. duty concessions are too small to have much effect on the level of imports or current duties are not a significant barrier to imports.

Section VI of this analysis discusses a more severe impact on a subsector of ISAC sector 06.

U.S. nontariff measures which affect imports in this sector include the American selling price (ASP) valuation system and regulations and standards promulgated by the U.S. Food and Drug Administration (FDA). However, the negotiated conversion from ASP to normal valuation is not expected to appreciably affect the level of U.S. duties, while FDA standards are for health and safety reasons and, therefore, will remain unaffected by the Agreement on Technical Barriers to Trade (Standards Agreement).

Thus, the combined effect of the negotiated U.S. tariff reductions and MTM agreements on this ISAC sector will be a moderate increase in imports with a negligible to small adverse impact on U.S. industry and labor.

Although savings from duty reductions on some products will likely be passed on to the consuming public, most duty savings will probably be absorbed in the trade.

III. MTM export impact

Based on information supplied by the STR, the average depth of cut in this ISAC sector on dutiable imports from the United States is 38 percent by the EEC, 25 percent by Japan, and 30 percent by Canada.

The overall effect of foreign duty modifications on U.S. exports in this ISAC sector will probably be a modest increase in export potential primarily in the areas of medicinal chemicals and pharmaceutical preparations. Among the major trading partners, expansion of export potential is probably greatest in Canada, because of the magnitude of certain duty reductions. For the most part, duty reductions by Japan are too small to significantly affect the level of U.S. exports, while significant duty reductions by the EEC (and often by Canada) are generally selective, rather than covering broad product categories and, therefore, offer little in the way of increasing export potential.

Another factor restricting export potential growth is that multinational firms usually meet demand in foreign markets from local production facilities, rather than engage in international shipments.

ISAC GROUP 06: DRUGS, SOAPS, AND RELATED ARTICLES SECTOR ANALYSIS

Foreign nontariff measures affecting products in this sector include government procurement policies, health and safety standards regulations, and customs valuation "uplift" procedures. Adoption of the NTM agreements could result in additional export potential, particularly in the Mideast and Far East nations. Furthermore, U.S. manufacturers are more likely to maintain stable and growing markets in the developing nations once allowed to compete on an equal footing with home producers.

Thus, the combined effect of foreign duty modifications and adoption of the NTM agreements will probably result in a moderate increase in export potential.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

The value-added tax (VAT) and discriminatory ocean freight rates are held by many to have a greater impact on U.S. exports than the aggregate effect of the tariff concessions and the NTM agreements.

The VAT (which would not be affected by adoption of the NTM agreements) is a turnover (indirect) tax with credit given at each stage of economic activity (except at the consumer level) on the full value of the product at the time of sale. It is also referred to as a "border tax" in that it is imposed on imports and is remitted in full on exports. Therefore, U.S. producers paying a U.S. corporate income tax are taxed again on exports to markets employing the VAT. Furthermore, in exports to third world markets, U.S. firms are at a disadvantage through paying corporate income tax, while exporters from areas using VAT have the tax on the exported product remitted to them in full.

U.S. exporters often feel they are penalized because outbound ocean freight rates from the United States are generally substantially higher than inbound freight rates for the same commodity traveling the same distance. Also, export freight rates for similar or identical products to third world markets from U.S. ports are higher than rates from equidistant European ports.

V. Overall impact on sector

On balance, the overall effect of U.S. and foreign duty modifications and adoption of the NTM agreements on ISAC sector 06 is likely to be about equal between imports and exports, with possibly a slightly greater benefit for increasing export potential. The United States, however, is offering larger duty modifications, on the average, for ISAC sector 06 than are its major trading partners. In addition, the United States' major trading partners are being more selective in their choice of products for which duty reductions have been offered. The overall effect of adoption of the NTM agreements, however, will be an expansion of U.S. export potential, with little or no effect on the level of imports. This expansion of export potential should outweigh the negative effect of NTM duty modifications and result in a slightly positive effect for U.S. industry.

ISAC GROUP 06: DRUGS, SOAPS, AND RELATED ARTICLES SECTOR ANALYSIS

Savings from U.S. duty reductions on some products will probably benefit the consuming public, but most duty savings will probably be absorbed in the trade.

VI. Analysis of selected segments of ISAC sector 06

SIC 283 (drugs), and in particular benzenoid drugs, is viewed as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures to a greater extent than the sector as a whole.

The effect of U.S. duty modifications on benzenoid drugs will probably be an appreciable increase in imports, with a significant adverse impact on industry and labor. This is based principally on the magnitude of duty reductions and how they will affect imports of bulk drugs.

While the effect of adoption of all MTN agreements will likely be positive for the United States in this trade area, this should be outweighed by the adverse effects of MTN duty reductions. The overall effect on drugs (SIC 283), therefore, will probably be a moderate to significant adverse impact on the U.S. industry.

ISAC Group 06: Drugs, Soaps, and Related Articles Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars <u>1/</u> --	19,327	22,200	24,262	27,758	26,160
Imports-----do-----	353	442	497	620	719
Exports-----do-----	919	1,191	1,260	1,488	1,707
Apparent consumption-----do-----	18,761	21,451	23,499	26,890	25,172
Ratio, imports to consumption--percent-----	2	2	2	2	3
Ratio, exports to shipments----do-----	5	5	5	5	7
Total employment--1,000 workers-----	254	259	258	261	265

1/ Data include value of product shipments and services.

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC GROUP 07: PAINTS AND MISCELLANEOUS CHEMICALS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector includes a variety of miscellaneous chemical products such as wintergreen oil, seawater desalting kits, battery acid, paint, jet fuel igniters, fire retardants, wood alcohol, dynamite, inks, naval stores, and laundry soaps. With the exception of paints and allied products, there is no specific industry that manufactures most or any part of these products, many of which are specialty products. Rather, they are part of the output of larger chemical industry establishments or firms. The major industry groups included in the sector are paints, varnishes, lacquers, enamels, and allied products (SIC 2851), gum and wood chemicals (SIC 2861), and miscellaneous chemical products (SIC 289).

The overall economic health of the sector is good. Product shipments, including exports, in 1977 were estimated at \$14 billion, up about 50 percent over the 1973 level of \$9.4 billion. Imports and exports trended upward between 1973 and 1977, with the value of exports being approximately 4 times greater than the value of imports. Exports accounted for an average of 9 percent of total product shipments in the years 1974-77. Imports' share of U.S. consumption during 1973-77 averaged about 2 percent annually.

Employment in the sector between 1973 and 1977 declined from approximately 156,000 to about 143,000, primarily because of the replacement of some labor-intensive operations by new technology and automation. Production workers represented about 59 percent of total employment during the period.

The U.S. sector is in a position of relative strength vis-a-vis foreign competition, owing to its advanced technology, marketing practices, and/or productive capacity. Also, many of the major producers in this sector are multinational in scope with operations in Europe, Japan, and/or Canada. The major problems of rising energy and pollution control costs are common to both U.S. and foreign manufacturers. Although pollution control costs are currently higher in the United States, most industrialized foreign countries are beginning to enact and enforce environmental standards on their industries. The equalization for non-productive costs should help U.S. producers maintain their competitive position in world commerce.

II. NTM import impact

The overall effect on this ISAC sector of U.S. tariff concessions and adoption of the NTM agreements should be negligible. Based on information supplied by STR, the average depth of cut in this ISAC sector is about 50 percent, with a resulting ad valorem equivalent (AVE) rate averaging about 3 percent. However, high transportation costs on imported finished products combined with, among other factors, the U.S. industry's advanced technology, accessible technical service, and/or more predictable delivery have a greater effect on deterring imports than either tariffs or nontariff measures covered by the NTM agreements. Thus, the combined effects of U.S. tariff concessions and adoption of the NTM agreements will probably be negligible.

ISAC GROUP 07: PAINTS AND MISCELLANEOUS CHEMICALS SECTOR ANALYSIS

Duty savings are expected to be absorbed by the foreign supplier and/or importer and will not likely benefit the industrial/intermediate consumer or the consuming public.

III. MTM export impact

There will probably be a negligible effect on this ISAC sector as a result of foreign tariff concessions and adoption of the MTM agreements. Canada's average AVE offer on U.S. goods is 12 percent, a cut of about 6 percent. Japan's offer on U.S. goods is about 5 percent, a cut of about 17 percent, and EEC's offer on U.S. goods is about 5 percent, a cut of about 32 percent. However, tariffs are not significant barriers to trade in this product sector.

Foreign adoption of the MTM agreements will likely have only a minimal effect on U.S. exports in this sector, because nontariff measures are not the principal reason for the relatively low level of U.S. exports of products covered here. As in the case of imports, exports are generally limited by the high transportation costs of bulky finished products, local service which is easily accessible, and reliable domestic products which encourage a preference for national products. Since many firms involved in this sector are multinational, with production facilities overseas as well as in the United States, the MTM agreements will have little if any effect on the exportation of such products. The effects of foreign adoption of the MTM agreements and tariff reductions, together, will have a negligible effect on the level of exports in this product sector, since these other factors have more influence on trade in these commodities.

IV. Foreign trade factors outside the scope of MTM tariffs and MTM agreements

There are many factors outside the scope of the MTM tariffs and MTM agreements which affect this ISAC sector. Some are officially imposed, such as border taxes (e.g., EEC countries), prior deposits (e.g., Italy), and government limitations as to what may be exported (e.g., certain explosives). Many, however, are simply commerce related, such as freight rates, local brand loyalty, safety factors, multinational companies, barter and/or duty-back deals, advanced and/or proprietary technology, and raw material resources. In this ISAC sector, these factors generally far exceed the impact of tariff concessions and the MTM agreements. In certain instances (e.g., artists sets and colors), the negotiations will have a marked effect; however, the factors which were not the subject of negotiations far outweigh those that were considered.

ISAC GROUP 07: PAINTS AND MISCELLANEOUS CHEMICALS SECTOR ANALYSIS**V. Overall impact on sector**

The overall impact of the current negotiations on this ISAC sector should be negligible. Factors not involved in the negotiations generally govern the patterns of foreign trade in this sector and no significant changes in these trade patterns are expected. Therefore, tariff reductions are not likely to benefit either the industrial/intermediate consumer of the consuming public.

ISAC Group 07: Paints and Miscellaneous Chemicals Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	9,445	11,426	11,526	13,100	1/ 14,000
Imports-----do-----	176	294	204	256	370
Exports-----do-----	631	1,121	992	1,209	1/ 1,368
Apparent consumption <u>1</u> /-----do-----	8,990	10,599	10,738	12,147	25,149
Ratio, imports to consumption--percent-----	2.0	2.8	1.9	2.1	1.5
Ratio, exports to shipments----do-----	6.7	9.8	8.6	9.2	9.8
Total employment--1,000 workers-----	156.0	150.8	139.8	139.2	143.1

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 08: RUBBER AND PLASTICS MATERIALS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC sector 08 includes synthetic rubber (vulcanizable elastomers, SIC 2822) and reclaimed rubber (SIC 3031); plastics materials and resins (SIC 2821); and semifinished and miscellaneous finished rubber and plastics products (SIC codes 3011, 3021, 3041, 3069, and 3079). Aggregate statistical data are used for this overall sector analysis; a more detailed breakdown is obtainable from separate analysis on (1) synthetic and reclaimed rubber (subsector 08A); (2) plastics materials: synthetic resins and nonvulcanizable elastomers (subsector 08B); and (3) other rubber and plastics materials (subsector 08C).

There were about 8,300 firms producing rubber and plastics materials in the United States in 1977. About 95 percent of these were engaged in production of the more labor-intensive semifinished and finished products included in this sector. Total U.S. shipments increased from \$31.5 billion in 1973 to \$49.7 billion in 1977, an increase for the period of 58 percent. Much of this growth is attributed to inflation. For example, the quantity of plastics resins (subsector 08B) increased only 14 percent during the period, while the output quantities of synthetic rubber (subsector 08A) tires and rubber footwear in 1977 were actually lower than in 1973. Output quantities for other semifinished and finished products are believed to have increased, but not to the degree indicated by values.

Many of the firms in ISAC sector 08 manufacture products included in two or all three of the subsectors mentioned above. For this reason, aggregate employment statistics and the number of firms could be overstated because of overlapping operations. The statistics show that total sector employment declined from 737,000 workers in 1973 to 651,000 in 1975 before recovering to 719,000 workers in 1977. For subsectors 08A and 08B, it is estimated that about two-thirds of the total employment is production-related; for the more labor-intensive products in subsector 08C, about 80 percent of employment is production-related.

Total sector imports increased from \$1.4 billion in 1973 to \$2.6 billion in 1977. More than 35 percent of the total in 1977 consisted of chiefly radial tires for passenger cars, mainly from Western Europe. The ratio of imports to consumption for the sector fluctuated between 4.2 percent and 5.2 percent during the period.

Total sector exports increased from \$1.7 billion in 1973 to \$2.9 billion in 1977. More than half the total consisted of articles in subsector 08C, especially miscellaneous rubber and plastics products (SIC codes 3069 and 3079) and tires (SIC 3011). Plastics materials (SIC 2821) accounted for another 35 percent, while synthetic and reclaimed rubber (SIC 2822) added another 12 percent. Western Europe, Canada, and Japan were the major markets, but U.S. exports were shipped to virtually every trading area in the world. The ratio of exports to shipments fluctuated between 5.3 percent and 6.9 percent during the 1973-77 period.

ISAC GROUP 08: RUBBER AND PLASTICS MATERIALS SECTOR ANALYSIS

Overall, the sector is competitive in foreign markets. Many of the larger producers are multinational firms that enjoy economies of scale in their operations and compete in foreign markets through local affiliates. The manufacturing processors of miscellaneous rubber and plastics products in subsector 08C, except for film and sheet products, are more labor intensive than the rest of sector 08. Furthermore, many fabricators and converters are small firms incapable of competing in international trade. Generally, these latter products are the most susceptible to import competition.

Within this sector are the following selected industry segments, tires and tubes (SIC 3011), rubber footwear (SIC 3021), and mechanical rubber goods (SIC 3069(pt)), which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Subsector 08C (ISAC Subgroup 08C: Other Rubber and Plastics Materials Subsector Analysis).

II. MTN import impact

Based on information supplied by STR, the average depth of cut (for dutiable imports) for this ISAC sector is 20 percent by the United States. For the overall sector, the probable economic effect of negotiated tariff reductions probably will include a small to moderate increase in the level of U.S. imports; minimal adverse impact on the sector 08 industry; and minor or no beneficial impact on consumers. However, the consuming public may benefit through lower prices on some finished products, while duty savings on bulk materials will likely be absorbed in the trade. Certain subindustries will be more affected than others. For example, certain plastics products, such as household goods, wearing apparel, and Christmas decorations could suffer significant loss of market share to imports (see subsector 08C analysis).

The impact of nontariff measures on the synthetic rubber and plastics resins industries is not significant. However, adoption of the NTM agreements by the GATT probably will result in a small increase in imports of tires because of the removal of the U.S. Government surcharge on tires imported for procurement purposes.

The combined effects of negotiated tariff reductions and adoption of the NTM agreements probably will not be significant for the overall sector.

III. MTN export impact

Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC sector is 36 percent by the EEC, 32 percent by Japan (applied to the United States), and 24 percent by Canada (applied to the United States). Such reductions are not likely to significantly affect the

ISAC GROUP 08: RUBBER AND PLASTICS MATERIALS SECTOR ANALYSIS

U.S. export potential for this sector. In the case of synthetic rubber and plastics materials, most major U.S. producers have local operations in the leading foreign markets. For these products, exports serve primarily to supplement local production until demand is met, or to serve some other ancillary purpose. For some products, such as hose and belting, there might be a modest increase in export potential. As with the U.S. industry, foreign producers enjoy advantages in their domestic markets (i.e., familiarity with local customs) which tend to limit import trade. Adoption of the NTM agreements presently before the Congress will, in all likelihood, have a minimal effect on this sector. Therefore, the overall impact of the proposed tariff reductions and the NTM agreements on U.S. exports is expected to be negligible.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

The major complaint of the industries covered in this sector is the VAT employed by the EEC and other foreign trading areas. (This tax is discussed more fully in ISAC subsector 08B, plastics materials.) Industry sources believe that the VAT is the most important foreign trade factor having an adverse impact on U.S. exports of items covered here. However, the effect of VAT is not limited to products covered in this sector or to those of the chemical industry alone. These industry sources also consider discriminatory ocean freight rates (see subsector 08B), government-owned firms and industries, and locally imposed restrictions against payment for services rendered to U.S. foreign subsidiaries as important additional foreign trade factors outside the scope of the MTN negotiations.

V. Overall impact on sector

The proposed MTN tariff concessions and the NTM agreements will have an overall negligible impact on the aggregate industries, labor, and consumers covered by this sector; although, as noted before, the consuming public may benefit through lower prices on finished products while duty savings on bulk materials will likely be absorbed in the trade. Factors not involved in the current negotiations (e.g., raw material shortages, political alliances, environmental considerations, and those cited above) generally will govern the pattern of foreign trade of the products in sector 08.

Duty savings on many articles included in this sector will likely benefit U.S. consumers to some degree. The impact will of course vary among the many product groups included in this digest, but it is believed that the overall benefits will be moderate.

ISAC Group 08: Rubber and Plastics Materials Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	31,468	38,209	36,884	44,968	49,655
Imports-----do-----	1,402	11,651	1,520	2,212	2,568
Exports-----do-----	1,675	2,654	2,211	2,729	2,940
Apparent consumption-----do-----	31,195	37,206	36,193	44,451	44,283
Ratio, imports to consumption--percent-----	4.5	4.4	4.2	5.0	5.2
Ratio, exports to shipments----do-----	5.3	6.9	6.0	6.1	5.9
Total employment--1,000 workers-----	737	731	651	695	719

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC SUBGROUP 08A: RUBBER MATERIALS SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

ISAC subsector 08A, rubber materials, includes basic raw material rubbers that are either produced synthetically from petrochemicals (SIC 2822) or reclaimed from waste rubber products (SIC 3031). Uncompounded natural rubber is not included in this subsector, because the United States has no large-scale commercial production of natural rubber. However, compounding of imported natural rubber (with antioxidants, fillers, vulcanizing agents, and other rubber processing chemical additives) is considered part of this subsector.

The volume of output attained by the U.S. rubber industry in 1977 was below the levels reached in 1973/74--8 percent below the record level for 1973. Industry sources attribute this apparent leveling off to several factors. For example, the largest end use for rubber is in tires; in turn, the tire industry depends upon the automotive (especially passenger cars) industry. Though automobile sales continue to grow, the average size of cars is diminishing, and less rubber is needed per tire produced. In addition, the rapid takeover of the U.S. tire market by radial tread designs means that tires are longer lasting (meaning lower replacement rates) and that a greater proportion of imported natural rubber per tire is being consumed at the expense of U.S.-made synthetic and reclaimed rubber. Conversely, industry is now emphasizing development of non-tire applications (see ISAC subsector 08C).

The industry faces huge capital expenditures that will be necessary to refurbish and expand existing production plants or to build new ones. Many existing plants were built in World War II, and by present standards are relatively inefficient. In addition, the rising cost of petrochemical raw materials has led to steadily increasing prices over the past few years.

U.S. shipments of rubber increased from \$1.4 billion in 1973 to \$2.6 billion in 1977, but much of the growth is attributable to rising prices. In fact, the quantity of U.S. production in 1977 (5.7 billion pounds) was lower than in 1973 (6.2 billion pounds) or 1974 (5.8 billion pounds). Total U.S. employment in the rubber industry remained steady between 11,000 and 12,000 workers (about two-thirds of whom were production-related) for most of the 1973-77 period.

Worldwide, the United States was the largest producer (31 percent of the total in 1977), but only the third largest exporter (12 percent), largely explained by the fact that U.S. companies have overseas subsidiary production facilities and successfully compete in world markets directly. As with U.S. production, U.S. export quantities in 1976 and 1977 were lower than in 1973 and 1974, but export values increased during the period because of rising prices. The ratio of the value of U.S. exports to U.S. production fluctuated only slightly during 1973-77 ranging from 12.9 percent to 15.7 percent.

ISAC SUBGROUP 08A: RUBBER MATERIALS SUBSECTOR ANALYSIS

U.S. exports meet their toughest competition in Western Europe. Not only do Western European countries operate their own rubber producing facilities, but there is also heavy trade from Japan and increasing trade from East Bloc nations. Nevertheless, 31 percent of U.S. exports went to Western Europe in 1977, down from 38 percent in 1973. Canada and Latin America accounted for the bulk of the remainder (53 percent of the U.S. export total in 1977).

U.S. imports (of synthetic rubber) increased from \$64.8 million in 1973 to \$139.9 million in 1977, but accounted for only 5.9 percent or less of U.S. consumption during 1973-77. Canada was the leading supplier of U.S. imports, accounting for more than half the U.S. total in most years during 1973-77. Japan accounted for about 20 percent each year and most of the remainder came from EEC countries.

II. MTN import impact

Reclaimed rubber is currently duty free and will not be affected by the MTN. Elimination of the 3 percent ad valorem rate of duty on synthetic rubber ^{1/} should have little or no effect on the level of imports. The U.S. industry is generally competitive with imports, and this would not change with the duty being reduced to zero. Any duty savings will probably be absorbed by the foreign supplier and/or importers and will not likely benefit the industrial/intermediate consumer or the consuming public.

Adoption of the proposed NTM agreements probably will have a negligible impact on U.S. imports. When producing companies were canvassed, there was no indication of significant problems resulting from nontariff barriers either in the United States or overseas.

Thus, the combined impact of U.S. tariff concessions and adoption of the proposed NTM agreements on U.S. imports probably will be negligible.

III. MTN export impact

The duty reductions offered by Canada, the EEC and Japan probably will have little effect on U.S. export potential, the industry, labor, or consumers. A significant portion of U.S. exports going to Canada and the EEC are actually transfer shipments by U.S. producers to their affiliated tire plants operating within the boundaries of those markets. In addition, exports

^{1/} Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC subsector is 21 percent by the United States. However, the figure was derived from data including semifinished and finished rubber products not covered by this analysis. For synthetic rubber only, the depth of cut approaches 100 percent.

ISAC SUBGROUP 08A: RUBBER MATERIALS SUBSECTOR ANALYSIS

of specialty rubbers depend heavily upon the specific end-use requirements of the individual customers; price becomes a secondary factor in these cases. In most cases, existing tariffs in foreign markets do not constitute a significant barrier to U.S. exports and those concessions that would benefit U.S. exports are superficial. Though the depth of cuts by Canada, the EEC, and Japan average 3.5 percentage points, ^{1/} the actual foreign rates now applied are often lower. Finally, in certain foreign markets, the United States already supplies all or a major part of each market's imports. Generally, where imports from the United States are only a small part of a foreign market's import consumption, it is not likely that U.S.-made material will undersell domestic products.

Since there are no significant problems resulting from nontariff measures that affect the U.S. rubber industry, the adoption of the NTM agreements probably will not have any impact on the industry. Thus, the combined effect of foreign tariff concessions and adoption of the NTM agreements on the U.S. rubber industry probably will be negligible.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

The U.S. rubber industry (subsector 08A) is not significantly affected by foreign excise taxes, State trading monopolies, or preferential tariffs. While removal of these barriers and the value added tax could certainly benefit the U.S. subsector, the impact on U.S. exports would not be substantial. Certain developing countries that depend heavily upon natural rubber as a basis for their economics or having fledgling synthetic rubber industries of their own impose quotas on imports from all sources, including the United States, but such quotas do not seriously affect the U.S. subsector.

V. Overall impact on subsector

The overall impact of the proposed MTN tariff concessions (both foreign and domestic) and the proposed NTM agreements on subsector 08A, synthetic and reclaimed rubber, will probably be negligible. The total depth of tariff cuts by all parties are not believed to be great enough to result in significant shifts in international trade and the only NTM's acting on trade in rubber materials are not affected by the proposed NTM agreements.

^{1/} Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC subsector is 28 percent by the EEC, 28 percent by Japan (applied to the United States), and 43 percent by Canada (applied to the United States). However, these figures were derived from data covering semifinished and finished rubber products not covered by this analysis. For the bulk of synthetic rubber, foreign tariffs are free or very small.

ISAC SUBGROUP 08A: RUBBER MATERIALS SUBSECTOR ANALYSIS

Duty savings on synthetic and reclaimed rubber probably will be absorbed by the importer, with only a small probability of being passed on to industrial consumers. Since these materials as such are not usually sold on the retail market, such consumers probably will not benefit from duty reductions, because such reductions will not be reflected in prices of finished rubber goods sold to retail consumers.

ISAC Subgroup 08A: Rubber Materials Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,422.0	1,897.0	1,848.0	2,227.0	2,580.0
Imports-----do-----	64.8	80.1	72.8	97.9	139.9
Exports-----do-----	202.4	297.2	268.7	335.6	332.5
Apparent consumption-----do-----	1,284.4	1,679.9	1,652.1	1,989.3	2,387.4
Ratio, imports to consumption--percent-----	5.0	4.8	4.4	4.9	5.9
Ratio, exports to shipments----do-----	14.2	15.7	14.5	15.1	12.9
Total employment--1,000 workers-----	12.0	11.7	10.7	12.0	12.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 08B: PLASTICS MATERIALS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

ISAC subsector 08B covers synthetic resins and plastics mat- ls 1/ (SIC code 2821), including 40 to 50 primary materials produced commercially. (These basic materials are available in thousands of individual compounds each having distinct properties depending on the molecular weight of the resin and the additives present.) By far the largest market share is held by a few large-volume, low-priced products usually referred to as the commodity resins. The 6 leading commodity resins account for three-fourths of the tonnage and 60 percent of the value of all resins; they include low density polyethylene, high density polyethylene, polypropylene, polystyrene (and its copolymers), polyvinyl chloride (PVC), and phenolic resins. The smaller volume plastics are generally high-performance resins possessing special properties such as high strength, weather resistance, or resistance to high temperature. These products tend to be higher in price than the commodity resins. Nonvulcanizable elastomers--plastics materials with rubbery characteristics--compose another small portion of this industry; they are used in a number of low-performance applications such as footwear.

Plastics have end uses in a variety of markets. Three of these markets, packaging (e.g., bottles, blister packages, vials), building/construction (e.g., pipe and fittings), and consumer/institutional (e.g., kitchenware, laboratory supplies) accounted for over half the domestic consumption of plastics in recent years (55 percent in 1977). Packaging applications alone accounted for a quarter of annual consumption of plastics in the United States.

The U.S. synthetic resins and plastics materials industry is comprised of some 250 producers operating about 325 domestic establishments. Twenty-five producers account for more than 60 percent of the industry's annual sales. Industry sources estimated that 36 of these firms each had sales of plastics (including fabricated products) in excess of \$125 million in 1977. The Northeast and South regions of the United States account for about three-fifths of the number of domestic establishments and about two-thirds of the value added by manufacture. Capital expenditures in the plastics industry increased irregularly from \$330 million in 1973 to \$746 million in 1976, or by about 126 percent. Total employment in the plastics materials industry increased irregularly from 54,400 in 1973 to 57,400 in 1977 and 1978, or by 5.5 percent. During this period, production workers comprised about 65 percent of total employment.

From 1973 to 1977, the value of shipments of plastics materials increased irregularly from \$5.7 billion to \$11.3 billion, or by about 99 percent (they reached \$12.6 billion in 1978). By comparison, the quantity of synthetic resins produced increased irregularly from 30.3 billion pounds in 1973 to 34.6 billion pounds in 1977 or by about 14 percent. Plastics production for 1978

1/ The terms "resins" and "plastics" are used interchangeably in the industry. Throughout this subsector analysis the terms "plastics" and "plastics materials" are used interchangeably.

ISAC SUBGROUP 08B: PLASTICS MATERIALS SUBSECTOR ANALYSIS

has been estimated by industry sources at 37.9 billion pounds. Exports of domestic plastics materials increased irregularly from \$656 million in 1973 to \$1.1 billion in 1977 (\$1.2 billion in 1978). Exports represented 8 to 12 percent of the value of production and 9 to 12.5 percent of producers' shipments during the period 1973-78. Imports of plastics materials have been relatively small during the period 1973-77, increasing irregularly from \$74 million in 1973 to \$112 million in 1977, an increase of 51 percent. Imports increased further in 1978, to \$181 million. The ratio of imports to consumption ranged from 1 to 2 percent during the period 1973-78.

The leading domestic plastics producers are large, highly diversified chemical or oil firms that have extensive foreign operations, with the largest foreign facilities located in Western Europe. U.S. producers also have major plastics operations located in Canada, Japan, Mexico, and other Latin American countries. Plastic production is capital intensive and certain economies of scale are achieved with increased plant size. Therefore, where there is a large home market for plastics, such as in the United States, Europe, and Japan, it is most economical for a firm to build a large plant locally. The U.S. plastics manufacturers, operating in their own market, have in the past traditionally had a raw material and energy cost advantage over their chief competitors in Europe and Japan. In recent years, these feed stock costs, which constitute a high proportion of plastics and resins costs, were well below those elsewhere in the world because of U.S. price controls on both oil and natural gas. However, with the impending decontrol of oil and gas prices, the raw material and energy cost advantage may disappear. Further, plastics is a technology-oriented industry and this has afforded the United States a competitive edge over its foreign competition. This advantage also appears to be diminishing, as the technology for many resins, especially the commodity resins, is now readily available.

II. MTN import impact

The overall effect of the reduction of the U.S. rates of duty on subsector 08B, plastics materials, synthetic resins, and nonvulcanizable elastomers, should be minimal. However, in certain specific instances, the negotiated tariff cuts could seriously affect a given plastics material. Two examples of plastics which could be impacted by the concessions are methyl methacrylate-butadiene-styrene (MBS) resins and polyvinyl alcohol resins. In the case of MBS resins, the foreign producers have superior technology and capacity. In the case of polyvinyl alcohol, the foreign producers have much larger operations and, therefore, enjoy significant economy of scale on this product.

Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC subsector is 43 percent by the United States. The current rates of duty (1976 basis) on plastics materials range from a 4.2 percent ad valorem equivalent (AVE) to a 16.8 percent AVE. The negotiated tariff cuts on these plastics materials range from zero to 9.3 percentage points.

ISAC SUBGROUP 08B: PLASTICS MATERIALS SUBSECTOR ANALYSIS

Imports of plastics in basic form have traditionally been small in comparison to both domestic exports and consumption. The low level of plastics imports can be attributed to the following factors: (1) operating in their own market, U.S. plastics producers have a distinct freight advantage; (2) there has been adequate domestic production of plastics in the United States, coupled with excellent technology; and (3) transportation from foreign resins producers to United States processors (i.e., fabricators) can present delivery and service problems.

There are no known U.S. NTM's that significantly affect imports of plastics materials. Therefore, since the proposed NTM agreements do not appear to have a significant bearing on foreign trade in the plastics materials industry, the combined effects of the proposed tariff reductions and NTM agreements on the U.S. plastics materials industry and on the level of imports appear to be negligible.

Duty savings from reductions are likely to be absorbed in the trade, and probably will not benefit the consuming public.

III. NTM export impact

It is believed that there will be a negligible effect on exports of plastics materials as a result of the current trade negotiations. However, the reductions will probably cause a moderate to appreciable increase in the exports of high-performance resins that require extensive technical service and marketing know-how. At present, these products comprise about 5 percent of the output of the domestic industry.

Exports of a particular product decline once it becomes more economical for U.S. plastics manufacturers to establish local production facilities in foreign countries. When this occurs, exports then serve primarily to supplement local capacity to introduce a new product or a new grade of an established product, or to help alleviate a temporary condition, such as a shortage of a starting material (e.g., ethylene).

Based on information supplied by the STR, the average depth of cut (for dutiable imports from the United States) for this ISAC subsector is 36 percent by the EEC, 33 percent by Japan and 18 percent by Canada (applied to the United States). Canadian offers will result in a negligible reduction in the average tariff rate applicable to their imports. In many instances Canada's applied rate is presently lower than their offer.

The proposed NTM agreements are not expected to significantly affect international trade of the plastics materials industry, because there are no NTM's covered by the agreements that presently restrict such trade. Therefore, the overall impact of the proposed tariff reductions and the NTM agreements on U.S. exports is expected to be negligible.

ISAC SUBGROUP 08B: PLASTICS MATERIALS SUBSECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements**

A belief strongly held by the plastics industry is that both the VAT and discriminatory ocean freight rates ^{1/} have a far greater negative impact on U.S. exports than does the aggregate effect of the tariff concessions and the NTM agreements now before Congress.

The VAT is considered by industry to be the single most important adverse foreign trade factor impacting on U.S. exports. The VAT is a turnover (indirect) tax assessed at each stage of economic activity (except at the consumer level) on the full value of the product at the time of sale. It is also known as a "border tax" in that it is imposed on imports and is remitted in full on exports. Therefore, U.S. producers paying a corporate income tax are taxed again on exports to markets employing VAT. Further, for exports to third world markets, U.S. firms still pay a corporate income tax while exporters from areas using VAT have the tax on the exported product remitted to them in full. U.S. plastics exporters also believe that they are penalized because outbound ocean freight rates from the United States are generally substantially higher than are inbound freight rates for the same commodity travelling the same distance. Further, export freight rates for similar or identical products to third world markets from U.S. ports are higher than are rates from equidistant European ports.

Industry sources cited other foreign trade factors (e.g., government-owned companies), but VAT and discriminatory ocean freight rates were reported to be the two most important.

V. Overall impact on subsector

The overall impact of the proposed MTN tariff concessions and the NTM agreements should be negligible. In general, tariffs do not significantly affect international trade in plastics materials among world-class plastics producers, and there are no NTM's covered under the proposed NTM agreements that limit international trade in these items. Therefore, no significant changes in trade patterns are expected to result from the current round of multilateral trade negotiations.

Duty savings on these materials will likely benefit both the importer and the industrial consumers, but the consuming public, which accounts for about 85 percent of the annual consumption of all plastics end products, is not expected to benefit from these duty savings. The savings are expected to be absorbed in the trade because of the many processing steps between the basic resins and the finished plastics products.

^{1/} These two foreign trade factors are so universal that they could impact on virtually any ISAC sector/subsector.

ISAC Subgroup 08B: Plastics Materials Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	5,687	8,444	7,748	10,445	11,300	12,600
Imports-----do-----	74	146	75	103	112	181
Exports-----do-----	656	1,053	707	1,061	1,059	1,181
Apparent consumption-----do-----	5,105	7,537	7,116	9,487	10,353	11,600
Ratio, imports to consumption--percent-----	1.4	1.9	1.1	1.1	1.1	1.6
Ratio, exports to shipments----do-----	11.5	12.5	9.1	10.2	9.4	9.4
Total employment--1,000 workers-----	54.4	57.7	54.3	56.2	57.4	57.4

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC SUBGROUP 08C: OTHER RUBBER AND PLASTICS MATERIALS SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

ISAC 08C, other rubber and plastics materials, includes all articles classifiable in the following SIC codes: 3011, tires and inner tubes; 3021, rubber and plastics footwear; 3041, rubber and plastics hose and belting; 3069, fabricated rubber products, n.e.c.; and 3079, miscellaneous plastics products. Supporting statistical data tables for the subsector analysis are included for each of the above SIC codes as well as for the subsector in the aggregate. ISAC subsectors 08A (rubber materials) and 08B (plastics materials) are analyzed separately.

U.S. shipments of articles covered by subsector 08C increased from \$24.4 billion in 1973 to \$35.8 billion in 1977, displaying an apparent growth rate of 10 percent per year. However, although price indexes are not available for the period, it is estimated that the greater portion of the annual growth rate was attributable to inflation. In fact, the output quantities of tires and footwear actually declined during 1973-77.

The number of producing companies in subsector 08C totaled more than 8,000 in 1977; SIC industry 3079 (miscellaneous plastics products) accounted for 7,600 of them. In perspective, the remaining companies were distributed as follows: SIC 3011, 14 major producers; SIC 3021, 53 companies; SIC 3041, about 200 firms; and SIC 3069, an estimated 300-400 producers.

Total U.S. employment declined from 671,000 workers in 1973 to 586,000 workers during the 1975 recession. By 1977, employment in the subsector had recovered to an estimated 650,000 workers, of whom about 80 percent were production-related. The only portion of the subsector that did not recover was the rubber and plastics footwear industry, for which employment declined from 32,000 workers to 21,000 workers between 1973 and 1977.

The value of U.S. exports, averaging about 4 percent of U.S. shipments annually, increased from \$817 million in 1973 to \$1.5 billion in 1977. On the average, SIC 3079 accounted for 58 percent of total subsector exports annually; SIC 3011 accounted for 25 percent annually, and SIC 3069, for 17 percent annually. Though hose and belting (SIC 3041) exports were relatively small, they doubled during the period.

The value of U.S. imports for the subsector increased from \$1.3 billion in 1973 to \$2.3 billion in 1977. The largest portion (41 percent in 1977) of subsector 08C imports consisted of radial tires from Western Europe. Rubber footwear accounted for 28 percent; the bulk of the remainder consisted of miscellaneous semifinished and finished plastics products. The ratio of imports to consumption increased from 5.1 percent to 6.3 percent during the period.

ISAC SUBGROUP 08C: OTHER RUBBER AND PLASTICS MATERIALS SUBSECTOR ANALYSIS

Overall, the subsector's strengths outweigh its weaknesses. The U.S. hose and belting industry (SIC 3041) is highly competitive both at home and abroad, enjoying probably the best technology available in the world. Furthermore, the market for hose and belting is growing rapidly because of rising interest in coal mining, petroleum exploration, and metals mining worldwide.

The competitiveness of SIC industries 3069 and 3079 appears to be adequate in domestic and foreign markets, as evidenced by a balanced trade situation. However, portions of SIC 3069 and 3079 have had problems trying to compete with low-priced imports. Within this subsector are the following selected industry segments which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures: tires and tubes (SIC 3011); and rubber footwear (SIC 3021). A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Subsector 08C, following the full subsector presentation.

II. MTN import impact

Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC subsector is 32 percent by the United States. However, this figure was derived from data covering only a small part of the articles included in this analysis. The actual average depth of cut was estimated by the Commission staff to be about 20 percent.

The overall impact on subsector 08C of the negotiated tariff concessions will include a moderate increase (estimated 10 percent) in the level of U.S. imports of the articles included in this analysis; there will be only a small impact on the U.S. industry and on employment. Duty reductions will likely be absorbed either by the importers or the industrial/intermediate consumer, but the consumer effect at the retail level will be negligible. However, in certain areas, the effects will be more significant.

For example, increased imports of rubber and plastics articles used for preparing, sewing, or storing of food and beverages; household buckets and pails; and the other household goods, including wall coverings, will likely result in some consumer savings on the retail level, as well as on the middle-man level. Imports of rubber and plastics wearing apparel and Christmas ornaments, religious articles, plaques, and figurines will likely increase significantly with the U.S. producers losing some market share because of their inability to meet the importers' lower prices. Imports of rubber and plastics hose and belting will probably increase significantly, but the rapid growth of the U.S. market will absorb the increases without adversely affecting the domestic industry.

Nontariff measures including customs valuation, standards, import licensing, and subsidies are not believed to have a significant impact on the imports of subsector 08C products in the aggregate. Therefore, the adoption

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of the NTM agreements by the GATT is not expected to have a significant effect on the industry, employment, or consumer interests.

Since the NTM agreements do not appear to have a significant bearing on foreign trade of the products of subsector 08C, the combined effects of U.S. tariff concessions and adoption of NTM agreements on the subsector and on the level of imports will probably be small.

III. NTM export impact

The average depth of cut (for dutiable imports) by Canada, the EEC, and Japan range from near zero percentage points (for rubber footwear) to 5.7 percentage points (for rubber and plastics hose and belting). For the aggregate, the average depth of cut is 4.3 percentage points. ^{1/} The concessions made will have little impact on the export potential for miscellaneous fabricated rubber products (SIC 3069), and virtually no impact on rubber footwear (SIC 3021). According to industry sources, the only significant potential for increased exports of rubber and rubber products is in developing countries.

Foreign reductions in duties will lead to a moderate increase in the export potential for hose and belting (SIC 3041). The U.S. industry should benefit accordingly. With the increased interest in coal mining, oil exploration, and improved methods for mining ores, these products are in high demand. The U.S. industry is believed to be competitive worldwide.

Foreign duty concessions will also bring a moderate increase in export potential for miscellaneous plastics products, especially in Europe. However, that increase will probably soon be offset by price competition from Taiwan, South Korea, and Hong Kong.

The existence of NTM's on U.S. exports has been a problem in the past for limited areas of industrial segments of subsector 08C, but the overall effects have been negligible. Therefore, the adoption of NTM agreements by the GATT probably will not affect the export potential of this industry subsector.

Finally, the combined impact of foreign tariff concessions and adoption by the GATT of NTM agreements probably will have only a moderate effect on export potential, with some benefits to U.S. industry and employment.

^{1/} Based on information supplied by the STR, the average depth of cut (for dutiable imports) for this ISAC subsector is 22 percent by Canada (applied to the United States). STR information for the EEC and Japan are not available. However, such data would be derived from data covering only a small part of the articles included in this analysis. The figures given in percentage points were estimated by the Commission staff.

ISAC SUBGROUP 08C: OTHER RUBBER AND PLASTICS MATERIALS SUBSECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements**

No other foreign trade factors outside the scope of the proposed MTN tariff concessions and the NTM agreements are known that significantly affect, or could significantly affect, the economic health of the ISAC subsector 08C.

V. Overall impact on subsector

The overall impact of the negotiated MTN tariff concessions and the NTM agreements on subsector 08C probably will be small. Imports will increase moderately in certain areas, and exports will increase in some areas. The opposing actions will probably offset each other over the long run, and no major trade balance shifts are expected. The overall impact of adoption of NTM agreements is not expected to be significant to the subsector.

Duty savings on these articles will likely benefit U.S. consumers to some degree on all levels (industrial, wholesale, retail). The beneficial impact will, of course, vary among the many product groups included in this analysis, but it is believed that the overall benefits will be moderate.

VI. Analysis of selected segments of subsector 08C

Tires and inner tubes (SIC 3011).--U.S. value of shipments of tires and tubes increased from \$6.5 billion in 1973 to \$9.0 billion in 1977, but the quantity of output actually declined during the period. U.S. exports increased from \$134 million in 1973 to \$309 million in 1977, averaging 3.3 percent of shipments. U.S. imports increased substantially from \$545 million in 1973 to \$962 million in 1977. The large increase is chiefly attributable to imports of radial tires (for passenger cars) from Western Europe.

Previous to the mid-1970's, American-built bias-ply and bias-belted tires had relatively little competition from European-made radials; bias-ply and bias-belted tires were the mainstay of the U.S. industry. However, in the early to mid-1970's, the popularity of radial tires, coupled with the rising imports of foreign cars equipped with radial tires, put U.S. tiremakers at a disadvantage to the well-established radial tire technology in Europe. The problem was aggravated by the Arab oil embargo (and the ensuing economic recession) which resulted in the downsizing of automobiles, and by a record-long United Rubber Workers strike in 1976, during which imports made substantial gains in U.S. market share. The ratio of imports to consumption jumped from less than 8 percent in 1975 to 10.6 percent in 1976. U.S. producers have made a major shift from bias-ply and bias-belted tire production to radial tire production in the past 5 years, thereby cutting back the importers' advantage, but growth of the industry will probably be slow (2-3 percent annually) for the next few years.

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The probable economic effects of U.S. tariff concessions will probably include only a minor increase in imports of tires and tube, because the average depth of tariff reduction is only 1 or 2 percentage points. The impact on the U.S. industry and employment should be negligible. Duty savings are not likely to be passed on to consumers in the form of lower retail prices.

The only U.S. NTM of significance is a surcharge on imports of tires for government procurement uses. The removal of that surcharge (ranging from 6 percent to 50 percent) through adoption of the NTM agreements will make bids by foreign suppliers more competitive. However, U.S. Government procurement of tires and tubes amounts to only \$30 million per year, compared with total U.S. imports of more than \$900 million in 1977.

The combined effects of U.S. tariff concessions and adoption of the NTM agreements probably will include a moderate increase in imports, with little impact on the U.S. industry and employment, and little benefit to U.S. consumers. However, even a small increase in imports will probably slow recovery of the U.S. tire industry during the remaining years of its changeover to radial tire technology.

The probable effects of foreign tariff concessions will include a negligible impact on U.S. export potential because: (1) current foreign duties are not significant in limiting U.S. exports; (2) most major foreign markets are served by U.S. multinational companies through local subsidiaries; and (3) U.S.-made tires are not price competitive in many markets.

The only significant foreign NTM is (as in the United States) government procurement. Adoption of the NTM agreements probably will do little to stimulate U.S. exports because of conditions already mentioned.

The combined impact of U.S. and foreign tariff concessions and adoption of the NTM agreements will probably be slightly adverse to the U.S. tire and tube industry and employment. While imports will increase moderately, U.S. exports are not expected to be affected significantly.

Rubber and plastic footwear (SIC 3021).--Three major issues affect the competitive position of the U.S. rubber footwear industry in international trade. First, because footwear production is highly labor intensive, U.S. producers are unable to compete on a price basis with imports from Korea, Taiwan, and other Asian countries. Second, the possible removal (as a result of current NTM negotiations) of the ASP method of import valuation could have a significant impact on the U.S. industry's competitiveness. The third major issue involves the current boom in specialized athletic footwear (generally referred to as "joggers") which has had a generally adverse effect on the U.S. industry. U.S. producers did not fully enter this market until 1977, and by that time imports were dominant.

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U.S. shipments of rubber footwear fluctuated between \$556 million and \$590 million during the 1973-77 period. Quantity output declined from more than 160 million pairs in 1973 to 107 million pairs in 1977. The downward trend continued in 1978. Total employment declined from 32,000 workers to 21,000 workers, and the number of producers (employing 20 or more employees) declined from 74 to 53 during the same period.

Imports, on the other hand, increased from 77 million pairs, valued at \$318 million (32 percent of U.S. consumption) in 1973, to 191 million pairs in 1978, valued at \$586 million (64 percent of consumption). In comparison, exports were only about \$6 million in 1978.

There were no duty reductions offered by the United States on imports of rubber footwear. However, new nomenclature and rates of duty are proposed for footwear entering under TSUS item 700.60, under which 90 percent of all rubber footwear imports were entered in 1978. The nomenclature and rates of duty were based on an investigation conducted by the Commission in 1978; the investigation provided for the conversion from the ASP method of import valuation (for tariff purposes) to a method based on transaction value. The final U.S. position provides separate categories for boots and slip-on footwear at a duty rate of 37.5 percent ad valorem. Separate categories are also provided for "joggers" and sneakers, each with a number of duty rates ranging from an ad valorem equivalent of 67.5 percent to 20 percent ad valorem. Adoption of the new nomenclature and converted rates probably will not have an appreciable effect on U.S. imports or on the domestic industry producing like or directly competitive footwear.

The adoption of the NTM agreements probably will have little impact on the U.S. rubber footwear industry. It should be noted that current U.S. NTM's are insufficient to stem the rising tide of low-priced imports. Thus, the combined effect of U.S. tariff concessions and adoption of the NTM agreements probably will not be significant for the rubber footwear industry.

The EEC and Japan made no tariff reduction offers on rubber footwear and Canada has offered a reduction of 5 percentage points. The Canadian offer will not increase U.S. export potential in light of the significant cost disadvantage that the United States faces in all foreign markets. Foreign adoption of the NTM agreements is not expected to improve the export competitiveness of the U.S. rubber footwear industry. Therefore, the combined impact of foreign tariff concessions and adoption of the NTM agreements will be negligible.

The overall NTM impact on the rubber footwear industry is expected to be minimal. Conversion from ASP valuation to transaction valuation will eliminate the current uncertainty and disagreement between importers and producers over duties to be paid on rubber footwear. However, neither that factor nor international adoption of the NTM agreements will improve the competitive status of U.S.-produced rubber footwear. Since little change will appear in the international trade of rubber footwear, neither U.S. industrial consumers nor the consuming public will likely be affected.

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Fabricated rubber products, n.e.c. (SIC 3069(pt)).--An estimated 300-400 U.S. establishments produce mechanical rubber goods such as engine mounts, packing, roll coverings, cable sheathing, and other molded and extruded products. The value of U.S. shipments is estimated to be about \$1 billion per year, accounting for about 45 percent of total U.S. output reported under SIC code 3069. U.S. exports are estimated at \$100 million annually; import data are not separately available.

U.S. tariff concessions probably will result in a moderate increase in U.S. imports of these articles, but industry and employment are not expected to be significantly affected. Likewise, U.S. NTM's are not believed to have an impact on the level of imports. Therefore, the combined effects of U.S. tariff concessions and the adoption of the NTM agreements will be negligible in the mechanical rubber goods industry.

Tariff concessions offered by Canada, the EEC, and Japan are not substantial enough to significantly affect the level of U.S. exports. However, industry sources believe that import licensing, port taxes, and letters of credit all tend to hinder U.S. export potential in Latin American markets. Since developing countries present the best opportunities for increasing export potential for mechanical rubber goods, adoption of NTM agreements that would reduce nontariff measures in Latin America would result in a moderate increase of U.S. exports to that area.

Finally, the combination of U.S. and foreign tariff concessions and adoption of the NTM agreements probably will have a minimal effect. Increased imports resulting from U.S. tariff concessions will be offset by improved export potential resulting from adoption of the NTM agreements. The overall impact on the industry would be negligible, though certain smaller producers could be injured by increased imports, while others may benefit from increased export potential. Industrial consumers will probably see slightly lower prices on certain imported items, but the bulk of the savings are not likely to be passed on by importers. Retail consumers will not be affected, because mechanical rubber goods would constitute only a small part of the cost of larger finished products such as appliances, automobiles, and machinery.

ISAC Subgroup 08C: Other Rubber and Plastics Materials Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	24,359	27,868	27,288	32,296	35,775
Imports-----do-----	1,263	1,425	1,372	2,011	2,316
Exports-----do-----	817	1,304	1,235	1,332	1,549
Apparent consumption-----do-----	24,805	27,989	27,093	32,975	36,542
Ratio, imports to consumption--percent-----	5.1	5.1	5.1	6.1	6.3
Ratio, exports to shipments---do-----	3.4	4.7	4.5	4.1	4.3
Total employment--1,000 workers-----	671	661	586	627	1/ 650

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--ISAC Group 08C, Other Rubber and Plastics Materials, includes all articles classifiable in the following SIC codes; 3011, Tires and Inner Tubes; 3021, Rubber and Plastics Footwear; 3041, Rubber and Plastics Hose and Belting; 3069, Fabricated Rubber Products, n.e.c.; and 3079, Miscellaneous Plastics Products. Statistical tables for each of the above SIC industry codes immediately follow this table.

ISAC Subgroup 08C(pt): Tires and Inner Tubes Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	6,542	7,348	7,143	7,714	8,975
Imports-----do-----	545	571	566	889	962
Exports-----do-----	134	303	306	219	309
Apparent consumption-----do-----	6,953	7,616	7,403	8,384	9,628
Ratio, imports to consumption--percent-----	7.8	7.5	7.6	10.6	10.0
Ratio, exports to shipments----do-----	2.0	4.1	4.3	2.8	3.4
Total employment--1,000 workers-----	115	117	106	104	110

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC Subgroup 08C(pt): Rubber and Plastics Footwear Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	556	590	566	570	575
Imports-----do-----	318	387	392	555	641
Exports-----do-----	3	4	5	6	6
Apparent consumption-----do-----	871	973	621	1,119	1,210
Ratio, imports to consumption--percent-----	36.5	39.8	63.1	49.6	53.0
Ratio, exports to shipments---do-----	.5	.7	.9	1.1	1.6
Total employment--1,000 workers-----	32	29	25	25	21

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC Subgroup O8C(pt): Rubber and Plastics Hose and Belting Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,052	1,250	1,235	1,412	1,525
Imports-----do-----	318	387	392	555	641
Exports-----do-----	43	67	71	68	85
Apparent consumption-----do-----	1,044	1,226	1,225	1,411	1,518
Ratio, imports to consumption--percent-----	3.4	3.5	5.0	4.7	5.1
Ratio, exports to shipments---do-----	4.1	5.4	5.7	4.8	5.6
Total employment--1,000 workers-----	30	31	27	30	31

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC Subgroup 08C(pt): Fabricated Rubber Products, n.e.c. Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	3,265	3,490	3,412	3,900	4,200
Imports-----do-----	13	14	15	23	16
Exports-----do-----	139	185	193	225	251
Apparent consumption-----do-----	3,139	3,319	3,234	3,698	3,965
Ratio, imports to consumption--percent-----	0.4	0.4	0.5	0.6	0.4
Ratio, exports to shipments----do-----	4.2	5.3	5.7	5.8	6.0
Total employment--1,000 workers-----	109	106	90	93	1/ 105

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 08C(pt): Miscellaneous Plastics Products Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	12,944	15,190	14,932	18,700	20,500
Imports-----do-----	352	410	338	477	619
Exports-----do-----	498	745	660	814	898
Apparent consumption-----do-----	12,798	14,855	14,610	18,363	20,221
Ratio, imports to consumption--percent-----	2.8	2.8	2.3	2.6	3.1
Ratio, exports to shipments----do-----	3.8	4.9	4.4	4.4	4.4
Total employment--1,000 workers-----	385	378	338	375	<u>1/</u> 380

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 09: LEATHER AND LEATHER PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

The leather and leather products sector covered in ISAC 09 consists of establishments which tan, curry, and otherwise finish hides and skins and those which manufacture finished products of leather and artificial leather (e.g., vinyl) and certain similar products of other materials (e.g., cotton handbags). Basically, the sector comprises five dissimilar component industries: (1) Leather tanning and finishing, (2) nonrubber footwear, (3) leather apparel, (4) handbags, luggage, and personal leather goods (flat goods), and (5) miscellaneous leather products.

Although the value of the sector's product shipments increased 24 percent from 1973 to a total estimated at \$7.7 billion in 1978, the sector's output actually declined during the period. Output in 1978, as measured by the Federal Reserve Board's Industrial Production Index for SIC No. 31, Leather and Leather Products, declined 1.6 percent from 1977 and 10.8 percent since 1973. The increased dollar value of the sector's shipments between 1973 and 1978 reflects higher labor and material costs, including the rapidly escalating prices of cattle hides, which represent about 70 percent of the cost of leather. In February 1979, for example, the price of hides from heavy native steers averaged 65.3 cents a pound, 73 percent above the year earlier level of 37.8 cents, 422 percent above the February 1975 hide surplus level of 12.5 cents, and 95 percent over the February 1973 level of 33.5 cents.

In addition to escalating raw material prices, another major problem confronting the sector is the influx of low-cost imports, particularly of finished leather products, from less developed or so-called low-wage countries, the major foreign suppliers. Between 1973 and 1978, the value of imports increased 127 percent, from \$1.5 billion to \$3.4 billion. Accordingly, imports' share of the U.S. market rose from a level of 20 percent in 1973 and 1974 to a high of 31 percent in 1978. Since the tanning of leather and the manufacture of leather products are labor intensive, producers in less developed countries have a cost advantage over their U.S. counterparts.

The price differential between U.S.-made and foreign-made leather and leather products is an important factor in accounting for why U.S. exports, particularly of finished leather products, have remained small relative to the sector's total shipments. During 1975-78, exports accounted for only 4 percent of the sector's total annual shipments. Although the value of the sector's exports increased 139 percent from 1973 to a record high \$330 million in 1978, nearly all of the current dollar growth stems from the escalating cost of raw materials and from increased shipments of leather, which in 1978 accounted for 56 percent of the sector's total exports.

Owing to the impact of low-cost imports both at home and abroad, the sector continually incurred increasingly larger trade deficits between 1973 and 1978. Its trade deficit increased from less than \$1.4 billion annually in 1973 and 1974 to nearly \$2.3 billion in 1977 and to more than \$3 billion in 1978. About two-thirds of the 1978 trade deficit, or approximately \$2

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billion, represented nonrubber footwear, which accounted for 61 percent of the total value of imports of leather and leather products that year. Trade deficits registered in 1978 by the leather apparel industry amounted to \$426 million and the handbag, luggage, and personal leather goods industries, \$528 million. The smallest deficit in the sector was incurred by the tanning industry totaling \$30 million.

Competition within the U.S. sector is keen, owing in part to the large but declining number of establishments. In 1976, the number of establishments in the sector totaled 3,285, 7 percent below the 1973 level. Moreover, about 79 percent of the establishments in 1976 employed less than 100 employees each. Average employment in the sector showed a decline of 10 percent from 1973 to a total of 266,000 employees in 1978.

Since circumstances differ among the sector's component industries, each industry is separately profiled below. In terms of the value of product shipments in 1978, the nonrubber footwear industry is by far the largest with about 47 percent of the total. The industries making handbags, luggage, and personal leather goods accounted for 19 percent of total shipments, the tanning and finishing industry, 18 percent, the leather apparel industry, 8 percent, and miscellaneous leather products, 7 percent. The leather tanning and finishing, nonrubber footwear, leather apparel, and luggage segments of the sector are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of the Leather and Leather Products Sector, following the full sector presentation.

Leather tanning and finishing (SIC 3111).--Leather, the tanned hides and skins of animals, is used principally in the manufacture of footwear and apparel. About 400 establishments, employing some 20,000 persons, are engaged in leather tanning and finishing, a labor-intensive operation. Many of the firms in the industry are relatively small, and most produce only one or a few kinds of leather.

The annual value of product shipments in the industry increased from about \$1 billion in 1973-75 to \$1.2 billion annually in 1976-77 and to nearly \$1.4 billion in 1978. In 1978, this represented 18 percent of total sector shipments. However, the current dollar growth primarily reflects rising labor and raw material costs. In fact, the quantity of shipments of leather declined 2 percent between 1973 and 1978, from 21.0 million hides to 20.5 million hides. The value of U.S. imports of leather fluctuated during the 1973-78 period, declining from \$127 million in 1973 to a low of \$88 million in 1975, before increasing sharply, though erratically, to a high of \$215 million in 1978. The value of U.S. exports increased continually between 1973 and 1978, from \$83 million to \$185 million. In 1978 exports' share of the industry's shipments amounted to 14 percent, compared with 8 percent in 1973.

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In recent years, U.S. tanners have been increasingly turning to foreign markets to sell part of their output because their larger domestic customers, such as the leather footwear and apparel industries, are being adversely impacted by low-cost imports. Canada and the EEC are the tanners' principal export markets. In addition to exporting fully tanned leather, U.S. tanners have expanded their exports of partially tanned leather, which is subsequently finished by foreign tanners to local specifications.

Although U.S.-tanned leather is reported to be among the best in the world, U.S. tanners usually are at a competitive disadvantage vis-a-vis foreign tanners in less developed countries owing to the latter's lower labor costs. Moreover, although U.S. tanners by reason of proximity have easy access to the huge U.S. market for cattle hides, that too has come under severe competition from foreign firms. In fact, 1978 exports accounted for an estimated 61 percent of U.S. production of cattle hides derived from commercial slaughter. Since many less developed countries now control their exports of hides, third market users have been increasingly purchasing U.S. cattle hides which has led to tighter U.S. supplies and, consequently, sharply higher prices. In addition, commercial slaughter is down substantially in 1979 and is expected to continue to be down for another year or two, placing further pressure on prices, as cattle are being withheld from slaughter in order to rebuild herds following the trough in the cattle cycle.

Nonrubber footwear (SIC 314).--The number of firms producing nonrubber (primarily leather and vinyl) footwear between 1972 and 1977 declined from about 500 to approximately 350, many of which are small operations. About half of the industry's output is produced by 26 firms. Average employment in the industry also showed a decline, decreasing 15 percent from 1973 to a total of 156,000 employees in 1977 and in 1978.

Profit margins of the industry are well below that for all manufacturing industries, primarily because of higher labor content and an inability to pass on increases in manufacturing costs due to strong competitive pricing, particularly from imports. In 1977 the industry's net operating profits as a percentage of net sales amounted to 6.6 percent, compared with 9.2 percent in 1976 and 14.2 percent for all manufacturing. The industry's profit margins are relatively low, partly because production is fragmented among many small producers who do not have the capital necessary to adopt new technologies. In fact, 1976 capital expenditures by the industry averaged only \$231 for each employee, compared with \$2,293 for all manufacturing.

Mainly because of growing volume of low-cost imports, U.S. nonrubber footwear production declined sharply in the 1970's. U.S. output during 1978 totaled 403 million pairs (\$3.7 billion), down fractionally from the 1977 level of 406 million pairs (\$3.3 billion) and 18 percent from the 1973 level of 490 million pairs (\$3.2 billion). In 1978, the value of nonrubber footwear shipments accounted for 47 percent of total shipments of the sector, making

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Competition within the industry is keen, partly because of the large but declining number of producing establishments. In 1976 the number of establishments in the industry totaled 556, 10 percent below the 1973 level. About 92 percent of the facilities in 1976 employed less than 100 employees each. Average employment in the industry in the years 1975-78 remained virtually unchanged at about 25,000 employees.

Handbags, luggage, and personal leather goods (SIC 3161, 3171, and 3172).--U.S. producers' shipments of handbags, luggage, and personal leather goods (flat goods) increased about 50 percent from 1973 to an estimated \$1.5 billion in 1978. In 1978 such shipments accounted for 19 percent of total sector shipments. Although the value of exports more than doubled between 1973 and 1978, from \$23 million to \$57 million, its share of the industries' total shipments was 4 percent or less annually. During the same period, the value of imports increased about 177 percent to \$585 million, or 29 percent of the U.S. market. Total employment in these industries, which consist primarily of small firms, fluctuated within a narrow range between 1973 and 1978, from a low of 49,000 employees in 1975 and 1978 to a high of 54,000 in 1976 and 1977.

Miscellaneous leather products (SIC 3131 and 3199).--Products covered here are boot and shoe cut stock and findings (SIC 3131) and a variety of leather goods such as saddlery, harness, whips, razor strops, and leather belting (SIC 3199). The value of U.S. producers' shipments increased 49 percent from 1973 to a total estimated at \$567 million in 1978. In 1978 such shipments represented 7 percent of the sector shipments. Although the estimated \$25 million value of exports in 1978 was 3 times greater than that in 1973, it still represented only 4 percent of total producers' shipments. Imports during 1978 amounted to \$88 million, 60 percent above the 1977 level and 42 percent above the 1973 level. Imports' share of the U.S. market in 1978 was 14 percent, compared with 10 percent in 1977 and 14 percent in 1973. Average employment in these industries between 1973 and 1978 remained quite stable, averaging about 15,000 workers.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

U.S. tariff concessions will have little effect on the sector primarily because, on the basis of the value of imports in 1978, about 90 percent of the total would be excepted from any tariff cuts. No duty reductions were made on leather apparel, virtually all luggage, and most leather gloves, handbags, and personal leather goods. In addition, nonrubber footwear was mandatorily excepted by statute from the negotiations, because it is currently subject to import relief under the OMA's.

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The tariff concessions made on leather and certain cotton handbags (TSUS(A) items 706.2205 and 706.2240) will probably lead to increased imports which, in turn, could have a significantly adverse effect on the respective industries and their employees. For leather, the depth of cuts ranging from 25 to 58 percent would further stimulate the upward movement in imports and further increase their share of the declining U.S. market. The duty savings on leather will likely benefit the manufacturers of finished leather products like footwear and apparel, but the consuming public is not expected to benefit as the savings will probably be absorbed in the trade.

The cotton handbags referenced above accounted for only 4 percent of total U.S. imports of handbags in 1977. These handbags have been very popular in recent years and are expected to continue that way, owing to fashion and as a lower price alternative to handbags of leather and plastics, which account for the vast majority of most handbag sales. Prices of leather and plastic bags increased sharply in recent years, but overall demand for handbags has shown little growth. Thus, diversion of trade under these TSUS(A) numbers might occur with significant adverse effect on industry and labor with some duty savings benefit being passed on to the consuming public.

B. Sector impact of U.S. adoption of proposed NTM agreements

U.S. adoption of the NTM agreements will have little or no impact on the leather and leather products industries and on consumers, primarily because the only U.S. nontariff barrier of any significance--the import quotas on nonrubber footwear--will not be affected by the agreements. Concerning the opening up of bidding on Government contracts to foreign suppliers, as required by the Government Procurement Agreement, many of the Government's purchases of these products will be exempt from the agreement, because the set-aside programs under the Buy American Act will be retained for small and minority business. Many of the firms that supply leather products to the Government are typically small businesses. Furthermore, another legislative restriction to be retained is the Berry Amendment, which has been attached to all Department of Defense (DOD) appropriation acts since 1954. This amendment requires DOD to procure footwear and certain other items only from domestic sources. During peace time, DOD purchases approximately \$5-6 million of footwear annually.

C. Combined impact on sector of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined effect on these industries and on consumers of U.S. tariff cuts and U.S. adoption of NTM agreements will probably be slight, since the bulk of the imports will be exempt from tariff cuts and the only U.S. nontariff barrier (OMA's) of any significance affecting the sector will

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not be affected. Although the tariffs were reduced considerably on leather, whatever adverse impact such cuts may have on U.S. tanners should be partially offset by the exception of most finished leather products from any tariff cuts. Imports of finished leather products have been a major factor in the tanners' shrinking domestic market.

III. MTN export impact**A. Sector impact of foreign tariff concessions**

Foreign tariff concessions on leather and leather products will benefit only the U.S. tanning industry. The U.S. industries producing leather footwear and apparel will not benefit because little or no tariff cuts were made on such articles by other developed nations. Foreign tariff concessions on other consumer leather products will probably have little or no effect on U.S. export levels since the import markets in other developed nations are dominated by low-cost goods from developing countries. Moreover, marketing and transportation costs and import duties effectively insulate home-market producers of consumer leather products in other developed nations from imports essentially comparable in price and quality. Only the luggage producers have experienced any significant success in export markets, but many of the major U.S. producers have licensees or wholly owned affiliates in the major markets abroad.

Foreign tariff concessions on leather will probably cause a moderate increase in U.S. exports, with a corresponding beneficial impact on the U.S. tanning industry and its level of employment. Although tariff concessions of Canada and Japan on leather will have little effect on U.S. export potential, concessions of the EEC, which is a potentially large market for the U.S. industry, will probably cause a moderate to an appreciable increase in U.S. exports of leather. For certain items, the duty reduction made by the EEC are significant. For example, its 8-percent ad valorem rate on bovine and equine leather (item 4102B) will be eliminated. In 1976, U.S. exports of bovine and equine leather to the EEC were valued at \$9 million, or about 4 percent of the EEC's total imports of such leather. Since leather is sold on very close margins, the EEC's other duty modifications, ranging from 17 to 24 percent, should also provide for increased U.S. export potential. Moreover, U.S. tanners of bovine leather have greater access to cattle hides than do their EEC counterparts. The EEC duty modifications will partially offset the border taxes imposed on U.S. leather which, according to industry sources, can range up to 31 percent ad valorem.

Although Canada has also made significant duty reductions on leather, its demand for U.S. leather may not expand at all. Canadian manufacturers of footwear and apparel of leather are reported to have been adversely affected by low-cost imports of directly competitive leather products.

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Japan's tariff modifications on leather are, for the most part, merely bindings of current applied rates. Its only actual duty reduction of from 35 percent to 25 percent ad valorem on patent leather and imitation patent leather will still leave a relatively high rate of duty, thereby, having a small effect on export potential for U.S. tanners.

B. Sector impact of foreign adoption of proposed NTM agreements

Foreign adoption of the NTM agreements will not significantly improve the potential for U.S. exports of leather and leather products. The barriers covered by the agreements do not currently impede U.S. exports of leather and leather goods. Moreover, assuming the adoption of the NTM agreements by the less developed countries, U.S. export potential will continue to be limited in these markets by the very high rates of duty imposed on imports.

C. Combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The adoption of the NTM agreements and tariff concessions by the major U.S. trading partners will probably have a slightly beneficial impact on the sector, only because the tanning industry, which accounts for more than half of the sector's exports, will likely experience an increase in exports to the EEC. Little or no duty reductions were made by other developed nations on most finished leather products, while the nontariff barriers covered by the NTM agreements have not affected U.S. trade to any great extent.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Although trade impediments other than those covered by the NTM agreements occasionally arise to affect the U.S. leather and leather products sector, none currently have the adverse impact as do foreign restrictions on cattle hide exports. During the 1970's, restrictions on cattle hide exports were adopted by many less developed countries such as Argentina, Brazil, India, and Uruguay to advance their own tanning and leather products industries. A very large part of their output is shipped to the United States and other developed nations. These export restrictions have forced Japan, the Republic of Korea, and other countries in need of cattle hides, to purchase more of their needs in the U.S. market, thereby, driving up prices amid increasingly tight domestic supplies. In fact, in 1978 the average price paid for all U.S.-produced cattle hides and skins increased 26 percent over the 1977 level. Exports accounted for an estimated 61 percent of U.S. cattle hide production in 1978.

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The only other problem areas materially affecting the sector are the longstanding quotas of Japan and certain taxes of several countries on imported leather. In February 1979, the Governments of the United States and Japan reached an understanding that will significantly increase the export potential of U.S. leather tanners. The understanding, which will be in effect for 3 years, calls for Japan to enlarge its existing quotas to accommodate a potential increase in U.S. leather exports of approximately \$20 to \$30 million. Japan's restrictions go back to the 1940's when they were imposed to help alleviate a balance of payments problem and, more recently, to protect the jobs of a minority group engaged in the tanning of leather.

With respect to taxes, such countries as the EEC nations levy value-added taxes (VAT) on imported leather while remitting such taxes on exported leather. Their remission of VAT on exported leather can put U.S.-made leather at a competitive disadvantage in third market countries and at home, but it is difficult to quantify the degree of this disadvantage. Absolute quotas and border taxes and fees are also imposed by some less developed countries, but U.S. export potential is limited in part by a shortage of foreign exchange in many of these countries.

V. Overall impact on sector

The overall economic impact on the leather and leather products sector resulting from tariff concessions, adoption of the NTM agreements, and continuation of existing trade impediments outside the scope of the NTM will not be adverse in terms of import impact and only slightly beneficial in terms of export potential. Thus, benefits to consumers will be negligible. The United States did not make any tariff concessions, in terms of 1978 trade, on about 90 percent of the total value of imported leather and leather products, nearly all of which were finished leather products. U.S. and foreign adoption of the NTM agreements will probably have little effect on the sector, primarily because the nontariff measures currently affecting it are outside the purview of the agreements. These measures include the OMA's on U.S. imports of nonrubber footwear from Taiwan and Korea, Japan's import quotas on leather which have been recently relaxed, and value-added taxes of the EEC and other countries. In addition, restrictions of less developed countries on their exports of cattle hides will continue to keep prices of such hides and, therefore, leather at artificial levels.

VI. Analysis of selected segments of the leather and leather products sector

Leather tanning and finishing (SIC 3111).--U.S. tariff concessions on leather of 25 to 58 percent will probably lead to increased imports which, in turn, could have a significantly adverse effect on the domestic industry and its level of employment (see Section I for industry profile). Since the magnitude of the tariff cuts will further increase the competitive advantage that foreign tanners in less developed or low-wage countries already

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have over U.S. tanners, imports' share of the declining U.S. market will probably increase significantly from its 1978 level of 15 percent. On the other hand, the significant tariff concessions of the EEC on leather will probably cause a moderate to appreciable increase in exports to that market of U.S.-made leather, reputed to be among the best in the world. Although Canada also made significant tariff cuts on leather, U.S. exports will probably not increase from their current levels primarily because the Canadian leather footwear and apparel industries have reportedly been adversely affected by competing low-cost imports. The tariff modifications made by Japan are primarily bindings of current applicable rates.

U.S. and foreign adoption of the NTM agreements will have little impact on the U.S. tanning industry, because the nontariff measures currently affecting the industry are outside the scope of the MTN (see Section IV).

Nonrubber footwear (SIC 314).--There will be no effect on the U.S. nonrubber footwear industry as a result of tariff concessions and adoption of the NTM agreements. Nonrubber footwear was excepted from the negotiations by the Trade Act of 1974 because the U.S. industry is currently receiving import relief (see section I for industry profile and conditions of competition). Moreover, the industry's export potential will not be improved because other developed nations made little or no reductions in duties on nonrubber footwear.

U.S. adoption of the NTM agreements will not affect the U.S. industry because the only nontariff measure (OMA's) benefitting the industry is outside the scope of the agreements. In addition, the Berry Amendment will continue to prohibit DOD, whose purchases of footwear approximate \$5-6 million annually during peace time, from procuring foreign-made footwear. Foreign adoption of the agreements will also have no effect on the U.S. industry, because it is not export competitive.

Luggage (SIC 3161).--The value of U.S. producers' shipments of luggage increased 42 percent from 1973 to a total estimated at \$550 million in 1978. During the same period, the value of exports more than doubled to \$42 million or 8 percent of producers' shipments in 1978 (some of these exports are parts which are reimported as finished luggage). Imports supplied much of the growth in the U.S. market between 1973 and 1978, rising 173 percent to \$202 million in 1978. Imports' share of the U.S. market, in terms of value, expanded from 17 percent in 1973 to an estimated 28 percent in 1978.

U.S. and foreign tariff concessions and adoption of the NTM agreements will have little or no effect on the U.S. luggage industry. On the basis of the value of 1978 imports, about 98 percent of the total would be excepted from any tariff reductions. Duty reductions made by other developed nations on luggage will also have little effect on the U.S. industry, primarily because the industry is not export competitive. The few U.S. producers which make internationally known, brand-name luggage usually service their markets in other developed countries through foreign affiliates, divisions, subsidiaries, and/or licensees. U.S. and foreign adoption of the NTM agreements will have no significant impact on the industry, primarily because the nontariff measures covered by the agreements have had little effect on the industry.

ISAC Group 09: Leather and Leather Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars ^{1/} -	6,171	6,317	6,419	7,133	7,077	7,746
Imports-----do-----	1,535	1,543	1,671	2,327	2,559	3,389
Exports-----do-----	138	184	231	250	270	^{1/} 330
Apparent consumption-----do ^{1/} -----	7,568	7,676	7,859	9,210	9,366	10,805
Ratio, imports to consumption--percent ^{1/} ----	20	20	21	25	27	31
Ratio, exports to shipments----do ^{1/} -----	2	3	4	4	4	4
Total employment--1,000 workers-----	296	288	269	281	272	266

^{1/} Estimated.

Source: Compiled from official statistics of the U.S. Departments of Commerce and Labor, except as noted.

ISAC Subgroup 09(pt): Leather Tanning and Finishing Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments—millions of dollars	1,042	1,013	1,029	1,237	1,216	1,368
Imports-----do-----	127	125	88	181	156	215
Exports-----do-----	83	102	140	139	150	185
Apparent consumption-----do-----	1,086	1,036	977	1,279	1,222	1,398
Ratio, imports to consumption—percent	12	12	9	14	13	15
Ratio, exports to shipments-----do-----	8	10	14	11	12	14
Total employment--1,000 workers-----	23	22	22	23	22	22

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--In terms of quantity, shipments of leather during the period actually rose from 21.0 million equivalent hides in 1973 to 23.3 million in 1976 and then declined to 20.5 million hides in 1978.

ISAC Subgroup 09(pt): Nonrubber Footwear Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	1/ 3,249	3,293	3,234	3,533	1/ 3,348	1/ 3,674
Imports-----do-----	976	983	1,132	1,449	1,599	2,057
Exports-----do-----	18	23	30	36	35	45
Apparent consumption-----do-----	1/ 4,207	4,253	4,336	4,946	1/ 4,912	1/ 5,686
Ratio, imports to consumption--percent-----	1/ 23	23	26	29	1/ 33	1/ 35
Ratio, exports to shipments----do-----	1	1	1	1	1	1
Total employment--1,000 workers-----	183	172	158	164	156	156

1/ Estimated.

Source: Compiled from official statistics of the U.S. Departments of Commerce and Labor, except as noted.

ISAC Subgroup 09(pt): Leather Wearing Apparel Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments—millions of dollars	511	546	553	564	611	647
Imports	159	179	199	298	346	444
Exports	6	10	9	13	13	1/ 18
Apparent consumption	664	715	743	849	944	1/ 1,073
Ratio, imports to consumption—percent	24	25	27	35	37	1/ 41
Ratio, exports to shipments	1	2	2	2	2	1/ 3
Total employment—1,000 workers	22	28	25	25	1/ 25	1/ 25

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 09(pt): Handbags, Luggage, and Personal Leather Goods Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars----	989	1,088	1,174	1,301	1/ 1,390	1/ 1,490
Imports-----do-----	211	206	218	350	403	585
Exports-----do-----	23	35	37	41	49	57
Apparent consumption-----do-----	1,177	1,259	1,355	1,610	1/ 1,744	1/ 2,018
Ratio, imports to consumption--percent-----	18	16	16	22	1/ 23	1/ 29
Ratio, exports to shipments--do-----	2	3	3	3	4	4
Total employment--1,000 workers-----	52	52	49	54	54	49

1/ Estimated.

Source: Compiled from official statistics of the U.S. Departments of Commerce and Labor, except as noted.

ISAC Subgroup 09(pt): Miscellaneous Leather Products Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments--millions of dollars	380	377	429	498	512	567
Imports-----do-----	62	50	34	49	55	88
Exports-----do-----	8	14	15	21	23	1/ 25
Apparent consumption-----do-----	434	413	448	526	544	630
Ratio, imports to consumption--percent-----	14	12	8	9	10	14
Ratio, exports to shipments---do-----	2	4	3	4	4	1/ 4
Total employment--1,000 workers-----	16	14	15	15	1/ 15	1/ 14

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 10: STONE, CLAY, GLASS, AND CONCRETE PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC group 10, comprising major SIC group 32, includes establishments engaged in the manufacture of flat glass (SIC 321), other glass products (SIC 322 and 323), cement (SIC 324), structural clay products (SIC 325), pottery (SIC 326), concrete, gypsum, and plaster products (SIC 327), cut stone products (SIC 328), and abrasive, asbestos, and miscellaneous nonmetallic mineral products (SIC 329).

Producers' shipments increased from \$23.9 billion in 1973 to \$31.9 billion in 1977; for 1978, the industry forecasted an increase in shipments of more than 10 percent. Although imports increased substantially between 1973 and 1977, from \$2.2 billion to \$3.6 billion, their share of the U.S. market remained fairly stable, averaging 9.5 percent in 1973-76 and 11.6 percent in 1977. Exports in 1977 totaled \$4.6 billion, 4 percent below the 1975 level of \$4.8 billion, but more than double the 1973 level of \$2.2 billion. Exports' share of producers' shipments in 1977 was 14.5 percent, compared with 17.8 percent in 1975 and 9.2 percent in 1973. Gemstones and industrial diamonds in 1977 accounted for nearly 50 percent of imports; coal, coke, and compositions thereof accounted for over 50 percent of 1977 exports. Employment in the sector declined from 644,000 workers in 1973 to 589,000 workers in 1975, then rose to 623,000 in 1977.

Within this sector are the following selected industry segments, ceramic floor and wall tile and ceramic tableware, which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Stone, Clay, Glass and Concrete Products Sector, following the full sector presentation.

II. MTN import impact

On the basis of data provided by the STR, the ad valorem equivalent (AVE) of U.S. imports in 1976 averaged 13.7 percent. The average AVE of final U.S. offers is 8.7 percent. The proposed duty reductions will likely cause an across-the-board modest increase in the level of U.S. imports and have a negligible adverse impact on U.S. labor and industry. Since most products covered in this sector are not particularly active in world trade, the proposed decrease in duty of 5.0 percentage points, or 36 percent, can be absorbed by the overall sector. U.S. consumer interests will find no discernible benefit as duty savings will likely be absorbed in the trade. The proposed NTM agreements will have little impact on the sector since the nontariff measures covered by the agreements currently do not adversely impact the sector.

ISAC GROUP 10: STONE, CLAY, GLASS, AND CONCRETE PRODUCTS SECTOR ANALYSIS**III. MTN export impact**

On the basis of the STR data, foreign tariff concessions amounted to 2.0 percentage points from the EEC, 1.3 percentage points from Japan, and 4.8 percentage points from Canada. These proposed cuts will probably generate only a modest increase in exports, primarily because most of the industries in this sector are not export oriented due to the nature of the product--heavy, bulky, and/or relatively inexpensive. The foreign adoption of the NTM agreements will not lead to increased U.S. exports, because the nontariff measures covered by the agreements do not significantly impede the sector's shipments abroad.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no significant trade factors outside the scope of the MTN that affect the exchange of goods in this sector.

V. Overall impact on sector

The overall impact of tariff reductions and adoption of the NTM agreements will be a modest increase in U.S. imports and exports. The anticipated increase in imports will have little overall effect on the sector and its level of employment, because most of the products covered in this sector are not particularly active in world trade and will have no effect on U.S. consumers.

Foreign duty reductions will probably result in increased exports for those industries within the sector that have experienced increasing export trends. The industries include those producing sand, gravel, and stone, coal and coke, certain clays, refractories, ceramic insulators, laboratory glassware, fiberglass, float glass, and glass containers.

VI. Analysis of selected segments of the stone, clay, glass and concrete products sector

Ceramic floor and wall tile industry.--The domestic industry currently consists of 39 firms operating 59 plants in 16 States. Between 1968 and 1977, there was a net decrease of 4 domestic plants, 9 were closed and 5 were opened.

U.S. consumption declined from 469 million square feet in 1973 to 325 million square feet in 1975, then increased to 500 million square feet in 1977. Similarly, U.S. shipments declined from 301 million square feet in 1973

ISAC GROUP 10: STONE, CLAY, GLASS, AND CONCRETE PRODUCTS SECTOR ANALYSIS

to 236 million in 1975, then increased to 288 million square feet in 1977. U.S. imports declined from 170 million square feet in 1973 to 92 million in 1975, then increased to 218 million in 1977.

The domestic industry has attempted to improve its competitive position against imports in a number of ways including reduction of employment, restriction on wage increases, increased productivity, and pursuit of legal relief under U.S. antidumping statutes. However, the import-to-consumption ratio increased from 36 percent in 1973 to an all-time high of 44 percent in 1977. Imports' success in the U.S. market primarily reflects their considerable price advantage over comparable U.S.-made products which, in 1977, averaged about 40 cents per square foot.

U.S. export potential is negligible because U.S.-produced tile is at a price disadvantage in foreign markets. Between 1973 and 1977, the quantity of U.S. exports accounted for less than 2 percent of total annual U.S. shipments.

There are currently no known U.S. or foreign NTM's restricting trade in ceramic floor and wall tile. In the past, certain ANSI standards for tile thickness, which imported tile could not generally meet, were a precondition for approval of FHA-backed financing, but such standards expired in 1975.

Ceramic tableware.--The domestic ceramic tableware industry is composed of three distinct subdivisions: (1) producers of earthen tableware; (2) producers of household china tableware; and (3) producers of hotel and restaurant china tableware. Most firms produce only one type of ware. In 1977, earthen tableware was produced by 15 firms, household china tableware by 4 firms, and hotel and restaurant china tableware by about 12 firms.

U.S. shipments of ceramic tableware declined from 22 million dozen pieces in 1973 to 19 million dozen pieces in 1976, then increased to 20 million dozen pieces in 1977. Shipments are about equally divided between earthen and china tableware, with hotel and restaurant china tableware accounting for the bulk of the shipments of china tableware. Exports' share of U.S. producers' shipments has been historically small; during 1973-77, it ranged from less than 1 percent in 1973 to 3 percent in 1977.

Imports of ceramic tableware between 1973 and 1977, which were generally greater than U.S. shipments, increased from 22 million dozen pieces to 35 million. Their share of the U.S. market in 1973-77 ranged from a low of 54 percent in 1974 to a high of 65 percent in 1977. Imports' share of the U.S. market for earthen tableware increased irregularly from 58 percent in 1973 to 70 percent in 1977, while their share of the U.S. china tableware market in 1977 was 59 percent.

The U.S. earthen tableware industry in 1972 received an affirmative injury determination under the escape-clause provisions of the Trade Expansion Act of 1962; consequently, U.S. import duties were increased on certain earthen and china tableware articles. In the MTN negotiations, the United

ISAC GROUP 10: STONE, CLAY, GLASS, AND CONCRETE PRODUCTS SECTOR ANALYSIS

States negotiated a new nomenclature for all ceramic tableware articles which will modernize the U.S. tariff schedules for such items and insure that U.S. tariff concessions will not adversely impact the domestic industry.

U.S. and foreign adoption of the NTM agreements will have little or no impact on the U.S. ceramic tableware industry, because the nontariff measures covered by the agreements do not currently impact the industry.

ISAC Group 10: Stone, Clay, Glass, and Concrete Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	23,867	26,381	27,074	30,635	31,922
Imports-----do-----	2,204	2,482	2,265	2,757	3,579
Exports-----do-----	2,191	3,878	4,815	4,711	4,637
Apparent consumption-----do-----	23,875	24,985	24,524	28,681	30,864
Ratio, imports to consumption--percent-----	9.2	9.9	9.2	11.2	11.6
Ratio, exports to shipments----do-----	9.2	14.7	17.8	15.4	14.5
Total employment--1,000 workers-----	643.8	638.7	588.8	598.9	622.9

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC GROUP 11: FERROUS METALS AND PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC sector 11, comprising SIC groups 331 and 332, covers such basic industries as ferroalloys, steel mills, and steel foundries. Between 1973 and 1977, shipments increased from \$33 billion to \$49 billion. Imports increased from \$3 billion to \$6 billion. Employment declined from about 700,000 in 1973 to 600,000 in 1977. Exports increased from \$1.1 billion in 1973 to \$1.8 billion in 1977. Steel mill products account for about 75 percent of this sector.

The profit experience of these U.S. industries has been less than satisfactory during recent years. Net income as a percentage of sales ranged from about 1 percent in 1977 to about 7 percent in 1974. It was about 5 percent in 1975 and 4 percent in 1976. Partially as a result of poor earnings, this sector has had difficulty attracting adequate capital to build new plants and to modernize existing facilities on the scale which appears necessary for the decade ahead.

Since the 1975 recession, the growth rate in demand for steel and ferroalloys has been dampened by the post-oil-crisis slowdown in economic growth in the developed countries. Estimates of future growth in world demand have been revised downward. In the most recent period, industry capacity utilization rates in the United States have been somewhat higher than in Japan and considerably higher than in Europe. Unused capacity in Europe and Japan (well over 100 million tons on an annual basis) and expanding production and capacity in developing countries pose an additional threat to the U.S. industry.

The sector's relative strengths lie in the large size of U.S. market, good raw materials base, and productive employees. Relative weaknesses would include inadequate return on investment, lack of capital formation, uncertainty of import levels and prices, slow growth in consumption and excess world capacity.

Within this sector are the following selected industry segments, ferroalloys and steel mills, which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Ferrous Metals and Products Sector, following the full sector presentation.

II. MTN import impact

Based on STR information, the average depth of cut for this ISAC group is 1.2 percentage points, or 26 percent. The depth of cut for the EEC is 28 percent, for Japan 26 percent, and for Canada 25 percent.

ISAC GROUP 11: FERROUS METALS AND PRODUCTS SECTOR ANALYSIS

Duty reductions are likely to cause an increase in imports, aggravating the problems faced by the industries in this sector. Any reduction in duties would give foreign suppliers an additional competitive advantage in price at a time when imports are already at record levels. U.S. employment is decreasing, and profits of the U.S. industry are extremely low. A reduction in duty may benefit the primary consumer in selected cases; if price competition intensifies, however, the U.S. consuming public is not likely to benefit from such small duty reductions.

The U.S. adoption of the proposed NTM agreements will not greatly affect the volume of imports.

III. MTN export impact

Based on STR information, the average depth of cut for this ISAC group is 26 percent (1 percentage point) for the EEC, 24 percent (0.4 percentage points) for Japan, and 37 percent (2.9 percentage points) for Canada. The foreign duty reductions are minimal and will likely result in only small increases in U.S. exports. The reduction offer by Canada will probably have the greatest beneficial effect on U.S. exports.

The U.S. industries would benefit more from the foreign adoption of NTM agreements than from tariff reductions. In particular, the subjecting of government subsidies to international criticism could result in production on a more economic basis. Definitive agreements concerning government purchasing, custom valuation and standards will also contribute to increasing exports. Therefore, the combined impact of foreign tariff concessions and adoption of NTM agreements is primarily that of the agreements alone.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

The principal factors other than tariffs and NTM's are border taxes (VAT's) in the EEC. These VAT's ranged from 5 percent to 30 percent depending on the product and country. These taxes are a more significant barrier to U.S. exports than either tariffs or NTM's covered by the agreements.

V. Overall impact on sector

U.S. reductions in tariffs, although small, will likely cause an increase in imports; such an increase cannot help the current services problems facing ISAC 11 industries. Foreign reductions in the duties and adoption of NTM agreements will have a small effect on increasing U.S. exports. However, given the large overcapacity in the world and the detrimental impact of non-

ISAC GROUP 11: FERROUS METALS AND PRODUCTS SECTOR ANALYSIS

NTM factors on U.S. exports, the overall impact of NTM negotiations will be negligible at best and could adversely affect industries in this sector. The U.S. consuming public is not likely to benefit from the 1.5 percent average reduction in import duties.

VI. Analysis of selected segments of ferrous metals and products sector

Ferroalloys.--The U.S. ferroalloys industry has declined almost without interruption over the past 10 years. Domestic production declined from 2.4 million tons in 1968 to 1.6 million tons in 1977. Employment declined from 10,600 production workers in 1968 to 8,300 in 1977. Imports rose steadily from 321,000 tons in 1968 to 1 million tons in 1977. The ratio of imports to consumption rose from 13.6 percent in 1968 to 43.8 percent in 1977.

Steel mill products.--The U.S. steel industry has experienced almost no growth in shipments over the last 10 years. Shipments in 1977 totaled 91 million tons compared to 92 million tons in 1968. Shipments were highest in 1973 (111 million tons) and lowest in 1975 (80 million tons). During 1968-77, employment, except for the 1973-74 boom years, steadily declined from 421,000 production workers in 1968 to 337,000 in 1977. Since 1968, imports of steel mill products have ranged from a low of 12.0 million tons in 1975 to a high of 19.3 million tons in 1977. The percentage of U.S. imports supplied by Japan and the EEC ranged from 75 to 88 percent over this period. U.S. exports of steel mill products are small in relationship to both U.S. production and imports. In 1977, U.S. exports were 2.0 million tons, the lowest amount in the last 10 years.

Analysis applicable to both segments.--Duty reductions are likely to result in an increase in imports, aggravating the current problems facing the U.S. ferroalloys and U.S. steel industries. U.S. NTM's consist mainly of various actions such as the trigger-price mechanism for steel products only, a non-injury test in countervailing duty actions, and the use of constructed costs to determine dumping margins. In view of the increasing imports of these products, both absolutely and relative to U.S. consumption, U.S. NTM's collectively do not appear to present serious barriers to imports. Buy American Act provisions for U.S. Government purchases provide for a difference of 6 percent (12 percent in a labor-depressed area) between the price of imports and domestic steel and ferroalloys products. Imports of steel mill products and ferroalloys usually undersell the domestic products by margins of 10-15 percent in normal trade; as a result, this NTM has not significantly affected imports.

The foreign tariff concessions are too small to significantly affect U.S. exports. Foreign NTM's are found in such areas as government subsidies, government purchasing, and customs valuation. It is extremely difficult to pinpoint the exact effect these NTM's have on the level of U.S. imports and exports. However, given the relative attractiveness of the U.S. market in terms of sizes and higher prices vis-a-vis the export market and the lack of excess U.S. capacity, U.S. exports are not greatly affected.

ISAC Group 11: Ferrous Metals and Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	32,985	43,939	38,820	43,733	<u>1/</u> 49,000
Imports-----do-----	2,988	5,422	4,491	4,465	5,953
Exports-----do-----	1,146	2,299	2,096	1,543	<u>1/</u> 1,802
Apparent consumption-----do-----	34,827	47,062	41,215	46,655	53,151
Ratio, imports to consumption--percent-----	8	11	10	9	11
Ratio, exports to shipments----do-----	3	4	5	3	3
Total employment--1,000 workers-----	682	689	600	634	<u>1/</u> 600

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 12: NONFERROUS METALS AND PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC sector 12, containing part of SIC major group 33, includes establishments engaged in the smelting and refining of primary and secondary nonferrous metals (SIC 333 and 334); rolling, drawing, and extruding of nonferrous metals (SIC 335); the production of nonferrous metal castings (SIC 336); the production of miscellaneous primary metal products (SIC 339); and the production of nonferrous forgings (SIC 3463).

Producers' shipments fluctuated from \$26.1 billion to \$33.5 billion during the 1973-77 period. Imports had a pattern similar to that of the business cycle, decreasing from \$4.3 billion in 1974 to \$3.2 billion in 1975 and then increasing to \$4.8 billion in 1977. Exports increased from \$1.3 billion in 1973 to \$2.5 billion in 1977. Imports exceeded exports by a ratio of about two to one throughout the period and accounted for 10 to 14 percent of apparent U.S. consumption. Exports ranged between 4 and 7 percent of U.S. shipments during the 1973-77 period. Employment decreased from 282,000 in 1973 to 233,000 in 1977.

This sector is divided into the following subsectors--copper (12A), lead (12B), zinc (12C), aluminum (12D), and other nonferrous metals (12E). Copper and zinc are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. Separate analyses of all these industries are given in subsectors 12A-12E, which follow.

II. MTN import impact

For the total nonferrous metal sector, U.S. duty offer reductions are equivalent to a 40 percent depth of cut for the world according to data provided by the STR. On a bilateral basis, U.S. tariff reductions are equivalent to cuts of 27 percent for the EEC, 32 percent for Japan, and 53 percent for Canada.

The probable effects of these proposed duty reductions vary as follows: no increase in imports or adverse impact on the copper industry and labor or on the industries and labor producing certain miscellaneous nonferrous metals; a modest increase in imports of lead, zinc, and aluminum, with little or no impact on the lead, zinc, and aluminum industries and labor; and an appreciable increase in imports of unwrought magnesium and magnesium alloys, with a significant adverse impact on this part of U.S. industry and labor. Except for unwrought magnesium and magnesium alloys, duty savings are likely to be absorbed in the trade, with no benefit accruing to industrial consumers or the consuming public. With respect to unwrought magnesium and magnesium alloys, only industrial consumers would receive some benefit from duty savings.

ISAC GROUP 12: NONFERROUS METALS AND PRODUCTS SECTOR ANALYSIS

Since adoption by the United States of all the NTM agreements would probably have no impact on the U.S. nonferrous metals industry, the net effect of the U.S. duty reductions and adoption of the agreements would be that of the duty reductions.

III. NTM export impact

Foreign duty reductions for the nonferrous metals sector are equivalent to a depth of cut of 21 percent for U.S. exports to the EEC, 26 percent for exports to Japan, and 39 percent for exports to Canada, based on data provided by the STR.

The foreign duty concessions are not expected to increase the overall export potential of the nonferrous metal industries covered by this sector analysis because the foreign duties are already low or nil and hence not a significant barrier to trade.

Because adoption of the proposed NTM agreements would probably have no impact on the level of U.S. exports of nonferrous metals, the overall effect of proposed duty reductions and adoption of the agreements would be negligible.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Foreign trade factors that have deterred U.S. exports include the EEC value-added tax, government ownership of nonferrous metals production facilities, and higher required domestic costs for legislated pollution and safety measures.

V. Overall impact on sector

For the sector as a whole, the combined probable economic effects resulting from the U.S. and foreign duty reductions, together with adoption of the NTM agreements, will not be significant for industry, labor, or consumers. Only the U.S. industry and labor producing unwrought magnesium and magnesium alloys will suffer a significant adverse impact from an appreciable increase in imports of such nonferrous metals resulting from the duty reductions. The industrial consumers of unwrought magnesium and magnesium alloys will receive some benefit from duty savings.

ISAC Group 12: Nonferrous Metals and Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments <u>1</u> /--millions of dollars--	28,809	33,454	26,093	31,752	32,460
Imports-----do-----	2,873	4,266	3,179	4,143	4,805
Exports-----do-----	1,306	1,884	1,957	1,785	2,476
Apparent consumption-----do-----	30,376	35,836	27,315	34,110	34,789
Ratio, imports to consumption--percent-----	9.5	11.9	11.6	12.1	13.8
Ratio, exports to shipments----do-----	4.3	5.3	7.2	5.2	7.1
Total employment--1,000 workers-----	281.7	263.1	221.8	235.2	232.8

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 12A: COPPER SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector of ISAC 12 covers establishments engaged in the production of primary copper (3331), secondary copper (3341(pt)), rolled, drawn, and extruded copper (3351), and cast copper (3362). Estimated U.S. producers' shipments from 1973 to 1977 ranged from a high in 1974 of \$10.3 billion to a low in 1975 of \$7.3 billion. Estimated total employment decreased from 78,000 in 1973 to 67,000 in 1977. In 1976, about one-half of the shipment values reported for this sector were accounted for by refined copper (primary and secondary) and about 40 percent, by rolled, drawn, or extruded products. The remaining 10 percent of shipments were castings. Imports had the pattern of the business cycle, peaking at \$796 million in 1974 and then decreasing sharply to \$322 million in 1975 before rebounding to \$787 million in 1977. U.S. imports as a percent of consumption ranged from 4 percent in 1975 to 9 percent in 1977. Exports decreased steadily from a high in 1974 of \$406 million to a low of \$189 million in 1977; their share of U.S. output was between 2 and 5 percent in these years.

Although the industry experienced low profitability and had a large inventory of refined copper in recent years, the inventory decreased in 1979 and the price of refined copper reached a record high.

The strength of the U.S. copper sector, relative to the industries in foreign countries, lies in the large size of the U.S. market and in a large supply of copper ore in the United States. The greatest weakness, relative to foreign producers, lies in high costs of U.S. production.

II. MTN import impact

The modest proposed reductions in duty are likely to have no effect upon the level of imports, U.S. industry, labor, or consumers.

The adoption by the United States of all the MTN agreements would probably have no impact upon the U.S. copper industry. Thus, the combined impact of the proposed duty reductions and MTN agreements would be negligible.

According to data from the STR, the U.S. offers would cut the AVE duty rate from 1.7 percent to 1.4 percent, or 0.3 percentage points.

III. MTN export impact

The foreign reductions in duty are not likely to result in additional U.S. exports of copper because most of the present rates are low to moderate and the differences between the present duty rates and the offers are too small to encourage additional exports. According to data from the STR, the

ISAC SUBGROUP 12A: COPPER SUBSECTOR ANALYSIS

depth of cut in the rates to the United States ranged from 21 to 43 percent. In addition, the U.S. copper sector is not export competitive because domestic producers have relatively high costs of production. Moreover, foreign markets are served through a number of overseas affiliates.

Foreign adoption of the proposed NTM agreements would probably have no impact on the level of U.S. exports because the U.S. industry is not export competitive. Thus the overall impact of the duty reductions and NTM agreements will be negligible.

IV. Foreign trade factors outside the scope of MTM tariffs and NTM agreements

In many developing countries, copper is a significant export item and essential to a nation's economic wellbeing. As a result, the U.S. copper industry competes against foreign producers who must consider national welfare and social and political objectives when marketing their product in international commerce.

The domestic industry also faces a competitive disadvantage relative to some foreign producers in the comparative cost of required pollution and safety measures.

V. Overall impact on subsector

The adoption of the MTM tariff reductions and agreements would probably have little effect on the level of U.S. imports or exports, on copper producers, or on copper consumers.

ISAC Subgroup 12A: Copper Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments <u>1</u> /--millions of dollars--	8,920	10,250	7,276	9,062	8,000
Imports <u>2</u> /-----do-----	478	796	322	726	787
Exports <u>2</u> /-----do-----	375	406	331	279	189
Apparent consumption <u>1</u> /-----do-----	9,023	10,640	7,267	9,509	8,598
Ratio, imports to consumption <u>1</u> /--percent----	5.3	7.5	4.4	7.6	9.2
Ratio, exports to shipments <u>1</u> /-do-----	4.2	4.0	4.6	3.1	2.4
Total employment <u>1</u> /--1,000 workers-----	78	76	65	68	67

1/ Estimated.

2/ Does not include data on castings.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 12B: LEAD SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector of ISAC 12 covers establishments engaged in the production of primary unwrought lead (SIC 3332), secondary unwrought lead (SIC 3341(pt)), rolled, drawn, and extruded lead (SIC 3356(pt)), and lead castings (SIC 3369(pt)).

This industry was plagued with an oversupply of the product and low profitability for several years prior to 1977, but now is healthy with the price of unwrought lead at an all-time high. Estimated U.S. producers' shipments increased from \$562 million in 1973 to \$767 million in 1974 and then decreased to \$633 million in 1977. U.S. imports increased irregularly from \$54 million in 1973 to \$159 million in 1977. Prior to 1977, the import-to-consumption ratio fluctuated between 7 and 9 percent, but jumped sharply to 21 percent in 1977. Exports fluctuated irregularly with a low of \$17 million in 1976 and a high of \$49 million in 1974. From 1973 to 1977, exports as a share of U.S. producers' shipments ranged between 3 and 7 percent. Estimated employment was steady at 4,400 during this time.

In 1976, the United States International Trade Commission determined that the domestic unwrought lead industry would not be seriously injured or threatened with serious injury by imports of unwrought lead from Australia and Canada if the 1974 findings of dumping were revoked.

The U.S. industry enjoys the advantages of a large domestic market and a world market that is relatively unencumbered by duties on unwrought lead. The industry also has the disadvantage of having to cope with stricter pollution control and safety regulations than those faced by foreign producers.

II. NTM import impact

The proposed reductions in duty are likely to result in a modest increase in imports, but there would probably be little or no adverse impact on most of the U.S. lead industry and labor, except that producers of unwrought lead are likely to experience some underutilization of plant capacity and some plant closures by secondary producers. The reductions in duty will have this effect because the quantity imported is quite responsive to small changes in the price difference between North America and the rest of the world while other factors, such as capacity utilization and employment, are less responsive. According to data from the STR, the overall U.S. offers would cut the AVE duty rate from 4.9 percent to 3.2 percent, or 1.7 percentage points. Although duty savings are expected to benefit the industrial consumer of unwrought lead, the duty savings on wrought lead items are expected to be absorbed by the foreign suppliers or importers. The consuming public is unlikely to benefit from any of the duty savings.

The impact on the domestic lead industry of U.S. adoption of all NTM agreements would probably be nil because there are no significant NTM's for lead.

ISAC SUBGROUP 12B: LEAD SUBSECTOR ANALYSIS

The combined impact of the proposed reductions in duty and U.S. adoption of the proposed NTM agreements is likely to be slightly adverse.

III. NTM export impact

The foreign reductions in duty are not likely to result in additional exports of the lead products included in this subsector. The foreign duties on unwrought lead are low or nil and are not a significant barrier to trade. Foreign duty reductions are small. According to data from the STR, the foreign duty reduction would cut the AVE's of Japan's rates by 0.3 percentage points and those of Canada's rates by 1.9 percentage points. Because labor and material costs are higher these wrought lead products are not export competitive. In addition, many wrought lead items are fragile and hard to ship. Moreover, three major producers have overseas affiliates that serve foreign markets.

The impact of foreign adoption of the proposed NTM agreements could be beneficial, but almost exclusively for the subsidy agreement and only for countries other than Japan, the EEC (except Ireland), and Canada. These major developed nations have domestic situations that make new subsidized production facilities unlikely.

The combined impact of the foreign reductions in duty and foreign adoption of the NTM agreements is likely to be of minimal benefit.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

The unwrought lead industry and many of the consumers of unwrought lead have felt a significant impact from the implementation of pollution control regulations. In addition, a new Occupational Safety and Health Administration regulation that would halve lead exposure in the workplace will have a heavy impact on both producers and consumers in the future, while new Environmental Protection Agency standards for lead in the air will have most of their impact on the secondary lead producers.

V. Overall impact on subsector

The overall impact of the NTM tariff reductions and NTM agreements on U.S. imports and exports is likely to be almost nil and there would be none on industry, labor, or consumers. That is, a slightly adverse impact from duty reductions on U.S. imports might be cancelled out by a slightly beneficial impact from foreign adoption of the proposed NTM agreements.

ISAC Subgroup 12B: Lead Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	562	767	675	1/ 670	1/ 633
Imports-----do-----	54	60	49	64	159
Exports-----do-----	39	49	22	17	31
Apparent consumption-----do-----	577	778	702	717	1/ 761
Ratio, imports to consumption--percent-----	9.4	7.7	7.0	8.9	20.9
Ratio, exports to shipments----do-----	6.9	6.4	3.3	2.5	4.0
Total employment--1,000 workers-----	4.4	4.4	4.4	4.4	4.4

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 12C: ZINC SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector of ISAC 12 covers establishments that produce primary unwrought zinc (SIC 3333), secondary unwrought zinc (SIC 3341(pt)), rolled, drawn, and extruded zinc (SIC 3356(pt)), and zinc casting and die casting (SIC 3369(pt)).

This industry has been unable to cope with conditions of oversupply of its product and low profitability or loss; in early 1979, these conditions abated slightly and the price of unwrought zinc crept up a bit from its low.

U.S. producers' shipments increased irregularly from \$369 million in 1973 to \$527 million in 1977. Imports increased substantially from \$278 million in 1973 to a high of \$493 million in 1976 and then decreased to \$372 million in 1977. The import-to-consumption ratio fluctuated between 42 and 47 percent except for 1975, when it dropped to 36 percent. Exports dropped irregularly from \$27 million in 1973 to \$17 million in 1977. Employment decreased from 5,700 in 1973 to 5,000 in 1977.

In 1978, the United States International Trade Commission determined that the domestic industry was not being seriously injured or threatened with serious injury by imports of unalloyed unwrought zinc.

The U.S. industry enjoys the advantages of a large domestic market and a world market that is relatively unencumbered by duties on unwrought zinc. It has the disadvantage of having to accept a low price for its unwrought product, coupled with a large volume of imports and a substantial loss of the die casting market to other materials.

II. NTM import impact

The proposed reductions in duty are likely to result in a modest increase in imports of unwrought zinc and articles of zinc and no increase in imports of zinc waste and scrap (which is now under a temporary duty suspension) and imports of wrought zinc items other than articles of zinc (which are minor and likely to remain so). According to data from the STR, the U.S. offers on zinc would cut the AVE average duty rate from 1.9 percent to 1.7 percent for the world. Producers of and workers on zinc and zinc articles are likely to experience a negligible impact from U.S. tariff cuts. The reductions in duty will have this effect because the quantity of the major items imported is quite responsive to small changes in the price difference between North America and the rest of the world while other factors, such as capacity utilization and employment, are less responsive. Duty savings are likely to be absorbed by the foreign suppliers and importers and are therefore unlikely to benefit industrial consumers and the consuming public.

The impact on the domestic zinc industry of U.S. adoption of all NTM agreements would be nil because there are no significant NTM's for zinc.

ISAC SUBGROUP 12C: ZINC SUBSECTOR ANALYSIS

The combined impact of the proposed reductions in duty and U.S. adoption of the proposed NTM agreements is likely to be slightly adverse.

III. NTM export impact

The foreign reductions in duty are not likely to result in additional exports of unwrought zinc because foreign duties are low or nil already and hence not a significant barrier to trade. According to data from the STR, the depth of cut for foreign offers to the United States was 42 percent for Canada, 23 percent for the EEC, and 36 percent for Japan. The foreign offers made to the United States would cut the respective AVE's 5.1 percentage points, 1.5 percentage points, and 3.0 percentage points. In addition, there is a limited supply of high-grade ore suitable for unwrought zinc plants, and any additional domestic capacity will be used to displace imports rather than be exported. These reductions are also not likely to result in additional exports of wrought zinc items because the products are in stiff technological and price competition with products made of certain other materials and because of relatively high raw materials costs.

The impact of foreign adoption of the proposed NTM agreements would be beneficial, but limited mainly to the subsidy agreement and mostly to countries other than Japan, the EEC (except Ireland), and Canada. Domestic economic conditions in these major developed nations decrease or minimize the likelihood of new subsidized production facilities.

The combined impact of the foreign reductions in duty and foreign adoption of the NTM agreements is likely to be slightly beneficial.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

There are no other known factors outside the scope of the NTM tariffs and NTM agreements that currently affect or could potentially affect in a significant way the economic health of the industries in this subsector.

V. Overall impact on subsector

The overall impact of the NTM tariff reductions and NTM agreements on U.S. imports and exports is likely to be almost nil and will have no effect on U.S. industry, labor, or consumers. That is, a slightly adverse impact from duty reductions on U.S. imports might be cancelled out by a slightly beneficial impact from foreign adoption of the proposed NTM agreements.

ISAC Subgroup 12C: Zinc Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments <u>1/</u> --millions of dollars--	369	577	533	641	527
Imports-----do-----	278	458	283	493	372
Exports-----do-----	27	59	23	19	17
Apparent consumption-----do-----	620	976	793	1,115	882
Ratio, imports to consumption--percent-----	44.8	46.9	35.7	44.2	42.2
Ratio, exports to shipments----do-----	7.3	10.2	4.3	3.0	3.2
Total employment--1,000 workers-----	5.7	5.5	5.4	5.3	5.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 12D: ALUMINUM SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector of ISAC 12 includes establishments that produce primary and secondary aluminum (SIC 3334 and 3341(pt)), aluminum plates, sheets, and foil (SIC 3335), aluminum extruded products (3354), and other rolled and drawn aluminum products n.e.c. (SIC 3355).

Between 1973 and 1977, the estimated value of U.S. producers' shipments had a pattern similar to that of the business cycle, increasing from \$10.6 billion in 1973 to \$11.5 billion in 1974, dropping to \$9.3 billion in 1975 and then increasing to \$14.7 billion in 1977. During 1973-77, imports more than doubled, increasing from \$301 million to \$693 million. During the same period, exports increased from \$387 million to \$543 million, accounting for 4 to 5 percent of U.S. shipments. Estimated total employment remained relatively stable during 1973-77, averaging about 73,000 workers.

The aluminum industry has shown a higher rate of growth than other metal-producing industries and the economy as a whole, owing in part, to its historical price stability. In 1977, however, the price per pound of ingot, in constant dollars, was more than double the 1973 price, which was Government price controlled.

In the past 10 years, 94 percent of the primary aluminum consumed in the United States was produced domestically. It is anticipated, however, that the proportion of such demand supplied by imports from countries with relatively lower cost electric energy will increase. The U.S. Bureau of Mines estimates that in the years 1985 and 2000, domestic production will satisfy 85 and 80 percent, respectively, of probable U.S. demand.

The subsector's relative strengths lie in the large size of the U.S. market within which it operates, modern highly efficient production facilities, and a productive work force. Relative weaknesses include a bauxite reserve which is small when compared with consumption and more difficult to process than imported bauxite and an uncertain long-term electric power supply in the Pacific Northwest. In the Pacific Northwest, where about one-fourth of domestic primary aluminum capacity is located, the Bonneville Power Administration has announced that it cannot renew its power contracts with the industry after the 1984-88 period, when the present contracts expire. After this period available power will be allocated among the various classes of consumers.

II. MTM import impact

Based on STR information the average depth of cut for this ISAC subsector is 2.2 percentage points or 74 percent. The proposed reductions in duty are likely to result in a modest increase in imports, with little or no adverse impact on the U.S. industry and labor. Current duties are low and have little

ISAC SUBGROUP 12D: ALUMINUM SECTOR ANALYSIS

effect on the level of U.S. imports. Since these articles are not consumer goods but are subject to further costly industrial processing, the consuming public is unlikely to benefit from any duty savings. However, such firms as nonintegrated aluminum fabricators, who are dependent, in part, upon imports of unwrought aluminum, would benefit from duty reductions.

The U.S. adoption of proposed NTM agreements is not expected to significantly affect the volume of imports because there are no known NTM's which affect the level of aluminum imports. The combined impact of the proposed reductions in duty and adoption of the proposed NTM agreements would be negligible.

III. NTM export impact

Based on STR information the foreign depth of cuts for this ISAC subsector is 83 percent (1 percentage point) for the EEC, 41 percent (0.5 percentage point) for Japan, and 31 percent (0.7 percentage point) for Canada. Foreign reductions in duty are not expected to significantly increase the export potential of these articles. Such duties are not currently a significant factor limiting U.S. exports, and foreign markets are served by overseas affiliates of U.S. firms. In addition, in some product categories, U.S. producers lack excess capacity for export markets and are reluctant to increase capacity for this purpose because export potential would not justify additional investment or marketing effort.

Foreign adoption of proposed NTM agreements are not expected to significantly affect the level of exports because the aluminum subsector has little export potential for the reasons given above. Thus, the combined impact of proposed foreign reductions in duty and foreign adoption of the NTM agreements would be negligible.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

There are no known foreign trade factors outside the scope of NTM tariffs and the NTM agreements which would affect trade in the industry.

V. Overall impact on subsector

The overall impact of the NTM tariff reductions and NTM agreements on U.S. imports and exports is likely to be minimal. Any beneficial impact from foreign adoption of the proposed NTM agreements can be expected to be offset by the adverse impact from duty reductions on U.S. imports. Thus, U.S. industry and labor will not be adversely affected. However, nonintegrated aluminum fabricators would benefit from duty reductions on imports of unwrought aluminum and the ultimate consumer would benefit from a more reliable supply of certain aluminum articles.

ISAC Subgroup 12D: Aluminum Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	10,582	11,494	1/ 9,300	1/ 12,500	1/ 14,700
Imports-----do-----	301	421	419	599	693
Exports-----do-----	387	511	462	533	543
Apparent consumption-----do-----	10,496	11,404	9,257	12,566	14,850
Ratio, imports to consumption--percent-----	2.9	3.7	4.5	4.8	4.7
Ratio, exports to shipments----do-----	3.7	4.5	5.0	4.3	3.7
Total employment--1,000 workers-----	74.7	77.2	66.0	72.0	75.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 12E: OTHER NONFERROUS METALS SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector of ISAC 12 covers establishments that produce the rest of the primary and secondary unwrought nonferrous metals, such as gold, magnesium, nickel, silver, and tin (SIC 3339 and 3341(pt)), rolled, drawn, and extruded items of these same metals (SIC 3356(pt)), castings of these metals (3369(pt)), and primary metal products (SIC 3398(pt) and 3399).

Average annual U.S. producers' shipments were estimated to be \$8.9 billion in the 1973-77 period. Imports increased irregularly from \$1.8 billion in 1973 to \$2.8 billion in 1977. The import-to-consumption ratio increased from 18 percent in 1973 to 29 percent in 1977. Exports increased rapidly from \$478,000 in 1973 to \$1.7 billion in 1977 and accounted for about a fifth of U.S. shipments in 1977. Estimated employment declined irregularly from 118,900 to 81,400 during this time.

The domestic industry enjoys the advantages of a large domestic market and a world market that is fairly unencumbered by duties on many of these items, especially the unwrought ones. It has the disadvantage of having little or no domestic ore reserves for production of many of the more important unwrought metals in this subsector.

II. MTN import impact

Based on STR information the average depth of cut for this ISAC subsector is 3.3 percentage points, or 37 percent. The proposed duty reductions on items in this subsector are likely to have no effect on producers, importers and consumers except for unwrought magnesium and magnesium alloys. The duties on unwrought magnesium and magnesium alloys are considered to be significant barriers to trade and the proposed duty reductions are likely to cause a substantial increase in imports. This increase in imports would have a significant adverse impact on U.S. industry and labor. Duty savings are expected to benefit the industrial consumers of unwrought magnesium and magnesium alloys, but not the consuming public. Generally, NTM's have not been significant factors limiting U.S. imports and adoption of the proposed agreements by the U.S. will have little, if any, impact on this subsector. Thus, the combined impact of U.S. tariff concessions and adoption of the NTM agreements would range from a significant adverse effect on producers and labor for magnesium and magnesium alloys to no effect for other nonferrous metals in this subsector.

III. MTN export impact

Based on STR information foreign depths of cuts for this ISAC subsector were 27 percent (1.4 percentage points) for the EEC, 41 percent (1 percentage point) for Japan, and 39 percent (2.6 percentage points) for Canada.

ISAC SUBGROUP 12E: OTHER NONFERROUS METALS SUBSECTOR ANALYSIS

The foreign reductions in duty are not likely to result in additional exports of most of these items because most of the foreign duties are low already and hence not a significant barrier, and because expanded production of many of the more important unwrought metals would be hindered by inadequate domestic reserves of their ores. Domestic producers of the wrought items have high costs, especially for labor. Generally, U.S. exports have not been limited by foreign NTM's and foreign adoption of the proposed agreements will not substantially increase total exports. Thus, the overall impact of foreign duty reductions and adoption of the proposed NTM agreements will be nil.

IV. Foreign trade factors outside the scope of MTM tariffs and NTM agreements

The only other foreign factor that might have an impact on domestic industry is the EEC value-added tax on the high-value, mostly wrought, metal items.

V. Overall impact on sector

The overall impact of the MTM tariff reductions and NTM agreements on U.S. imports and exports is likely to be nil for all these nonferrous metals except for unwrought magnesium and magnesium alloys, and the impact on the U.S. industry and labor producing these magnesium products would be significantly adverse. Only industrial consumers would receive some duty savings.

ISAC Subgroup 12E: Other Nonferrous Metals Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments <u>1/</u> millions of dollars--	8,376	10,366	8,302	8,879	8,600
Imports-----do-----	1,762	2,531	2,106	2,261	2,794
Exports-----do-----	478	859	1,119	937	1,696
Apparent consumption <u>1/</u> -----do-----	8,660	12,038	9,296	10,203	9,698
Ratio, imports to consumption--percent-----	18.2	21.0	22.7	22.1	28.8
Ratio, exports to shipments----do-----	5.7	8.3	13.5	10.6	19.7
Total employment <u>1/</u> 1,000 workers-----	118.9	100.0	81.0	85.5	81.4

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 13: CUTLERY, TABLEWARE, AND HANDTOOLS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC 13, comprising parts of SIC major group 34 and 39, includes establishments that manufacture household cutlery (SIC 3421), silverware, plated ware, and stainless steel ware (SIC 3914), and handtools (SIC 3423 and 3425).

Domestic shipments from these industries increased continuously during the period, from \$2.5 billion in 1973 to over \$3.7 billion in 1977. Economic indicators suggest that these industries will experience an aggregated increase in shipments of at least 15 percent in 1978. From 1973 to 1977, imports increased from \$300 million to more than \$500 million; exports during the same period also increased, from \$300 million in 1973 to \$572 in 1977. The ratios of imports to apparent consumption and exports to producers' shipments were fairly stable during this period and amounted to 14 percent and 15 percent, respectively, in 1977. Total employment in these industries decreased slightly from 139,000 in 1973 to 125,000 in 1977.

For the most part, the industries manufacturing products included in this sector require a high degree of hand labor, which places them at a price disadvantage with comparable products produced in low-wage countries. Another competitive advantage of foreign made products is derived from the lower cost of raw materials, which constitutes a significant part of the total cost of the finished product. The relative strength of the domestically produced products is dependent upon the high degree of quality that has become a trade-mark of the domestic industries. Within this sector are the selected industry segments tableware and handtools, which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTM tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Cutlery, Tableware, and Handtools Sector, following the full sector presentations.

II. MTM import impact

Based on STR information, the average depth of cut for this ISAC group is 4.2 percentage points or 36 percent. This proposed decrease in duty would probably accelerate the existing upward trend of imports, thereby adversely affecting many of the industry components included in this sector. The industrial consumer and the consuming public will probably benefit by lower prices, slower rises in prices, and/or greater product availability.

Implementation of MTM agreements would have little or no impact on the domestic industries.

III. MTM export impact

Based on STR information the foreign depth of cuts for this ISAC group was 34 percent (2.3 percentage points) for the EEC, 33 percent (2.1 percentage points) for Japan, and 42 percent (7.3 percentage points) for Canada.

ISAC GROUP 13: CUTLERY, TABLEWARE, AND HANDTOOLS SECTOR ANALYSIS

The overall effects of the foreign tariff offers would tend to moderately enhance the export capabilities of domestic manufacturers. In many instances, however, increasing production costs would offset the benefit resulting from the foreign offer. The foreign adoption of NTM agreements would serve to produce a more stable atmosphere for export marketing, especially for domestic handtool manufacturers.

IV. Foreign trade factors outside the scope of MTM tariffs and NTM agreements

Foreign NTM's outside the scope of the agreements, including port, dock, and warehouse taxes, consular approval of invoice and other shipping papers, and required deposits of large percentages of the value of the export shipments prior to the shipping date (the money is returned to the seller in 180 days), tend to foreclose potential export markets to most small and medium producers.

V. Overall impact on sector

U.S. imports have increased significantly in the last 5 years. The overall impact of the tariff reductions and NTM agreements would increase the adverse conditions that have resulted from past imports. The overall effect of foreign tariff offers and NTM agreements would be moderate. The industrial consumer and the consuming public will probably benefit by lower prices, slower rises in prices, and for/or greater product availability.

VI. Analysis of selected segments of cutlery, tableware, and handtools sector

Tableware.--The tableware industry is composed of about 70 major companies, employing about 10,000 employees. Shipments in 1977, including interplant transfers, amounted to about \$150 million. Exports of these products were negligible, not more than 1 percent of shipments. Imports amounted to about \$160 million.

Tableware is sold principally in two markets--retail and institutional. The retail market consists largely of households, which purchase flatware through department stores, variety stores, specialty shops, or mail-order catalogs, or may acquire it through other retail establishments as premiums. The latter is especially true of the cheaper types of flatware. The institutional market includes airlines, restaurants, cafeterias, hospitals, hotels, nursing homes, schools, the U.S. Government, and other organizations that sell food.

U.S. NTM's consist mostly of standards prescribed and regulated by Federal regulatory agencies and the Federal Government's procurement practices, which are mainly for use in military installations.

ISAC GROUP 13: CUTLERY, TABLEWARE, AND HANDTOOLS SECTOR ANALYSIS

Foreign NTM's similar to those in the United States, are not effective in most cases because several U.S. firms have foreign subsidiaries.

The combined impact on U.S. industry of the adoption by the United States of all NTM agreements would probably be negligible. A large part of the U.S. tableware market already is supplied by imports with the U.S. firms having their established places or portions of the market. Thus, U.S. adoption of the NTM agreements and tariff offers would not materially alter the current market situation.

The combined effect on the U.S. industry of foreign adoption of all NTM agreements would have no practical effect on the U.S. marketing of tableware abroad, since the U.S. tableware industry generally is not export competitive.

The implementation of foreign offers would have no significant impact on the tableware industry.

Handtools--The handtool industry is comprised of over 200 individual establishments and employs more than 50,000 production workers. Many of these establishments are relatively small manufacturing operations. Shipments in 1977 are estimated at nearly \$2.5 billion. Two product groups, saws and pipetools, and wrenches and spanners, represent almost 30 percent of the value of total shipments. Exports accounted for nearly \$243 million worth of shipments. Imports amounted to over \$120 million.

The general public is the largest purchaser of handtools. Exports are distributed widely throughout the world. Canada, Venezuela, and Belgium are three of the larger markets for U.S.-made handtools. Imports are concentrated primarily in the low value, low quality lines of handtools sold through drugstores and retail chain stores. Japan is by far the major supplier of handtools to the U.S. market.

U.S. NTM's on nonpowered handtools consist almost entirely of Buy American provisions in the Federal Government procurement law. Domestically made handtools receive a 50 percent price difference preference over foreign-made handtools under the provisions of the law. The single U.S. NTM provides little protection or benefit to the domestic handtool producers because importers have found numerous loopholes in the law that have allowed them to increase their sales to the Federal Government, especially in the various lines of special toolsets.

Foreign NTM's are varied and numerous, ranging from port, dock, and warehouse taxes to consular approval of invoice and other shipping papers. The foreign NTM's, such as requiring deposits of large percentages of the value of the export shipments prior to the shipping date (the money is returned to the seller in 180 days), tend to foreclose potential export

ISAC GROUP 13: CUTLERY, TABLEWARE, AND HANDTOOLS SECTOR ANALYSIS

markets to most small and medium producers. Laws governing procurement by many foreign governments are structured to allow the procuring officer to choose the method of bidding. In this manner, many export sales opportunities for items such as handtools may easily be denied U.S. manufacturers. The overall impact of foreign NTM's on domestic handtool manufacturers has been restrictive in comparison to the single U.S. NTM.

The combined impact on U.S. industry of U.S. adoption of all NTM agreements would probably be negligible. The U.S. industry does not manufacture many of the items now being imported. U.S. tariff offers, however, would cause imports to increase at a rate greater than the existing trend, thereby adversely affecting domestic manufacturers.

The combined impact on U.S. industries of foreign adoption and implementation of all NTM agreements would be beneficial. NTM agreements are not uniformly applied, and the acceptance of a common code would, in effect, produce a stable atmosphere for export marketing. Foreign tariff offers would have a moderate effect on the export potential of U.S. producers because of the increasing cost required to produce the high-quality handtools.

ISAC Group 13: Cutlery, Tableware, and Handtools Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	2,477	2,663	2,758	3,199	3,711
Imports-----do-----	311	335	304	409	514
Exports <u>1</u> /-----do-----	313	425	494	512	572
Apparent consumption-----do-----	2,475	2,573	2,568	3,096	3,653
Ratio, imports to consumption--percent-----	12.6	13.0	11.8	13.2	14.1
Ratio, exports to shipments----do-----	12.6	16.0	17.9	16.0	15.4
Total employment--1,000 workers-----	139	133	116	125	125

1/ Export statistics are slightly understated because data are not available for some of the products included in this sector.

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC GROUP 14: OTHER FABRICATED METAL PRODUCTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

ISAC 14 includes establishments engaged in the manufacture of metal cans and shipping containers (SIC 341), various nonelectric plumbing and heating items (SIC 343), fabricated metal products (SIC 344 and 349), screw machine products (SIC 345), metal stampings (SIC 346(pt)), and lawn and garden equipment (SIC 3524).

Most of these products are made to order and, therefore, must conform both to cost estimates and completion date of a contractor's project. Thus, the key competitive factors for the fabricator are quality (i.e., manufactured to exact specifications), price, and timeliness of job site delivery.

The value of U.S. producers' shipments increased from \$43.6 billion in 1973 to \$56.6 billion in 1976, before declining to an estimated \$50 billion in 1977. The value of exports rose continuously between 1973 and 1977, from \$1.5 billion to more than \$3 billion. Exports represent a relatively small but growing share of producers' shipments, increasing from 4 percent of the total in 1973 to about 6 percent in 1977. Although the value of imports advanced 75 percent from 1973 to nearly \$2 billion in 1977, the sector's favorable balance of trade grew from \$376 million to nearly \$1.1 billion during the period. Imports' share of the U.S. market in 1977 was 4 percent, compared with 3 percent in 1973. Average employment in the sector declined from 1.09 million employees in 1973 and 1974 to slightly less than 1 million in 1975, then increased to almost 1.04 million in 1977.

Within this sector is the industrial fasteners segment, which is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of this segment appears in Section VI, Analysis of Selected Segments of Other Fabricated Metal Products Sector, following the full sector presentation.

II. MTN import impact

On the basis of 1976 trade data provided by the STR, the average depth of cut in this ISAC sector will be 3 percentage points to an ad valorem equivalent rate of 4.3 percent. This reduction will be likely to cause a modest increase in overall imports, which will probably have little or no impact on the sector or its level of employment. Imports' share of the \$50 billion U.S. market is relatively small, owing in large part to the competitive position of many of the segments in this sector. In fact, the U.S. sector's overall favorable balance of trade grew regularly from 1973 to 1977 because of the surge of exports by many of the industrial segments.

The U.S. fabricated metal products industry generally enjoys market advantages such as proximity to users and familiarity with local customs, as well as certain licensing arrangements that contribute significantly to its ability to compete with imports. Thus, the proposed duty reductions will

ISAC GROUP 14: OTHER FABRICATED METAL PRODUCTS SECTOR ANALYSIS

probably result in a negligible effect on the level of U.S. imports of the products considered here, which will have little impact on the overall industry. Any duty savings that might accrue will probably be absorbed by foreign suppliers and importers and will not likely benefit industrial or intermediate consumers or the consuming public.

Since the proposed NTM agreements do not generally have a significant bearing on imports of products in this ISAC sector, the effect of these agreements on the sector will be negligible, primarily because of the market advantages referred to above.

III. NTM export impact

Industry sources have indicated that the governments of rapidly developing countries in the Western Hemisphere (Mexico, Venezuela, Brazil and Argentina) have imposed a number of NTM's and apply special duties on steel products that may have a general impact on U.S. exports of fabricated metal products. In addition, foreign tariff concessions are somewhat less than U.S. concessions and, therefore, will probably generate only a modest increase in U.S. exports. Foreign adoption of the NTM agreements, if all-inclusive, may have some marginal benefit to the U.S. sector if they provide relief from the NTM's and special duties mentioned above. Based on information provided by the STR, the average depth of cuts offered for this sector by the EEC, Japan, and Canada are 30 percent, 29 percent, and 40 percent, respectively.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

There are no other significant trade factors affecting the exchange of goods in this sector.

V. Overall impact on sector

The tariff reductions and NTM agreements will have little or no effect on U.S. industry or labor, because of this ISAC sector's competitive position. U.S. exports will probably increase modestly as a result of foreign duty reductions.

VI. Analysis of selected segments of other fabricated metal products sector

Industrial fasteners.--Approximately 325 U.S. establishments, employing about 55,000 persons, produce industrial fasteners (ferrous nuts, bolts, and

ISAC GROUP 14: OTHER FABRICATED METAL PRODUCTS SECTOR ANALYSIS

screws). In 1977, domestic shipments totaled about 1.9 billion pounds. Imports, which are primarily supplied by Japan and Canada, amounted to 877 million pounds, while exports were estimated at 409 million pounds. Canada is by far the largest export market. Domestic shipments, imports, and exports have increased each year since 1975.

Throughout the domestic industry, industrial fasteners are classified as being either "standards" or "specials." A standard fastener is nationally recognized and may be produced by any interested manufacturer, domestic or foreign. Special fasteners are usually produced in the United States, and may be modified standards, proprietary, patented, or specially engineered. In the special fastener markets, such as the aerospace, automotive, and heavy equipment markets, quality control, engineering, and certain technical requirements prohibit or greatly curtail foreign competition. Many domestic producers have changed their product mix to consist primarily of special fasteners.

One major concern of the industrial fastener industry is that rapid growth of imports of industrial fasteners might take place if the international metrication system goes into effect. The U.S. system has served as an effective aid for U.S. companies. There is some concern that indeed metrication will open major markets for this product to the foreign producer, which is currently only a minor factor. These markets include higher quality level fasteners which presently account for between \$300 million and \$500 million in sales for domestic U.S. producers. U.S. tariff concessions and adoption of the NTM agreements will lead to a modest increase in imports of industrial fasteners, which will have a moderate adverse effect on industry and labor.

Current foreign nontariff measures applicable to exports of industrial fasteners have little effect on U.S. exports, since approximately 85 to 90 percent of all U.S. exports are shipped to Canada and sold directly to major Canadian durable goods manufacturers. Therefore, the adoption of NTM agreements will not expand U.S. export potential. Approximately half of current U.S. exports are shipped free of duty under special trade agreements and used in the manufacture of automobiles.

ISAC Group 14: Other Fabricated Metal Products Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	43,600.7	50,567.7	50,179.3	56,626.3	<u>1/</u> 50,243.6
Imports-----do-----	1,133.3	1,742.4	1,609.6	1,694.5	1,984.8
Exports-----do-----	1,509.2	2,149.3	2,484.9	2,728.6	3,052.6
Apparent consumption-----do-----	43,224.8	50,160.8	49,304.0	55,592.2	49,175.8
Ratio, imports to consumption--percent-----	2.6	3.5	3.3	3.0	4.0
Ratio, exports to shipments----do-----	3.5	4.3	5.0	4.8	6.1
Total employment--1,000 workers-----	1,092.5	1,090.8	969.3	1,004.8	1,039.4

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 15: CONSTRUCTION, MINING, AGRICULTURAL, AND OILFIELD MACHINERY AND EQUIPMENT SECTOR ANALYSIS

The industries included in this sector are the construction machinery industry (SIC 3531), the mining machinery industry (SIC 3532), the oilfield machinery industry (SIC 3533), and the agricultural machinery industry (SIC 3523 and 3524). Shipments for this sector as a whole increased steadily from \$16.5 billion in 1973 to an estimated \$28.7 billion in 1977, or by 73 percent. Total employment rose from 357,000 in 1973 to a 5 year high of 391,000 in 1974, then declined to range between 380,000 and 385,000 in the following 3 years. Exports more than doubled during the period, rising to \$8 billion in 1976 before dropping to \$7.4 billion in 1977. Exports accounted for 21.6 percent of U.S. producers' shipments in 1973 and rose to 31.2 percent in 1975; the ratio declined in the following years, reaching 25.6 percent in 1977. With the exception of a slight decline in 1976, imports increased steadily from \$813 million in 1973 to \$1.8 billion in 1977, when they accounted for 7.7 percent of domestic consumption.

According to the STR, the average depth of cut offered by the United States in the rates applicable to all the machinery covered in this sector is 46 percent. The depth of cut offered by the EEC to the United States is 35 percent, by Japan, 29 percent, and by Canada, 9 percent.

There are two distinct industries within this sector--the construction, mining, and oilfield machinery industry and the agricultural machinery industry. The construction, mining, and oilfield machinery industry is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff and nontariff trade measures. It is discussed first.

Construction, Mining, and Oilfield Machinery and Equipment

I. Subsector profile and conditions of competition

The construction machinery industry manufactures heavy machinery and equipment, such as bulldozers, concrete mixers, dredging machinery, pavers, and power shovels used in construction and surface mining. Small- and medium-sized construction machinery is used mainly for excavation and construction of water and sewer lines, single and multi-family housing, and commercial and industrial buildings. The larger machinery is used in surface mining of coal and other materials.

Mining machinery and equipment includes products used by the mining industry such as coal breakers, mine cars, mineral-cleaning machinery, concentration machinery, core drills, coal cutters, portable rock drills, rock-crushing machinery, continuous miners, loaders, and haulers.

**ISAC GROUP 15: CONSTRUCTION, MINING, AGRICULTURAL, AND OILFIELD
MACHINERY AND EQUIPMENT SECTOR ANALYSIS**

Products of the oilfield machinery industry include rigs, blowout preventors, mud pumps, drill collars, rotary bits, cutting tools, and tool joints, and such oilfield production equipment as pumps, screens, rod-lifting equipment, and oil and gas separators.

Overall, shipments of construction, mining, and oilfield machinery have shown significant and steady growth since 1973. In 1977, shipments reached \$17.5 billion, up from \$9.7 billion in 1973, increasing by 80 percent. Oilfield and mining machinery displayed the largest increases in shipments. During 1973-77, the value of oilfield machinery shipments increased 141 percent; mining machinery shipments increased 148 percent; and shipments of construction equipment increased 60 percent. The increases in shipments of oilfield and mining machinery are more dramatic because of the increased demand for coal, oil, and gas.

U.S. export performance--based on quality of product and service--has been very strong. Exports, about two-thirds consisting of construction machinery, showed a rather significant growth through 1973-76 while tapering off slightly in 1977. The value of exports reached \$6.3 billion in 1976, up from \$2.9 billion in 1973, then dropped to \$5.7 billion in 1977. Several important factors are involved in the decline in exports in 1977. Exports of construction machinery, for example, are not concentrated in any particular part of the world. The economies of most of the U.S. trading partners did not recover appreciably in 1977, so there was no increased demand. In addition, European and Japanese companies are narrowing the gap between themselves and U.S. producers in technology and size of machines produced, thus giving greater competition to U.S. exports.

Overall, exports of construction, mining, and oilfield machinery amounted to 29.6 percent of total U.S. producers' shipments in 1973 and rose to 42 percent in 1975; the share declined in both 1976 and 1977, reaching 32.5 percent in 1977. In that year the favorable trade balance amounted to \$5.1 billion, up from \$2.7 billion in 1973.

Imports of construction, mining, and oilfield machinery rose from \$207 million in 1973 to \$626 million in 1977. The overall import-to-consumption ratio for the three types of machinery reached a high of 5.2 percent in 1975 and subsided somewhat to 5.0 percent in 1977. Construction machinery accounted for over 80 percent of the imports in this group.

Total employment in the construction, mining, and oilfield machinery industries was 232,900 employees in 1974, representing an increase of 10 percent over 1973. After 1974, employment increased modestly, rising to 239,000 employees in 1977. Increases in employment in both the oilfield and the mining machinery industries overshadowed a drop-off in employment in the construction machinery industry, which fell to 147,900 employees in 1977 from a high of 157,000 in 1974. In the mining and oilfield machinery industries, the number employed rose by almost 30,000 from 1973 to 1977.

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U.S. manufacturers of construction, mining, and oilfield machinery, through exports from the United States and shipments from foreign subsidiaries and joint ventures, supply about 70 percent of world consumption of such machinery. Nevertheless, European and Japanese producers have drawn increasingly closer to U.S. producers in technology and size of machines in the most recent years.

II. NTM import impact

A. Subsector impact of U.S. tariff concessions

U.S. manufacturers of construction, mining, and official machinery face very little competition from imports. As was mentioned earlier, imports accounted for less than 6 percent of total consumption during 1973-77. U.S. tariff concessions will not result in a significant rise in imports because, in part, these concessions are rather small. For the majority of imported items, tariff concessions amount to a 2.4-percentage point decrease (from 5.1 to 2.7 percent ad valorem). More important, however, U.S. equipment is the most advanced and durable machinery produced anywhere and is highly price competitive.

B. Subsector impact of U.S. adoption of proposed NTM agreements

There are no major U.S. nontariff measures that limit imports of construction, mining, or oilfield machinery into the United States. Since the U.S. Government is not a major purchaser of the equipment discussed here, it is unlikely that elimination of the Buy American Act would have any significant impact on U.S. imports. No foreign NTM's covered by the agreements are known to significantly affect U.S. imports of construction, mining, and oilfield machinery. Thus, U.S. or foreign adoption of the NTM agreements is not expected to have an effect on U.S. imports of construction, mining, and oilfield machinery.

C. Subsector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The overall impact on U.S. imports of construction, mining, and oilfield machinery of U.S. tariff concessions and U.S. and foreign adoption of the proposed NTM agreements would probably be negligible. No significant price benefits are expected to accrue to users of the equipment covered here.

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III. NTM export impact

A. Subsector impact of foreign tariff concessions

The implementation of foreign tariff concessions would only slightly increase the level of U.S. exports of construction, mining, and oilfield machinery because U.S. manufacturers, through shipments by their foreign subsidiaries and foreign joint ventures, are already the dominant suppliers to most foreign markets. In addition, the foreign tariff concessions are too small to induce significant new exports from the United States. Trade-weighted tariff reductions amounted to 2.2 percentage points for the EEC, 1.5 percentage points for Japan, and 1.0 percentage point for Canada.

B. Subsector impact of foreign adoption of proposed NTM agreements

The U.S. construction, mining, and oilfield machinery industries face foreign NTM's which include government procurement policies, import licensing restrictions, multiplicity of standards, customs valuation practices, and government subsidies, all of which are subjects of the proposed agreements.

In the area of government procurement, Canada discriminates against goods of foreign origin and Japan has an outright ban on foreign bids on contracts for equipment used by government entities. The United Kingdom has a preference in force for oilfield machinery that favors the EEC countries over the United States.

Licensing practices coupled with frequently changing standards in Japan unduly delay and impede U.S. exports of machinery. Multiplicity and varying degrees of stringency of standards and local testing requirements in the EEC also inhibit U.S. exports of construction and mining machinery.

Customs valuation practices in Canada usually inflate the value of machinery and parts imported from the United States. In the EEC, U.S. exporters experience customs value "uplifts" ranging from 1 to 5 percent depending on the country of importation. Reportedly, Japan's valuation practices raise the price of U.S. machines and equipment above those of Japanese origin.

Various forms of government subsidies, including direct subsidies in Italy, financing and credit guarantee programs in Belgium, France, and the Netherlands, and contract bid preparation assists in Canada are other NTM's affecting U.S. exports of construction, mining, and oilfield machinery.

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Adoption of the NTM agreements would eliminate or reduce the anti-competitive effects of the NTM's enumerated above. However, U.S. exports (chiefly to Japan and the EEC) may increase only slightly as a result of such adoption because (1) the practices dealt with by the codes have not been very restrictive to the strongly competitive U.S. products; (2) established trading patterns through foreign subsidiaries and joint ventures, which evolved in part as a result of NTM's, are not likely to change; (3) foreign producers have become more competitive technologically; and (4) additional NTM's not covered by the agreements still remain in effect (discussed in section IV below).

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

For the reasons given above, the combined effect of foreign tariff concessions and the adoption of the NTM agreements by foreign governments and the United States would probably not cause an appreciable increase in U.S. exports of construction, mining, and oilfield machinery and equipment.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Exports by the industries discussed herein face trade impediments which are not covered under the MTN. Among the most important of these barriers are domestic subsidies, preferential tariff rates, local content rules, import fees and taxes other than tariff, and bans on imports of items locally manufactured. Some of these barriers affect all traders equally; some are discriminatory. In addition, U.S. firms are further handicapped by certain provisions of U.S. law which do not allow practices considered acceptable by many of our trading partners. These include antitrust laws which inhibit concerted action by U.S. firms in the face of consortiums of foreign enterprises and prohibitions in the use of monetary incentives to facilitate contract negotiation. The aggregate effect of these trade factors cannot be measured. They do not, however, cancel the gains made through the MTN.

V. Overall impact on subsector

There will be little noticeable effect on U.S. exports and imports of mining, construction, and oilfield machinery and equipment if tariff concessions and the NTM agreements are adopted. Foreign tariff concessions are rather small for most of the equipment covered here, and such concessions would not likely cause an increase in U.S. exports. Similarly, U.S. tariff concessions, which provide for a 2.4-percentage point decrease on most of the machinery covered herein, will not likely result in increased imports. U.S.

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MTN's appear to be negligible and do not now significantly inhibit imports. However, international adherence to the agreements may result in a slight increase in U.S. exports, especially to Japan and the EEC. As mentioned earlier, these two markets have several nontariff barriers which would be eliminated or ameliorated with the adoption of the agreements. On balance, U.S. producers and labor may derive a small benefit from the MTN. However, no significant price benefits are expected to accrue to users of the equipment covered herein.

Agricultural Machinery and Equipment

I. Subsector profile and conditions of competition

The farm and garden machinery included here encompass wheel (farm and garden) tractors, cultivating, planting, fertilizing, harvesting, irrigating, and farm dairy machinery; equipment used in raising livestock and preparing farm products for market; and farm and lawn-mowing machinery.

In 1977, U.S. shipments of farm and garden machinery and equipment were valued at an estimated \$11.2 billion, or about 63 percent higher than in 1973; tractors accounted for about \$3.4 billion of the 1977 total. Total employment, in over 1,500 establishments, was about 146,000 in 1977. The number of employees in 1977 was about the same as in 1973, but approximately 8 percent lower than in 1974.

Although experiencing a slight decline from 1976, exports of agricultural machinery and equipment were valued at \$1.7 billion in 1977--132 percent higher than in 1973. In 1977, exports accounted for 15 percent of total U.S. shipments, compared to 10 percent in 1973. The favorable trade balance amounted to \$0.5 billion in 1977, up from \$0.1 billion in 1973.

The value of U.S. imports increased by 91 percent during the period 1973-77, rising to \$1.2 billion in 1977. Imports accounted for 10.8 percent of domestic consumption of these products 1977, a slight increase over the share in 1973.

A large share of U.S. exports and imports are by U.S.-based multinational corporations and a Canadian-based firm with plants in the United States. Farm machinery produced in the United States is aimed at United States and Canadian farms that, on the average, are much larger than farms elsewhere in the

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non-Communist world. Consequently, a significant portion of U.S. exports consist of large, high-production machinery to Canada and areas, such as Australia, where there is an increasing trend for the creation of larger farms. There is a significant export trade in components and parts; many of the exports of parts are to the numerous foreign subsidiaries of U.S. firms (several in the EEC) that supply smaller equipment to local, third country, and some U.S. markets that are more economically served from overseas sources. U.S. imports from Canada consist mainly of large cultivating and harvesting machines manufactured by U.S. subsidiaries and the aforementioned Canadian firm.

Because of its constantly advancing technology and competitive prices, and its multinational production, distribution, and servicing facilities, the U.S. farm and garden machinery industry is a strong competitor both in the United States and in world markets. The only exceptions are the non-Communist countries in the Far East for which Japan is the predominant supplier of equipment designed for rice farming.

II. NTM import impact

Since virtually all farm and garden machinery enters the United States duty free, and there are no known U.S. or foreign NTM's that significantly affect U.S. imports of such machinery, the overall NTM import impact is expected to be negligible.

III. NTM export impact

A. Subsector impact of foreign tariff concessions

Foreign duty reductions are not expected to significantly increase the export potential of U.S. farm and garden machinery and equipment. Foreign duties are not currently a significant factor limiting U.S. exports and many foreign markets are served by overseas affiliates of U.S. firms. Moreover, the bulk of Canadian concessions consist of binding duty-free treatment of equipment for which the United States is the dominant supplier. Concessions by the EEC and Japan, primarily consisting of reductions of approximately 2 to 3 percentage points, are too small to have a positive impact on U.S. exports.

B. Subsector impact of foreign adoption of proposed NTM agreements

Implementation of NTM agreements by U.S. trading partners is expected to have a beneficial impact on U.S. exports of farm and garden machinery. Acceptance of U.S. test results, instead of requiring local testing, and the opportunity to participate in regional certification systems (such as those in the EEC) will particularly enhance U.S. exports of equipment for which there

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is a multiplicity of national technical standards. Streamlining of licensing procedures, particularly in developing countries and Japan, will also be beneficial. The subsidy agreement could enhance the competitiveness of U.S. farm machinery in some third-country markets where U.S. equipment competes against subsidized exports from Europe and Japan.

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Overall, foreign tariff reductions and implementation of the NTM agreements are expected to result in a modest increase of U.S. exports of farm and garden machinery and equipment.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

As was indicated for the construction, mining, and oilfield machinery industries, there are a number of trade measures outside the scope of the MTN that affect U.S. exports of agricultural machinery to some extent. These include preferential tariff rates, local content rules, import fees and taxes other than tariffs, and bans on imports of items manufactured locally. The aggregate effect of these trade factors cannot be measured. They do not, however, cancel the gains made through the MTN.

V. Overall impact on subsector

The overall impact of tariff reductions and the implementation of the NTM agreements is expected to be beneficial to U.S. producers and labor as U.S. exports, given the size and competitiveness of the U.S. farm and garden machinery industry, are expected to increase more than imports. As imports are also expected to increase, U.S. purchasers of agricultural machinery are expected to benefit from an even larger variety of equipment than heretofore was available in the U.S. market.

**ISAC Subgroup 15(pt): Construction, Mining, and Oilfield Machinery
and Equipment Subsector Analysis**

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	9,668	12,627	14,916	15,630	17,475
Imports ^{1/} -----do-----	207	330	473	415	626
Exports-----do-----	2,864	4,174	6,261	6,324	5,680
Apparent consumption-----do-----	7,011	8,783	9,128	9,721	12,421
Ratio, imports to consumption--percent-----	3.0	3.8	5.2	4.3	5.0
Ratio, exports to shipments----do-----	29.6	33.1	42.0	40.5	32.5
Total employment--1,000 workers-----	212	233	234	234	239

^{1/} Imports of oilfield machinery are estimated at \$10 million annually during 1973-77.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 15(pt): Agricultural Machinery and Equipment Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	6,868	8,641	9,884	10,534	<u>1/</u> 11,200
Imports-----do-----	606	852	998	1,051	1,159
Exports-----do-----	721	1,075	1,485	1,690	1,673
Apparent consumption-----do-----	6,753	8,418	9,397	9,895	10,686
Ratio, imports to consumption--percent-----	9.0	10.1	10.6	10.6	10.8
Ratio, exports to shipments----do-----	10.5	12.4	15.0	16.0	14.9
Total employment--1,000 workers-----	145	158	150	146	<u>1/</u> 146

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 16: OFFICE AND COMPUTING EQUIPMENT SECTOR ANALYSIS**I. Sector profile and conditions of competition**

The office and computing equipment sector covers the following product areas: typewriters (SIC 3572); computers and computer peripherals (SIC 3573); accounting machines, adding machines, and cash registers (SIC 3574); scales and balances (SIC 3676); addressing, numbering, dating, check-writing, postage-franking, ticket-issuing, and office-copying machines and other miscellaneous office machines (SIC 3579).

Aggregate sector shipments, about three-fourths of which consisted of electronic computing equipment, rose by approximately 64 percent from \$9.9 billion in 1973 to approximately \$16.2 billion in 1977. Sector exports generally increased from \$2.1 billion in 1973 to \$3.7 billion in 1977. During this period the share of sector exports represented by electronic computing equipment rose from 81.5 percent to 88.7 percent. Exports as a percentage of industry shipments reached a peak of 23.5 percent in 1975, and then fell to 22.7 percent in 1977.

Imports of office and computing equipment--the great bulk of which is for the account of U.S.-based multinational firms--increased annually, with the exception of a slight dip in 1975, from \$958 million in 1973 to \$1.7 billion in 1977. The import-to-consumption ratio over this period rose modestly from 10.9 to 12.2 percent. Miscellaneous office machines (SIC 3579) accounted for the largest percentage of total imports as well as for the greatest percentage increase (143 percent) during the period. Parts for the office machines covered by this subgroup accounted for more than 50 percent of total imports.

Industry employment increased during the early 1970's to approximately 247,000 workers during the peak of business activity in 1974. During the subsequent recession of 1975, employment slumped to approximately 225,000 workers, but by 1977 a new industry high of 254,000 workers was established. Employment in the electronic computing equipment industry accounted for approximately 75 percent of total sector employment in 1977 and, additionally, accounted for the largest percentage subgroup increase (21 percent) during 1973-77.

While some U.S. industries in this sector have in the past been dominated by large U.S. companies, notably electronic computing equipment and certain product areas of the miscellaneous office machinery industries, competition from both foreign and domestic sources has become increasingly evident. In all but a few product areas, U.S. companies have maintained a competitive edge vis-a-vis imported merchandise.

In this sector electronic technology is playing an increasingly important role in product development and is a significant determinant of the competitive position of companies within industries. In SIC's 3573, 3574, and 3579, large multinational firms have taken up dominant positions in most product markets and are responsible for a substantial share of total industry

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business activity, including exports and imports. This market structure has resulted from the considerable commitments which must be made to research and development and capital investment that only large firms can afford.

Within this sector, electronic computing equipment is viewed by many as a U.S. trade area which could be affected by changes in nontariff trade measures. A brief analysis of this segment appears in Section VI following the full sector presentation.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

Based on trade, the STR estimates the average depth of cut of concessions offered by the United States to be 33 percent, from an average of 5.4 percent to an average of 3.6 percent. Such a reduction would have minimal impact on imports. Most imported products in this sector are already competitive or are becoming increasingly competitive in U.S. markets with or without tariff reductions. Furthermore, many of the products, particularly parts, within the scope of the sector are imported from less developed countries which have qualified for duty-free import status. Such duty savings as will be realized are not expected to benefit the ultimate users of the equipment.

B. Sector impact of U.S. adoption of proposed NTM agreements

U.S. NTM's related to products of this sector are in such areas as the Buy American Act, standards, and customs-related problems such as valuation and classification. The Buy American Act applies to security-and national-defense-oriented products, but sometimes is applied to high technology articles, such as computers and related equipment. Standards are local specifications which must be met by imported articles. These standards are prepared domestically by organizations such as the U.S. Underwriters Laboratories. Customs-related problems primarily involve the proper classification for these types of products and can become quite involved. However, for the most part, U.S. NTM's present no major problems for foreign exporters of office and computing equipment to the United States. Therefore, U.S. adoption of the NTM agreements will not materially affect U.S. imports.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. and foreign adoption of proposed NTM agreements

The combined probable effect of duty modifications and the adoption of NTM agreements by the U.S. and other countries would result in a negligible or nil increase on U.S. imports.

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III. NTM export impactA. Sector impact of foreign tariff concessions

The impact on the U.S. office and computer equipment exports resulting from anticipated foreign tariff reductions would be negligible in the absence of significant coincidental NTM modifications. The average depth of cut in EEC duties of 30 percent (from 6.9 to 4.9 percent) would have little effect on the competitive positions of U.S. firms, many of which already have significant technological advantages in these markets.

According to the STR, Japan has offered to reduce duties on office and computing equipment by 67 percent (from 16.2 to 5.5 percent); while significant, this is still not as important in opening this market to U.S. producers as is the modification of current NTM's.

The proposed elimination of tariffs on Canadian imports (from an average of 9.9 percent AVE) are not expected to significantly alter U.S.-Canadian trade as the U.S. industry is dominant in Canadian markets. The tariff reductions might serve to further strengthen the position of U.S. companies in Canada but are not likely to significantly expand the export market for U.S. producers of these products in Canada.

B. Sector impact of foreign adoption of proposed NTM agreements

The combined impact on U.S. industry of foreign adoption of all NTM agreements would be highly beneficial to U.S. office and computer equipment exports by providing the U.S. industry with greater access to foreign markets (particularly Japan and the EEC). Participation in the formulation of standards would benefit the high-technology U.S. producers of computers and related products. Simplified foreign licensing and customs valuation and participation in foreign government procurement would allow U.S. producers to compete with foreign manufacturers on equal terms.

In the area of government procurement the following list is illustrative. Heretofore, in the United Kingdom, for instance, the policy for procurement of large-scale computers for government use is, if at all possible, to procure them from ICL (the major producer in the United Kingdom), which is partly owned by the government. The policy regarding other computers is to acquire them on a sole-source basis if possible. If reasons such as price, compatibility, or delivery prevent a single-source procurement, competitive bids may be sought but at least one United Kingdom manufacturer must be solicited.

The EEC encourages the procurement of computers and related products (including software and services) from European-based companies. A European-based company is defined as one in which the majority of the owners (usually on a stock basis) reside in the EEC. On this basis, CII-HB (partially owned by Honeywell) qualifies as a European-based company, but IBM does not.

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The procurement policy of the West German Government is that computer manufacturers based in West Germany or in other countries of the EEC must be solicited as a matter of principle and that in cases of approximately equivalent offers, the award should be made to one of these manufacturers.

If foreign MTN participants adopt and conform to the proposed agreement on government procurement, the foregoing obstacles to U.S. exports will be removed or negated to a large extent. However, restriction of the agreement on government procurement to contracts of Special Drawing Rights \$150,000 and over would severely limit the effectiveness of the agreement, since many U.S. exports, particularly of minicomputers, microcomputers, and low-priced peripherals, may be produced in amounts of less than the limit.

Government subsidies are other NTM's that represent considerable obstacles to U.S. exports of office and computer equipment. In Japan the government directly supports industry cartels in the development of advanced computer systems and it also provides loans for rental of Japanese-manufactured computers. In the United Kingdom, ICL (the major computer producer) is partly owned by the government. In France, the computer industry receives government subsidies. To the extent that adherence to the subsidies agreement will eliminate or reduce subsidies which have an impact on U.S. exports, U.S. exporters will benefit.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The combined benefit of proposed foreign tariff concessions and adopted NTM agreements could be significant to exports of computer and related equipment and office equipment, n.e.s., where U.S. companies possess technological advantages in world markets. In other product areas such as calculators, cash registers, and the like in which U.S. companies face much stronger world competition, particularly from Japan, the impact on exports is likely to be mixed.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

One trade-limiting restriction beyond the scope of MTN tariff and NTM agreements limits U.S. exports of office and computing equipment. The value-added tax system, prevalent particularly in the EEC but also in other countries, severely penalizes U.S. exporters while benefiting foreign exporters. The rebate of these taxes by foreign countries to their exporting domestic producers represents a strong competitive subsidy, while border taxes levied on imports of U.S. origin raise the price of U.S. goods.

Another impediment (not covered by the agreements) to U.S. exports is the local content requirement practiced by many countries, particularly the EEC and the developing nations.

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V. Overall impact on sector

U.S. imports of office and computing equipment should not change appreciably as the result of proposed U.S. tariff concessions, which are small in absolute terms and which do not figure significantly in the competitive balance between U.S. and foreign products. However, such duty savings as will be realized are not expected to benefit the ultimate users of this equipment. The same would generally be true of foreign tariff offers, which are of less importance than foreign NTM's in restricting U.S. export flow.

The combined effect of U.S. and foreign adoption of all agreements would be a net gain for the U.S. office and computing equipment industry. However, factors outside the scope of the MTN are likely to outweigh any gain anticipated as the result of reductions of tariff and NTM's in the apparent favor of the U.S. office and computing equipment industry. Foreign governments, particularly among the developed nations, are expected to continue to bolster their domestic industries through the use of direct and indirect subsidies (such as the value-added tax system), support of research and development programs, "customer preference" systems, and low-interest loan programs. The prospect for U.S. companies in this sector seems to indicate increased levels of international competition, particularly from Japan, underwritten by foreign government-industry cooperation. To the extent that the United States will be able to enforce its rights under the agreements, the effects of the foregoing practices by foreign governments--which are expected to continue--will be reduced and U.S. exports of office and computing equipment should increase.

VI. Analysis of a selected segment of the office and computing equipment sectorA. Industry profile

Electronic computing equipment accounted for 77.6 percent of the value of U.S. shipments of office and computing equipment in 1977. The principal products in the electronic computing equipment segment are computers, computer peripherals, and parts thereof. The products are made by some 200 firms, of which about 25 are major multinational corporations. Production is concentrated with one firm supplying over half the value of worldwide industry shipments. Advancement in technology is the bulwark of the industry.

The value of U.S. producers' shipments increased from \$7.1 billion in 1973 to \$12.6 billion in 1977 while experiencing a slight downturn in 1975 owing to the recession. U.S. imports, the bulk of which are accounted for by U.S. producers, rose in value from \$251 million in 1973 to \$539 million in 1977. U.S. exports rose from \$1.7 billion to \$3.3 billion during the same period.

The balance of trade in electronic computing equipment is overwhelmingly in favor of the U.S. Imports have accounted for less than 6 percent of U.S.

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apparent consumption whereas exports have represented more than 24 percent of the value of U.S. shipments.

Employment has generally increased despite large layoffs in 1975 and 1976. In 1977 employment was an estimated 188,000 persons, an industry high. The employees' output increased from \$45,700 per man-year in 1973 to \$66,800 in 1977. This impressive increase resulted in part from productivity gains but a significant portion of the increase stems from increased purchases from other industries, principally the semiconductor industry. These purchases increase the value of shipments but do not take into account employment in the supplying industries.

B. Effect of nontariff measures

Neither U.S. nor foreign tariffs have been a significant impediment to trade. However, despite an overwhelmingly favorable balance of trade, exporters of U.S.-made electronic computing equipment must overcome nontariff barriers erected by foreign countries to protect growing industries. Although these NTM's are potentially serious barriers to all U.S. exports of electronic computing equipment, they have been most effective against exports of mature products or those relying on older technology.

Many of the nontariff measures are in the categories of government procurement, standards, and licensing, and are covered by the negotiated agreements. However, other barriers such as local content requirements, the value-added tax system, continue to constitute a threat to a computer industry without a substantial lead in technology. Thus, U.S. producers, although encouraged by the negotiated agreements, continue to be vulnerable to a narrowing lead in technology.

ISAC Group 16: Office and Computing Equipment Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	9,904	12,041	11,395	13,355	1/ 16,165
Imports-----do-----	958	1,148	1,145	1,538	1,743
Exports-----do-----	2,104	2,705	2,678	2,997	3,677
Apparent consumption-----do-----	8,758	10,484	9,862	11,895	14,231
Ratio, imports to consumption--percent-----	10.9	11.0	11.6	12.9	12.2
Ratio, exports to shipments----do-----	21.2	22.5	23.5	22.4	22.7
Total employment--1,000 workers-----	221	247	225	230	1/ 254

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 16(pt): Electronic Computing Equipment Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	7,085	8,668	8,443	10,134	12,550
Imports-----do-----	251	280	301	471	539
Exports-----do-----	1,717	2,198	2,229	2,588	3,264
Apparent consumption-----do-----	5,619	6,750	6,515	8,017	9,825
Ratio, imports to consumption--percent-----	4.5	4.1	4.6	5.9	5.5
Ratio, exports to shipments----do-----	24.2	25.4	26.4	25.5	26.0
Total employment--1,000 workers-----	155	177	162	166	<u>1/</u> 188

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 17: NON-ELECTRICAL MACHINERY SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector embraces some 32 4-digit SIC product areas, covering a large variety of non-electrical machinery and equipment. Product shipments for this sector totaled about \$55 billion in 1977 and employment in that year was about 910,000 production workers. The sector includes a large share of the nation's firms engaged in the production of manufactured goods. In many of the industries, the firms include multinationals with subsidiaries or other affiliates in one or more of the important foreign markets; such subsidiaries and affiliates supply not only the local markets but also other foreign markets. In some instances, the domestic firms are subsidiaries or affiliates of large foreign multinational corporations. Imports grew more rapidly than did exports during 1973-77, but exports remained considerably larger so that the sector's trade showed an export surplus throughout.

Product shipments of this industry sector, in terms of value, increased steadily from \$40 billion in 1973 to about \$55 billion in 1977, or by 38 percent. Shipments increased in each year, but the rate of growth varied from 1.1 percent in 1975 to 13.4 percent in 1974. The largest shares of the annual product shipments were accounted for by the following five major product groups: Refrigeration and heating equipment (SIC 3585); special dies, tools, jigs and fixtures (SIC 3544); pumps and pumping equipment (SIC 3561); ball and roller bearings (SIC 3562); and machine tool accessories (SIC 3545). Together, the products of these industries accounted for about two-fifths of recent total sector shipments.

The exports of this industry sector increased from \$4.6 billion in 1973 to approximately \$8.8 billion in 1977, a total increase of 91 percent and an average annual increase of 17.6 percent, a much higher rate than that for industry shipments. The more important exports, by industry, ranked in order of export magnitude, were refrigeration and heating equipment; pumps and pumping equipment; food products machinery; and air and gas compressors. The combined exports of these industries equalled about one-third of the sector's total exports in both 1976 and 1977.

The ratio of total exports to total shipments for the sector was 11.4 percent in 1973; it topped at 16.8 percent in 1975, and settled at 16.0 percent in 1977.

Sector imports grew from \$2.1 billion in 1973 to \$3.2 billion in 1977, representing a total growth of 52 percent and an average annual growth of 11.1 percent. The larger shares of the imports--roughly two-fifths in recent years--were attributed to four industries, in order of import magnitude as follows: textile machinery; metalcutting machine tools; ball and roller bearings; and food products machinery. Imports were consistently much smaller than exports, so that the trade had a net export surplus, one that expanded from \$2.5 billion in 1973 to \$5.6 billion in 1977. The ratio of imports to consumption for the sector fluctuated near the 6-percent level during 1973-77.

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Employment in this industry sector during 1973-77 fluctuated between 900,000 workers (1975) and 950,000 workers (1974); employment in 1977 was about 910,000 persons. About one-fourth of the employment in recent years was accounted for in four product areas: refrigeration and heating equipment; ball and roller bearings; pumps and pumping equipment; and metalcutting machine tools.

This industry sector, on the whole, is judged to be efficient and a capable competitor, equal to its foreign counterparts in both the U.S. and foreign markets. During 1973-76, the sector nearly doubled its exports, held imports to roughly 6 percent of apparent U.S. consumption, and realized a growing annual export surplus that was 1.2 to 2.0 times the amount of imports.

Within this sector, however, is the ball and roller bearing industry, which is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or non-tariff trade measures. A brief analysis of this industry appears in Section VI, Analysis of a Selected Segment of the Non-electrical Machinery Sector, following the full sector presentation.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

Proposed reductions in U.S. duty rates on products of this sector are small in terms of percentage points. Based on trade, the STR estimated that the average depth of cut of the many offers is 35 percent.

The level of increase in imports will vary widely for the many industries in this sector, however, for the sector as a whole any increase in imports induced by U.S. concessions will be negligible. Industry and labor of this sector should therefore experience no more than a negligible adverse effect from the expected rise in imports. About one half of the total value of any resulting duty savings would be absorbed by the foreign supplier or importer while the other half of such savings would accrue to the industrial user of equipment.

Most of the products of this sector are not so price sensitive that small changes in price are of prime importance in the purchase decision. Considerations of quality, availability, services--sometimes in favor of the U.S. manufacturer and sometimes favoring the imported product--are more important than small differences in price. In addition, U.S. and foreign prices have tended to equalize during the past decade.

B. Sector impact of U.S. adoption of proposed NTM agreements

Although practices dealt with by the NTM agreements appear to have had little effect on imports of a large number of the products of this sector, some industries in the sector have felt the impact of foreign export subsidies.

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A potential influence for increased imports should derive from U.S. adoption of the standards agreement, although many segments of this sector claim any concern with U.S. adoption of that agreement. U.S. adoption of the agreement on government procurement should have little effect on U.S. imports of equipment covered herein because many U.S. agencies have little occasion to purchase significant quantities of such equipment.

As appears from the above statement the various agreements tend to have offsetting effects on imports. On balance, adoption of the NTM agreements should diminish U.S. imports slightly.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined effects of tariff reductions and adoption of the agreements should be a negligible increase in U.S. imports of equipment of the types in this sector. Any adverse effect on U.S. industry or labor should be slight.

III. MTN export impact

A. Sector impact of foreign tariff concessions

As in the case of imports, the proposed reductions in duty rates on products of this sector are small in terms of percentage points and are therefore not expected to significantly increase the export potential of this sector. Based on trade, the STR estimates that the average depth of cut in the many applicable duties is 27 percent for the EEC, 26 percent for Japan, and 38 percent for Canada. Again, such factors as quality, availability and service are more important than small price changes. In many subsectors of this sector, U.S. affiliates or licensees abroad fulfill the role which U.S. parent companies might otherwise perform.

B. Sector impact of foreign adoption of proposed NTM agreements

Although a large proportion of the industries included in this sector appear to encounter little or no export competition from foreign firms enjoying export subsidies, some important industries have long felt a severe disadvantage in third country markets as a result of such export subsidies. Foreign adoption of the subsidies/countervailing duty measures agreement could bring considerable relief to such industries. Likewise, widespread complaints of standards barriers in both the developed and developing countries indicate that adoption of the standards agreements should have at least a modest positive effect on U.S. exports. The agreement on government procurement

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will, for the most part, affect U.S. sales of advanced capital equipment to developed countries. The volume of such sales is not likely to be a significant share of total sector output and much of it can be accomplished by U.S. subsidiaries abroad. Foreign adoption of the agreement on import licensing procedures should have at least a small positive effect on U.S. exports in view of the number of past complaints by U.S. firm in this regard. The net effect of the adoption of all the agreements should be a small increase in exports for the sector as a whole.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The aggregate effects of the small tariff concessions plus the small positive effects of agreement adoption indicates that the combined effects of the NTM on equipment in this sector should be a modest increase in U.S. exports.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Exports by the industries discussed herein face trade impediments which are not covered in the NTM agreements and are not affected by tariff concessions. Among the most important of these are domestic subsidies, preferential tariff rates, local content rules, import fees and taxes additional to normal tariffs, and bans on imports of items locally manufactured. Some of these barriers affect all traders equally; some are discriminatory. In addition, U.S. firms are further handicapped by certain provisions of U.S. law which do not allow practices considered acceptable by many of our trading partners. These include antitrust laws, which inhibit concerted action by U.S. firms in the face of consortiums of foreign enterprises. They include prohibitions in the area of monetary incentives which may not be applied by our trading partners.

The aggregate effect of these impediments cannot be measured; no doubt trade would be freer if they were dismantled. However, the general structure of obstacles to trade discussed here has been in place for many years--certainly prior to the inception of the MTN--and, in effect, has made up the context in which trade has been conducted. Within this framework the MTN took place. Whatever gains were made by tariff concessions and agreements were made in this context and are net gains within it.

V. Overall impact on sector

The combined effect of U.S. tariff reductions and adoption of NTM codes should be a negligible increase in U.S. imports. About half the total value of any resulting duty savings would be absorbed by the foreign supplier or importer while the other half of such savings would accrue to the industrial user of equipment. The aggregate effects of the small tariff concessions by

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our trading partners plus the small positive effects of agreement adoption indicate that the total effects of the MTN on this sector should be a modest increase in U.S. exports. The effects of foreign trade factors outside the scope of the MTN tariffs and NTM agreements cannot be measured, but, as they stand now, they will not diminish the net gains of the MTN.

VI. Analysis of a selected segment of the non-electrical machinery sector

The U.S. ball and roller bearing industry consisted of about 140 establishments in 1977, not much different from the number in 1973. A small number of firms have accounted for a large share of the industry's recent annual shipments.

During 1973-77, product shipments increased by 41 percent to \$2.2 billion and imports by 55 percent to \$287 million; exports grew 49 percent to \$202 million in 1976 and then dropped 7 percent to \$188 million in 1977. Trade in this industry showed an import deficit that grew irregularly from \$48.6 million in 1973 to \$98.9 million in 1977, but had been only \$5.5 million in 1975. The ratio of exports to shipments fluctuated from 8.6 percent (1977) to 10.9 percent (1975). Employment of production workers varied moderately--in 1977 it was about 40,000, or approximately at the 1973 level.

The domestic ball and roller bearing industry is considered to be advanced in its technology of production and efficient in its operations; it is clearly on a par, in the main, with its foreign counterparts in both the domestic market and, given free access, in foreign markets. However, for certain types of bearings, especially types used in large volume, certain imports have enjoyed a distinct price advantage in the U.S. market.

The U.S. offer would reduce the compound or ad valorem tariff rates on bearings as follows: on antifriction balls and rollers, from an AVE of 7.5 percent to 5 percent; on ball bearings with integral shafts, from 6 to 4 percent; and on roller bearings (including combination roller and ball bearings) and parts, from an AVE of 13 percent to 6.5 percent. On the other types of ball bearings (principally radial bearings) and parts thereof, the U.S. has offered only to convert the current compound rate to its present AVE of 11 percent.

Tariffs are judged to have been an important factor in the U.S. bearings market. If implemented, the U.S. concessions would widen existing disparities between prices of U.S. goods and imports. Such price effect would result in an appreciable increase in U.S. imports, with an adverse impact on the domestic industry and its labor force. Duty savings will likely benefit the industrial consumer, but the consuming public is not expected to experience any benefit. Bearings represent a very small part of the value of most end products.

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U.S. NTM's affecting bearings, all concerned with Government purchases, consist of the Buy American Act and certain Department of Defense procurement regulations. The net benefit to the domestic industry from such NTM's apparently has been negligible. U.S. adoption of the NTM agreements should thus have no detrimental effect on the domestic bearings industry.

The foreign tariff concessions include offers by Canada of generally negligible and somewhat selective reductions of 2 to 5.8 percentage points from duty levels of 7.5 to 15 percent and the binding of a duty-free status on certain major import classes. The EEC has offered to bind its 9 percent duty. Japan has offered to reduce its rates from 12.5 to 6.6 percent; the latter rate, however, is above the current applied rate of 6 percent. Tariffs have not been a significant factor limiting U.S. exports. To a significant extent, some foreign markets are served by subsidiaries or affiliates of U.S. firms. Expansion in demand in those areas would more likely be met from those sources. Moreover, in some foreign markets, U.S. producers are at a competitive disadvantage because of higher labor and other costs and lack of market proximity. Adoption of the proposed foreign concessions would thus not significantly advance U.S. export potential for this industry.

According to industry spokesmen, NTM's in foreign countries have hindered the exports by the U.S. industry. For example, Mexico, Brazil, and other developing countries have used import licensing to restrict or curtail imports for the purpose of protecting local producers. However, those same spokesmen state that the lone foreign NTM that has significantly restricted U.S. exports is the Government of Japan's practice termed "administrative guidance"; that practice is probably based in some measure on national security considerations. Adoption of the proposed NTM agreements would not be likely to alter that informal curb on U.S. exports to Japan. Foreign adoption of the NTM agreements, therefore, though difficult to judge at this time, is not likely to significantly boost U.S. exports.

From the foregoing, the overall outlook for the domestic industry from U.S. and foreign adoption of the tariff concessions offered and the NTM agreements proposed is that there will be an increase in U.S. imports of such dimensions that the domestic industry and its labor force will be adversely affected.

ISAC Group 17: Non-Electrical Machinery Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	39,993	45,364	45,886	50,441	<u>1/</u> 55,000
Imports <u>2/</u> -----do-----	2,096	2,483	2,553	2,869	<u>1/</u> 3,200
Exports <u>2/</u> -----do-----	4,575	6,485	7,723	8,259	<u>1/</u> 8,800
Apparent consumption-----do-----	37,515	41,362	40,716	45,049	49,400
Ratio, imports to consumption--percent-----	5.6	6.0	6.3	6.4	6.5
Ratio, exports to shipments---do-----	14.6	14.3	16.8	16.4	16.0
Total employment <u>1/</u> --1,000 workers-----	910	950	900	910	910

1/ Estimated

2/ Data are incomplete, but are believed to be sufficiently representative of the sector.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 17(pt): Ball and Roller Bearings and Parts Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,559	1,775	1,858	1,995	<u>1/</u> 2,195
Imports-----do-----	185	233	207	221	287
Exports-----do-----	136	189	202	202	188
Apparent consumption-----do-----	1,607	1,819	1,864	2,013	2,294
Ratio, imports to consumption--percent-----	11.5	12.8	11.1	11.0	12.5
Ratio, exports to shipments----do-----	8.7	10.6	10.9	10.1	8.6
Total employment--1,000 workers-----	43.9	45.0	40.2	39.8	<u>1/</u> 40.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 18: HEAVY ELECTRICAL MACHINERY SECTOR ANALYSIS

I. Sector profile and conditions of competition

The heavy electrical machinery sector is comprised of the following 18 major product groups (4-digit SIC classes):

Transformers	Non-current carrying wiring devices
(Electric) Motors and	Residential lighting fixtures
Generators	Commercial lighting fixtures
Industrial controls	Vehicular lighting equipment
Welding apparatus	Lighting equipment, n.e.c.
Carbon and graphite	Storage batteries
products	Primary batteries
Industrial apparatus,	Engine electrical equipment
n.e.c.	Electrical equipment supplies,
Electric lamps	n.e.c.
Current-carrying wiring	
device	

The heavy electrical machinery sector is a diverse group, the only common element being that the products included either produce or use electricity when being operated.

The United States is the world's largest producer and consumer of electricity and, thus, is the largest manufacturer of and market for the equipment included in this sector. The sector is dominated by large electrical firms, and in each of the 18 product groups, the concentration ratio is high. Some large manufacturers produce equipments classified in more than half of the group whereas some major manufacturers produce equipment classified in only one of the groups.

Individually and collectively the U.S. industries in the heavy electrical machinery sector are economically healthy. Profits are generally at or above normal for U.S. manufacturers. U.S. producers have a significant advantage over foreign producers, owing to the size of the U.S. market. Many foreign producers are closely allied to, if not partly held by, their respective Governments. Thus, U.S. producers compete with foreign producers in the U.S. market but are seldom afforded the opportunity to compete in foreign markets. Most U.S. exports are shipped to developing countries not having the capability to produce electrical machinery.

The value of U.S. producers' shipments increased from \$21.4 billion in 1973 to \$29.0 billion in 1977 despite a dip in the recession year of 1975. Imports cycled downward from \$1.9 billion in 1973 to \$1.4 billion in 1975 but climbed to \$2.1 billion in 1977. Exports on the other hand, rose steadily from \$1.7 billion in 1973 to \$3.1 billion in 1976 before declining to \$2.8 billion in 1977.

ISAC GROUP 18: HEAVY ELECTRICAL MACHINERY SECTOR ANALYSIS

After a negative showing in 1973, the U.S. balance of trade in heavy electrical machinery was positive during 1974-77. Imports ranged from 6.3 percent to 8.6 percent of apparent U.S. consumption while exports accounted for 7.8 percent to 11.6 percent of the total value of U.S. shipments.

The number of employees in this sector declined from 640,400 in 1973 to 538,200 in 1975 before rising to 582,500 in 1977. However, output per employee increased over those years from \$33,000 to \$49,000. This factor indicates that employment is probably on a long term downward trend because of either productivity gains or changes in operations resulting in buying products outside the scope of the sector.

Within this sector is a selected industry segment, electrical transmission and distribution equipment, which is viewed by many as a U.S. trade area which could be affected by changes in nontariff measures. A brief analysis of this segment appears in Section VI, Analysis of a Selected Segment of the Heavy Electrical Machinery Sector, following the full sector presentation.

II. NTN import impact

A. Sector impact of U.S. tariff concessions

The U.S. has offered tariff reductions in excess of 30 percent on virtually all of the products in this sector; according to the STR, the average depth of cut in the duties applicable to products in the sector is 42 percent which amounts to only 3 to 4 percentage points. This small reduction tends to reduce the cost of importing machinery into the United States but is not a critical reduction which might have widespread effects on imports, the domestic producers, or the domestic markets since the aggregate rate of 6.6 percent ad valorem equivalent was not a serious deterrent to imports. Such duty savings as might occur are expected to be absorbed by the importer and would not accrue to the user of the equipment.

B. Sector impact of U.S. adoption of proposed NTN agreements

The U.S. industry is not expected to be affected significantly by U.S. adoption of proposed NTN codes. The U.S. industry would be exposed principally in the markets formerly protected by the Buy American Act, but a large share of U.S. production has not been protected by the provisions of the Buy American Act. The U.S. industry is capable of competing in the market presently protected. If all markets, both foreign and domestic, were open to the same degree, an advantage would accrue to the U.S. producer; foreign producers would no longer be able to operate from a protected production base and offer the same attractive prices as offered in the United States in the past.

ISAC GROUP 18: HEAVY ELECTRICAL MACHINERY SECTOR ANALYSIS

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreement

The U.S. industry has consistently supported the concept of free trade, which allows all countries to compete on the same competitive basis without the encumbrance of tariffs or trade barriers. The combined effect of the small reduction in tariff rates and the adoption of the NTM agreements is not expected to affect the level of U.S. imports although the small amount of protection afforded by the Buy American Act will be lost, imports are not expected to replace U.S.-made products in that segment of the market.

III. MTN export impactA. Sector impact of foreign tariff concessions

Japan, according to the STR, has offered to reduce its rates applicable to these products by an average of 53 percent. Similarly, the EEC has offered a 30 percent reduction and Canada, a 26 percent reduction. Notwithstanding the foreign offers, foreign duties would remain higher than the average U.S. duties. The foreign rates, however, are not the major deterrent to U.S. exports.

B. Sector impact of foreign adoption of proposed NTM agreements

The adoption of the proposed NTM agreements by foreign countries could, theoretically, be very helpful to U.S. exports. The markets for heavy electrical machinery in developed countries are usually protected through guided government procurements, administrative guidelines, local content requirements, certification to standards, or other means. If the agreements were adopted, and carefully administered, many of the existing foreign NTM's could be overcome and U.S. producers would be favored with a less encumbered access to foreign markets. Improved access would result in greater U.S. exports. However, foreign governments consider the heavy electrical machinery sector to be an important part of the national infrastructure and a necessity for independence. Access to their markets would seriously erode their production base, which is well protected and dependent on exports to achieve an economical scale of production. It is not likely that foreign adoption of the NTM codes will result in any more than token increases in U.S. exports of heavy electrical machinery.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The combined effect of foreign adoption of proposed tariff reductions and proposed NTM codes should, theoretically, improve the access of U.S. firms to foreign markets even though foreign rates of duty will be higher than U.S. rates. As indicated, foreign duties have not been a major deterrent to U.S. exports; the major deterrent has been NTM's. The adoption of NTM codes is not expected to alter the actuality that the foreign production base has operated behind protective walls in the past and must continue to do so in the future.

ISAC GROUP 18: HEAVY ELECTRICAL MACHINERY SECTOR ANALYSIS

IV. Foreign trade factors outside the scope of the MTN tariffs and NTM agreements

Trading restrictions outside MTN tariffs and NTM agreements are expected to continue to limit U.S. exports of heavy electrical machinery. The major deterrent to U.S. exports is expected to be the scope of the agreements on standards and government procurement. Specifically, the value limitation in and the institutions excluded from the coverage by the Agreement on Government Procurement are expected to be major limitations on U.S. exports. In the standards agreement, certification requirements and appeals involving certification requirements are expected to be major stumbling blocks to U.S. exports.

In many countries, particularly the EEC, the use of the value-added tax system is costly to U.S. exporters, but an incentive to foreign exporters. The other major factor affecting U.S. exports is "customer preference" in countries where the government is allied with industry. These factors and the need of foreign governments to protect their indigenous industries from import competition (mentioned previously) will continue to limit U.S. exports.

V. Overall impact on sector

The pattern of trade in heavy electrical machinery is not expected to change materially as a result of the MTN reductions or the NTM agreements. The overriding factor affecting trade in the heavy electrical machinery is the need of the developed countries to protect their production base while exporting in sufficient quantities to maintain an economical scale of production. Foreign governments might be expected to use loopholes in the agreements and non-negotiated barriers such as the value-added tax and "customer preference" to limit U.S. exports. The U.S. imports are not expected to be affected materially by the duty reduction, which is small in absolute terms, or the NTM agreements, which on balance may be just as restrictive as current policies of the U.S. Government. Such duty savings as might occur are expected to be absorbed by the importer and would not accrue to the user of the equipment.

VI. Analysis of a selected segment of the heavy electrical machinery sector

A. Industry profile

Electrical transmission and distribution equipment is a selected segment of the heavy electrical machinery sector. It consists of four major product groups: Transformers (SIC 3612), switchgear (SIC 3613), motors and generators (SIC 3621), and industrial controls (SIC 3622). This segment represented 40 percent of the value of U.S. shipments in the heavy electrical machinery sector in 1977. From the standpoint of technical and manufacturing capabilities, this segment is capable of much improved export performance if changes in nontariff measures provide improved access to foreign markets, particularly in developed countries.

ISAC GROUP 18: HEAVY ELECTRICAL MACHINERY SECTOR ANALYSIS

The segment consists of approximately 500 U.S. firms but is concentrated in a small number of giant producers of electrical equipment. The value of U.S. shipments increased from \$8.8 billion in 1973 to \$11.6 billion in 1977 despite a slight decline in the recession year of 1975. The value of imports and exports also increased during 1973-77, imports from \$420 million to \$693 million and exports from \$595 million to \$1 billion. (Exports surged to \$1.6 billion in 1976, then returned to a more modest growth curve in 1977.) Imports rose as a percent of the value of apparent U.S. consumption from 4.8 percent to 6.3 percent. Exports as a percent of the value of U.S. shipments increased generally from 6.7 percent to 10.4 percent.

Employment by U.S. producers of transmission and distribution equipment fluctuated from 283,000 workers in 1973 to 254,000 workers in 1977. The trend of employment is downward as indicated by the increase in output per worker from \$31,300 in 1973 to \$45,600 in 1977. The increased output per worker is attributed to gains in technology resulting in higher productivity and an improvement in the use of materials and manufacturing techniques.

B. Effect of changes in NTM's

U.S. exports of electrical transmission and distribution equipment are virtually excluded from the markets of developed countries. The foreign countries accomplish this exclusion by a variety of means including withholding the privilege of U.S. firms to bid, preventing U.S. firms from qualifying as suppliers, and awarding contracts to indigenous suppliers through undisclosed evaluation procedures.

The government procurement and standards agreements appear to neutralize many of the past practices which precluded U.S. firms from exporting to developed countries. Should this be the case, U.S. firms would have far better access to foreign markets and U.S. exports should increase. However, it is expected that the government controlled or quasi-government controlled foreign utilities, which are the large potential market for U.S. exports, will continue stringent limitations on U.S. exports. Significant U.S. incursion into the foreign markets would seriously disrupt the manufacturing industries in the developed countries where the capacity to produce exceeds domestic demand. Thus, although U.S. producers are technologically superior, have superior manufacturing capability, and can produce electrical transmission and distribution equipment more economically than other developed countries, the potential U.S. advantage is not expected to result in significant increases in U.S. exports.

ISAC Group 18: Heavy Electrical Machinery Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	21,394.0	23,988.9	22,841.9	26,365.2	<u>1/</u> 28,953.8
Imports <u>1/</u> -----do-----	1,903.1	1,492.9	1,385.1	1,698.5	2,085.2
Exports-----do-----	<u>1/</u> 1,674.5	1,910.9	2,246.2	3,057.9	2,829.6
Apparent consumption <u>1/</u> -----do-----	21,622.6	23,570.9	21,980.8	25,005.8	28,209.4
Ratio, imports to consumption <u>1/</u> percent----	8.8	6.3	6.3	6.8	7.4
Ratio, exports to shipments----do-----	<u>1/</u> 7.8	8.0	9.8	11.6	<u>1/</u> 9.8
Total employment--1,000 workers-----	640.4	638.2	538.2	569.8	<u>1/</u> 582.5

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

**ISAC Subgroup 18(pt): Electrical Transmission
and Distribution Equipment Subsector Analysis**

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	8,844	10,199	9,736	10,742	11,590
Imports <u>1/</u> -----do-----	420	467	470	576	693
Exports-----do-----	<u>1/</u> 595	<u>1/</u> 765	997	<u>1/</u> 1,591	1,201
Apparent consumption-----do-----	8,669	9,901	9,209	9,727	11,082
Ratio, imports to consumption <u>1/</u> percent----	4.8	4.7	5.1	5.9	6.3
Ratio, exports to shipments----do-----	<u>1/</u> 6.7	<u>1/</u> 7.5	10.2	<u>1/</u> 14.8	10.4
Total employment--1,000 workers-----	283	287	244	251	254

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 19: CONSUMER ELECTRONICS SECTOR ANALYSIS

I. Sector profile and conditions of competition

The industries included in this sector produce household appliances, television receivers, radios, hi-fi equipment (including tape recorders and players), video recorders, and phonograph records and tapes for the consumer market. Household appliances include electric and nonelectric cooking equipment (ranges and ovens), refrigerators and freezers, laundry equipment, small or portable electric appliances, vacuum cleaners, sewing machines, and other appliances.

In this sector color television receivers are a leading product accounting for about 20 percent of total sector shipments in 1977. Other imported products are household refrigerators and cooking equipment, together accounting for one-fifth of total shipments; small electric appliances, constituting about 10 percent of shipments, and records and tapes accounting for an additional 6 percent of total sector shipments in 1977.

The two important industry segments within this sector, household appliances and consumer electronics equipment, have been affected differently by foreign competition. Household appliance manufacturers are generally very competitive with foreign producers with the exception of producers of certain portable appliances and mini-refrigerators. Foreign competition, however, is intense in the consumer electronics industry. U.S. producers depend to a large extent on production facilities abroad, and the value of U.S. shipments in the industry is dominated by foreign components.

The household appliance industry is economically healthy and many companies reported outstanding sales and profits in 1977. The consumer electronics industry, for several years, has faced long-term price and profit depression, in large part because of sizeable import penetration. The number of U.S. producers in this industry has fallen sharply in the past decade. However, U.S. producers of phonograph records and pre-recorded tapes enjoy a growing market. The United States is the largest producer of records and tapes, and U.S. products have a substantial advantage over imports.

Despite a downturn in 1974 and 1975, total shipments in this sector rose from \$13.3 billion in 1973 to \$17.2 billion in 1977. In the past decade, imports have increased faster than U.S. producers' shipments. Industry shipments increased by 30 percent between 1973 and 1977, while imports increased 76 percent during the same period. In 1977, imports amounted to \$4.8 billion or 23 percent of the market. For televisions, radios, and audio equipment, the import-to-consumption ratio was 42.6 percent in 1977. The import-to-consumption ratios for household appliances and record and tape products were considerably lower, 8.9 percent and 4.3 percent, respectively, in 1977.

The value of total sector exports almost doubled from \$620 million in 1973 to \$1.2 billion in 1977. Exports represent about 7 percent of U.S. shipments, with little variation across product lines shown in the export-to-shipment ratio.

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The U.S. balance of trade in this industry sector is heavily in favor of imports. In 1977, import value was almost 4 times the size of export value. For televisions, radios and audio equipment, imports were 8 times higher in value than exports. For the record and tape industry, however, the balance of trade was positive, with exports 2.5 times the value of imports.

Employment in the industry has declined in recent years. Total employment amounted to 264,000 in 1977, a decrease from a high of 286,000 in 1973.

Within this sector, the radio and TV receiving equipment industry (including tape players and recorders) is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of this segment appears in Section VI, following the full sector presentation.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

U.S. tariff reductions probably would result in no more than a modest increase in U.S. imports with a negligible adverse impact on U.S. industry and labor. Only a limited impact is expected because the reductions are relatively small. Based on information supplied by the STR, the average depth of cut for this ISAC group is 35 percent. No reductions were offered on color television receivers and microwave ovens, the most significant articles in the import trade in 1978. Even without duty reductions, in the consumer electronics industry the price advantage currently enjoyed by imported goods is already very significant.

Several factors moderate the impact of tariff reductions. Many foreign producers concentrate on supplying appliances for which the U.S. market is limited or U.S. producers offer limited competition. Other foreign producers, especially of such major appliances as washing machines, cooking ranges, and large refrigerators, find exports to the United States restricted by high transportation costs and significantly different technology and styling. For many appliances such as sewing machines, quality and service are more important factors than price in the market.

Most of the benefit of duty reductions is expected to be absorbed in trade or by intermediate consumers, and the consuming public will derive little benefit. However, in the case of vacuum cleaners and sewing machines in which imports encounter stiff competition from domestic appliances or other imports, duty savings are likely to be passed on to the consuming public at least by delaying increases in prices. U.S. manufacturers of equipment may derive some gain from tariff concessions on consumer electronic components.

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B. Sector impact of U.S. adoption of proposed NTM agreements

U.S. adoption of proposed NTM agreements is expected to have little effect on trade in the consumer electronics and household appliances industries. In comparison with most other countries, the U.S. has fewer and less difficult NTM's to cope with; the U.S. market, therefore, is accessible to foreign competition. Because of this, adoption of NTM agreements by the United States will not contribute to a significant change in the volume of imports. In the standards area, U.S. certification procedures are accessible to foreign manufacturers, and do not appear to act as a deterrent to imports, as testified to by the large influx of small electric and consumer electronics imports into the United States. U.S. acceptance of the other NTM agreements will have no, or very marginal, impact on the level of imports of consumer electric and electronics goods in the United States.

C. Sector impact of foreign adoption of proposed NTM agreements on U.S. imports

The adoption of the agreements by U.S. trading partners is not expected to have a significant impact on U.S. imports.

D. Sector analysis of the combined impact of U.S. tariff concessions and U.S. and foreign adoption of proposed NTM agreements

The combined impact of the small reduction in the rates of duty and acceptance of NTM agreements is expected to be minimally adverse to the U.S. industry and not likely to alter the high negative balance of trade in the U.S. consumer electronics industry.

III. MTN export impact

A. Sector impact of foreign tariff concessions

The aggregate tariff concessions offered by foreign governments are small and selective, and will contribute little to expansion of U.S. exports, with the possible exception of trade with Canada. Many U.S. producers in this sector have overseas affiliates to serve foreign markets in preference to exporting to these markets.

The foreign tariff reductions are moderately higher than the U.S. reductions. Based on STR information, the EEC's offer is equivalent to a drop of 2.2 percentage points, a 31 percent depth of cut, while Japan's duty concession is 1.9 percentage points (a 33 percent depth of cut). Neither the EEC nor Japan offered a duty reduction on television receivers. Canada,

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however, has reduced its duty on television receivers and certain audio equipment to zero. Since the Canadian market is served by affiliates of U.S. firms, the concession should be beneficial to U.S. producers in the border trade between related companies. Canada's offer on laundry equipment (from 20 percent to 12.5 percent) can be expected to increase U.S. exports moderately. While Canada's duty reductions amount to an estimated average depth of cut of 59 percent its tariff rates remain substantially above average U.S. rates.

B. Sector impact of foreign adoption of proposed NTM agreements

Most of the NTM agreements pertain marginally to trade in this sector, with the exception of the standards agreement. U.S. producers and exporters claim that foreign electrical certification procedures are often arbitrary, time consuming and design-based rather than performance-based. Regional certification rules which favor certain groups of countries are another stumbling block to U.S. firms. The NTM standards agreement would lessen discriminatory practices through international participation in standards writing and certification arrangements, and establishment of rules restricting regional favoritism. The regional provision of the agreement should benefit U.S. producers in obtaining certification in Europe and Canada. Presently, Canada accepts electrical certification determinations from certain foreign institutions, but U.S. companies are at a disadvantage because no U.S. institution is listed. The Nordic countries have reciprocal arrangements which facilitate certification among themselves but work against other countries. If the NTM standards agreement achieves some uniformity among national certification procedures and diminishes the importance of regional considerations, the certification process will be more open to U.S. producers and U.S. exports may increase.

The other NTM agreements should have little effect on trade in this sector. U.S. exports in the industry are small, particularly exports to developing countries, and consumer products are seldom an item of government procurement.

C. Sector impact of U.S. adoption of NTM agreements on U.S. exports

U.S. adoption of the NTM agreements is not expected to have an impact on U.S. exports of consumer electronic products and household appliances.

D. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

While the combined impact of foreign tariff concessions and adoption of NTM agreements will not significantly change the export potential of this sector, it may result in a modest improvement for U.S. exports. Tariff reductions, particularly Canadian, and the lessening of discrimination offered in the standards agreement can be expected to benefit U.S. exporters.

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IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Local content regulations are one of the most significant factors restricting U.S. trade in this sector. Several countries require a certain percentage of value to be added in the country of importation, and many developing countries exclude imports of products that are being or can be made in the home market. Consumer electronics products, in particular, encounter such trade restrictions in developing countries.

Customer preference for goods produced in the home market, complicated marketing channels, complex internal trade regulations, and value-added and border taxes are additional obstacles to U.S. exports not covered by the NTM agreements.

V. Overall impact on sector

The duty reductions and NTM agreements will have little effect on the pattern of trade in this sector and consumer benefits will be slight. On the whole, U.S. imports will increase modestly, the U.S. industry is not likely to be hurt by U.S. concessions, and U.S. producers and exporters may stand to gain from common adoption of the standards agreement. While U.S. exports may increase as a result of adoption of the agreements and duty reductions, the growth will be marginal because of substantial trade restrictions which operate outside the scope of the MTN negotiations. Thus, the uneven balance of trade in this sector will be little changed by duty concessions and common adoption of the NTM agreements.

VI. Analysis of the radio and TV receiving equipment industry segment (including tape players and recorders)

A. Industry segment profile and conditions of competition

The industries included in this segment produce radio (including automobile radio) and television receivers, phonographs, and tape players and recorders for home consumption. Much of the value added by these industries is the final assembly of imported products. Monochrome TV receivers, radio receivers, automatic record changers, and tape players and recorders are largely imported. Color TV production in the United States is large, although nearly half of U.S. production is accounted for by U.S. subsidiaries of foreign firms.

The industries consist of some 400 firms. U.S. producers' shipments decreased from \$5.1 billion in 1973 to \$4.4 billion in 1975 before increasing to \$5.5 billion in 1977. U.S. imports generally increased from \$2.2 billion in 1973 to \$3.7 billion in 1977, while U.S. exports rose from \$318 million to \$463 million. U.S. imports have accounted for an increasing share of apparent U.S. consumption, rising from 31.3 percent in 1973 to 42.6 percent in 1977. U.S. exports, which were 6.2 percent of the value of U.S. producers' shipments

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in 1973, increased to 8.4 percent of the value of shipments in 1977. Total employment was 92,000 workers in 1973; it decreased to 69,000 in 1975, and then increased to 74,000 in 1977. Profits have been below the norm for the electronics industries.

B. MTN import impact

U.S. tariff reductions should have little effect on U.S. imports of radio and TV receiving equipment. Further, adoption of NTM agreements by the United States and foreign countries is not expected to have any effect on U.S. imports. The U.S. industries are dependent on imports for most products and no offer was made on color TV receivers. Imports are expected to remain high, but are not expected to accelerate as a result of the MTN.

C. MTN export impact

Foreign tariff cuts and foreign and U.S. adoption of MTN codes are expected to have no impact on U.S. exports of radio and TV receiving equipment. The U.S. industries have a very weak production base compared with that of their foreign competitors. While the U.S. production base was being eroded by imports, U.S. producers' prices were lower than foreign market prices but U.S. producers were prevented by tariffs and numerous NTM's from selling in foreign markets. The same is true today, but U.S. export performance has been poor at best. If the protectionist posture of foreign governments evaporates with the agreements, it is unlikely that U.S. producers would risk an incursion into foreign markets when they have scant success in the U.S. market.

D. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

U.S. producers of radio and TV receiving equipment have been unable to penetrate foreign markets owing to a variety of foreign trade factors, most of which are probably changed by the tariff reductions and NTM agreements. Those formidable obstacles remaining include the value-added tax or similar tax and complicated distribution systems. Further, foreign customers seem to prefer products made by manufacturers of the same national origin.

E. Overall impact on industry segment

The overall impact of tariff reductions and NTM agreements on trade in radio and TV receiving equipment (including tape players and recorders) is projected to be negligible. U.S. exports are expected to remain small.

ISAC Group 19: Consumer Electronics Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	13,271	13,079	12,425	14,354	17,210
Imports-----do-----	2,702	2,741	2,322	3,676	4,755
Exports-----do-----	620	884	875	1,106	1,199
Apparent consumption-----do-----	15,353	14,936	13,872	16,924	20,766
Ratio, imports to consumption--percent-----	17.6	18.4	16.7	21.7	22.9
Ratio, exports to shipments----do-----	4.7	6.8	7.0	7.7	7.0
Total employment--1,000 workers-----	286	276	232	247	264

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC Subgroup 19(pt): Radio and TV Receiving Equipment 1/ Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars---	5,147	4,865	4,444	5,056	5,500
Imports-----do-----	2,203	2,253	1,810	2,981	3,740
Exports-----do-----	318	383	392	498	463
Apparent consumption-----do-----	7,032	6,735	5,862	7,539	8,777
Ratio, imports to consumption--percent-----	31.3	33.5	30.9	39.5	42.6
Ratio, exports to shipments----do-----	6.2	7.9	8.8	9.8	8.4
Total employment--1,000 workers-----	92	88	69	72	74

1/ Including tape players and recorders.

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC GROUP 20: SCIENTIFIC INSTRUMENTS SECTOR ANALYSIS**I. Sector profile and conditions of competition**

This sector covers three major product groups: (1) measurement, analysis and control instruments (SIC products codes 3811, 3822, 3823, 3824, 3825, 3829, and 3832); (2) medical, surgical and ophthalmic instruments (SIC product codes 3693, 3841, 3842, 3843, and 3851); and (3) watches, clocks, clockwork operated devices, and parts (SIC product code 3873).

In the United States there are approximately 5,400 establishments manufacturing products covered in this sector. However, production of most of the commodities of each product group is dominated by a few leading enterprises. Total employment increased from approximately 398,000 in 1973 to an estimated 463,000 in 1977, or by 16.6 percent. The aggregate annual value of U.S. shipments increased from \$11.5 billion in 1973 to an estimated \$18.6 billion in 1977, or by 61.7 percent. The value of U.S. exports doubled, rising from \$1.7 billion in 1973 to \$3.4 billion in 1977. Imports increased from \$968 million in 1973 to \$2.1 billion in 1977, or by 117 percent (see attached table).

U.S. producers of scientific and medical instruments, which account for more than 90 percent of the total value of products encompassed by this sector, are highly competitive, and the sector, as a whole, has exhibited definite strength in the domestic and foreign markets. In terms of the total sector, the ratio of U.S. exports to shipments increased from 14.5 percent in 1973 to 18.5 percent in 1977. The ratio of U.S. imports to apparent consumption rose steadily from 9.0 percent in 1973 to 11.9 percent in 1977.

Most domestic and foreign end-users of scientific and medical instruments do not purchase these products solely on the basis of cost, but take into consideration the design features, performance capabilities, reliability, accuracy and availability of parts and after-sale services. The strength of the U.S. instrument industry can be attributed to the fact that U.S. instruments are generally price competitive, are often superior to foreign made instruments, and, with few exceptions, U.S. producers have efficient after-sale service facilities in the United States not matched by their foreign competitors. In the United States, the domestic manufacturers face foreign competition primarily in the area of low to medium technology instruments. Most foreign needs and demands for U.S. instruments are generally for high technology instruments where the United States is most competitive. A number of the larger U.S. companies have foreign subsidiaries or local distributors overseas. However, in spite of these favorable conditions, U.S. exports of instruments are restrained to a considerable extent by a variety of nontariff measures such as standards and technical regulations, government procurement practices and subsidies.

The competitive position of the U.S. horological devices industries in the U.S. and world markets is less favorable than that of the scientific and medical instruments industries; this is especially true for the watch industry. While the ratio of imports to consumption of scientific and medical

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instruments increased by only 1.5 percentage points between 1973 (7 percent) and 1977 (8.5 percent), for horological products it rose from 23 percent in 1973 to 32 percent in 1977. The Swiss have long been dominant in world trade in mechanical watches, and the Germans, to a lesser degree, in mechanical clocks. The U.S. digital watch industry has faced intense competition in the past 2 years largely as a result of overproduction and rampant price cutting. Despite technological advances, styling, and automated assembly operations, U.S. producers are disadvantaged because of relatively high production costs. Although inflation abroad and changes in currency relationships have tended to benefit U.S. producers in recent years, the competitive position of the U.S. horological industry in both the United States and foreign markets is expected to change very little in the near future.

Within this sector are the following selected industry segments: instruments for measurement, analysis and control, and watches, clocks, clockwork operated devices and parts, which are viewed by many as U.S. trade areas which are, or could be, affected by changes in MTN tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of Scientific Instruments Sector, following the full sector presentation.

II. MTN import impact

Based on information supplied by the STR, the average U.S. depth of cut for this ISAC sector is 48 percent. With few exceptions, the implementation of the proposed U.S. tariff concessions will likely have only a marginal impact on U.S. imports, producers, labor and consumers. Since the already relatively low duties on most products of this sector are not in themselves significant barriers to trade, the U.S. offers will not significantly alter the competitive conditions to the extent that U.S. imports will be substantially increased. However, while the aggregate impact of the proposed U.S. tariff concessions will likely have only a marginal impact on most U.S. industries covered in the sector, certain products will likely be subjected to greater foreign competition and the producers of these products will likely be appreciably adversely impacted. These include surveying and hydrographic instruments, drawing, marking-out and mathematical calculating instruments (SIC 3811(pt)), bicycle speedometers and taximeters (SIC 3824(pt)), compound optical and scanning electron microscopes (SIC 3832(pt)), and clocks and other timing devices but not watches (SIC 3873(pt)).

Although there are scores of industry design and/or performance standards in the United States which affect many of the products included in this sector, their impact on imports has been minimal. Similarly, other NTM's, such as marking and labeling requirements, have not been a serious barrier to imports. Thus, the adoption of the proposed NTM agreements will likely have only a marginal impact on aggregate U.S. imports of products in this sector.

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With respect to certain scientific instruments, all aeronautical instruments must conform to the Technical Standard Orders issued by the Federal Aviation Administration (FAA), or be certified by that agency. These requirements must be met by foreign and domestic producers alike in the interest of safety. Accordingly, it does not appear that the FAA requirements relating to imported instruments will be affected by the adoption of uniform agreements. In addition, it does not appear that the health and safety regulations imposed by the Food and Drug Administration on all domestically produced and imported medical and ophthalmic products will be affected by the adoption of the NTM agreements. For horological devices, the marking requirement specifying the country of origin is not considered to be restrictive of imports.

U.S. Government purchases of scientific instruments under the Buy-American Act constitute the only NTM that adversely affects U.S. imports to any degree. Although government purchases are large, factors other than cost--capability, quality, design features, availability of after-sale services--must be considered in the purchases of these products. Therefore, the effect on import trade from the adoption of a uniform government purchasing agreement will probably be small in view of the competitive advantages enjoyed by most domestic producers over foreign producers in the U.S. market.

Together, the U.S. tariff concessions and the adoption of the proposed NTM agreements will have only a minor impact on the bulk of U.S. imports covered by this sector. However, tariff reductions on certain products, already identified, will result in slight to appreciable increases in U.S. imports, which in turn will impact adversely on the producers of these products to varying degrees.

III. NTM export impact

Based on information supplied by the STR, the average depth of cut for this ISAC sector is 36 percent for the EEC, 24 percent for Japan, and 54 percent for Canada. Foreign tariff concessions will likely have only a marginal positive impact on U.S. exports. The duties, as a whole, are not in themselves significant barriers to trade for most products, and the average duty reductions, by the EEC, Japan and Canada will not alter competitive conditions to the extent that U.S. exports will be significantly increased.

The adoption of the proposed NTM agreements will likely have a significant positive impact on U.S. exports of scientific and medical instruments. However, it will probably have no impact on exports of watches, although it will provide some stimulus for increased exports of other timing devices.

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According to instrument industry spokesmen, including members of the ISAC Committee, foreign NTM's are serious impediments to sales of U.S. scientific and medical instruments in many developed and some developing countries. Among the barriers to trade that have been cited, but which would presumably be reduced by adoption of the NTM agreements, are a myriad of customs practices and procedures which add to the cost of or effectively limit exports, such as, unrealistic and/or unnecessary industry design and/or performance standards which exporters are required to meet, restrictions on movements of sample instruments, subsidies or other preferential treatment for domestic products, and government procurement policies that effectively limit the purchase of U.S. instruments.

The adoption of uniform NTM agreements by foreign nations will likely benefit the U.S. scientific and medical instrument industry and may provide some stimulus for increased exports of clocks and other timing devices. Because the U.S. scientific and medical instrument industry enjoys an established reputation for producing high quality and competitive products, and several larger manufacturers have overseas subsidiaries and/or distribution systems and after-sale service facilities, the adoption of NTM agreements will permit the United States to further penetrate or open new markets for its moderate to high technology instruments.

With few exceptions, the implementation of the proposed foreign duty reductions in themselves will likely have only a marginal impact on international trade. However, for the sector as a whole, the adoption of uniform NTM agreements, even in the absence of duty reductions, would probably have a significant positive impact on the U.S. industry, leading to an increase in exports and employment.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no known foreign trade factors, other than foreign tariffs and NTM's that are peculiar to this sector and would restrict trade.

V. Overall impact on sector

The U.S. industry comprising this sector as a whole is generally highly competitive and well established in both the domestic and foreign markets. Therefore, with the exception of the products already identified, the implementation of the proposed U.S. tariff concessions will likely have only a marginal impact on U.S. imports, labor and consumers. Because U.S. NTM's do not constitute a significant barrier to imports, the adoption of the proposed NTM agreements will likely have only a marginal impact on U.S. imports.

Since foreign duties are not in themselves significant barriers to trade for most products of this sector, the foreign tariff concessions will likely have only a marginal positive impact on U.S. exports. However, because

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foreign NTM's are significant impediments to international trade, the adoption of uniform NTM agreements would probably have a significant positive impact on this sector leading to an increase in exports and employment.

VI. Analysis of selected segments of the scientific instruments sector

Scientific instruments 1/-- There are about 2,800 establishments, employing over 250,000 workers in the United States, that produce scientific instruments. Although there are a few leading manufacturers, some of which operate foreign subsidiaries, most are small and employ fewer than 20 people. The total value of U.S. shipments increased from \$5.6 billion in 1972 to \$9.6 billion in 1977; exports rose from \$960 million to \$2.2 billion and imports jumped from \$313 million to \$727 million over the same period.

While U.S. tariff concessions will likely have only a marginal impact on the scientific instruments sector in the aggregate, that part of the industry producing surveying and hydrographic, drawing, marking-out and mathematical calculating instruments (SIC 3811(pt)), and that producing bicycle speedometers and taximeters (SIC 3824(pt)) will likely be subjected to increased foreign competition with appreciable adverse impact.

The European producers have historically excelled in the high-technology precision-optical surveying and hydrographic instruments. Thus, U.S. duty reductions will probably result in an appreciable increase in imports of surveying and hydrographic instruments as the more sophisticated foreign instruments become more price competitive. Likewise, reductions in the U.S. tariff rates on drawing, marking-out, and mathematical calculating instruments, and taximeters and bicycle speedometers will probably result in appreciable increases in imports of these products. Since these articles are low technology instruments and compete mainly on the basis of price, the imported products will likely be more competitive with the domestic instruments. The adoption of the proposed NTM agreements will in themselves probably have only a marginal impact on U.S. imports.

Overall, while there will be some adverse impact on U.S. producers of certain scientific instruments, the combined effect of U.S. duty reductions and adoption of the NTM agreements on the industry, labor and consumers will not be significant.

Foreign duties on scientific instruments are not significant barriers to U.S. exports. Since the foreign instruments are generally price competitive with those of U.S. manufacturers, the foreign tariff concessions will likely increase U.S. exports only marginally.

Although U.S. exports of scientific instruments have been substantial (\$2.2 billion in 1977), they have been seriously restricted by various NTM's, such as design and/or performance standards, restrictions in movements of sample instruments, subsidies, government procurement practices, and a myriad

1/ Does not include medical instruments.

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of customs practices and procedures. Since the U.S. industry enjoys a reputation for producing high quality and competitive products, foreign adoption of uniform NTM agreements will permit the United States to further penetrate or open new markets for its moderate to high technology instruments.

On balance, the combined effect of tariff concessions and adoption of the NTM agreements on the industry producing scientific instruments will be to significantly increase U.S. exports.

Watches, clocks, clockwork operated devices and parts (horological devices).--Except for one large domestic producer that has supplied a significant part of the U.S. market for inexpensive mechanical watches, the U.S. mechanical watch market has been dominated by imported watches or imported movements cased in the United States.

Although U.S. producers pioneered in the development of electronic watches and production was initially begun in the United States, there has been a trend in the past several years for the industry to increasingly shift assembly of modules to subsidiaries in the Far East, returning them to be cased and sold in the United States. European and Japanese watch producers are shipping electronic watches to the United States as well.

The United States produces no mechanical clocks, and its production of battery operated clocks faces tight competition in the domestic and world markets. Other horological products such as time switches and timing apparatus are probably the strongest competitive segment of the total horological industry. This sector is a net exporter and enjoys a technological advantage and skill that has not yet been reached abroad, especially in the less developed countries.

The reduction in the U.S. duties on horological products will likely result in a modest increase in imports, thus affecting an industry that has experienced considerable competition in recent years, resulting from some overproduction and price cutting. The general trend of rising domestic production costs also has provided a favorable market for and encouraged imports of horological products. Since there are no U.S. NTM's on horological products, except for marking requirements specifying country of origin, the adoption of the NTM agreements will have no discernible effect on the level of imports.

On balance, the combined effect of U.S. tariff reductions and the adoption of the NTM agreements on horological products will probably result in a modest increase in imports with a limited impact on the domestic industry, labor, and consumers.

Foreign tariff reductions will not affect U.S. exports of horological devices to a significant degree, although tariff reductions may stimulate exports of timers and other clockwork operated devices.

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For the most part, U.S.-made watches and clocks will not be price competitive in foreign markets despite the proposed tariff reductions. It is not expected that the adoption of the NTM agreements will significantly affect exports because one of the basic limiting factors for export expansion is the foreign cost advantage.

The combined effect of lower foreign rates of duty and the adoption of the NTM agreements will generally have little impact on U.S. exports of horological devices.

ISAC Group 20: Scientific Instruments Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	11,526	13,722	14,819	16,778	1/ 18,569
Imports-----do-----	968	1,125	1,272	1,700	2,051
Exports-----do-----	1,675	2,283	2,691	3,087	3,435
Apparent consumption-----do-----	10,819	12,564	13,400	15,391	17,185
Ratio, imports to consumption--percent-----	9.0	9.0	9.5	11.1	11.9
Ratio, exports to shipments----do-----	14.5	16.6	18.2	18.4	18.5
Total employment--1,000 workers-----	398	423	425	442	1/ 463

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 21: PHOTOGRAPHIC EQUIPMENT SECTOR ANALYSIS

I. Sector profile and conditions of competition

Sector 21, Photographic Equipment and Supplies, 1/ covers the products of the photographic industry. The industry's output can be classified into two basic categories: sensitized materials (film, papers, plates and chemicals) and equipment. The production of sensitized materials requires large capital investment and a high degree of technology. While reflecting substantial material cost, sensitized products have a relatively low labor input. The manufacture of photographic equipment covers a wide range of products such as cameras, projectors, photofinishing and photoprocessing equipment, micro-filming and photocopying equipment, projection screens, enlargers, and others. When compared to sensitized materials, photographic equipment generally can be considered labor intensive. Certain of these products, however, require relatively high technology and benefit from sophisticated manufacturing capability.

There are about 570 establishments producing photographic products, located mostly in the northeast and north central part of the country. Several of the larger firms, however, account for a large part of the industry's output and employment.

The value of shipments of U.S. photographic products increased from \$6.2 billion in 1973 to \$9.3 billion in 1977, representing an annual average rate of increase of 10.8 percent. Items accounting for most of the increase were photocopying equipment and photographic sensitized film, and to a lesser degree still picture equipment, i.e., still picture cameras, projectors, photofinishing equipment and photographic paper. Total employment in the industry is estimated at 110,000 in 1977, an increase of about 9 percent over the number employed in 1973.

U.S. imports of photographic products increased from a value of \$416 million in 1973 to slightly over \$1 billion in 1977, an annual average rate of increase of 24.9 percent. Imports are heavily weighted by Japanese products which have been rising steadily over the years. Japan accounted for about 65 percent of total U.S. imports of photographic products in 1977, followed by West Germany, and Belgium-Luxembourg with 7 percent and 6 percent, respectively. The ratio of imports to consumption increased from 7.2 percent in 1973 to 11.4 percent in 1977.

U.S. exports nearly doubled in 1973-77, increasing from \$799 million in 1973 to \$1.44 billion in 1977, representing an average annual rate of increase of 15.8 percent. A large part of the increase is due to the substantial exports of hand type still picture cameras, photographic film and photocopying equipment. The United States exports photographic products to about 140 countries; Canada, West Germany, Japan, Netherlands, United Kingdom, and France are the leading customers. The ratio of exports to shipments increased from 12.9 percent in 1973 to 15.4 percent in 1977.

1/ SIC code 3861.

ISAC GROUP 21: PHOTOGRAPHIC EQUIPMENT SECTOR ANALYSIS

The United States is the world's largest producer of photographic equipment and supplies; it is also the largest and most accessible market for foreign photographic goods. Because of this large market, the bulk of U.S. producers' shipments, about 85 percent over the past several years, is sold for domestic consumption. For many foreign competitors, however, the reverse is true. Germany exported 79 percent of its production of photographic products to foreign markets in 1976, and Japan exported 85 percent of its 1977 production of still picture cameras.

The United States has experienced a favorable trade surplus in photographic products for many years; this surplus reached a high of \$632 million in 1974, but declined to \$427 million in 1977. An additional surplus of 2 or 3 percent is estimated for 1978 and 1979 over what it was in 1977, partly because of increased exports of instant-print cameras and film, which, to date, are produced only by U.S. manufacturers. The strength of the U.S. photographic industry has been in the development and promotion of new and improved products; each new development--the miniature 110 cameras and film, new models of instant-print cameras and improved film, technological developments for microfilm processing, new and improved models of photocopying machines--has contributed to the growth of sales in both the United States and abroad. Imports, however, have increased their share of the American market. A major import is the 35 mm camera, which is not produced in the United States. Imports of this type of camera have increased substantially in recent years. Its popularity, however, has accounted for a tremendous increase in the sale of U.S. photographic color film.

Several of the larger U.S. companies have overseas subsidiaries which produce various products; photographic film, for example, is produced in nine countries by foreign affiliates of U.S. firms, a number of which also produce photographic paper. Cameras are manufactured by U.S. affiliates in seven foreign countries, and projectors in four countries. Despite the strength of the U.S. firms, low labor costs in several developing countries enable imports to undersell many U.S. products of comparable quality, both in the U.S. market and abroad.

Within this sector, two industry segments, photographic color films and color photographic paper, are viewed by many as U.S. trade areas which are or could be affected by changes in MTN tariff or nontariff trade measures. A brief analysis of each of these segments appears in Section VI, Analysis of Selected Segments of the Photographic Equipment and Supplies Sector, following the full sector presentation.

II. MTN import impact

Although the U.S. duty reductions on photographic goods generally are at maximum permissible levels, they likely will result in only a modest increase in aggregate imports, with a negligible adverse impact on the U.S. industry and labor. Based on information supplied by the STR, the average depth of cut

ISAC GROUP 21: PHOTOGRAPHIC EQUIPMENT SECTOR ANALYSIS

for this ISAC sector is 40 percent. Several of the more important photographic products already have relatively low rates of duty which are not significant barriers to trade. However, imports of photographic filters, editors, viewers, and still and motion-picture projectors, for which the current rate of duty is somewhat restrictive, probably would increase significantly following the offered duty reductions. Japan is the major supplier of these products, and duty reductions of the magnitude offered will give the Japanese industry added competitive advantage that could result in an appreciable increase in imports with a significant adverse impact on labor. Duty savings from U.S. tariff concessions will likely benefit the intermediate consumer with some savings passed on to the consuming public.

There are no known NTM's limiting imports of photographic goods, other than the marking requirements specifying the country of origin, and the American selling price basis of valuation affecting a small number of photographic chemicals.

The combined impact of U.S. tariff concessions and the adoption of the proposed NTM agreements will have only a small impact on the majority of U.S. imports of photographic equipment and supplies. However, tariff reductions on several items could result in an appreciable increase in imports with a significant impact on labor for a few segments of the U.S. photographic industry.

III. NTM export impact

Based on information supplied by the STR, the average depth of cut for this ISAC sector is 42 percent for the EEC, 55 percent for Japan, and 40 percent for Canada. Generally, the foreign duty reductions will not likely increase export potential for the U.S. photographic industry. Foreign affiliates of U.S. firms produce photographic cameras in seven countries, including the EEC, Canada, and Japan; photographic projectors are also produced by U.S. firms in the EEC, Canada, and Japan. Photographic film is produced in nine foreign countries by U.S. affiliates, a number of which also produce photographic paper. However, certain segments of the industry should benefit greatly from rate reductions offered by Canada and Japan. Although a large part of the important products of the U.S. photographic industry already enter free of duty into Canada, such items as motion-picture cameras, parts for film projectors, and other cameras and parts (not made in Canada), will also be granted a duty-free status; other products also received substantial duty cuts which will improve U.S. export potential.

Perhaps the most important foreign duty reduction is the offer from Japan on photographic color film and color photographic paper. The offered duty reduction on these products, significant items of trade, place the U.S. industry in a more competitive position in the Japanese market, and it is expected that U.S. exports will increase with a beneficial impact on U.S.

ISAC GROUP 21: PHOTOGRAPHIC EQUIPMENT SECTOR ANALYSIS

industry and labor. With the exception of a few products, rate reductions offered by the EEC are too small to increase export potential. In addition, U.S. affiliates produce photographic goods in many countries within the EEC.

The majority of the NTM's employed by foreign countries are generally considered nuisance factors by the domestic photographic industry. However, such NTM's as requirements for currency deposits and import licensing and quotas generally add to the cost of doing business. The only known quota involves the Government of Brazil, which has entered into a joint venture with Konishiroku Industry Co. Ltd., (Japan) in the production of medical X-ray film in Brazil. As a result of this venture, Brazil has imposed an import quota of one million square meters of medical X-ray film per year.

The combined impact of foreign tariff concessions and foreign adoption of the NTM agreements will not likely increase export potential for the U.S. photographic industry in the aggregate. Many of the important photographic products are manufactured by foreign affiliates of U.S. firms. Certain sectors of the industry, however, should benefit greatly from foreign duty reductions offered by Canada and Japan.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

With the exception of one quota on medical X-ray film (as mentioned in section III), and the VAT imposed by some foreign countries, there are no other known trade factors which presently affect, or could potentially affect, the health of the U.S. photographic industry.

V. Overall impact on sector

The U.S. tariff concessions on photographic equipment and supplies and adoption of the NTM agreements will probably cause a modest increase in imports, but will have only a negligible impact on the U.S. industry and labor. A few segments of the industry, however, may experience some market penetration by imports of certain products. The consuming public would probably realize some savings passed down through U.S. tariff cuts.

Foreign adoption of the proposed NTM agreements and foreign tariff concessions will not likely increase export potential for the U.S. photographic industry as a whole. Foreign affiliates of U.S. firms produce photographic products in a number of countries, including the EEC, Canada and Japan. Several segments of the industry, however, should increase their export potential because of substantial foreign duty reductions, notably by Canada and Japan.

ISAC GROUP 21: PHOTOGRAPHIC EQUIPMENT SECTOR ANALYSIS

Overall, the combined effect of U.S. and foreign duty reductions and adoption of the NTM agreements by participants in the MTN should be favorable to the United States.

VI. Analysis of selected segments of the photographic equipment and supplies sector

Duty reductions by the United States on photographic film and paper will likely result in only a modest increase in imports with a negligible adverse impact on the U.S. industry and labor. The value of imports of photographic film and photographic paper amounted to about \$195 million and \$90 million, respectively, in 1977. There are no known NTM's limiting imports of photographic film or paper, other than the marking requirement specifying the country of origin.

Although the United States is a net exporter of photographic film and photographic paper, the offer from Japan on photographic color film and color photographic paper is significant. The duty reductions on these products (from 16 percent to 4 percent) place the U.S. industry in a more competitive position in the Japanese market, and it is expected that U.S. exports will increase. Foreign affiliates of U.S. firms produce photographic film in nine foreign countries, including the EEC and Canada; many of these countries also produce photographic paper.

Except for a quota on medical X-ray film entering Brazil, the majority of the NTM's employed by foreign countries are generally considered nuisance factors by the domestic photographic industry.

The net trade effect of both domestic and foreign tariff reductions as well as adoption of NTM agreements by participants in the MTN on photographic film and paper should be favorable to the United States.

ISAC Group 21: Photographic Equipment Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars ^{1/--}	6,183	7,035	7,318	8,242	9,310
Imports-----do-----	416	470	524	741	1,009
Exports-----do-----	799	1,102	1,100	1,198	1,436
Apparent consumption-----do-----	5,800	6,403	6,742	7,785	8,883
Ratio, imports to consumption--percent-----	7.2	7.3	7.8	9.5	11.4
Ratio, exports to shipments----do-----	12.9	15.7	15.0	14.5	15.4
Total employment--1,000 workers-----	101	109	100	107	110

^{1/} Value of shipments of photographic equipment and supplies produced by all industries.

Source: Compiled from official statistics of the U.S. Departments of Commerce and Labor.

ISAC GROUP 22: NONCONSUMER ELECTRONICS SECTOR ANALYSIS

I. Sector profile and conditions of competition

The nonconsumer electronics sector is composed of 11 four-digit SIC industries. These product groups and their share of the value of total U.S. shipments in this sector in 1977 are shown below:

SIC code	Description	Percent of sector shipments, 1977
3661	Telephone and telegraph apparatus-----	20.8
3662	Communications, broadcast, intercommunications, : signal, search, detection, navigation, guidance and : other apparatus-----	39.0
3671	Electron tubes, receiving type-----	.3
3672	Cathode ray picture tubes-----	1.8
3673	Transmitting, industrial, and special purpose electron : tubes-----	1.7
3674	Integrated circuits, modules, and semiconductor : devices-----	14.8
3675	Capacitors-----	2.3
3676	Resistors-----	1.7
3677	Coils, transformers, reactors, and chokes-----	1.7
3678	Connectors-----	3.0
3679	Electronic, components, and subassemblies, n.e.c-----	12.9

SIC groups 3661 and 3662 are composed chiefly of end products. The products included in SIC 367 are chiefly electronic components used in the products of SIC groups 3661 and 3662 as well as a host of other articles including computers, consumer products, industrial process controls, and electronic instruments. SIC group 3662 is composed of products principally for military, commercial, and industrial applications, but it also contains CB radio transceivers and blank magnetic recording tape.

There are over 3,000 firms in the United States producing the end products and components covered in this sector. Production of telephone and telegraph apparatus, is highly concentrated.

At this time, trade in telephone and telegraph apparatus is small owing to the government involvement in the industry in most developed foreign countries. The U.S. industry is the world's technology leader and has great potential to export to developed and developing countries. 1/

1/ See USITC Publication 946, February 1979, A Baseline Study of the Telephone Terminal and Switching Equipment Industry.

ISAC GROUP 22: NONCONSUMER ELECTRONICS SECTOR ANALYSIS

Production of the products of SIC 367, consisting chiefly of electronic components, is highly concentrated within 4-digit SIC groups. Integrated circuits are highly export competitive 1/; however, capacitors, resistors, and receiving tubes, are imported into the U.S. market in large quantities.

The United States is the world's largest producer and consumer of communications equipment and nonconsumer electronic equipment. The value of U.S. shipments of all products of this sector increased from \$22.8 billion in 1973 to \$32.7 billion in 1977. During the same period, imports increased from \$1.4 billion to \$3.5 billion and exports increased from \$2.4 billion to \$4.4 billion. Imports fluctuated between 6.6 percent (1973) and 12.0 percent (1976) of U.S. apparent consumption and exports fluctuated between 10.3 percent (1973) and 14.5 percent (1976) of U.S. shipments. The balance of trade was about \$1.0 billion in favor of the United States each year during the period.

A large part of the value of imports and exports was composed of transactions between domestic and foreign facilities of U.S. multinational firms which characterize the sector. During the CB radio craze, particularly in 1976, these radios dominated the import of products in SIC 3662 until the President imposed increased duties on such radios in 1978.

The number of employees in this sector decreased from 858,000 in 1973, to 737,000 in the recession year of 1975, before increasing to 785,000 in 1977. Output per employee increased from \$26,600 to \$41,600 during the period. The long-term outlook for the sector is an increase in the output per employee and a slow downward trend in employment from the 1973 level. Although the minimum wage has played a significant role in the movement of U.S. firms to offshore assembly operations, the major factors affecting U.S. employment in this sector have been (1) improved technology chiefly evidenced in integrated circuits and (2) the necessity for U.S. firms to set up foreign subsidiaries in order to obtain access to foreign markets. In the meantime, many U.S. employees have been displaced by imports of established (mature) products from countries which protect their own markets from U.S. exports.

Profits among the producers of communications equipment and of selected electronic components are above the industry norm; on the other hand, U.S. producers of the other components covered here are under heavy pressure from imported products and consequently are not prospering.

The United States holds a technology lead in this sector but the importance of electronic components and communications to world leadership has encouraged foreign nations to maintain indigenous industries which are protected while the foreign nations attempt to achieve parity in technology

1/ A current U.S. International Trade Commission study (Inv. No. 332-102) dealing with Integrated Circuits and Their Use in Computers is expected to be completed in early fall, 1979.

ISAC GROUP 22: NONCONSUMER ELECTRONICS SECTOR ANALYSIS

and surpass the United States. In this effort all countries except Japan have failed to mount a serious challenge. Nonetheless, most developed nations have a production base for mature products included in this sector and have erected formidable barriers to U.S. products. These barriers, strictly enforced on mature products, are not strictly enforced on the new products at the forefront of technology.

II. MTN import impact

A. Sector impact of U.S. tariff concessions

Based on information supplied by STR, the U.S. offers of tariff reductions amount to an average depth of cut of 24 percent from the average rate of 6.6 percent ad valorem for the products in this ISAC group. The reduction is not significant and will not have a noticeable impact on U.S. imports, producers, labor, or the consuming public.

B. Sector impact of U.S. adoption of proposed NTM agreements

The impact on the sector of U.S. adoption of the proposed NTM agreements would probably be minimal. The U.S. market is open to imports except as protected by the Buy American Act. If the Buy American Act is repealed, the highly competitive U.S. industry is expected to continue to dominate the sector protected by the Act.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined impact of U.S. duty reductions and U.S. adoption of the proposed NTM agreements will be minimal as it does not appear that U.S. imports will be affected measurably.

III. MTN export impact

A. Sector impact of foreign tariff concessions

Based on trade, the STR estimates that the average depth of cut offered by the EEC on all duties applicable to products in this sector is 14 percent; similarly, the average depth of cut offered by Japan is 54 percent and that offered by Canada, 44 percent. Although the residual rates remain higher than the U.S. residual rate, the offers, on their face, are significant. However, the tariff rates have never been the principal barrier to U.S. exports in this sector. The reduced tariff rates, if adopted, will make foreign duties more equitable but are not a promise of increased exports unless nontariff barriers to U.S. exports are also removed or relaxed.

ISAC GROUP 22: NONCONSUMER ELECTRONICS SECTOR ANALYSIS

B. Sector impact of foreign adoption of proposed NTM agreements

Adoption of the proposed NTM agreements by foreign countries--principally the developed nations--gives some promise of increased U.S. exports from this sector. The uneven, often arbitrary, application of rules and procedures in the past has made exporting a poor basis for developing manufacturing capability. Adoption of an agreement and predictable behavior on the part of foreign administrators could be a boom to the world-leading U.S. industry. The extent of the beneficial result depends heavily upon the definition of "national security." This definition is reflected in the government institutions open for business. Benefits will also depend on the restriction on the transaction amount under the Agreement on Government Procurement. Under the Standards Agreement, the beneficial result depends upon how readily foreign governments accept U.S. producers on the qualified suppliers lists and how effectively the appeal process works in settling disputes over invoking unnecessary standards.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The combined effect of foreign tariff concessions and foreign adoption of proposed NTM agreements could be slightly beneficial to U.S. exporters in this sector. Foreign tariffs would be much more equitable than previously and the administration of the import policies of foreign governments would be predictable and subject to review. If foreign governments comply with the NTM agreements access to foreign markets will improve somewhat for U.S. exporters.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Trading restrictions outside MTN tariffs and NTM agreements are expected to continue to limit U.S. exports of communications equipment and nonconsumer electronic equipment. Access to foreign markets will be restricted by allowable practices under the NTM agreements--specifically the value limitation and the institutions covered by the Agreement on Government Procurement; also determining what are necessary and what are unnecessary standards will probably be a long, tedious process.

The value-added tax in the EEC and the commodity tax in Japan is costly to U.S. exporters attempting to penetrate those markets. Such taxes, however are rebated or excused when domestically produced goods are exported from the EEC or Japan. U.S. producers, on the other hand, pay virtually the same taxes to the U.S. Government whether their goods are sold at home or in the export market. Another disadvantage to U.S. exporters is "customer preference" in countries where "government guidance" can sway purchasing practices.

ISAC GROUP 22: NONCONSUMER ELECTRONICS SECTOR ANALYSIS

V. Overall impact on sector

The pattern of trade in communications equipment and nonconsumer electronic products may improve for the United States as a result of the trade negotiations. In tariff reductions and nontariff measures the United States appears to have obtained easier access to foreign markets. In contrast, the United States has not made a significant tariff reduction nor has it given up a significant amount by accepting the NIM agreements. Therefore, the end-use consumer will only marginally benefit from the reductions. Although the overall impact appears optimistic, an improvement in U.S. access to foreign markets is only a potential result of the negotiations. Sufficient nontariff measures on U.S. products remain to cause concern as to the amount of improvement in the U.S. trade balance.

ISAC Group 22: Nonconsumer Electronics Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	22,786.3	24,762.0	24,928.6	28,497.4	32,672.4
Imports-----do-----	1,434.0	2,220.6	2,120.2	3,326.6	3,524.3
Exports-----do-----	2,357.0	3,266.9	3,268.5	4,120.2	4,423.4
Apparent consumption-----do-----	21,863.3	23,715.7	23,780.3	27,703.8	31,773.3
Ratio, imports to consumption--percent-----	6.6	9.4	8.9	12.0	11.1
Ratio, exports to shipments---do-----	10.3	13.2	13.1	14.5	13.5
Total employment--1,000 workers-----	858	845	737	744	785

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC Subgroup 22(pt): Telephone and Telegraph Apparatus Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	4,273.4	4,840.8	4,803.1	5,205.0	6,790.4
Imports-----do-----	125.0	162.7	95.2	95.3	117.7
Exports-----do-----	113.0	160.0	197.7	226.5	257.2
Apparent consumption-----do-----	4,285.4	4,843.5	4,700.6	5,073.8	6,650.9
Ratio, imports to consumption--percent-----	2.9	3.4	2.0	1.9	1.8
Ratio, exports to shipments--do-----	2.6	3.3	4.1	4.4	3.8
Total employment--1,000 workers-----	140	145	119	105	112

Source: Compiled from official statistics of the U.S. Department of Commerce.

**ISAC Subgroup 22(pt): Communications, Search, Detection, Space and Other
Nonconsumer Electronic Apparatus Subsector Analysis**

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	8,300.5	9,033.4	10,377.0	11,621.8	12,738.9
Imports-----do-----	422.0	667.6	845.4	1,595.9	1,342.2
Exports-----do-----	524.0	916.8	1,137.7	1,414.9	1,551.2
Apparent consumption-----do-----	8,198.5	8,784.2	10,084.7	11,802.8	12,529.9
Ratio, imports to consumption--percent-----	5.1	7.6	8.4	13.5	10.7
Ratio, exports to shipments----do-----	6.9	10.1	11.0	12.2	12.2
Total employment--1,000 workers-----	323	318	316	316	322

Source: Compiled from official statistics of the U.S. Department of Commerce.

**ISAC Subgroup 22(pt): Electronic Parts, Components and
Subassemblies Subsector Analysis**

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	10,212.4	10,887.8	9,784.5	11,670.6	13,143.1
Imports-----do-----	887.0	1,390.3	1,179.5	1,635.3	2,064.3
Exports-----do-----	1,670.0	2,190.1	1,933.0	2,478.8	2,615.0
Apparent consumption-----do-----	9,429.4	10,088.0	8,971.0	10,827.1	12,592.4
Ratio, imports to consumption--percent-----	9.4	13.8	13.8	15.1	16.4
Ratio, exports to shipments----do-----	16.4	20.1	19.8	21.2	19.9
Total employment--1,000 workers-----	395	382	302	323	351

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC GROUP 23: TRANSPORTATION EQUIPMENT SECTOR ANALYSIS

I. Sector profile and conditions of competition

This sector is composed of eight separate subsectors. They are: bicycles and parts (23A); motorcycles (23B); locomotives, cars, and parts (23C); railroad materials (23D); outboard motors (23E); boats (23F), shipbuilding (23G); and other transportation equipment (23H). For analysis of each of these industries see the individual subsector reports that follow.

Total annual shipments by U.S. producers of all transportation equipment covered here increased steadily from \$10.8 billion in 1973 to \$15.9 billion in 1977. In 1977 shipbuilding and locomotives, cars and parts accounted for approximately 63 percent of the total U.S. shipments.

Total annual imports of transportation equipment during the period 1973-77, ranged from \$924 million (1976) to \$1.5 billion (1974). Motorcycles consist of the largest share of imports during 1977, accounting for 57 percent.

Annual exports of transportation equipment increased from \$743 million in 1973 to \$1.3 billion in 1976 and then declined to \$1.1 billion in 1977. The ratio of exports-to-shipments during 1973-77 fluctuated between 6.9 percent (1973 and 1977) and 8.8 percent (1974 and 1976).

The total value of U.S. apparent consumption increased steadily from \$11.2 billion in 1973 to \$16.0 billion in 1977. Imports of transportation equipment tended to decline in relation to U.S. consumption during 1973-77. The import-to-consumption ratio during the period 1973-77 ranged from 6.5 percent (1976) to 12.3 percent (1974).

U.S. employment in the transportation equipment sector remained fairly constant during 1973-76, averaging 325,000. In 1977, the number of employees increased to 356,000.

Since this sector is composed of a number of subsectors producing dissimilar articles, it is difficult to evaluate the overall economic health and competitive position in international commerce of the total sector. Depending upon the subsector, one or more factors, such as price, geographic location, technology, and consumer preference for locally produced products, may have a major effect on the limitation or expansion of U.S. imports and exports. Within this sector, the bicycle and parts subsector (23A) is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariffs or nontariff trade measures. For analysis see subsector 23A.

II. MTN import impactA. Sector impact of U.S. tariff concessions

The proposed duty reductions would probably result in only a slight increase in the level of imports of transportation equipment. Although the total depth of the proposed cut in the average AVE tariff rate is 29 percent,

ISAC GROUP 23: TRANSPORTATION EQUIPMENT SECTOR ANALYSIS

according to data supplied by the Office of the Special Representative for Trade Negotiations (STR), the actual reduction is only 2.1 percentage points. Therefore, a negligible adverse impact on overall domestic production, employment, and consumers might be anticipated. However, industry and labor making certain parts produced in the United States would be significantly adversely affected while industrial users and the consuming public would benefit.

B. Sector impact of U.S. adoption of proposed NTM agreements

If all of the NTM agreements are adopted, there will be little, if any, effect upon the level of imports of transportation equipment. The only exception might be the locomotive, cars, and parts subsector where there might be a small increase in imports.

C. Sector analysis of combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The proposed duty reductions and the U.S. adoption of the proposed NTM agreements would probably result in only a slight increase in the level of imports of the transportation equipment covered here with significant increases in imports only of certain parts produced in the United States.

III. MTN export impact

A. Sector impact of foreign tariff concessions

The proposed foreign duty reductions will result in a slight increase in the level of U.S. exports. Based on information supplied by STR, the proposed depth of cut from the EEC is 41 percent (2.7 percentage points) and from Japan is 34 percent (2.1 percentage points); neither is significant enough to cause more than a slight increase in exports. On the other hand, Canada's depth of cut of 29 percent (4.6 percentage points) is significant, but factors other than rates of duty limit U.S. export potential to Canada.

B. Sector impact of foreign adoption of proposed NTM agreements

The adoption of the NTM agreements by foreign countries will result in a slight increase in exports. This slight overall increase for transportation equipment is due almost entirely to the adoption of the agreement on government procurement, which would significantly increase exports of locomotives, cars and parts to Canada and to a lesser extent, the EEC. Therefore, the domestic transportation equipment industry will benefit somewhat if all the proposed agreements are adopted.

ISAC GROUP 23: TRANSPORTATION EQUIPMENT SECTOR ANALYSIS**C. Sector analysis of combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements**

The combined effect of foreign tariff concessions and foreign adoption of the proposed NTM agreements will probably be a slight increase in the level of exports. Thus, the overall transportation equipment sector should experience a small increase in employment and production resulting from the anticipated increase in exports.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Most foreign trade factors outside the scope of the tariffs and NTM agreements are related to standards which will not fall under the purview of the proposed Standards Agreement. For an analysis of each industry see the individual subsectors.

V. Overall impact on sector

The transportation equipment industry will benefit slightly from the adoption of the tariff reductions and the NTM agreements by the United States and foreign countries. The level of U.S. imports will increase by a very small amount, while exports are expected to increase to a somewhat greater degree. Thus, there will probably be an overall net gain in employment and production in the transportation sector. The overall impact on consumers will be negligible.

ISAC Group 23: Transportation Equipment Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	10,757	12,021	13,879	14,565	15,859
Imports-----do-----	1,199	1,535	1,124	924	1,242
Exports-----do-----	743	1,060	1,147	1,285	1,090
Apparent consumption-----do-----	11,213	12,496	13,856	14,204	16,011
Ratio, imports to consumption--percent-----	10.7	12.3	8.1	6.5	7.8
Ratio, exports to shipments----do-----	6.9	8.8	8.3	8.8	6.9
Total employment--1,000 workers-----	328	324	321	327	356

Source: Compiled from data presented on ISAC Subgroups 23A-H, which are derived from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 23A: BICYCLES AND PARTS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Currently, six U.S. firms manufacture bicycles on a commercial scale. Two of these firms account for about 30 percent each of the volume of shipments and compete in the price-sensitive, very import-competitive volume portion of the market. The volume of bicycles imported in 1978 exceeded exports by 27 times. U.S. apparent consumption of bicycles decreased from a peak of 15 million units in 1973 to 9 million units in 1978. The import-to-consumption ratio decreased from 34 percent in 1973 to 21 percent in 1978. However, along with the decrease in demand, the introduction of Consumer Product Safety Commission (CPSC) standards in early 1976 helped to curtail imports.

Trade sources indicate that in the late 1960's, wholesale prices in the United States for imported bicycles were generally about 20 percent lower than prices for comparable domestic bicycles. However, owing to such factors as the revaluation of foreign currencies and the enactment of legislation which temporarily suspends the 15 percent duty on imports of certain bicycle parts, the prices for domestic bicycles are approximately the same or below those for the bulk of imported bicycles. For the major EEC suppliers and Japan, the prices are either about the same or higher than those of domestic manufacturers in the U.S. market; for Taiwan, Korea, and Poland, the prices are either comparable or slightly lower.

U.S. bicycles are not competitive in foreign markets for several reasons: (1) foreign consumers apparently have traditionally preferred locally produced products; (2) even though U.S. bicycles compete favorably with foreign products in the U.S. market, when duties, freight and other costs incident to foreign shipment are included, the U.S. bicycle would probably not compete in overseas markets (in this connection, it should be noted that a large percentage of parts used in the manufacture of U.S. bicycles is imported); and (3) it is doubtful that U.S. producers have aggressively attempted to market their products in foreign countries, preferring to depend largely on the domestic market.

With respect to bicycle parts, the industry is highly fragmented and consists of less than 25 small firms, the number of which is believed to be decreasing.

Most bicycle parts, both domestic and imported, are used by manufacturers and assemblers to make bicycles. The replacement market is a small part of sales; thus, demand for U.S. bicycle parts is dependent on sales of domestic bicycles as exports have generally been small. In addition, in recent years demand for bicycles has shifted considerably toward the multiple-speed bikes, many of the parts of which are made primarily overseas.

Estimated apparent consumption of bicycle parts decreased from a peak of \$206 million in 1974 to \$137 million in 1978. Estimated U.S. producers' shipments of bicycle parts followed a similar trend, decreasing from \$61

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million in 1974 to \$50 million in 1978. Since 1973, U.S. imports of bicycle parts have supplied between three-fifths and nearly three-fourths of the value of U.S. apparent consumption. The value of U.S. imports has generally exceeded exports by 30 to 75 times. For aggregate subsector statistics, see attached table.

The bicycles and bicycle parts subsector is viewed by many as a U.S. trade area which is, or could be, affected by changes in the MTN tariff or NTM agreements.

II. MTN import impact

U.S. tariff offers will have little impact on the bicycle industry, but will have substantial adverse impact on the industry and labor producing bicycle parts. Duty savings will likely benefit both the industrial/intermediate consumer of parts and the consuming public, which are expected to benefit by slower rises in prices and greater availability of the ultimate product.

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 20 percent. Current duties on TSUS items which account for virtually all U.S. imports of bicycles are 5.5 percent ad valorem and 11.0 percent ad valorem; the U.S. made no offer on these items. The current duty on the items which account for the majority of U.S. imports of bicycle parts is 15 percent ad valorem, but nearly all such parts enter duty free under temporary legislation because such parts are not produced in the United States. However, on certain bicycle parts produced in the United States, duty reductions (from 15 percent ad valorem to 6-10 percent, depending on the part) will cause substantial adverse impact on the U.S. industry and labor; these parts include saddles, pedals, derailleurs, hubs other than coaster brake and variable speed, and spokes and nipples.

The adoption by the United States of the NTM agreements would have little, if any, impact on the U.S. industries producing bicycles and parts. With respect to the individual NTM's, the United States does not have practices or problems in the customs valuation, government procurement, import licensing, and subsidies and countervailing duties areas which affect the U.S. bicycle and parts industries. U.S. bicycle and parts producers would not be impacted by the U.S. adoption of a uniform standards agreement. Because the U.S. Consumer Product Safety Commission safety standards are similar to the International Organization for Standardization guidelines, U.S. practice would be changed little. Since most parts are purchased by bicycle manufacturers and assemblers who make their purchases on the basis of price and timely availability, U.S. Customs regulations requiring country of origin labeling have little impact on U.S. parts producers. Any lessening of labeling

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requirements would not benefit parts producers, but would reduce the nuisance to importers and U.S. bicycle producers who import. The net impact of duty changes and the NTM agreements will be somewhat beneficial as both bicycle producers and the consuming public should receive benefits exceeding harm suffered by the parts industry.

III. MTN export impact

Since U.S. bicycles and parts are not export competitive, foreign duty reductions and the NTM agreements will have little, if any, impact on the domestic industries.

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 33 percent for the EEC, 40 percent for Japan, and 41 percent for Canada. With respect to specific foreign tariff offers, the EEC made no offer to reduce its current duty of 17.0 percent ad valorem on bicycles classified under Brussels Tariff Nomenclature (BTN) item 87.10. Japan reduced its duty from 8.0 percent ad valorem to 4.8 percent ad valorem, and Canada cut its duty from 25.0 percent ad valorem to 13.2 percent ad valorem.

With respect to foreign duties on parts for bicycles, the EEC made no offer on its current rate of 8 percent ad valorem on parts classified under BTN item 87.12B, while, on the basis of the same current rate, Japan reduced the duty to 4.8 percent ad valorem. Canadian tariffs ranging from 12.5 percent to 17.5 percent ad valorem were reduced to 8.0 percent and 10.2 percent ad valorem, respectively.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Foreign trade practices outside the scope of tariffs and NTM agreements are not known to significantly impact U.S. exports of bicycles and bicycle parts.

V. Overall impact on subsector

With respect to the bicycle industry, there will be little, if any, impact of U.S. and foreign duty modifications and adoption of NTM agreements on either industry, labor, or consumers.

Similarly, United States and foreign duty reductions and adoption of NTM agreements will have little, if any, impact on most of the bicycle parts industry. However, U.S. duty reductions on certain parts produced in the United States will result in substantial adverse impact on U.S. industry and labor with some benefit for the consumer.

ISAC Subgroup 23A: Bicycles and Parts Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-78.

Item	1973	1974	1975	1976	1977	1978
Producers' shipments <u>1</u> /-millions of dollars--	510.0	560.5	320.0	380.0	457.0	490.0
Imports-----do <u>2</u> /-----	337.3	346.4	136.8	150.7	183.8	207.2
Exports <u>1</u> /-----do-----	2.1	3.2	3.0	4.8	9.5	12.2
Apparent consumption-----do-----	845.2	903.7	453.8	525.9	631.3	685.0
Ratio, imports to consumption--percent-----	40	38	30	29	29	30
Ratio, exports to shipments----do-----	<u>3</u> /	<u>3</u> /	1	1	2	2
Total employment <u>1</u> /--1,000 workers-----	16.0	16.0	8.0	9.8	12.2	12.0

1/ Estimated.

2/ Includes the value of certain imported parts on which the duty was temporarily suspended.

3/ Less than 0.5 percent.

Source: Compiled from official statistics of the U.S. Department of Commerce and industry data, except as noted.

ISAC SUBGROUP 23B: MOTORCYCLES AND PARTS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Currently, there are two major domestic manufacturers of motorcycles. One is a subsidiary of a large U.S.-based multinational firm that features leisure-time products such as golf cars, motorcycles, and sporting equipment. The other is a subsidiary of a large Japanese firm that also produces other types of motor vehicles. The U.S.-owned firm at present produces only large (1000cc and over) motorcycles. The Japanese firm has produced motorcycles ranging in size from 400cc to 1000cc at its U.S. plant since that plant opened in 1975. In addition to these two manufacturers, there are smaller manufacturers of motorcycles that produce mini-cycles, mopeds, and scooters (under 90cc). There are also about 10-12 firms that produce parts for motorcycles, primarily for the U.S.-owned motorcycle firms. 1/

Since 1973, one new firm, the Japanese-owned motorcycle producer, has entered the domestic industry, while four small firms have ceased production.

Foreign producers, especially the Japanese, dominate the motorcycle world market. The Japanese produce efficient and extremely maneuverable cycles. Imported motorcycles currently compete directly with the domestically produced models and are somewhat less expensive than comparable U.S.-made motorcycles. Although exports of U.S.-made motorcycles increased steadily during 1973-77, they represented only 9 percent of domestic production in 1977. U.S.-made motorcycles have a difficult time competing overseas due primarily to the traditional preference by foreign consumers for locally produced products and the lower cost of the foreign models.

As shown in the attached table, total shipments of motorcycles and parts for the 1973-77 period fluctuated from a low of \$170.1 million in 1973 to a high of \$327.4 million in 1977. Profitability of the producers that can be attributed solely to motorcycles is not known. It is estimated that overall profits do not compare favorably with those for all manufacturing establishments. Employment in the domestic industry (for both motorcycles and parts) is estimated to have declined from 4,700 in 1973 to 4,000 in 1977.

Total imports of motorcycles and parts during 1973-77 ranged from a high of \$969 million in 1974 to a low of \$533.1 million in 1976. In 1977, about 84 percent (based on value) of total U.S. imports of motorcycles and parts originated from Japan, while the remaining 16 percent were primarily from European countries. Imports from Japan have consisted of all types and sizes of motorcycles. During the period 1973-77, the major U.S.-owned firm imported some lightweight motorcycles from a plant it owned in Italy, but this plant closed in July 1978. The ratio of U.S. imports to domestic consumption during 1973-77 ranged from a high of 80.2 percent in 1974 to a low of 68.0 percent in 1976.

1/ Motorcycles and parts are included in SIC 3751.

ISAC SUBGROUP 23B: MOTORCYCLES AND PARTS SUBSECTOR ANALYSIS

U.S. exports of motorcycles and parts increased steadily from \$8.8 million in 1973 to \$29.4 million in 1977. Approximately 30 percent (based on value) of U.S. exports were shipped to Canada in 1977. Other major consuming countries are Japan, the Netherlands, West Germany, Australia, Iran and the United Kingdom. The ratio of U.S. exports to shipments increased from 5.2 percent in 1973 to 9.0 percent in 1977.

II. MTN import impact

A. Subsector impact of U.S. tariff concessions

The proposed duty reductions would probably result in only a slight increase in the level of imports; a negligible adverse impact on domestic production and employment would follow. Since the duty reduction amounts to only 1.5 percentage points on motorcycles, the actual reduction would average less than \$12 on a motorcycle having an entered value of \$750 (customs appraised value). Neither industrial consumers of parts nor the consumers purchasing motorcycles are likely to benefit from the duty reduction.

B. Subsector impact of U.S. adoption of proposed NTM agreements

The U.S. market for motorcycles and parts is open to foreign suppliers as witnessed by the volume of imports and the ratio of imports to domestic consumption during 1973-77. The United States does not restrict or discourage imports of motorcycles and parts by means of such NTM's as government procurement, customs valuation, subsidies, import licensing, and countervailing duties. The U.S. regulations requiring all new motorcycles manufactured after January 1, 1978, to meet emission standards that will result in a reduction of hydrocarbons and carbon monoxide are similar to the regulations in other major producing countries. In one major motorcycle producing country the regulations are more stringent than in the United States.

Since the domestic motorcycle market is already available to foreign suppliers, no increase in imports is expected due to the adoption of the NTM agreements.

C. Subsector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined effect of duty modifications and the adoption of the NTM agreements by the United States would have little, if any, effect on the U.S. motorcycle industry. As stated previously, the U.S. market, at present, is accessible to foreign suppliers due to the existing low rate of duty (5 percent

ISAC SUBGROUP 23B: MOTORCYCLES AND PARTS SUBSECTOR ANALYSIS

ad valorem on motorcycles and 6 percent ad valorem on parts) and the virtual absence of restrictions by NTM's.

III. MTN export impact

A. Subsector impact of foreign tariff concessions

Canada has offered to reduce duties on motorcycles by as much as 12.5 percentage points, or by an average depth of cut of 28 percent, based on trade. Such reductions would probably result in a slight increase in the level of U.S. exports. However, the duty reductions proposed by Japan (from 8 percent to 5 percent or by 38 percent) and the EEC (from 10.3 to 8.5 percent or by 17 percent) would probably have little, if any, effect on the level of U.S. exports due largely to the consumers preference for locally produced products.

B. Subsector impact of foreign adoption of NTM agreements

With the adoption of the NTM agreements by foreign countries, exports by the U.S. industry could increase slightly. The adoption of these agreements by the major foreign producing countries would have little effect on the U.S. motorcycle industry. However, if certain countries in South America (Argentina and Peru), the Far East (Indonesia, Malaysia, Philippines and Thailand) and Mexico adopt the NTM agreements, exports to these countries might increase. Currently, each one of these countries restrict imports by granting few or no import licenses for complete motorcycle units. In each of these countries these policies are aimed at protecting the local producer(s).

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of the proposed NTM agreements

The combined effect of duty modifications and the adoption of the NTM agreements by foreign countries would probably result in a slight increase in exports with corresponding beneficial impact on the U.S. industry and employment. However, the slight expected increase in export markets would not be realized in the EEC and Japan. As previously stated, the increase in exports would be to certain countries in South America, the Far East, Mexico and Canada.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Foreign trade practices outside the scope of tariffs and NTM agreements are not known to significantly impact U.S. exports of motorcycles and parts.

ISAC SUBGROUP 23B: MOTORCYCLES AND PARTS SUBSECTOR ANALYSIS

V. Overall impact on subsector

The U.S. motorcycle industry would benefit slightly from tariff reductions and the adoption of the NTM agreements. Although U.S. imports of motorcycles far exceed U.S. exports, no increase of U.S. imports are expected due to tariff reductions and adoption of the NTM agreements; however, U.S. exports are expected to increase somewhat. It should be noted that this net increase is based primarily on the United States obtaining access to markets in certain foreign countries that heretofore have been completely closed to or severely restrictive of U.S. exports.

Neither the U.S. industrial consumers of parts nor the consumers purchasing motorcycles are likely to benefit from duty modifications or adoption of NTM agreements.

ISAC Subgroup 23B: Motorcycles and Parts Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	170.1	249.7	301.9	272.8	1/ 327.4
Imports-----do-----	609.2	969.0	744.5	533.1	705.2
Exports-----do-----	8.8	10.8	18.7	22.4	29.4
Apparent consumption-----do-----	770.5	1,207.9	1,027.7	783.5	1,003.2
Ratio, imports to consumption--percent-----	79.1	80.2	72.4	68.0	70.3
Ratio, exports to shipments----do-----	5.2	4.3	6.2	8.2	9.0
Total employment 1/--1,000 workers-----	4.7	4.6	4.6	4.2	4.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 23C: LOCOMOTIVES, CARS AND PARTS SUBSECTOR ANALYSIS**I. Profile and conditions of competition**

This subsector comprises establishments primarily engaged in building railway locomotives and passenger, freight, and rapid transit and parts of the foregoing. This subsector also includes establishments involved in the manufacture of trackless trolley buses. The subsector does not include railway cranes, workshops and other railroad service vehicles or railroad materials which are included in subsector 23D.

The great bulk of locomotives, cars and parts used by U.S. railroads are of domestic origin. The value of U.S. shipments of such rail equipment increased by nearly 48 percent from about \$2.4 billion in 1973 to about \$3.4 billion in 1977 (see attached table). A large portion of this rising trend can be attributed to an increase in demand for freight cars. While current demand for locomotives, cars and parts is high, demand tends to be somewhat cyclical, fluctuating with recent profits in the railroad industry, fuel costs, and the rate of railcar retirement. All locomotives, cars, and parts for use on U.S. railroads must meet design and safety standards established by the Association of American Railroads (AAR).

Locomotives, cars and parts are produced by approximately 140 domestic manufacturers. There are two producers of locomotives, and six relatively large freight car builders and a dozen smaller ones. The number of producers of passenger and rapid transit (subway) cars has decreased significantly over the past few years due to low profitability. A representative of one major producer of rail equipment has stated that for years the profits made in freight car sales have had to subsidize passenger car production. There are presently two domestic passenger car builders, and three subway car builders; however, one major producer of both passenger and subway cars will honor current commitments, but will no longer accept new contracts. There are a few large producers and many smaller firms producing a variety of parts.

U.S. manufacturers of locomotives and other railway equipment have subsidiaries and/or licensees in Europe, Canada, Brazil, South Africa, and Australia. The total number of employees involved in the manufacture of locomotives, cars, and parts in the United States has fluctuated between 45,000 and 55,000 from 1973 to 1977.

U.S. locomotives, passenger and freight cars are generally competitive in world markets, and have a reputation for high quality and reliability. The large domestic market has permitted the United States to gain a slight competitive advantage over other producing countries due to lower unit costs available with mass production.

Imports of locomotives, cars and parts fluctuated between approximately \$36 million and \$86 million during the 1973-77 period. There is very little competition in the U.S. market for locomotives from foreign sources. Imports of freight cars, especially from Mexico, have increased significantly over the past few years. The increase in imports of such items can be attributed in large measure to a domestic shortage of component parts for freight car production.

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Obvious geographical advantages exist for Mexico and Canada with respect to trade with the United States. In addition both nations have rail systems that are compatible with that of the United States. Imports from Mexico and Canada accounted for about 33 percent of total U.S. imports of rail products in 1977. Other major sources of imported locomotives, cars, and parts in 1977 were France and Japan.

The import-to-consumption ratio for such rail products during 1973-77 ranged from 1.3 percent in 1974 to 2.6 percent in 1975. Imports of rail car wheels increased, particularly in recent years, but such imports do not yet pose a threat to U.S. railcar wheel manufacturers. About 21 percent of the value of imports of locomotives, cars, and parts in 1977 entered duty free under the provisions of the GSP; virtually all such imports were from Mexico.

Exports of railway equipment declined from a peak of \$446 million in 1975 to \$291 million in 1977; however, they are still well above the export levels of the early 1970's. Canada, Brazil and Mexico are the most consistent foreign markets, but U.S. rail products are shipped worldwide. U.S. exports of locomotives, cars, and parts to developing countries are significant. In these markets both price and credit terms are important. The major foreign competitors of the United States for railway cars and parts in these third world markets are India, Poland, Spain, Yugoslavia, Brazil, and Belgium. Foreign competitors in the locomotives segment of developing countries' markets include Canada, Japan, France, West Germany, the United Kingdom, Sweden, East Germany and Rumania. Producers in these developed countries dominate their home markets as well as compete in export markets.

II. MTN import impact**A. Impact of U.S. tariff concessions**

With the exception of articles falling under TSUS item 690.15 (passenger, baggage, mail, freight and other cars, not self-propelled), the proposed tariff reductions are unlikely to significantly increase the rate at which such articles are being imported into the United States. Based on information supplied by the STR, the average depth of cut for this ISAC subgroup is 45 percent.

U.S. producers are not likely to be adversely affected by the expected modest increase in imports. It is unlikely that the proposed duty reductions will have any adverse effect on the level of domestic employment. Duty savings are expected to be absorbed by the foreign supplier and probably would not significantly benefit U.S. railway operators or car builders.

Since the duty reduction for railcars, not self-propelled (TSUS 690.15), amounts to 10 percentage points, the actual reduction would average \$3,000 on a railcar having an entered value of \$30,000 (customs appraised value). A reduction of this magnitude is likely to stimulate imports. Although demand

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for railcars in the United States is currently very high, as noted earlier, the industry is somewhat cyclical. Thus, if U.S. purchasers continue to contract with foreign suppliers beyond peak demand periods, imports are likely to aggravate the difficulties of domestic producers during periods of low demand. Employment would likewise be adversely affected during these periods. Duty savings will likely significantly benefit the U.S. railway operators by lowering prices on imported railcars, but railway patrons are not expected to benefit from the duty savings.

A major U.S. producer of railcars (both self-propelled and other than self-propelled) has stated that U.S. tariff rates should not be lowered since other countries (i.e., Canada) have significantly higher tariff rates than those imposed by the United States. Another U.S. manufacturer of rolling stock indicated that the duty on axles and parts can be eliminated without any negative economic impact on U.S. producers.

B. Impact of U.S. adoption of proposed NTM agreements

Government procurement has been singled out as being the greatest barrier to worldwide trade in railway equipment. Government procurement policies in the U.S. rail equipment market would only be a limiting factor in the passenger car segment of the market. This market is primarily controlled by Amtrak, a quasi-governmental authority.

Equipment purchases by Amtrak of \$1 million in value or more are limited by Public Law 95-421 to U.S. manufactured articles made of U.S. materials. There are several exceptions to the law, however, including the following: (1) when imposing such a requirement is inconsistent with the public interest, (2) when the cost of imposing the regulations is unreasonable, or (3) when the items are not produced by a domestic supplier. Generally, implementation of an agreement on government procurement would have little effect on U.S. imports of locomotives, railcars, and parts from Canada, Mexico, Japan, or Europe. Some slight increase in foreign imports of passenger cars may be a result of the adoption of an agreement on government procurement.

U.S. adoption of the remaining NTM agreements would probably have little effect on the level of U.S. imports of rail equipment.

C. Combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

Generally, some slight increase in imports of rail equipment can be expected as a result of the proposed tariff concessions and the adoption of the NTM agreements. Most of the increased imports can be expected to be in the freight and passenger car (not self-propelled) segments of the industry.

ISAC SUBGROUP 23C: LOCOMOTIVES, CARS AND PARTS SUBSECTOR ANALYSIS**III. NTM export impact****A. Impact of foreign tariff concessions**

The foreign offers to reduce duties on railway equipment have been relatively small. Based on trade, the STR estimated that the average of 1.2 percentage point reduction offered by the EEC is equivalent to an average depth of cut of 24 percent. Similarly, Japan's offer (1.1 percentage point) is equivalent to a depth of cut of 18 percent and Canada's offer of an average of 2 percentage points to a 16 percent reduction.

The proposed Canadian duty reductions will probably result in a moderate increase in export potential for U.S.-produced rail equipment with corresponding beneficial impact on U.S. industry and employment. During 1977, exports of U.S.-made rail equipment to Canada accounted for about 12 percent of the total exports of such articles. The U.S.-made and Canadian-made rail equipment is generally of comparable quality, and the price differentials between the two are slight. Due to the geographic advantage that the U.S. has in relation to Canada, the proposed reductions may improve U.S. export potential by a greater amount than for other foreign suppliers competing for the Canadian market.

B. Impact of foreign adoption of proposed NTM agreements

Generally, U.S. export potential would appreciably increase as a result of the agreement on government procurement. Exports of rail equipment to Mexico would be less affected by implementation of such an agreement than would exports to Canada and Europe. Industry officials have stated that government procurement is a major barrier of sales of U.S.-made rail equipment to Canada. The adoption by Canada of the agreement on government procurement should significantly increase the export potential of U.S. rail equipment in Canada.

Domestic railcar manufacturers have alleged that European markets are not open to them since the railroads are government owned and/or supported. Exports of U.S.-made locomotives, railcars, and parts to the EEC have been relatively small over the past few years. Government owned or supported European firms assist in the organization, design, and research of domestic rail systems. These firms generally apportion the work from the national railway and transit authorities in order to support several domestic manufacturers. Extremely close ties between government authorities and the national railroads usually result in the exclusion of foreign firms, a situation which exists in Japan also. Implementation of the agreement on government procurement would, most likely, increase exports of U.S.-made rail equipment to the EEC countries substantially. It can be assumed that such an agreement would have greater impact on trade in rail equipment within Europe, due to geographical proximity and the general compatibility of the rail systems, than on other rail product suppliers located outside the continent.

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The implementation of an agreement on government procurement would probably have little effect on U.S. exports to Japan, should that country become a signatory to the agreement, since the railway system there is largely electrified. Japan's domestic manufacturers have somewhat of a technological advantage over U.S. manufacturers in production of electrified rail equipment for their home market.

Exports of U.S.-made rail equipment to Mexico would probably increase significantly only in those segments of the industry requiring relatively more technology (i.e., locomotives), should an agreement on government procurement be implemented. The railroads and major rail equipment producers in Mexico are government owned and/or supported; however, U.S. exports of such items to Mexico have not been significantly restricted. The Mexican railcar manufacturing industry has a slight competitive advantage over U.S. manufacturers in the production of freight cars due in part to lower labor costs.

Several U.S. firms are convinced that foreign companies receive incentives and subsidies from their respective governments. For example, a Canadian manufacturer with a foreign contract can write off its research and development, thereby essentially letting the government pay for its development cost. The enforcement of the subsidies/countervailing duty measures agreement by our major trading partners could make U.S. railway products more competitive in export markets.

The remaining NTM agreements, when implemented, are likely to have little or no effect on the export potential of U.S.-produced locomotives, railcars, and parts.

C. Combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Generally, a moderate increase in exports of rail equipment can be expected as a result of the proposed foreign tariff concessions and the foreign adoption of the NTM agreements. A large portion of the increased exports can be expected to be in the locomotive segment of the industry.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Some countries require UIC (European) standards for railcar construction, which puts U.S. producers, which build to AAR (U.S.) standards, at a competitive disadvantage. Safety requirements are an example of such a difference in the two standards.

ISAC SUBGROUP 23C: LOCOMOTIVES, CARS AND PARTS SUBSECTOR ANALYSIS**V. Overall impact on subsector**

The overall impact of the tariff reductions and NTM agreements will probably be a slight increase in U.S. imports of locomotives, cars, and parts from all sources with some price benefits to consumer railways but not to the railway users. On the other hand, there may be a somewhat greater increase in exports items than in imports of such items. Thus, the overall effect will probably be a slight increase in production and employment within this subsector.

ISAC Subgroup 23C: Locomotives, Cars and Parts Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	2,367	3,143	3,690	3,171	3,408
Imports-----do-----	36	38	86	55	74
Exports-----do-----	211	215	446	375	291
Apparent consumption-----do-----	2,192	2,906	3,330	2,851	3,191
Ratio, imports to consumption--percent-----	1.6	1.3	2.6	1.9	2.3
Ratio, exports to shipments----do-----	8.9	8.7	12.1	11.8	8.5
Total employment--1,000 workers-----	48	55	55	45	55

Source: Compiled from official statistics of the U.S. Department of Commerce, Association of American Railroads, and U.S. International Trade Commission estimates.

ISAC SUBGROUP 23D: RAILROAD MATERIALS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Subsector 23D comprises establishments primarily engaged in building railroad signaling equipment and workshops, cranes, and other railroad service vehicles. This subsector also includes manufacturers of parts of the aforementioned products. The railroad materials subsector does not include locomotives; freight, passenger, or baggage cars; or any parts of these products (see subsector 23C).

Railroad service vehicles are manufactured domestically by approximately 12 firms. A majority of these firms produce a wide variety of construction and mining equipment. There are two manufacturers of complete signaling systems, and three others which produce some portions of railroad signaling systems. There are a few large and many smaller firms producing a variety of parts. Employment in this subsector was estimated as being about 6,300 persons in 1977, an increase of 26 percent over employment in 1973.

Generally, U.S. railroad materials are competitive with products made by foreign manufacturers. Production of railroad workshops, cranes, and other service vehicles, and railroad signaling equipment increased steadily from approximately \$188 million in 1973 to approximately \$332 million in 1977. Domestic producers of these railroad materials supply nearly 95 percent of the U.S. market.

Imports of railroad materials increased from approximately \$7.5 million in 1973 to about \$20.5 million in 1977. The major foreign supplier of railroad service vehicles in 1977 was Austria. Most of the imports from Austria contained U.S.-made components which were permitted duty-free entry under the provisions of TSUS item 807.00. Other major suppliers of railroad service vehicles during 1977 were Italy and France. Major foreign suppliers of railroad signaling equipment in 1977 were Hong Kong, Taiwan, and Japan. Many of these imported products also contained U.S.-made components.

Exports of railroad materials increased from approximately \$14.4 million in 1973 to approximately \$36.2 million in 1977. The major U.S. export markets for railroad cranes and signaling equipment in 1977 were Canada and Brazil.

II. MTN import impact

A. Subsector impact of U.S. tariff concessions

The proposed U.S. tariff concession for railroad workshops, cranes, and other service vehicles would reduce the duty on such items from 5 to 3.5 percent. The proposed U.S. offer on railroad signaling equipment would reduce the tariff on these items from 4 to 3 percent. Based on trade, the average depth of the proposed cut in duties applicable to railroad materials is estimated by the STR to be 26 percent. It is unlikely that the lower duties would result in a significant increase in U.S. imports of railroad materials.

ISAC SUBGROUP 23D: RAILROAD MATERIALS SUBSECTOR ANALYSIS

B. Subsector impact of U.S. adoption of proposed NTM agreements

Although government procurement has been singled out as being the greatest barrier to worldwide trade in railway materials, it probably has little impact on the items within this subsector. U.S. adoption of the remaining NTM agreements would probably not lead to significant increases in imports of railroad materials.

C. Subsector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

Generally, some slight increase in imports of railroad materials can be expected as the result of the proposed tariff concessions and the adoption of the NTM agreements; however, such increases will have at most a negligible impact on U.S. producers or their labor forces. Consumers, i.e., railroad operators, will not be likely to benefit from the duty reductions; choice of products may, however, be broader.

III. NTM export impact

A. Subsector impact of foreign tariff concessions

The current Canadian duty on railroad materials included in this subsector is zero; this will remain unchanged.

The depth of cut represented by the EEC offers on railroad materials, as provided by the STR, amounts to 27 percent; however, the maximum reduction amounts to only 1.6 percentage points. Such a small decrease in duty is not expected to significantly expand U.S. export potential of railroad materials to the EEC.

The proposed Japanese duty on railroad service vehicles and signaling equipment would reduce the duty by an average of 1.7 percentage points representing a depth of cut, as reported by the STR, of about 29 percent. This small reduction is also unlikely to increase U.S. export potential for railroad materials to Japan.

Mexico has made no formal offer to reduce duty rates on the items covered in this subsector.

B. Subsector impact of foreign adoption of proposed NTM agreements

Generally, U.S. export potential of railroad materials would increase slightly as a result of the agreement on government procurement. Industry officials have stated that government procurement policies are a major barrier to sales of U.S.-made rail equipment in Canada. Domestic rail equipment manufacturers have alleged that European markets are not open to them because the railroads are government owned and/or supported. Extremely close ties between government authorities and the national railroads usually result in the exclusion of foreign firms, a situation which also exists in Japan.

ISAC SUBGROUP 23D: RAILROAD MATERIALS SUBSECTOR ANALYSIS

Several U.S. firms believe that foreign companies receive incentives and subsidies from their respective governments. For example, a Canadian manufacturer with a foreign contract can write off its research and development cost for tax purposes, thereby essentially letting the government pay for that development. The enforcement of a subsidies/countervailing duty measures agreement could make U.S. railway products more competitive in export markets. The remaining NTM agreements, if implemented, will have little or no effect on the export potential of U.S.-produced railroad materials.

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Generally, a slight increase in exports of railroad materials may be expected as a result of the proposed foreign tariff concessions and the foreign adoption of the NTM agreements.

IV. Foreign trade factors outside the scope of MTN tariff and NTM agreements

Some countries require UIC (European) standards for rail equipment which puts U.S. producers, who build to AAR (U.S.) standards, at a competitive disadvantage. Safety requirements are an example of such a difference in the two standards.

Other foreign trade practices outside the scope of tariffs and the NTM agreements are not known to significantly affect U.S. exports of railroad materials.

V. Overall impact on subsector

The overall impact of the tariff reductions and NTM agreements will probably be a slight increase in U.S. imports of railroad materials. However, it is likely that the increase in exports will be greater than that for imports; thus, U.S. production and employment can be expected to benefit somewhat. Consumers, i.e., railroad operators, are unlikely to benefit from the MTN other than through a slightly broader product selection.

ISAC Subgroup 23D: Railroad Materials Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77. 1/

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	188.0	240.0	280.0	287.3	332.3
Imports-----do-----	7.5	12.5	11.2	14.9	20.5
Exports-----do-----	14.4	16.2	25.5	27.6	36.2
Apparent consumption-----do-----	181.1	236.3	265.7	274.6	316.6
Ratio, imports to consumption--percent-----	4.1	5.3	4.2	5.4	6.5
Ratio, exports to shipments----do-----	7.6	6.8	9.1	9.6	10.9
Total employment--1,000 workers-----	5.0	5.0	5.2	6.0	6.3

1/ Estimated.

Source: Estimates compiled from official statistics of the U.S. Department of Commerce.

ISAC SUBGROUP 23E: OUTBOARD MOTORS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

This industry subsector is concerned with outboard motors, a class of piston-type internal combustion engine for marine craft. Such motors are used in recreational craft, predominantly, and craft used for a variety of commercial and other purposes such as fishing and transportation. Three large firms dominate the domestic industry, accounting for more than nine-tenths of total domestic output. Between its domestic facilities and foreign subsidiaries, supported by extensive foreign services and parts networks, the U.S. industry has dominated the world market for a long time. Import competition in the domestic market, in large measure from Japan, has grown in the last few years, but has reached only a moderate level.

U.S. industry shipments of outboard motors grew irregularly from \$234 million in 1973 to \$267 million in 1976 and is estimated to have risen to about \$305 million in 1977, representing growth of approximately 30 percent during the period.

U.S. exports increased irregularly from \$31.0 million in 1973 to \$57.4 million in 1976, an increase of 85 percent, then dropped 7 percent to \$53.2 million in 1977. The exports took 13.2 percent of the industry's shipments in 1973, 21.5 percent in 1976, and 17.4 percent of estimated shipments in 1977. The principal markets in 1977 were Australia, Canada, Argentina, Venezuela, and France; these markets accounted for almost half of the total exports in that year.

Annual U.S. imports increased from \$3.5 million in 1973 to \$21.6 million in 1977, with especially large increases in 1976 and 1977. Imports equaled 1.5 percent of shipments in 1973 and 7.1 percent in 1977. The ratio of imports to consumption increased from 1.7 percent in 1973 to 7.9 percent in 1977. The principal import sources were Japan and Canada; imports from this group accounted for about three-fifths of the total. Sweden and Mexico also were important sources. The total value of outboard motors imported under the provisions of TSUS item 807.00 has grown considerably in relation to total imports of such motors; from 4 percent of imports in 1973, such imports accounted for about 40 percent in 1977.

The trade showed a fluctuating export surplus, which ranged from \$27.5 million (1973) to \$49.1 million (1974) and amounted to \$31.6 million in 1977.

Data on employment in U.S. production of outboard motors are not available, but employment is believed to have followed the upward trend in production during 1973-77.

Three U.S. producers dominate the domestic industry. These same three have subsidiaries in Canada, Belgium, Australia, and Hong Kong. The overseas subsidiaries generally concentrate on engines of smaller sizes and the domestic plants of those three firms concentrate on the engines of larger sizes. On this basis, they share the U.S. and foreign markets.

ISAC SUBGROUP 23E: OUTBOARD MOTORS SUBSECTOR ANALYSIS**II. MTN import impact**

The U.S. offer eliminates the 4-percent ad valorem rate of duty on outboard motors, i.e., a reduction of 100 percent. If granted, that concession should result in no more than a moderate rise in imports, at most. Differences in recent prices apparently are larger than the duty collected under the existing rate of duty and are far more important in determining import penetration. U.S. adoption of the proposed NTM agreements should not affect the levels of imports; such nontariff measures are not known to have been significant impediments to imports. Thus, adoption of the proposed concession in the duty rate and of the proposed NTM agreements should bring on no more than a moderate rise in imports and thus have only negligible adverse effects on domestic industry and labor. It is not likely that any price benefit will accrue to boatowners or other consumers.

III. MTN export impact

The foreign tariff offers include a reduction from 10 to 5 percent by Japan, and a 1 percentage point reduction from 11- and 8-percent duty levels by the EEC. Based on trade, the STR estimates such reductions are equivalent to an average depth of cut of 34 percent and 52 percent, respectively. Canada has offered to reduce its rate on outboard motors, classified as "machines, n.o.p.," from 15 percent to 9.2 percent or by 39 percent. The offer rate, nevertheless, exceeds the currently applied rate of 8.7 percent. The U.S. industry recently supplied nearly one-half of the total imports of outboard motors by Japan, 15 percent of the smaller size engines, and 37 percent of the larger size engines imported by the EEC and approximately four-fifths of the imports by Canada. The impact of the foreign tariff offers on U.S. exports should be negligible--the U.S. industry now supplies large shares of those foreign markets either directly from U.S. facilities or from overseas subsidiaries.

To the extent that they exist, foreign nontariff measures have not adversely affected the U.S. industry's export potential to a significant degree--the industry has expanded its exports, supplies a large number of countries, and is a major supplier in many cases.

ISAC SUBGROUP 23E: OUTBOARD MOTORS SUBSECTOR ANALYSIS

Thus, foreign adoption of the proposed foreign tariff concessions and the NTM agreements should not significantly affect the potential for U.S. exports of outboard motors.

IV. Impact of foreign trade factors outside the scope of MTN tariffs and NTM agreements

The U.S. outboard motor industry has had to contend with certain non-tariff measures outside the scope of MTN tariffs and NTM agreements, such as preferential tariff rates, for some time. The industry has proved capable of overcoming the seeming adverse effect of such measures up to now and should continue to do so in the foreseeable future.

V. Overall impact on subsector

The overall result of the implementation by the U.S. and foreign countries of the duty offers and the NTM agreements should be negligible. Benefits to consumers will not be evident.

ISAC Subgroup 23E: Outboard Motors Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	234.0	218.0	234.0	267.0	1/ 305.0
Imports-----do-----	3.5	3.3	5.2	12.6	21.6
Exports-----do-----	31.0	52.4	43.0	57.4	53.2
Apparent consumption-----do-----	206.5	168.9	196.2	222.2	273.4
Ratio, imports to consumption--percent-----	1.7	2.0	2.7	5.7	7.9
Ratio, exports to shipments----do-----	13.2	24.0	18.4	21.5	17.4
Total employment--1,000 workers-----	NA	NA	NA	NA	NA

1/ Estimated.

NA = Not available.

Source: Producers' shipments reported by the National Association of Engine and Boat Manufacturers, except as noted; imports and exports compiled from official statistics of the U.S. Department of Commerce.

ISAC SUBGROUP 23F: BOATS SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

This subsector comprises establishments primarily engaged in producing boats ranging from inflatables and canoes to sailboats, runabouts and large power cruisers. Production in the boat manufacturing industry increased about 9 percent from approximately \$1.1 billion in 1973 to \$1.2 billion in 1977. Sales of boats fluctuate with the level of fuel cost and the availability of disposable income and leisure time. There were approximately 1,800 firms in the pleasure boat industry in 1977. Annual employment in the industry fluctuated between 38,000 and 50,000 during 1973-77. Income for most of the industry was up in 1977, but profitability has been low due to rapidly rising costs and competitive pressures in many areas. Net operating profit in 1977 was estimated to be about 1.5 percent of factory sales.

Hull design and construction of pleasure craft now incorporate ideas and materials unknown to the industry a few years ago. Wood, the traditional boatbuilding material, is still used by older custom builders and in some kits and home-built craft, but has generally been replaced by fiberglass reinforced plastic. Important factors affecting the purchase of a pleasure boat are price, speed or racing record, accommodations, and sound construction.

The U.S. boatbuilding industry has few foreign subsidiaries. One U.S. company has a joint venture agreement with an Italian firm which aids in sales efforts within the EEC.

U.S. imports of pleasure boats are generally in the larger more expensive classes as transportation; distribution costs generally preclude imports of smaller boats (e.g., rowboats). Total imports of items included in this subsector fluctuated between approximately \$69 million and \$123 million during 1973-77. Canada, Taiwan, and Japan are the largest suppliers of boats to the United States. The ratio of imports to consumption ranged from 5.6 to 10.3 percent during 1973-77. In general, imported boats are competitive with U.S.-made products in terms of both quality and price. It has also been noted that a hand-crafted pleasure yacht can still be purchased from Europe for somewhat less than the comparable U.S.-made product.

Exports of these items, largely to Canada, fluctuated between \$69 million and \$98 million from 1973 to 1977. Other major export markets were West Germany and the Netherlands. United States exports of boats have benefited from a good reputation for quality. Frequently, purchasing factors such as reliability of a boat and its machinery are more important than price.

II. MTM import impact**A. Subsector impact of U.S. tariff concessions**

The average depth of cut offered on U.S. import duties applicable to products in this sector, as reported by the STR, is 55 percent. The reductions will in all probability, have little, if any, effect upon the level

ISAC SUBGROUP 23F: BOATS SUBSECTOR ANALYSIS

of imports, domestic production, or employment. While price comparisons between the domestic and imported pleasure craft are difficult to make, the current rate of duty do not appear to be significant barriers to imports as evidenced by the increase in imports in recent years. U.S. consumers might receive some slight price benefit as a result of lowered tariff rates.

The National Association of Engine and Boat Manufacturers has indicated that the present rate of duty for pleasure boats should not be reduced. Individual U.S. producers within the boating industry, especially sailboat manufacturers, have expressed concern that significant disparities exist between U.S. and Canadian rates of duty.

B. Subsector impact of U.S. adoption of proposed NTM agreements

Generally, U.S. standards have not been a barrier to foreign exporters of pleasure boats. U.S. Coast Guard safety requirements apply only to powered boats 20 feet in length and under and to inboard boats of any size when powered by a gasoline engine or engines. U.S. boat manufacturers and foreign suppliers of boats to the United States must certify that their boats meet Coast Guard requirements. Other types of pleasure boats need not meet these standards, (e.g., canoes, sailboats, inflatables, etc.). U.S. Coast Guard inspection of either imported or domestic craft is done at random, unless water accident reports indicate that a specific boat-type may be substandard with regard to safety. It is evident that these standards do not form a significant barrier to U.S. imports of boats. The implementation of the standards agreement is not likely to have any effect on the level of imports nor on domestic producers or labor.

U.S. adoption of the remaining NTM agreements would probably have little effect on the level of U.S. imports, production, or employment.

C. Subsector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

Generally, little increase in imports can be expected as a result of the proposed U.S. tariff concessions and the adoption of the NTM agreements.

III. NTM export impact

A. Subsector impact of foreign tariff concessions

The current duty rates on boats imported into the EEC range from 3 to 5 percent. The average depth of cut represented by the EEC offers on boats, as indicated by the STR, is 18 percent; duties would be reduced by a maximum of 1.2 percentage points. Such slight tariff reductions would be unlikely to significantly affect U.S. export potential to these countries.

ISAC SUBGROUP 23F: BOATS SUBSECTOR ANALYSIS

The current rate of duty for boats imported into Japan is 7.5 percent; however, two categories are temporarily free of duty while the two remaining categories are temporarily subject to duty at the rate of 6 percent. The Japanese offers on boats, which, according to the STR, would represent an average depth of cut of 49 percent would have little effect on the export potential of U.S.-produced boats to Japan. Factors such as strict certification standards are far more important than the tariff in limiting U.S. exports of boats to Japan.

The current Canadian duty rates for imported boats range from 17.5 to 25 percent. The Canadian offers would reduce the duty rates on boats by 2.5 percentage points in two categories and by 10 percentage points in the third category (a reduction from 25 percent ad valorem to 15 percent ad valorem). Based on trade with Canada, the STR has indicated that these reductions represent an average depth of cut of 16 percent. Imports within the third category are almost exclusively from the United States; thus, little export potential will be gained by this duty reduction or by the smaller reductions.

Mexico has made no formal offer to reduce the rates of duty on boats.

B. Subsector impact of foreign adoption of proposed NTM agreements

Implementation of the NTM agreements would have little impact on the competitive situation of the United States in foreign markets, because the agreements would not cover any NTM's that significantly affect exports of boats.

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Generally, little increase in exports of pleasure boats can be expected as a result of the proposed foreign tariff concessions and the adoption of the NTM agreements.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Japanese safety certification standards are of particular significance because they effectively bar importation of boats exported by the United States. As a result of the existence of such standards, the liberalization of tariff or other nontariff barriers by Japan would not improve the competitive situation of the United States with regard to pleasure boats.

The Japan Small Boat Regulations, implemented in 1974, require that each imported boat be individually inspected and certified for safety. Japanese manufacturers are only required to submit a prototype model for inspection. The impact that these regulations have had on U.S. exports of pleasure craft is clearly reflected in the trade figures. Exports of U.S.-made pleasure craft to Japan declined from approximately \$1.7 million in 1973 to \$253,000 in

ISAC SUBGROUP 23F: BOATS SUBSECTOR ANALYSIS

1977. U.S. imports of Japanese-produced pleasure boats have fluctuated between approximately \$4.7 million and \$3.2 million during the same period.

V. Overall impact on subsector

The overall impact of the tariff reductions and NTM agreements would probably be a slight increase in both imports and exports of boats. Thus, U.S. production and employment within this subsector will probably not be significantly affected. However, if strict safety certification standards, such as those in Japan, were eliminated, U.S.-produced boats would have greater access to that market and U.S. producers and labor would benefit correspondingly. Some small price benefits may accrue to U.S. consumers.

ISAC Subgroup 23F: Boats Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars---	1,078	964	1,106	1,399	1/ 1,194
Imports-----do-----	103	99	69	78	123
Exports-----do-----	69	98	76	84	87
Apparent consumption-----do-----	1,112	965	1,099	1,393	1,230
Ratio, imports to consumption--percent-----	9.3	10.3	6.3	5.6	10.0
Ratio, exports to shipments----do-----	6.4	10.2	6.9	6.0	7.3
Total employment--1,000 workers-----	44	38	37	47	1/ 50

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 23G: SHIPBUILDING SUBSECTOR ANALYSIS**I. Subsector profile and conditions of competition**

Subsector 23G comprises establishments engaged in building all types of ships, barges, and vessels, whether sail or motor powered or towed by other craft. Floating drydocks, floating radar towers and hydrofoil vessels are also included in this subsector.

The value of U.S. shipments of ships increased 68 percent from approximately \$4 billion in 1973 to \$6.6 billion in 1977. Builders of ships in the United States are privately owned firms that handle new commercial and naval ship construction. The U.S. Navy increasingly uses private repair yards for repair and overhaul work. Of the \$3 billion to be spent in fiscal 1979 on the repair and overhaul of naval ships nearly \$1 billion will be spent in private U.S. shipyards. There were about 190 major facilities involved in the shipbuilding industry in 1977; however, only 36 have the capability for major ship construction. A steady upward trend of employment was evident in this industry during 1973-77. A decline in orders of ships during 1978 is expected to lead to employment cutbacks from 176,000 in 1977 to 153,000 by the end of 1980.

U.S. and foreign-built ships are generally competitive, but U.S. shipbuilders may have a slight technological advantage in the design and construction of high technology vessels.

The Jones Act forbids the importation of foreign work craft for domestic use. Except for items classified as floating docks or yachts, the articles within this subsector are treated as intangibles and are not covered by the TSUS. It is, therefore, impossible to quantify imports, consumption, and the import-to-consumption ratio for this subsector.

Exports of ships included in this subsector ranged from a high of about \$390 million in 1974 to a low of about \$179 million in 1977. The ratio of exports to shipments has fluctuated between 2.7 and 8.1 percent during the same time period. Major export markets for U.S.-made nonmilitary ships include Mexico, Indonesia, and Venezuela. Export markets for U.S.-made military ships cannot be individually identified, but total exports of these items were approximately \$57 million in 1977.

II. MTN import impact**A. Subsector impact of U.S. tariff concessions**

The proposed U.S. offer for floating dry docks and parts thereof (item 696.50) would reduce the duty on such items from 5 to 3.5 percent. Due to the high unit value of dry docks, the decrease in cost brought about by a 1.5 percentage point reduction may be significant--as much as \$150,000 per unit. It is likely that a reduction of this magnitude would render the imported docks more attractive to domestic users. Demand for dry docks will not

ISAC SUBGROUP 23G: SHIPBUILDING SUBSECTOR ANALYSIS

increase; thus, domestic production and employment can be expected to decline to the extent that imports increase. Both the users of dry docks and their customers will likely benefit by lower prices. U.S. producers of floating dry docks in the Northwest have expressed concern about imports of such structures from the Far East at prices substantially below their costs.

A small number of the largest and most expensive yachts are included in this subsector. The tariff reduction on such yachts (item 696.10), from 5 percent to zero, will probably have little, if any, effect on the level of imports, domestic production, or employment. While price comparisons between the domestic and imported pleasure craft are difficult to make, the current rate of duty does not appear to be a significant barrier to imports.

The remaining items included in this subsector are treated as intangibles and are not subject to duty under the TSUS; therefore, they will not be affected by any U.S. tariff reductions.

B. Subsector impact of U.S. adoption of proposed NTM agreements

The U.S. shipbuilding industry, although privately owned, is directly linked to the operating budgets of agencies of the U.S. Government, and particularly to naval construction programs. A majority of the items within this subsector fall under the provisions of the Buy American Act which allow for a percentage add-on to the bid price of foreign producers. To the extent the Act is affected by the proposed NTM agreements, domestic production and employment in the U.S. shipbuilding industry could decrease.

C. Subsector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

Generally, some slight increase in imports of items classified as ships can be expected as a result of the proposed tariff concessions and the adoption of the NTM agreements. Domestic production and employment can be expected to decline somewhat. Consumers might receive some slight price benefits as a result of lowered tariff rates and possibly a wider variety of products from which to choose.

III. NTM export impact

A. Subsector impact of foreign tariff concessions

The Japanese offers for duty reductions applicable to ships probably would not have a significant effect upon U.S. exporters. The Japanese offers will reduce the duty applied to most U.S.-made ships from 7.5 percent to a range of zero to 4.9 percent. Many of these items currently enter under a temporary duty-free provision, thus, U.S. exports of ships to Japan will

ISAC SUBGROUP 23G: SHIPBUILDING SUBSECTOR ANALYSIS

probably increase only slightly, if at all. No offers were made for a reduction of the duties on warships which are currently 15 percent. The STR has indicated that the average depth of cut in Japanese duties on the products covered here is 15 percent.

Virtually all of the ships being imported by the EEC from the United States are currently duty free and will remain so. The current rates of duty for three remaining categories will be reduced by a maximum of 2.1 percentage points. Generally, the EEC offers on ships will not increase U.S. export potential for these items. However, the EEC offer to reduce the duty on floating structures from 7 to 4.9 percent may be expected to increase the U.S. potential for exports somewhat. The average depth of cut in EEC duties applicable to products of this subsector, according to the STR, is 29 percent.

Of the three categories of ships imported into Canada one is currently duty free, while the other two categories are dutiable at 25 percent. The Canadian offers do not change these duty rates.

No offer was made for ships imported into Mexico.

B. Subsector impact of foreign adoption of proposed NTM agreements

Generally, implementation of the NTM agreements would increase the export potential of U.S.-produced ships to foreign markets substantially. The shipbuilding industry in nearly all developed countries is closely tied to the defense sectors of their government. U.S. shipbuilders have indicated that subsidies given by foreign governments to their national industries have significantly restricted exports to many markets. The implementation of a subsidies agreement may increase U.S. export potential. Licensing practices in some countries (i.e. Norway), have also allegedly restricted exports of U.S.-made ships. The implementation of a licensing agreement would probably increase the export potential for U.S.-produced ships slightly.

C. Subsector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

Generally, a moderate increase in exports of U.S.-produced ships may be expected as a result of the proposed foreign tariff concessions and the adoption of the NTM agreement.

IV. Foreign trade factors outside the scope of the MTM tariff and NTM agreements

Safety standards limit exports of U.S.-made ships to some degree; however, such standards would not be affected by the implementation of a standards agreement. Other foreign trade practices outside the scope of MTM

ISAC SUBGROUP 23G: SHIPBUILDING SUBSECTOR ANALYSIS

tariff and NTM agreements are not known to significantly impact U.S. exports of the products covered here.

V. Overall impact on sector

Generally, it is likely that the tariff concessions, both U.S. and foreign, and the adoption of the NTM agreements will increase exports of ships by a greater amount than imports. Domestic production and employment may increase slightly, while U.S. users of imported equipment may gain some slight price benefits and possibly a greater product selection.

ISAC Subgroup 23C: Shipbuilding Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	3,959	4,825	5,615	5,896	^{1/} 6,640
Imports-----do ^{2/} -----	NA	NA	NA	NA	NA
Exports-----do-----	237	390	247	370	179
Apparent consumption-----do-----	NA	NA	NA	NA	NA
Ratio, imports to consumption--percent-----	NA	NA	NA	NA	NA
Ratio, exports to shipments----do-----	6.0	8.1	4.4	6.3	2.7
Total employment--1,000 workers-----	152	162	167	166	176

^{1/} Estimated.

^{2/} Ships are considered to be intangibles and therefore are not classifiable in the TSUS; import data are not reported.

NA = Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 23H: OTHER TRANSPORT EQUIPMENT SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

This subsector is divided into two distinct industries--defense and recreational products. Tanks and tank components are defense related, while travel trailers and campers, all-terrain vehicles, golf cars, and snowmobiles are related to the recreational industry. Also included in this subsector are miscellaneous types of transportation equipment such as wheelbarrows and shopping carts; these products, however, account for less than 1 percent of the total U.S. production in this subsector. 1/

Tanks are produced by one manufacturer which was awarded a contract by the U.S. government, while tank components are manufactured by a small number of U.S. producers. Employment, production, and profits in the tank industry are not normally affected by external factors such as downturns in the economy or fluctuations in currency, while the recreational industry is very dependent upon the economy, gasoline prices and other external factors.

The U.S. recreational vehicle (RV) industry is the largest in the world. Included in this industry are the large motor homes, truck campers, small camper trailers, and chassis and parts for these vehicles. Closely related to RV's are snowmobiles, golf cars, and all-terrain vehicles.

As shown in the attached table, U.S. producer's shipments of the transportation equipment in this subsector fluctuated from a low of \$1.8 billion in 1974 to a high of \$3.2 billion in 1977. Tanks and tank components accounted for \$850 million or 26.6 percent in 1977, while the listed recreational vehicles accounted for most of the remaining \$2.3 billion.

Employment during the 1973-77 period ranged from a low of 43,800 in 1974 to a high of 58,100 in 1973. Employment in the tank industry steadily increased from 6,300 in 1973 to 10,000 in 1977, while employment in the RV vehicle industry generally fluctuated with the U.S. economy.

Imports during 1973-77 were at their highest level in 1973 (\$103.4 million), and lowest in 1974 (\$67.2 million). There are few imports of tank components and no imports of completed tanks. Recreational vehicles represent almost 98 percent of the imports in this subsector, with snowmobiles, golf cars and all-terrain vehicles accounting for about 85 percent of the total.

U.S. exports rose in each year during the period, from \$169.7 million in 1973 to \$405.1 million in 1977, or by 139 percent. Tanks and tank components accounted for about 58 percent of the total exports in this subsector in 1977, travel trailers and campers, 31 percent, and miscellaneous vehicles, the remaining 11 percent. With the exception of tanks, most of these vehicles were exported to Canada.

1/ The products covered in this subsector are included in SIC 379.

ISAC SUBGROUP 23H: OTHER TRANSPORT EQUIPMENT SUBSECTOR ANALYSIS

Little is known concerning the U.S. competitive strengths and weaknesses in the tank industry because of national security issues. The U.S. travel trailer and camper industry does not compete in the EEC or Japan because 1) the average fuel consumption for the vehicles required to pull most U.S. produced travel trailers or fuel a motor home is too high (gasoline prices in the EEC and Japan are more than twice those in the U.S.), and 2) the average automobile in these countries is not large enough to pull most U.S. trailers. Most U.S. exports are to countries where conditions are virtually the same as in the United States.

II. MTN import impact

A. Subsector impact of U.S. tariff concessions

The U.S. concessions on miscellaneous vehicles, which account for approximately 85 percent of the imports in this subsector, amount to an average of less than 1 percentage point. Based on trade, the STR estimates that these reductions represent a depth of cut of 29 percent. Therefore, the proposed duty reductions would have little, if any, effect on the level of U.S. imports, U.S. producers or labor. Further, these small tariff concessions will not result in any price benefits to the consuming public.

B. Subsector impact of U.S. adoption of proposed NTM agreements

The adoption of the NTM agreements by the United States will not affect the level of imports.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

The combined effect of duty modifications and the adoption of the NTM agreements would have little, if any, effect on the level of U.S. imports in this subsector.

III. MTN export impact

A. Subsector impact of foreign tariff concessions

About 75 percent of the items in this subsector are not subject to foreign duties. Tanks and components are purchased by foreign governments, so theoretically no duty is paid; and the other portion enters Canada duty free under the Automotive Products Trade Act of 1965. According to the STR, the tariff reductions offered by Canada on dutiable imports represent an average depth of cut of 31 percent. Exports of such products to Canada are not likely to increase relative to exports of the duty-free articles.

ISAC SUBGROUP 23H: OTHER TRANSPORT EQUIPMENT SUBSECTOR ANALYSIS**B. Subsector impact of foreign adoption of proposed NTM agreements**

The adoption of the NTM agreements will have little, if any, effect upon the level of U.S. exports.

C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of proposed NTM agreements

The combined effect of foreign duty modifications and adoption of the NTM agreements on exports will be negligible.

IV. Foreign trade factors outside the scope of MTM tariffs and NTM agreements

Foreign trade practices outside the scope of tariffs and NTM agreements are not known to significantly impact U.S. exports of the miscellaneous transport equipment covered here.

V. Overall impact on subsector

U.S. duty reductions are small and will not result in a significant increase in imports; most of the products exported are not subject to foreign duties, and the duty cuts on those that are, are insignificant; NTM's have not been factors limiting trade. Thus, there will be little, if any, change in the level of either imports or exports of other transportation equipment because of the tariff reductions and adoption of the NTM agreements. In addition, the consuming public will not benefit from tariff modifications or adoption of the NTM agreements.

ISAC Subgroup 23H: Other Transport Equipment Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars	2,251.4	1,820.3	2,332.0	2,891.6	3,196.7
Imports ^{1/} -----do	103.4	67.2	70.8	79.3	90.0
Exports ^{1/} -----do	169.7	214.7	286.9	344.1	405.1
Apparent consumption-----do	2,185.1	1,672.8	2,115.9	2,626.8	2,881.6
Ratio, imports to consumption--percent	4.7	4.0	3.4	3.0	3.1
Ratio, exports to shipments---do	7.5	11.8	12.3	11.9	12.7
Total employment--1,000 workers	58.1	43.8	43.9	49.4	52.0

^{1/} Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 24: AEROSPACE EQUIPMENT SECTOR ANALYSIS**I. Sector profile and conditions of competition**

Sector 24 comprises establishments primarily engaged in the production of civil aircraft, military aircraft, spacecraft, and parts of such products. For a complete evaluation of the effects of the MTN on trade in civil aircraft and parts, see the separate analysis of the agreement on trade in civil aircraft.

The United States, as well as foreign aircraft manufacturers, face uncertainties in the 1980's relative to the availability and price of fuels. The aircraft industry, both U.S. and foreign, can be characterized as a capital-intensive and highly leveraged industry. U.S.-produced military aircraft have a good reputation and are generally competitive with foreign craft in terms of quality, cost, and efficiency. In the past it was normal for the commercial aircraft industry to rely on military aircraft derivatives. More recently however, commercial aircraft producers have been taking the lead in many new developments.

Spacecraft are currently produced by about 8 developed countries, but nearly all of the reported spacecraft launchings were from the U.S.S.R. (79 percent of total spacecraft launchings) and the U.S. (19 percent of total spacecraft launchings).

An ever increasing number of foreign countries have or are in the process of developing their own national aircraft industry. Foreign competitors in the aircraft industry are adopting a more aggressive stance, especially those in the EEC countries. Government instrumentalities have displaced most privately owned foreign manufacturers. The new competition facing U.S. aircraft manufacturers is often government owned and/or financed.

There are approximately 18 establishments involved in the production of complete military aircraft and about 5 producing spacecraft. There are probably thousands of domestic suppliers of parts for these articles. Employment in this sector has generally decreased from about 326,000 in 1973 to 297,000 in 1977.

Annual imports of military aircraft, spacecraft, and parts in recent years ranged from a high of approximately \$180 million in 1973 to a low of approximately \$89 million in 1974. There were no imports of complete spacecraft during this period. The major foreign supplier of military aircraft during 1977, the United Kingdom, accounted for about 96 percent of total U.S. imports of such aircraft in that year. The major foreign suppliers of aircraft and spacecraft parts during 1977 were Canada, the United Kingdom, France, West Germany, Italy, and Japan. Imports of these parts under TSUS items 806.30 and 807.00 were substantial during 1977. The import-to-consumption ratio for items included in this sector fluctuated between 3.9 and 1.6 percent during 1973-77.

ISAC GROUP 24: AEROSPACE EQUIPMENT SECTOR ANALYSIS

Exports of military aircraft, spacecraft, and parts generally increased from about \$1.1 billion in 1973 to \$1.8 billion in 1977. Major export markets for military aircraft and spacecraft are not individually identified by country. Major export markets for parts of these items included Canada and the United Kingdom in 1977; however, U.S. produced aircraft parts are shipped worldwide.

II. MTN import impact**A. Impact of U.S. tariff concessions**

The current duty on military aircraft and spacecraft is 5 percent ad valorem. The proposed U.S. tariff concessions would reduce the duty to zero for aircraft and parts; and to 3.5 percent for spacecraft. Based on trade, these reductions, as estimated by the STR, represent a depth of cut of 100 percent. It is unlikely that the proposed reductions will have any effect on the level of imports of military aircraft, spacecraft, and parts. The current 5 percent duty on these items, which is frequently waived, does not significantly restrict imports. Other factors, such as quality of the product, attractive financing arrangements, and delivery date, are far more important than is the tariff in limiting imports of such articles. Neither U.S. producers nor labor will be imported by these concessions. Further, the consumer, i.e., the U.S. Government will not realize any cost benefits as a result of these tariff reductions.

B. Impact of U.S. adoption on proposed NTM agreements

Imports of military aircraft and spacecraft into the United States are somewhat limited by the provisions of the Buy American Act which allows for a percentage add-on of the bid or offered price of materials of foreign origin. The Buy American Act has been identified by our major trading partners as being the most prohibitive nontariff barrier facing foreign aircraft producers attempting to export to the U.S. The Buy American Act, when specifically applied to Department of Defense contracts, allows for a 50-percent preference margin to be added on all foreign bids. Aircraft purchased by the Department of Defense are exempt from the proposed agreement on government procurement. Recently this 50-percent preference margin has often been waived for European exporters supplying military aircraft to the U.S. Government in return for market openings for U.S.-produced aircraft in Europe. Imports of military aircraft would probably increase only slightly since U.S.-made military aircraft are at least comparable and in some segments superior to foreign-made planes.

A slight increase in imports of spacecraft parts can be expected in the next few years due to the implementation of an agreement on government procurement since purchases by the National Aeronautics and Space Agency are specifically identified as being covered by the agreement.

ISAC GROUP 24: AEROSPACE EQUIPMENT SECTOR ANALYSIS

The Aerospace Industries Association of America, which represents most of the manufacturers of products included here, recommends a total elimination of duties on all aerospace products--both domestic and foreign--on a reciprocal basis with nations having similar statutes. In general, the association does not feel as though the industry is seriously restricted by the present duty rates.

U.S. adoption of the remaining NTM agreements would probably have little effect on the level of U.S. imports of these items.

C. Analysis of the combined impact of U.S. tariff concessions and U.S. adoption of the proposed NTM agreements

The proposed U.S. tariff concessions and U.S. adoption of NTM agreements may result in a slight increase in imports of military aircraft, spacecraft, and parts.

III. NTM export impact

A. Sector impact of foreign tariff concessions

The major trading partners of the United States have all offered to reduce import duties on military aircraft, spacecraft, and parts to zero or by 100 percent--Canada from as much as 7.5 percent, the EEC from 5 to 15 percent, and Japan from 8 to 12 percent. These reductions are not likely to improve the export potential of the U.S. industry measurably because in the past foreign duties were virtually always waived on imports of these products from the United States and thus were not restrictive of exports. On the other hand, Japan is currently increasing expenditures for research and development in the aircraft sector in the hope of becoming the world's fifth largest producer by the 1990's. This may have a negative effect on trade with Japan as that country attempts to protect its investment.

B. Sector impact of foreign adoption of proposed NTM agreements

Government procurement has been identified as being the greatest restriction on imports of the products included in this subsector. Since all governments have a close association with the defense sectors of their aircraft industries as a matter of national security it is clear that the agreement on government procurement will have little effect on these relationships.

The remaining NTM agreements, codes, when implemented, will have little or no effect on the export potential of U.S.-produced military aircraft, spacecraft, and parts.

ISAC GROUP 24: AEROSPACE EQUIPMENT SECTOR ANALYSIS**C. Sector analysis of the combined impact of foreign tariff concessions and foreign adoption of NTM agreements**

The proposed foreign tariff concessions and foreign adoption of NTM agreements can be expected to have a small beneficial impact on the competitive position of U.S.-produced military aircraft, spacecraft, and parts

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

Aircraft manufacturers are increasingly discovering they must "offset" their sales to foreign countries in order to compete effectively. For instance, they often must subcontract part of the production of the aircraft to the foreign purchaser, or line up manufacturing work in an unrelated field, or even aid in opening markets for foreign products in the United States. Participants in offset agreements are usually privately owned U.S. companies and foreign governments.

It has been almost universally understood in the past two decades that none of the national industries of France, the United Kingdom, Germany, or Italy could survive financially in the high capital-risk aircraft industry. International cooperation has evolved as the only viable solution to this situation and some solid groundwork has been laid. In the military segment of the industry, the United Kingdom and France have coproduced the Jaguar strike aircraft and a variety of helicopters. The German-British-Italian Panavia consortium is to begin production of a multirole combat aircraft in the near future. Because of their financial involvement, the respective governments become interested in the success of a particular new generation of aircraft and the resulting benefits to the native participants. This tends to insure sales of the new aircraft to participating countries. Perpetuation of such aircraft development, particularly in Europe, could adversely affect future sales of U.S.-produced military aircraft in that market.

V. Overall impact on sector

In general, a slight increase in trade can be expected as the combined result of U.S. and foreign MTN tariff concessions and NTM agreements. It is unlikely that U.S. production and employment will be affected.

ISAC Subgroup 24(pt): Military Aircraft and Spacecraft Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77. 1/

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	5,522	5,320	6,400	8,115	7,798
Imports-----do-----	180	89	164	108	96
Exports-----do-----	1,095	1,488	1,803	1,548	1,766
Apparent consumption-----do-----	4,607	3,920	4,761	6,675	6,128
Ratio, imports to consumption--percent-----	3.9	2.2	3.4	1.6	1.6
Ratio, exports to shipments----do-----	19.8	28.0	28.2	19.1	22.6
Total employment--1,000 workers-----	326	330	321	303	297

1/ Estimated.

Source: Estimates compiled from official statistics of the U.S. Department of Commerce and the Aerospace Industries Association.

ISAC GROUP 25: AUTOMOTIVE EQUIPMENT SECTOR ANALYSIS

I. Sector profile and conditions of competition

The automotive equipment sector covers the following commodities: passenger automobiles, automobile trucks and truck tractors, motor buses, fire engines, special purpose motor vehicles such as self-propelled cranes and rescue vehicles, internal combustion engines designed for use in motor vehicles, chassis and bodies for motor vehicles, and most parts and accessories for motor vehicles. The parts include both original equipment and replacement parts; however, tires and other rubber products used for motor vehicles are included in ISAC 08.

The U.S. automotive equipment industry is by far the largest in the world, followed by Japan, a distant second, and the EEC countries, third. The two largest U.S. producers, General Motors Corporation and Ford Motor Company, are the world's largest motor vehicle producers. All five major U.S. producers (General Motors, Ford, Chrysler, American Motors, and International Harvester) have production facilities in Canada. Although exports of U.S. motor vehicles and parts represent a small percentage of total U.S. production, both Ford and General Motors have assembly plants in the EEC, South Africa, Australia, South America, and some other lesser developed countries. In addition, Ford, Chrysler, and General Motors, along with some major motor vehicle parts suppliers, operate firms jointly in Japan with Japanese motor vehicle producers.

Industry profits have steadily climbed since the 1974-75 recession. Because of Chrysler's \$204 million loss, total 1978 profits for the industry were about the same as 1977. Excluding Chrysler, earnings in the automotive equipment industry would have increased a modest 3.4 percent over the 1977 level. One of the primary reasons for the small profit increase is that motor vehicle manufacturers have invested heavily in capital improvements in recent years in order to meet current and upcoming Government pollution, safety, and gas mileage standards.

Because of the government regulations, domestic motor vehicles, especially passenger vehicles, are becoming more competitive worldwide. As U.S. automobiles and lightweight trucks become smaller, they become more competitive with similar vehicles from the EEC and Japan, their primary competitors. In addition, U.S. motor vehicles are becoming more price competitive because of the devaluation of the U.S. dollar relative to the Japanese yen and German mark.

During the 1973-77 period, U.S. production of automotive equipment ranged from a low of \$68.4 billion in 1974 to a high of \$115.7 billion in 1977. Motor vehicles accounted for about 65 percent of the 1977 total; parts and accessories, 31 percent; and truck and bus bodies, truck trailers, and some miscellaneous automotive products, the remaining 4 percent.

Exports of automotive equipment increased steadily from \$6.7 billion in 1973 to \$13.1 billion in 1977. Parts and accessories represented \$7.5 billion or 57.2 percent of the total in 1977; completed vehicles, \$5.6 billion or 42.7 percent; and miscellaneous products, the remaining 0.1 percent.

ISAC GROUP 25: AUTOMOTIVE EQUIPMENT SECTOR ANALYSIS

Employment in the automotive equipment industry is directly related to the number of new motor vehicles produced. Thus, during the 1973-77 period, employment was at its highest level in 1973 when it totaled about 888,600 persons, and at its lowest level in 1975, when about 699,500 persons were employed.

Although total imports of all automotive equipment dropped somewhat in 1975, to \$12.6 billion, from the previous year's total of \$13.0 billion, the general trend during 1973-77 has been upward. Imports rose from \$11.4 billion in 1973 to \$20.4 billion in 1977. The ratio of imports to consumption in 1973 was 14.4 percent, compared with 17.9 percent in 1974. The primary import commodity, complete motor vehicles and chassis, comprises the largest share of imports. Such imports fluctuated between \$7.1 billion in 1973 and \$12.4 billion in 1977 and accounted for between 13 percent (1973) and 17 percent (1974) of annual U.S. consumption of these products.

The automotive equipment sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or non-tariff trade measures.

II. MTN import impact**A. Sector impact of U.S. tariff concessions**

U.S. tariff concessions will have very little or no effect upon the level of imports of automotive equipment. Imports of motor vehicles (primarily automobiles and trucks) represented \$12.4 billion or 61 percent of the sector total of \$20.4 billion in 1977. Passenger automobiles accounted for approximately 38 percent of total imports; automobile trucks and truck chassis, 20 percent; miscellaneous imports of motor vehicles, 3 percent; and parts and accessories the remaining 39 percent.

Almost 50 percent of the total imports in this sector in 1977 entered duty free from Canada under the APTA. U.S. tariff concessions on the remaining 50 percent of the imports range from 0.5 percentage points on automobiles to 3.0 percentage points on fire engines. Based on information supplied by STR, the average depth of cut for all items in this sector is 16 percent. This small decrease would cause little, if any, increase in the level of imports.

The duty savings would not likely be passed on to the consuming public, but would result in a smaller increase in prices or be absorbed completely by the importer or automobile dealer.

ISAC GROUP 25: AUTOMOTIVE EQUIPMENT SECTOR ANALYSIS

B. Sector impact of U.S. adoption of proposed NTM agreements

U.S. adoption of the proposed NTM agreements will have little effect upon the level of automotive equipment imports. The adoption of these agreements will have no effect upon the number of motor vehicles or vehicle parts and accessories imported.

U.S. adoption of the agreement on government procurement would affect the level of imports, especially if domestic manufacturers continue to import small pickup trucks. The U.S. Government has expressed interest in purchasing small imported pickup trucks because none are currently produced in the United States. All current imports of small pickup trucks are from Japan; in the event Japan does not sign the agreement, U.S. adoption of the agreement by the United States would not likely result in increased imports of these articles.

C. Sector analysis of the combined impact of U.S. tariff concessions and U.S. adoption of proposed NTM agreements

In light of the foregoing, the combined net effect on this ISAC of U.S. tariff concessions and adoption of the NTM agreements is likely to be insignificant.

III. MTN export impact

A. Sector impact of foreign tariff concessions

With the exception of one portion of the automotive equipment sector (parts and accessories), the foreign tariff concessions will have little effect on the level of U.S. exports. Completed motor vehicles and chassis account for about half of the U.S. exports in this sector. Virtually all motor vehicles exported to Canada are entered duty free under the APTA. On April 1, 1978, Japan unilaterally reduced its tariff on most motor vehicles from 6.4 percent ad valorem to zero, while the EEC did not make tariff concessions on most motor vehicles. Thus, the number of motor vehicles exported will probably not be affected by foreign tariff concessions.

However, the level of U.S. exports of parts and accessories, representing about half of the exports in this sector, could be affected by the foreign tariff reduction. Although 90 percent of the U.S. exports enter Canada duty free under the Automotive Products Trade Act of 1965, the remaining 10 percent are currently subject to duties ranging from zero (if comparable parts are not made in Canada) to 20 percent ad valorem. Thus, the reduction in duty rates on parts and accessories by Canada (ranging from zero to 9.8 percentage points), the EEC (2.1 percentage points), and Japan (3.0 percentage points) would probably increase the volume of U.S. exports to Canada, the EEC, and

ISAC GROUP 25: AUTOMOTIVE EQUIPMENT SECTOR ANALYSIS

Japan, because U.S. parts and accessories are price competitive with those produced in these countries. The reductions would be even more significant in the EEC and Japan because U.S. manufacturers would become more competitive in the original equipment market. (Parts and accessories for use in assembly of new motor vehicles already enter Canada free.) Many times, a few cents difference on a small part to a motor vehicle manufacturer could mean the difference between choosing a part imported from the United States and a part supplied from local sources.

B. Sector impact of foreign adoption of proposed NTM agreements

Foreign adoption of the NTM agreements will have little effect upon the level of U.S. exports in the automotive equipment sector. The only agreements which might increase U.S. exports somewhat are those for standards and technical regulations and government procurement. Many South American countries and other third world countries have quotas on the number of motor vehicles that can be imported into the country, or local content laws. In addition, some countries such as Mexico limit the number of vehicles imported to a ratio of vehicles exported.

Standards and technical regulations also tend to limit U.S. exports to some countries. Again, this applies primarily to less developed countries, and, to some extent, Japan. The adoption of this agreement could increase exports somewhat, although the increase would probably be small. If bids on automotive equipment by foreign governments, especially motor vehicles, were opened to U.S. manufacturers, exports could increase to some slight degree.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

The main barriers to worldwide trade in automotive equipment, however, will remain even if all NTM agreements are adopted internationally and the foreign tariff concessions that have been proposed become permanent. Since virtually all motor vehicles and most parts and accessories enter Canada duty free under the APTA, there are very few trade barriers on U.S. exports to Canada. The primary barrier in the EEC remains a combination of high rates of duty (11 percent on automobiles and 20 percent on most trucks and buses) and a high tax on automobiles with engines larger than 2,000 cc. (most U.S. automobiles are equipped with engines larger than 2,000 cc.). In Japan, the primary trade barriers are the high tax on automobiles with engines larger than 2,300 cc. and the complex Japanese distribution system which, along with various taxes, tends to increase the cost of an imported motor vehicle by about 150 to 200 percent. In lesser developed countries such as Brazil and Mexico, where there is a fairly large market for motor vehicles, although not nearly as large as the EEC or Japan, the primary barriers to trade will continue to be local content laws, taxes on large automobiles, and high rates of duty.

ISAC GROUP 25: AUTOMOTIVE EQUIPMENT SECTOR ANALYSIS**V. Overall impact on sector**

Tariff reductions and adoption of the NTM agreements will have little effect on this ISAC sector. Since the average duty reduction for U.S. automotive equipment amounts to less than 1 percentage point, and the adoption of the NTM agreements will have an insignificant impact on imported automotive equipment, the overall impact upon imports will be minimal. Such duty savings as might occur are expected to be absorbed by the importer or automobile dealer and would not accrue to the conserving public. Similarly, the overall impact upon exports will be small because most foreign duty reductions are small, and the measures covered by the NTM agreements do not impede U.S. exports. Consequently, the combined effect on the U.S. automotive industry will be minimal. The only area which may be measurably affected by foreign tariff reductions is parts and accessories. Since significant duty reductions were made on these products by Canada, Japan, and the EEC, the foreign market, especially for original equipment parts, could increase for U.S. producers.

ISAC Group 25: Automotive Equipment Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments <u>1</u> / millions of dollars---	74,801	68,363	70,031	95,380	115,703
Imports-----do-----	11,441	12,984	12,621	17,108	20,417
Exports-----do-----	6,654	8,709	10,930	12,118	13,081
Apparent consumption <u>1</u> /-----do-----	79,588	72,638	71,722	100,370	123,039
Ratio, imports to consumption--percent-----	14.4	17.9	17.6	17.0	16.6
Ratio, exports to shipments <u>1</u> /-do-----	8.9	12.7	15.6	12.7	11.3
Total employment--1,000 workers-----	888.6	797.4	699.5	796.8	1/ 844

1/ Estimated

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC GROUP 26: MISCELLANEOUS MANUFACTURES SECTOR ANALYSIS

I. Sector profile and conditions of competition

ISAC sector 26 includes a myriad of heterogenous manufactured commodities. These products, which include small arms, ammunition and accessories; sporting goods; toys, games, children's vehicles and dolls; jewelry; musical instruments; furniture and fixtures; printing and publishing; pens, pencils and other office and artists' materials; and all other manufactures, not elsewhere classified (n.e.c.), are discussed in detail in individual subsector papers following this general discussion.

As shown in the attached table, total producers' shipments of products encompassed by ISAC 26 rose in each year during the period 1973-77, from a value of \$57.6 billion to an estimated \$78.4 billion, or by 36 percent. The printing and publishing industry was, by far, the most important industry in this sector, accounting for an average of nearly 56 percent of total annual shipments during the period; next was the furniture and fixtures industry, which accounted for over 19 percent of the total. The balance of shipments of the sector (25 percent), as a percent of total shipments, ranged from an average of 1.3 percent for the musical instruments industry to 7.6 percent for the industry producing all other manufactures, n.e.c.

For the sector as a whole, employment trended irregularly downward during 1973-77, declining by 4.6 percent, from nearly 2.1 million workers in 1973 to an estimated 2.0 million in 1977. Those subsectors that recorded gains in employment over the period were the printing and publishing industry--the largest employer, accounting for more than half of total sector employment--(up 3 percent); the sporting goods industry (up 6 percent); the jewelry industry (up 14 percent); and the musical instruments industry (up 5 percent). Those subsectors that showed losses in employment included the second largest employer in this sector, the furniture and fixtures industry, which accounted for more than a fifth of total sector employment during 1973-77 (down 11 percent); the small arms, ammunition and accessories industry (down 33 percent); the industry producing toys, games, children's vehicles and dolls (down 22 percent); those producing all other manufactures, n.e.c. (down 14 percent); and the industry producing pens, pencils, and other office and artists' materials (down 3 percent).

Total U.S. exports in sector 26 increased without interruption during 1973-1977, rising by 56 percent from \$2.0 billion to \$3.2 billion. Except for 1976, the industries producing sporting arms, ammunition and accessories were the most prolific exporters, in terms of total value, selling more than a fifth of their total shipments to foreign markets during the period. The jewelry industry was also a major exporter, shipping about 17 percent of its total production overseas. The printing and publishing industry, though large in absolute terms compared to total sector exports, sold only an insignificant part of its total shipments abroad. The ratio of total sector exports to total shipments rose irregularly from 3.5 percent in 1973 to 4.1 percent in 1977.

ISAC GROUP 26: MISCELLANEOUS MANUFACTURES SECTOR ANALYSIS

Total U.S. imports for sector 26 rose irregularly from \$2.5 billion in 1973 to \$4.3 billion in 1977--a 75 percent increase. In terms of total value, imports of jewelry, followed by those of all other manufactures, n.e.c., furniture and fixtures, and toys, games, children's vehicles and dolls accounted for the great bulk of total sector imports. Aggregate imports under these subsectors accounted for more than 70 percent of overall sector imports. The ratio of total sector imports to U.S. apparent consumption rose from 4.3 percent in 1973 to 5.5 percent in 1977.

Except for 1975, the United States experienced a trade deficit in its overall foreign trade of the many products included in sector 26 during 1973-1977. For certain subsectors, specifically, those including small arms, ammunition, ordnance, and accessories, and pens, pencils and other office and artists' materials, exports significantly exceeded imports during the period; for others, such as printing and publishing, exports were greater than imports, but not sharply so. Finally, for the remaining six subsectors, imports were greater than exports. This deficit, however, had little adverse impact on the total domestic industry, as in the case of that industry producing furniture and fixtures where imports supply but a small share of the U.S. market.

II. MTN import impact

The overall probable economic impact on this sector of increased imports resulting from tariff concessions (which average 54 percent, according to information supplied by the STR) will be negligible, having little adverse effect on the various U.S. industries and labor. However, for a number of products such as (but not limited to) certain small arms, fishing rods and reels, dolls, certain musical instruments, certain furniture, pins and toilet brushes, the duty concessions will impact adversely on the domestic industries involved; as mentioned, these products and others are discussed in greater detail, by subsector, in the following pages. Though exceptions exist, for the sector as a whole, it is expected that duty savings are likely to be absorbed in the trade with little benefit accruing to the consuming public.

Generally, NTM's have not been significant factors limiting U.S. imports, and the adoption of the proposed agreements by the United States will have little, if any, impact on this sector. Thus, the combined impact of U.S. tariff concessions and adoption of the NTM agreements is essentially the same as that for tariff concessions only, i.e., minimal effect.

III. MTN export impact

The foreign duty concessions (which, according to information supplied by the STR, are 39 percent for the EEC, 43 percent for Japan, and 40 percent for Canada) are not expected to significantly increase overall export potential of the many industries covered by this sector. Consequently, these industries

ISAC GROUP 26: MISCELLANEOUS MANUFACTURES SECTOR ANALYSIS

and their employment will not benefit significantly. However, for numerous commodities--golf clubs, ski equipment, coin-operated amusement machines, buttons and zippers, to name a few--the export potential is expected to sharply increase following reductions in foreign duties, and the industries involved are likely to benefit proportionately.

Except for existing NTM's on precious metal jewelry and musical instruments, which have restricted exports of these products (see following write-ups on subsectors 26D and 26E), NTM's have not been significant factors in limiting U.S. exports under this sector, and the foreign adoption of the proposed agreements will not substantially increase total exports. The combined impact, however, of foreign duty reductions and adoption of the NTM proposed agreements should increase export potential for the sector as a whole, and, certainly, exports of some products are expected to be sharply increased.

IV. Foreign trade factors outside the scope of the MTN tariffs and NTM agreements

Other than value added taxes imposed by a number of countries on luxury jewelry items, which significantly deter sales, there are no known foreign trade factors that presently affect or could potentially affect the economic health of sector 26.

V. Overall impact on sector

On the sector as a whole, the combined probable economic effects resulting from the U.S. and foreign duty reductions, together with the adoption of the proposed NTM agreements are not expected to be significant. Certain industries within the nine subsectors that comprise sector 26 are expected to be adversely impacted because of U.S. duty cuts, but most will only be affected marginally; others may realize sharp increases in their exports because of lower foreign duties and/or adoption of the uniform proposed agreements, but again, most will be relatively unaffected. Likewise, U.S. labor and consumers are not expected to be significantly impacted, on balance.

ISAC Group 26: Miscellaneous Manufactures Sector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	57,634	61,258	63,043	70,942	1/ 78,392
Imports-----do-----	2,478	2,698	2,579	3,440	4,347
Exports-----do-----	2,039	2,388	2,672	2,751	3,188
Apparent consumption-----do-----	58,073	61,568	62,950	71,631	1/ 79,552
Ratio, imports to consumption--percent-----	4.3	4.4	4.1	4.8	1/ 5.5
Ratio, exports to shipments----do-----	3.5	3.9	4.2	3.9	4.1
Total employment--1,000 workers-----	2,063	2,011	1,889	1,945	1/ 1,973

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 26A: SMALLS ARMS AND AMMUNITION SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

The commodities covered under ISAC subsector 26A include small arms (those arms having a bore diameter of 30mm and under), including sporting as well as military arms; ordnance and accessories, such as guns, howitzers, mortars, recoilless rifles, rocket projectors, line-throwing guns, flame throwers, torpedo tubes and their parts; and ammunition for these arms. ^{1/} The bulk of these products are arms and munitions of war, although sporting, hunting, and target shooting arms and ammunition are included. The total value of U.S. shipments of arms and ammunition declined steadily from \$3.1 billion in 1973 to \$2.8 billion in 1976, then recovered partially to \$2.9 billion in 1977 (see attached table). Shipments of small arms and ammunition countered the trend of the subsector as a whole rising from \$887 million in 1973 to \$1.4 billion in 1977.

The number of producing firms has remained relatively stable, at about 300. Employment in the arms industries decreased constantly over the period 1973-77, dropping from 111,600 to an estimated 74,400 employees. The decline occurred primarily in ordnance, accessories, and ammunition for arms other than small arms; the number of workers manufacturing small arms and ammunition increased from 29,700 in 1973 to an estimated 33,200 in 1977. However, this increase is believed to be attributable to the production of small arms and ammunition used for nonsporting purposes.

Exports of all arms and ammunition, which peaked in 1975 at \$805 million, rose on a generally increasing trend from \$430 million in 1973 to \$755 million in 1977. Exports of ordnance, accessories, and ammunition for the larger arms defined the trend for this subsector, accounting for more than 90 percent of all exports over the 5 year period. With the exception of 1975, when exports represented 28.1 percent of domestic shipments, the ratio of exports to producers' shipments increased at a fairly even rate, rising from 13.9 percent in 1973 to 25.7 percent in 1977. For those product categories where exports to individual countries are reported--sporting arms and parts--Canada was the largest U.S. market during 1973-77, accounting for approximately 18 percent of the value exported in 1977. The EEC, Australia, and Japan were the other major export markets, accounting for 9 percent, 6 percent, and 4 percent, respectively, in 1977.

Imports of all products in this subsector rose from \$84.3 million in 1973 to \$97.6 million in 1974, then declined steadily to \$89.3 million in 1977. Imports are relatively unimportant in the U.S. market, accounting for less than 4.5 percent of annual domestic consumption during the 5 year period. Sporting arms and ammunition accounted for two-thirds to three-fourths of U.S. imports during 1973-77. Japan, Brazil, and West Germany are the major sources of sporting arms imports.

Industries within this subsector compete well in international trade in these products; U.S. producers have an excellent reputation for quality. Their greatest strength in the domestic market is in arms and munitions of war

^{1/} These products are included in SIC 348.

ISAC SUBGROUP 26A: SMALLS ARMS AND AMMUNITION SUBSECTOR ANALYSIS

and ammunition. In addition to solid exports of sporting arms and ammunition, U.S. manufacturers maintain a number of foreign manufacturing facilities to serve foreign markets. The primary weakness in the domestic market is experienced in less expensive sporting arms. In this case, the U.S. producers are particularly vulnerable to imports from the Orient and South America (principally Japan and Brazil).

The United States requires licenses for the importation of firearms and parts. Only licensed importers and firearms dealers may obtain the necessary permits from the Bureau of Alcohol, Tobacco and Firearms (ATF) of the U.S. Department of Treasury. Licenses to import are denied for military surplus and nonsporting firearms and machineguns. In addition, import licenses are denied for certain handguns, and frames and actions, on the basis of size and safety features. As a result, no handgun having a barrel measuring less than 3 inches in length can be imported and most .25 caliber handguns are banned because they are not considered sporting arms. Although aimed at preventing the importation of inexpensive handguns ("Saturday Night Specials") these provisions have also affected imports of certain expensive, high-quality handguns, principally those from Italy. Finally, although licenses are required to import parts of firearms, there is no prohibition on the importation of parts for the proscribed firearms listed above, except for frames and actions which are considered by ATF to be complete weapons. U.S. pistol and revolver manufacturers gain some measure of protection from direct import competition through these controls. However, foreign manufacturers and importers now import parts of these restricted firearms for assembly and sale in the United States, thereby nullifying the barrier to some extent.

II. NTM import impact

The majority of products in this subsector are arms and munitions of war that do not travel in the usual trade channels and are not affected by tariffs. The probable effect of the offered U.S. tariff reductions for the subsector as a whole is negligible. Based on information supplied by STR the average depth of cut for this ISAC subgroup is 50 percent. However, the proposed reductions for some sporting arms and parts could result in an appreciable increase in imports, particularly from Japan and Brazil (already providing stiff import competition). Such an increase would have a significant adverse impact on U.S. production and employment while benefiting consumers through slower price rises.

The two major NTM's affecting imports of arms and ammunition--licensing restrictions on imports of certain weapons and preferential government purchasing of arms and ammunition--will not be affected by the U.S. adoption of the proposed NTM agreements. Arms and ammunition are exempted under the government procurement agreement for reasons of national security. The adoption of the NTM agreements by the U.S. will probably have no impact on industries in this subsector. Thus, the combined impact of U.S. tariff concessions and the adoption of the NTM agreements is that for tariff concessions alone--little effect other than on certain sporting arms and parts.

ISAC SUBGROUP 26A: SMALLS ARMS AND AMMUNITION SUBSECTOR ANALYSIS**III. NTM export impact**

As was discussed in the previous section, international trade in arms and munitions of war does not take place through the normal trade channels and is not generally affected by tariffs. The U.S. is currently export competitive in sporting arms and ammunition, competing primarily on the basis of quality, not price. With the exception of Japan, most of the present tariffs and offered duty rate reductions by the U.S. major trading partners are not of a size to further affect U.S. exports of sporting arms and ammunition. Based on information supplied by STR, the average depth of cut for this ISAC subgroup is 39 percent for Canada, 36 percent for the EEC, and 22 percent for Japan. Japan severely restricts the private ownership of firearms and therefore does not offer a large market for U.S. exports of sporting arms. For these reasons, the foreign tariff concessions will have little impact on U.S. producers of exports of arms and ammunition.

Those foreign nontariff measures that tend to limit U.S. exports of arms and ammunition, particularly restrictions on the private ownership of firearms, do not appear to be affected by the proposed NTM agreements. Other NTM's that may or may not be affected by the agreements, such as the Canadian requirement for bilingual marking, the EEC requirement for government reproofing of all U.S. sporting arms, and the Australian safety regulations do not currently restrict U.S. exports. Therefore, the adoption of the proposed agreements will probably have little, if any, effect on U.S. exports. The combined effect of the foreign trade concessions and foreign adoption of the proposed NTM agreements would probably be negligible.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no other known factors outside the scope of the MTN tariffs and agreements, other than political or diplomatic considerations, that presently affect or could potentially affect the economic health of industries in this subsector.

V. Overall impact on subsector

In general, arms and ammunition discussed under this subsector represent a unique group of commodities that are not traded in the normal channels, and, with the exception of certain sporting arms, are not affected by tariffs. While international trade in these commodities is often restricted by most countries through NTM's, particularly licensing to prevent, restrict or control the private ownership of firearms by a nation's citizens, the proposed NTM agreements do not materially affect such practices. Additionally, arms and ammunition are specifically removed from the coverage of certain agreements and the GATT for national security purposes. Therefore, the impact of the MTN on international and domestic trade, employment, and consumers related to the products in this subsector will probably be negligible.

ISAC Subgroup 26B: Sporting Goods Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,488.6	1,725.5	1,803.5	2,136.4	1/ 2,300.0
Imports-----do-----	277.4	309.3	260.8	388.0	493.3
Exports-----do-----	141.8	166.2	167.0	169.5	191.5
Apparent consumption-----do-----	1,624.2	1,868.6	1,897.3	2,354.9	2,601.8
Ratio, imports to consumption--percent-----	17.1	16.5	13.7	16.5	19.0
Ratio, exports to shipments----do-----	9.5	9.6	9.3	7.9	8.3
Total employment--1,000 workers-----	57.6	61.9	54.5	60.0	1/ 61.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC Subgroup 26A: Small Arms and Ammunition Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	3,093.2	2,890.9	2,864.7	2,804.3	1/ 2,933.0
Imports <u>2/</u> -----do-----	84.3	97.6	93.7	90.3	89.3
Exports-----do-----	430.3	555.9	805.0	560.0	755.2
Apparent consumption-----do-----	2,747.2	2,432.6	2,153.4	2,334.6	2,267.1
Ratio, imports to consumption--percent-----	3.1	4.0	4.4	3.9	3.9
Ratio, exports to shipments---do-----	13.8	19.2	28.1	20.0	25.7
Total employment--1,000 workers-----	111.6	97.0	81.6	74.7	1/ 74.4

1/ Estimated.

2/ Import data is not strictly comparable to shipments and exports; includes a small amount of guided missile parts and miscellaneous arms and parts.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 26B: SPORTING GOODS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

ISAC subsector 26B covers all sporting and athletic goods except vehicles, arms, ammunition, shoes, uniforms, and sportswear. 1/ Over a half dozen firms make a broad variety of sporting and athletic goods. These corporations import, export, manufacture abroad, contract out work, and license the use of their names. There are also over 1,500 other firms in the United States that produce sporting goods, but on a smaller scale. The world demand for most of these products has grown rapidly in the past decade, but some commodities have experienced stagnant sales.

As shown in the attached table, between 1973 and 1977, the value of U.S. producers' shipments of sporting goods climbed from \$1.5 billion to an estimated \$2.3 billion, while employment was fairly stable hovering between 57,600 and 61,900, except for the recession year of 1975 when it dipped to 54,500. Productivity has been improving as evidenced by the steady decline in the ratio of salaries and wages to value added over the 1973-77 period.

U.S. manufacturers of sporting goods are most competitive in the international markets for products whose manufacturing processes are relatively capital intensive. Consequently, the U.S. fares poorly in the overseas markets for labor intensive items such as sports gloves, nets, balls, and bags, but does well in the export of high-quality golf, tennis, fishing, gymnasium, and skateboard equipment. Between 1973 and 1977, U.S. exports of sporting and athletic goods increased from \$141.8 million to \$191.5 million. The ratio of exports to producers' shipments during the 1973-77 period declined from 9.5 percent to 8.3 percent.

Between 1973 and 1977, exports to Canada climbed from \$24.4 million to \$48.2 million and to the EEC from \$17.5 million to \$44.9 million. Owing to a sharp decline in the Japanese golf market, exports to Japan dropped from \$68.1 million to \$41.1 million. Outside these three markets, exports grew from \$31.8 million to \$57.0 million.

Between 1973 and 1977, exports of fishing and hunting equipment, except guns, increased from \$10.7 million to \$18.5 million. Exports showed strong growth in all markets, with the largest customer in 1977 being Canada at \$6.5 million. There is a consumer preference for high-quality, U.S.-made fishing equipment, while the producers in Taiwan and Korea are successful at the low-end of the world market.

The United States, employing superior technology, is the world's largest producer of golf equipment, especially clubs. Because of more efficient production techniques, U.S.-made golf clubs are priced lower than foreign clubs of similar quality. Exports fell from \$72.8 million in 1973 to \$52.3 million in 1977. Although exports to Japan declined between 1973 and 1977 because of a halt in the construction of golf courses in Japan and the

1/ The products covered by this subsector are included in SIC 3949.

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emergence of the Japanese golf industry, exports to other parts of the world increased. Taiwan, Korea, and the Philippines are the leading producers of golf gloves.

The United States is also the leading supplier of bowling equipment. Between 1973 and 1977, exports were stagnant, sliding from \$7.7 million to \$7.6 million. However, exports to Canada and the EEC grew from \$2.0 million to \$3.4 million. An oversupply situation caused a sharp drop in Japanese purchases, from \$1.8 million to \$0.4 million. Elsewhere, the market was stable at just under \$4 million.

Outside of the EEC, U.S. exports of special game tables and other indoor sporting and athletic goods almost tripled between 1973 and 1977, rising from \$3.8 million to \$10.2 million. In 1977, Canada purchased over half of the total \$11.9 million in exports. Shipping costs are often a more important consideration than the duty in selling game tables.

Exports of water sports equipment fell from \$4.9 million to \$4.4 million to the EEC and Japan between 1973 and 1977, but grew elsewhere from \$8.1 million to \$15.7 million for an overall expansion from \$13.0 million to \$20.1 million. Canada was the principal purchaser of U.S. exports at \$8.8 million in 1977. Domestic producers face stiff competition overseas from Japanese makers of above ground swimming pools and French manufacturers of diving masks and snorkels. U.S. firms, however, make the top water skis and surfboards.

Exports exhibited very strong growth to all regions except Japan in the area of gymnastic, track and field, exercise, health, playground and other equipment for sports and outdoor games, increasing from \$31.7 million in 1973 to \$81.0 million in 1977. The market for U.S. goods expanding most rapidly in those years was the EEC, rising from \$5.8 million to \$30.5 million. Canadian purchases rose from \$7.0 million to \$15.7 million, but exports to Japan were stable at about \$7 million. Exports to all other destinations also grew rapidly, from \$10.6 million to \$25.7 million. Taiwan and Japan are the chief competitors in the international markets for most of these products. The Scandinavian countries and West Germany make high quality gymnastic, track and field, exercise, and health equipment that compete with the U.S. products.

During the 1973-77 period, imports expanded from \$277.4 million to \$493.3 million while marginally increasing their share of apparent consumption from 17.1 percent in 1973 to 19.0 percent in 1977. Most of the increase was in items that are basically labor intensive such as balls, gloves, nets, and certain fishing equipment. The major foreign producers of such commodities, Japan, Taiwan, and South Korea, accounted for 54 percent of total U.S. imports of sporting goods in 1977. However, imports of high quality skis and bindings from Europe have also increased rapidly. Of the total sporting goods imports of \$543.9 million in 1978, gloves accounted for 21 percent, balls 14 percent, fishing tackle 18 percent, and ski equipment (except gloves and boots) 22 percent.

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The U.S. sporting goods industry competes successfully with imports in the domestic market by utilizing high production technology, style changes, and sophisticated market advertising to sell products of style and quality in the middle and upper price ranges. Competition with imports at the low-end, however, has forced some of the smaller and less diversified companies out of the market.

II. NTM import impact

In general, the U.S. tariff concessions on sporting goods will lead to only a modest increase in imports with a negligible adverse impact on U.S. industry and labor. Much of the duty savings are likely to be absorbed in the trade, but there will probably be some beneficial impact on price levels experienced by the consuming public. Based on information provided by the STR, the average depth of cut for this ISAC subgroup is 49 percent. The average U.S. tariff on sporting goods from the EEC will fall only from 8.6 percent to 4.5 percent; such a small reduction will have little effect on the U.S. industries. Similarly, the reduction in the average duty on imports of Canadian goods--from 7.0 percent to 2.8 percent--will have little impact, especially since Canada supplies less than 5 percent of all U.S. sporting goods imports. Of greater significance will be the concessions granted imports from Japan (from an average duty of 10.6 percent to 5.6 percent) and developing countries (10.7 percent to 5.3 percent), but the adverse effects of these duty reductions will be mitigated by the appreciation of the yen versus the dollar, duty-free treatment under the GSP, and the use of the provisions of TSUS item 807.00 by U.S. firms to assemble products in developing countries. LDC's supply about half of all sporting goods imports.

Certain segments of the sporting goods industry are likely to suffer a significant adverse impact resulting from increased imports following the duty reductions. Included are the lone manufacturer of cast-resin billiard balls, and producers of golf gloves, hunting decoys, and fishing rods and reels.

U.S. nontariff measures are not a factor in limiting imports of sporting goods. Adoption of the NTM agreements will not affect import levels.

III. NTM export impact

On the whole, foreign duty modifications will result in a modest increase in U.S. exports with a corresponding beneficial impact on U.S. employment. The Canadian reductions, however, will lead to an appreciable increase in the export potential of some significant dollar-earning commodities, including fishing equipment, golf gloves, rackets, and ski equipment. Based on information supplied by the STR, the average depth of cut for this ISAC subgroup is 42 percent in Canada, 37 percent in the EEC and 44 percent in Japan. The average duties on all U.S. sporting goods entering Canada will be reduced from a current rate of 17.6 percent to 10.2 percent. The average EEC

ISAC SUBGROUP 26B: SPORTING GOODS SUBSECTOR ANALYSIS

duties will drop from 9.5 percent to 6.0 percent, while in Japan the average tariff rate on sporting goods will lower only from 7.5 percent to 4.2 percent. However, specific duty reductions for fishing, golf, and tennis equipment should moderately increase U.S. exports of those commodities to the EEC and Japan.

U.S. exports are not significantly hindered by nontariff measures practiced by the major trading partners. Adoption of the NTM agreements are not likely to increase export levels.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

No factors outside the scope of the Multilateral Trade Negotiations are believed to have a potential impact on the sporting goods industry.

V. Overall impact on subsector

From an overall standpoint, moderate increases in both imports and exports resulting from the MTN tariff reductions and adoption of the NTM agreements will offset each other in terms of job displacement and job creation. However, the appreciably increased export potential to Canada for a number of commodities should tip the balance in favor of the United States in terms of job creation. The sporting goods trade balance with Canada already favors the United States by a ratio of 2:1. The Canadians are reducing their tariffs by an average of 7.4 percentage points, while the average U.S. duty on Canadian sporting goods will be reduced by 4.2 percentage points. The reason behind this seeming advantage to the United States is that the current Canadian duties are relatively high. When the staging is completed, the Canadian tariffs on U.S. goods will average 10.2 percent compared to an average 2.8 percent assessed Canadian goods entering the United States.

The negotiations will bring U.S., EEC, and Japanese tariffs into close harmony. EEC and U.S. tariffs will drop by an average of 3.5 and 4.1 percentage points, respectively, on each other's goods. After staging, the average EEC duty will be 6.0 percent while the average U.S. duty will be 4.5 percent. The depth of cut on U.S. tariffs imposed on Japanese goods will be 47 percent compared to a Japanese trimming of 44 percent. The resulting Japanese average duty on U.S. sporting goods will still be lower than the reciprocal treatment, 4.2 percent compared with 5.6 percent.

The duty modifications by the United States should yield some beneficial impact on price levels experienced by the consuming public despite the likelihood of considerable absorption of the duty savings in the trade.

ISAC SUBGROUP 26C: TOYS AND GAMES SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

The products covered under ISAC subsector 26C include dolls and stuffed toy animals; all other toys, including model and hobby kits; games of all kinds, including playing cards, except coin-operated amusement machines (ISAC 26I); and children's vehicles and baby carriages. ^{1/} This subsector can be divided into four interrelated industries: Dolls, Toys, Games, and Children's Vehicles. Although each industry contains firms dedicated primarily to the one product group, most of the major producers manufacture products falling into all four industries. There were approximately 750 firms manufacturing these products in 1977, although less than 20 firms dominate the subsector. There is believed to have been a slight but constant decrease in the number of producers since 1973 as a result of the transfer of production facilities abroad and the acquisition of smaller firms by the major producers. This trend is partially counterbalanced by the entry of firms, particularly those manufacturing electronic games and toys.

Domestic shipments of products in this subsector have increased steadily since 1973, rising from \$2 billion in that year to \$2.4 billion in 1977. Most of this increase occurred after 1975. With the exception of a slight upsurge in 1976, employment in these industries declined from 73,000 workers in 1973 to 56,600 workers in 1977. Most of this decline occurred in toys games, and children's vehicles; employment in the doll and stuffed toy industry fluctuated between 8,900 and 10,700 workers during 1973-77, beginning and ending the period at 9,200.

Exports for the subsector as a whole increased from \$70 million in 1973 to \$147.9 million in 1977. However, most of this increase is attributable to toys, games, and children's vehicles, primarily toys and games. Dolls and stuffed toy exports fluctuated sharply over the period, from \$3.3 million to \$10.1 million, but most of the doll exports are believed to consist of parts and unfinished products shipped for assembly abroad for eventual reentry into the United States. A sizable portion of the other toy exports are also believed to fall into this category. Exports as a share of domestic output rose from 3.6 percent in 1973 to 6.2 percent in 1977. Canada is the largest single U.S. export market for these products.

As was the case for exports, imports increased steadily between 1973 and 1977, with a slight downturn in 1975, rising from \$209.5 million in 1973 to \$537.3 million in 1977, when they supplied nearly 20 percent of domestic consumption. The vast majority of imports are supplied from the Orient, principally Hong Kong, Korea, and Taiwan.

The relative positions of these industries in international and domestic trade are controlled primarily by three factors: labor costs, transportation costs, and marketing expertise. With the exception of children's vehicles, the production of most of these items is relatively labor intensive. As such, domestic producers of dolls, stuffed toys, other inexpensive toys and games are at a definite cost disadvantage in relation to imports from the Orient.

^{1/} The SIC product groups included are 3942 and 3944.

ISAC SUBGROUP 26C: TOYS AND GAMES SUBSECTOR ANALYSIS

Over the past decade there has been a constant movement of production facilities overseas to take advantage of these lower labor cost. However, since freight charges are based on space used, transportation costs on bulkier and larger items tend to act as a limiting factor on imports. The freight cost factor also serves to limit U.S. exports. In addition to freight cost protection, the U.S. producer enjoys a distinct marketing advantage in the domestic market because of consumer preference for known brand names and high quality and, in the case of many specially designed board games, patents.

Most of the largest domestic producers can be more properly termed as multinationals, serving the U.S. market and more traditional U.S. export markets, in part, through foreign production facilities. As a result, there is a trend in the international markets for inexpensive or labor-intensive dolls, toys, and games to be supplied from the Orient while the children's vehicles, plastic model kits, and larger dolls, toys, and games are served by production in each domestic market. U.S. products tend to compete on the basis of uniqueness or high quality in foreign markets, while domestically, U.S. products occupy the middle and upper price and quality ranges. U.S. imports from developed countries compete similarly in the U.S. market as do U.S. exports in foreign markets.

II. NTM import impact

The impact of U.S. tariff concessions on trade in the products of ISAC subsector 26C probably will be moderate. Based on information supplied by STR, the average depth of cut for this ISAC subgroup is 49 percent. The proposed tariff reductions contribute to the present trend toward reliance on imports to supply the market for lower end merchandise. However, due to the freight cost limitation, imports of children's vehicles, model kits, and most of the larger toys and games should experience only modest increases, having a negligible adverse impact on U.S. producers and employment. In the case of dolls and stuffed toy animals, imports will probably increase appreciably since the combination of low labor costs and duty reductions could offset the domestic producers' freight cost and marketing advantages on the larger products. This could eventually result in a small domestic doll and stuffed toy industry devoted to the production of specialty and collectible dolls that are not sold on a price basis. Since most domestic doll producers currently rely to some extent on imports, a shift to foreign production facilities could easily take place. In all cases, the ultimate consumer can be expected to share some of the benefits for duty savings through slower rises in prices if not lower prices.

The adoption of the proposed NTM agreements would probably have little effect on the industries in this subsector because the agreements do not affect the only nontariff barriers acting on these products (safety requirements). Therefore, the combined impact of tariff concessions and the adoption of the NTM agreements is that given for the tariff concessions alone.

ISAC SUBGROUP 26C: TOYS AND GAMES SUBSECTOR ANALYSIS**III. NTM export impact**

Of the various products in this subsector, games are the only items whose export potential is likely to be affected by the foreign duty offers. Based on information supplied by the STR, the average depth of cut for this ISAC subgroup is 49 percent for Canada, 44 percent for the EEC, and 48 percent for Japan. However, most U.S. exports of dolls, toys, and children's vehicles are limited by disadvantageous labor and freight costs rather than duty rates. Those products that are exported compete on the basis of uniqueness or quality, not price. One exception is the Canadian market for baby carriages and other children's vehicles (except bicycles) where the U.S. supplies four-fifths of Canada's imports. However, the present duties are not limited to trade in these products and the duty reductions offered by Canada are too small to further stimulate exports.

U.S. and French producers lead the world in the international sale of high-quality playing cards, with the U.S. dominating the markets in Canada and Japan. U.S. exports of other games compete effectively in the middle and upper price ranges throughout the world, the principal markets being the EEC, Canada, Singapore, and Latin America. The proposed duty reductions on games, including playing cards, would probably result in a moderate increase in exports with a correspondingly beneficial impact on U.S. industry and employment. The Canadian reductions on playing cards should have the greatest impact, but the EEC and Japanese reductions on games will also be beneficial. However, the offered Canadian reduction for games, other than playing cards, is too small to increase export potential.

There are no known foreign NTM's that significantly restrict U.S. exports of these products and, as such, the foreign adoption of the proposed NTM agreements would probably have little effect on the industries in this subsector. The combined impact of foreign tariff concessions and the foreign adoption of the NTM agreements would be that of the tariff concessions alone.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

There are no other known factors outside the scope of the NTM tariffs and NTM agreements that currently affect or could potentially affect the economic health of the industries in this subsector.

V. Overall impact on the subsector

The overall effect of the multilateral trade negotiations on ISAC subsector 26C is varied and dependent almost solely on duty changes. Total imports will probably increase moderately ranging from slight increases of

ISAC SUBGROUP 26C: TOYS AND GAMES SUBSECTOR ANALYSIS

imported children's vehicles to appreciable increases of dolls. Of the major product groups, only exports of games can be expected to increase significantly. Production of the remaining products is labor intensive and this disparity along with high freight costs tend to limit U.S. exports. There continues to be a shift of toy, game, and doll production facilities overseas, particularly to the Orient, to take advantage of the lower labor costs; an effect that can reasonably be expected to intensify as the result of tariff reductions. However, this trend is balanced to some extent by the expected increase in the domestic market for all products in this subsector and the foreign demand for games. The industries in this subsector can be expected to move further toward true multinational operations, leaving the United States with a stable production base having increasing domestic shipments in the higher quality, less labor-intensive goods. Generally the ultimate consumer can be expected to benefit through lower prices or slower rises in prices and from an expanded product selection.

ISAC Subgroup 26C: Toys and Games Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,956.0	1,989.0	1,992.0	2,214.0	2,383.0
Imports-----do-----	290.5	329.1	286.8	410.9	537.3
Exports-----do-----	70.0	106.9	100.1	124.0	147.9
Apparent consumption-----do-----	2,176.5	2,211.2	2,178.7	2,500.9	2,772.4
Ratio, imports to consumption--percent-----	13.3	14.9	13.2	16.4	19.4
Ratio, exports to shipments----do-----	3.6	5.4	5.0	5.6	6.2
Total employment--1,000 workers-----	73.0	70.7	58.1	59.3	56.6

Source: Compiled from official statistics of the U.S. Department of Commerce.

ISAC SUBGROUP 26D: JEWELRY SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Jewelry, both precious and costume jewelry, and jeweler's findings and lapidary products compose ISAC subsector 26D. The articles covered include jewelry and other articles worn on or carried about the person, such as compacts, watchbands, and precious metal trim for umbrellas and canes, as well as cut and/or polished diamonds and other precious, semiprecious, or imitation stones, drilled pearls, and unassembled jewelry parts and findings. 1/

The jewelry industry is currently healthy, partly because of the great demand for precious metal jewelry and precious stones as an investment in a time of inflation. Because New York City is one of the three world centers for the cutting and polishing of diamonds, cut but unset diamonds, mostly in sizes over 0.5 carat, form the major portion of this subsector's exports. Despite the lower prices of foreign jewelry, the U.S. industry also maintains an export market, severely limited by NTM's (particularly precious metal jewelry), based on the high quality and style of its products.

The value of shipments of the sector's products increased about 47 percent in 1973-77, rising each year from \$2.1 billion in 1973 to an estimated \$3.1 billion in 1977 (see attached table). The value of shipments of precious metal jewelry accounted for well over half the subsector's shipments each year, largely because of the high value of the precious metals and precious stones. The value of shipments of costume jewelry exceeded that of shipments of jeweler's findings and lapidary products, despite the high value of the diamonds cut and polished by the lapidary industry.

The value of imports of the products in this subsector increased considerably in 1973-77, rising each year from \$0.6 billion in 1973 to \$1.4 billion in 1977; the greatest annual increases were in 1976 and 1977. Imports of cut diamonds suitable for jewelry, mostly of small sizes less than 0.5 carat, have constituted a major share of the subsector's imports. During this period, the value of imports of precious metal jewelry increased about fivefold and was \$307 million in 1977, while costume jewelry imports more than doubled to \$125 million. The ratio of imports to consumption declined from 26.2 percent in 1973 to 24.8 percent in 1974, then rose each year and was 35.3 percent in 1977.

The value of the subsector's exports declined annually from \$425 million in 1973 to \$364 million in 1975, then rose annually to \$488 million in 1977. Cut but unset diamonds, mostly over 0.5 carat, made up the major portion of the exports. Exports of precious metal jewelry in 1973-77 rose each year from a value of \$70 million in 1973 to \$87 million in 1977. Costume jewelry exports also increased from a value of \$17 million in 1973 to \$31 million in 1977. The ratio of exports to shipments in 1973-77 declined from 20.4 percent to 15.3 percent in 1975, then rose to about 16 percent in 1976 and 1977.

1/ The SIC product groups included are 3911, 3915, and 3961.

ISAC SUBGROUP 26D: JEWELRY SUBSECTOR ANALYSIS

Total employment within the subsector declined from 64,300 workers in 1973 to 61,900 workers in 1974, then rose annually to 73,200 workers in 1977. More than half the workers were employed in producing precious metal jewelry, employment in that industry rising each year of the 1973-77 period. Employment in the costume jewelry industry accounted for about one-third of the subsector's total employment.

The jewelry subsector is viewed by many as a U.S. trade area which is, or could be, affected by changes in NTM tariff or nontariff trade measures.

II. NTM import impact

Based on information supplied by the STR, the average U.S. depth of cut for this ISAC subsector is 67 percent, which will probably cause imports to increase appreciably. As long as the current demand is maintained, employment will be affected only minimally. Duty savings will likely benefit both the intermediate consumer and the consuming public. Duty savings on cut diamonds, however, are expected to be absorbed by the foreign supplier and will not likely benefit the intermediate consumer or the consuming public.

The only known NTM imposed by the United States on jewelry and lapidary product imports are the federal regulations requiring that any labeling of precious metals and/or precious stones be accurate; although marking of metal content, or gem type, is not required by law, any such voluntary marking must be free of deceptive practices. These requirements are of unknown benefit to the U.S. industry and consumers.

III. NTM export impact

Based on information supplied by the STR, the average depth of cut for this ISAC subsector on offers from EEC, Japan, and Canada is 47 percent, 47 percent, and 46 percent, respectively. While foreign duties are not a significant factor restraining U.S. exports of jewelry and lapidary products, foreign tariff concessions should lead to some increase in exports.

U.S. exports of precious metal jewelry have been limited by various types of foreign NTM's, as discussed below. The effect of foreign NTM's on exports of costume jewelry and lapidary products has been minimal.

Standards and technical regulations.--In the United Kingdom, France, Switzerland, and Italy, every piece of precious jewelry must be tested. In France, the Napoleonic Code specifies six entry ports where the jewelry must be tested and marked. The testing process damages the article, so it must be refinished. The testing of imports in these countries is reportedly delayed, so the testing process takes 3 or 4 months, tying up inventory and funds.

ISAC SUBGROUP 26D: JEWELRY SUBSECTOR ANALYSIS

The Province of Quebec requires that everything be marked in two languages, adding to the manufacturers' costs.

Spain, France, and Italy stipulate that no article may be designated as gold unless it is 18 karat. Thus, gold jewelry may not be sold as such if its purity is less than 18 karat. (In the United States, gold jewelry may be as low as 10 karat.)

Switzerland is the only country requiring that silver plate be made by fusing the silver to the base metal rather than by electroplating.

Customs valuation practices.--Canada evaluates jewelry for tariff purposes at wholesale value rather than actual import value, which results in a 33-1/3 percent overcharge on the duty.

Licensing.--Spain requires licensing of imported jewelry. Licensing requirements by the following countries virtually ban the importation of U.S. made jewelry: Argentina, Colombia, Brazil, Chile, Ecuador, Uruguay, Jamaica, Peru, Afghanistan, Algeria, Burma, Syria, India, United Arab Republic, Indonesia, Ceylon, Pakistan, South Korea, and most of Africa. If not for the licensing restrictions, countries with rising standards of living would be good markets for U.S. exports, and India, which formerly was a good market before restrictions on imports were imposed, would be even more so because of its vast population with an affinity for precious metal jewelry as an investment medium.

Subsidies.--According to some U.S. industry sources, Italian jewelry manufacturers, which account for 50 percent of the world's production of gold jewelry, reportedly receive consignments of gold from the Italian Government and are not required to pay for it until the jewelry products made from the gold are shipped from their plants. Since gold represents 50-70 percent of the cost of the articles, such government aid would free the manufacturers from the financial burden of the large capital outlay required for gold, both as raw material and product inventory, before shipping the jewelry--a tremendous advantage over non-Italian manufacturers.

The combined impact of foreign NTM's on the U.S. industry is to restrict severely U.S. exports of precious metals jewelry as well as to lower profits because of the higher cost of doing business with the countries involved. Universal adoption of agreements on NTM's would minimize U.S. export difficulties, lower the cost of doing business and result in a substantially greater volume of U.S. exports of precious metals jewelry than the 88 million dollars' worth exported in 1977. The resulting increased production requirement would probably necessitate a rise in employment.

Specifically, the NTM agreements provide that testing and marking be permitted before export, or if not feasible, that the exported product be accorded the same treatment as the domestic product; this would save the U.S. manufacturers much time and money in completing a transaction and because of the time saved, purchase orders requiring fast delivery could be accepted.

ISAC SUBGROUP 26D: JEWELRY SUBSECTOR ANALYSIS

The agreement that deals with import licensing is concerned with harmonizing and simplifying administrative procedures so they do not restrict trade as current systems do by means of complicated procedures and bureaucratic delays. Should such an agreement be implemented, export markets now effectively closed to the U.S. precious metals jewelry industry would be open and the U.S. jewelry output would increase to fill the gap.

While foreign duties are not a significant factor restricting U.S. exports, duty reductions are bound to be of some help for all jewelry exports. The combined impact of adoption of the NTM agreements and reduction of foreign import duties would probably result in an appreciable increase in U.S. precious metals jewelry output for the export market.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

Value-added taxes imposed by a number of countries on luxury items such as are discussed here, often at high rates, are significant deterrents to sales of the items, particularly since they are usually imposed on the entered value of the imports.

V. Overall impact on subsector

U.S. tariff concessions will probably cause imports to increase appreciably. Foreign adoption of NTM agreements, however, and, to a much lesser extent, the lowering of foreign duties, will gradually result in a considerably increased export market, particularly the precious metal jewelry, despite the restrictive effect of value-added taxes. Overall benefits for the subsector and for consumers will be the net result.

ISAC Subgroup 26D: Jewelry Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	2,079	2,273	2,373	2,766	<u>1/</u> 3,056
Imports-----do-----	588	612	667	987	1,404
Exports-----do-----	425	416	364	452	488
Apparent consumption-----do-----	2,242	2,469	2,676	3,301	3,972
Ratio, imports to consumption--percent-----	26.2	24.8	24.9	29.9	35.3
Ratio, exports to shipments---do-----	20.4	18.3	15.3	16.3	16.0
Total employment--1,000 workers-----	64.3	61.9	62.6	70.4	<u>1/</u> 73.2

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 26E: MUSICAL INSTRUMENTS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

The commodities covered under ISAC subsector 26E include musical instruments, accessories and parts. ^{1/} Some 340 concerns, employing about 27,000 workers, manufacture these products in the United States. Products range from pianos and organs to tuning pins. Over two-thirds of the manufacturing establishments are concentrated in the North Central and Northeast regions; smaller concentrations are found in the West and the South.

During the period 1973-77, producers' shipments of musical instruments, accessories and parts increased by 41 percent, rising from a value of \$0.7 billion to an estimated \$1.0 billion. U.S. imports, principally parts and accessories, acoustical guitars and pianos, rose by 34 percent over the period, from \$125 million to \$167 million, and the ratio of imports to apparent consumption dropped slightly from 16 percent to 15.5 percent. Exports rose by 74 percent over the period, increasing from \$55.8 million in 1973 to \$97.2 million in 1977, and the ratio of exports to producers' shipments moved upward from 7.8 percent to 9.6 percent. Total employment was an estimated 27,000 workers in 1977, up by 4.7 percent from 25,800 in 1973 (see attached table).

The economic health of the domestic musical instrument industry is good. Of particular importance is the production of the electronic organ featuring solid-state circuitry, sales of which depend more on performance and special features rather than price. The piano is the second most important musical instrument produced in the United States. In addition, those musical instruments of the professional type, rather than the student type, are price competitive with the foreign made instruments.

In foreign markets, however, the U.S. industry on the whole is not export competitive, despite the strong sales in electronic organs, pianos and certain recognized trade-name products, and some professional items.

The musical instrument subsector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff trade measures.

II. MTN import impact

Based on information supplied by the STR, the average U.S. depth of cut for the musical instrument subsector is 52 percent.

For the subsector as a whole, rate reductions will cause a modest increase in imports of musical instruments which will have a negligible to moderate adverse impact on the U.S. industry, depending on the product. As a result of the concessions, domestic producers will turn in part to imports to meet foreign competition and fill out their product lines, thus depressing

^{1/} These products are included in SIC 3931.

ISAC SUBGROUP 26E: MUSICAL INSTRUMENTS SUBSECTOR ANALYSIS

domestic output and employment. Duty savings realized from lower rates of duty will benefit the middleman and retailer. A small portion of the savings will be passed on to the ultimate consumer.

The effects of increased imports will vary in one or two selected areas. Although there will be only a modest increase in piano imports as a whole, a rise in imports of grand pianos will be more significant because the U.S. market is much smaller than that for upright pianos and imports of grand pianos already supply a significant share of that market. Rate reductions should stimulate imports of student brass-wind instruments and student wood-wind instruments from sources in the Far East. With respect to parts and accessories for musical instruments, reductions in the rates of duty will provide some additional price advantage for imports, but this will be compensated for in part by factors that make imports less competitive, like the weakening of the dollar and increasing costs of production overseas.

No known NTM's currently affect imports of musical instruments except for the marking requirement specifying country of origin, which is of no effective consequence.

The combined impact of the U.S. tariff concessions and the adoption of the proposed NTM agreements will increase imports modestly and have a negligible to moderate effect on the industry. Sales of domestically produced instruments will contract, domestic production and employment will fall. Although duty savings realized from rate reductions will benefit principally the middleman and the retailer, some of the duty savings can be expected to reach the ultimate consumer.

III. MTN export impact

Based on information supplied by the STR, the average depth of cut for this subsector is 46 percent for Canada, 37 percent for the EEC and 33 percent for Japan. The Canadian duty reduction offers are not expected to significantly increase the export potential for U.S. products to this market because the United States already supplies a substantial part of this market. There is also little room for expansion of exports to the EEC countries because certain U.S. firms already operate subsidiaries in Europe and both areas concentrate production on the same type of instrument, i.e., those of high price and high quality. Finally, the duty reductions being offered by Japan are not of sufficient size to significantly stimulate exports.

The adoption of the proposed NTM agreements will be a more significant factor in stimulating exports than tariff reductions. Exchange controls, prior import deposits, marking and labeling requirements, surcharges, variable valuation procedures, credit restrictions, and consular formalities inhibit U.S. exports along with other NTM's. Although it is not possible to assess accurately the effects of proposed NTM agreements on U.S. exports of musical instruments, exports of some instruments, like electronic organs, some

ISAC SUBGROUP 26E: MUSICAL INSTRUMENTS SUBSECTOR ANALYSIS

professional instruments, and even pianos, are already growing. One musical instrument industry spokesman has indicated that NTM's are more effective in restricting the growth of U.S. exports than are the rates of duty. Hence, it is probable that the adoption of uniform NTM agreements would result in a significant increase in exports of some of the products of this industry.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

As far as is known there are no trade factors outside of MTN duty reductions and the NTM agreements that presently affect or could potentially affect the products in this subsector.

V. Overall impact on subsector

On balance, it is likely that the duty reductions and adoption of the uniform NTM agreements will have a highly beneficial impact on the U.S. musical instruments industry as a whole. Although producers of some specific products such as grand pianos will be faced with increased competition from imports, producers of other highly export-competitive products such as electronic organs, certain professional types of musical instruments, and probably pianos, should gain a substantial increase in export potential. Even under present conditions of competition, U.S. exports of musical instruments, although much smaller than imports, have been growing at a more rapid rate than imports. The lowering of trade barriers, especially the adoption of uniform NTM agreements, is expected to see this trend continue at an accelerated rate. The duty savings from the rate reductions will benefit principally the middleman and retailer, but some of the duty savings can be expected to reach the ultimate consumer.

ISAC Subgroup 26E: Musical Instruments Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	714.9	806.0	773.7	925.2	1/ 1,008.5
Imports-----do-----	125.2	145.5	117.0	134.6	167.3
Exports-----do-----	55.8	78.6	77.2	92.0	97.2
Apparent consumption-----do-----	784.3	872.9	813.5	967.8	1,078.6
Ratio, imports to consumption--percent-----	16.0	16.7	14.4	13.9	15.5
Ratio, exports to shipments---do-----	7.8	9.8	10.0	9.9	9.6
Total employment--1,000 workers-----	25.8	29.6	25.3	26.4	1/ 27.0

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 26F: FURNITURE SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Products covered in ISAC subsector 26F include household furniture (SIC 251), office furniture (SIC 252), public building and related furniture (SIC 2531), partitions and fixtures (SIC 254), and other furniture and fixtures (SIC 259). There are approximately 6,000 U.S. manufacturers of these articles; however, the 11 largest firms are believed to account for 25 percent of total producers' shipments. Although there are production facilities in every State, the subsector is primarily concentrated in North Carolina, New York, Michigan, and California. Employment in the sector during 1977 was estimated at 426,000 workers, unchanged from 1976 but down 11 percent from 1973.

The value of U.S. product shipments rose 18 percent from \$12.3 billion in 1973 to an estimated \$14.5 billion in 1977. U.S. imports showed little growth between 1973 and 1975, averaging roughly \$400 million annually. In 1976, however, imports rose 35 percent from the previous year to \$528 million and 22 percent in 1977 to \$642 million. Imports' share of the U.S. market in 1977 amounted to 4.3 percent, compared with 3.8 percent in 1976 and an annual average of 3.2 percent in 1973-75. U.S. exports more than doubled between 1973 and 1977, from \$93 million to \$231 million. Nevertheless, exports' share of producers' shipments in 1977 remained at a negligible level of only 1.6 percent (see attached table).

During 1973-77, the domestic industry supplied over 95 percent of U.S. consumption. Factors which have hindered imports of most furniture articles into the U.S. market are high transportation costs for bulky articles and strong U.S. brand-name recognition and acceptance. Moreover, the U.S. industry's extensive marketing and distribution network also serves to stimulate demand for its products.

High transportation costs also account for the relatively low level of U.S. exports. The single largest foreign market is Canada, because of its proximity and, therefore, the relatively low cost of transporting furniture to that market.

II. MTN import impact

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 50 percent. U.S. tariff concessions will probably result in a modest increase in overall imports, with little effect on the subsector or its level of employment. Although imports have increased in recent years, they account for a relatively small part of the U.S. market, primarily because of prohibitive transportation costs. Duty savings will likely be absorbed by foreign suppliers and importers; thus, little or no benefit will accrue to the intermediate consumer or to the consuming public.

ISAC SUBGROUP 26F: FURNITURE SUBSECTOR ANALYSIS

It should be noted, however, that U.S. tariff concessions on furniture of unspun fibrous vegetable materials and folding chairs of wood will result in increased imports that could adversely affect industry and labor. For furniture of the vegetable materials, also known as wicker and rattan furniture, the U.S. tariff will be reduced from 16 percent ad valorem to 7.5 percent. The depth of the cut will likely result in an appreciable increase in imports, with a significant adverse effect on industry and labor. Although wicker and rattan furniture is made by many U.S. firms, primarily to fill out their product lines, it is believed that a small number of firms specialize in the production of this furniture. U.S. output is believed to have increased from about \$30 million in 1973 to \$50 million in 1977, while imports rose from \$15.2 million to \$45.3 million in the same period. Imports traditionally represent a sizable share of this market (about 45 percent in 1977), primarily because of the ready availability of the raw materials in less developed countries. Duty savings will likely benefit both the intermediate consumer and the consuming public through lower prices.

The U.S. tariff concession on wood folding chairs, including directors chairs, will likely result in a substantial increase in imports, since price is an important consideration at the retail level. While U.S. production between 1973 and 1977 declined an estimated 10 percent, imports more than tripled from \$2.1 million to \$6.7 million in the same period. Since these chairs are foldable and, therefore, less bulky than other types of furniture, the cost of transportation is not prohibitive. Imports' share of this U.S. market in 1977 amounted to about 25 percent, compared with less than 10 percent in 1973. Duty savings will probably benefit both the intermediate consumer and the consuming public in the form of lower prices.

U.S. adoption of the NTM agreements will not significantly affect the subsector because the measures covered in the agreements have had little impact on its trade.

It should be noted that approximately one-third of U.S. imports of furniture is motor-vehicle equipment from Canada under the APTA provision. Import levels for these items, which currently enter duty free, are primarily determined by the demand for motor vehicles. The NTM agreements will not affect this trade.

III. NTM export impact

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 34 percent for the EEC, 41 percent for Japan, and 28 percent for Canada. Foreign tariff concessions will probably not affect the export potential of this subsector. With the exception of Canada, the U.S. subsector is not price competitive in foreign markets because of relatively high transportation costs. Although Canada reduced its average tariff on furniture by 5.5 percentage points, according to data provided by the STR, its concessions are not, by themselves, sufficient to stimulate U.S. exports to any significant extent.

ISAC SUBGROUP 26F: FURNITURE SUBSECTOR ANALYSIS

Foreign adoption of the NTM agreements will not affect this subsector, primarily because the nontariff measures covered by the agreements do not currently affect its trade.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no other significant foreign trade factors that currently affect the U.S. furniture and fixtures subsector.

V. Overall impact on subsector

U.S. tariff reductions will likely result in only a modest increase in imports, with little overall effect on the subsector. Imports' share of the U.S. market is relatively small, largely owing to prohibitive transportation costs. Foreign tariff concessions will have little or no effect on U.S. export potential, also because of the relatively high cost of transportation. The NTM agreements will not significantly affect the subsector, because the nontariff measures covered in the agreements currently have little impact on its trade. Little or no benefit will accrue to the intermediate consumer or the consuming public as a result.

ISAC Subgroup 26F: Furniture Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	12,270	12,364	11,633	13,411	<u>1/</u> 14,500
Imports-----do-----	381	426	391	528	642
Exports-----do-----	93	137	150	206	231
Apparent consumption-----do-----	12,558	12,653	11,904	13,733	14,911
Ratio, imports to consumption--percent-----	3.0	3.4	3.3	3.8	4.3
Ratio, exports to shipments----do-----	0.8	1.1	1.3	1.5	1.6
Total employment--1,000 workers-----	479	459	396	426	<u>1/</u> 426

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISAC SUBGROUP 26G: PRINTING AND PUBLISHING SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

The U.S. printing and publishing industry (ISAC 26G) produces a large assortment of printed matter by various printing processes. Most of the printing is done on paper and paperboard to produce a wide variety of products such as newspapers, periodicals, books, catalogs, advertising printing matter, manifold business forms, and greeting cards. Blankbooks, looseleaf binders, albums, and similar articles and printing plates also are products of this industry. 1/

The printing and publishing industry's 40,000 establishments employed an estimated 1.1 million people in 1977, which is the highest level of employment during the 1973-77 period. During 1973-77, the value of shipments of this industry's products, as well as of U.S. consumption, increased every year reaching the record levels of \$44.8 billion, and \$44.5 billion, respectively, in 1977; the value of U.S. exports and imports during this period also increased each year to highs of \$674 million and \$368 million, respectively. During 1973-77, the ratios of exports to shipments and of imports to consumption were relatively stable, and in 1977, the respective ratios were 2 and 1 percent. U.S. exports consist principally of books and periodicals (an estimated \$260 million and \$140 million, respectively, in 1977), most of which go to Canada. U.S. imports are mostly books (\$170 million in 1977), which are supplied largely by the United Kingdom.

The U.S. printing and publishing industry has experienced a rising demand for many years. The value of industry shipments increased an estimated 11 percent from 1976 to 1977 and by the same amount from 1977 to 1978, and is projected to rise an additional 11 percent in 1979.

Automation and highly skilled workers within the U.S. industry enable it to produce quality products that are competitive worldwide. Continued keen competition within the United States and increased international trade in informational material will be likely in the future to increase the awareness of U.S. publishers and printers to additional foreign marketing opportunities. The printing and publishing industry sector is viewed by many as a U.S. trade area which is, or could be, affected by changes in MTN tariff or nontariff measures.

II. MTN import impact

Based on information supplied by the Office of the Special Representative for Trade Negotiations (STR), the average depth of cut in U.S. tariffs on dutiable imports of products of the printing and publishing industry is about 38 percent. U.S. imports of these dutiable articles totaled \$105 million in

1/ The SIC product groups included are 2711, 2721, 273, 2741, 275, 2761, 2771, and 278; printing trade services, SIC 279, are not covered in ISAC 26G.

ISAC SUBGROUP 26G: PRINTING AND PUBLISHING SUBSECTOR ANALYSIS

1977, nearly 30 percent of the total value of all imports of products of the printing and publishing industry. These dutiable imports accounted for about 0.2 percent of the value of U.S. consumption of all products of the printing and publishing industry. The majority of U.S. imports are books (about \$170 million in 1977) which enter duty free under provisions of the Florence Agreement (P.L. 89-651).

The U.S. printing and publishing industry generally enjoys U.S. market advantages such as proximity to users and familiarity with local customs and idioms. Copyright legislation and licensing arrangements also contribute advantages to the domestic industry. It is believed that the proposed duty reductions will result in a negligible effect on the level of U.S. imports of the products considered here and a negligible effect upon the overall industry. Any realized duty savings are expected to slightly benefit the intermediate consumer, but the ultimate consumer is not expected to benefit to any great extent.

Because the proposed NTM agreements do not appear to have a significant bearing on foreign trade in the products of the printing and publishing industry, the combined effects of the proposed tariff reductions and NTM agreements on the U.S. printing and publishing industry and on the level of imports appear to be negligible.

III. NTM export impact

Based on STR information, the EEC, Japan, and Canada are expected to reduce their average tariff rates on dutiable imports from the United States by about 30 to 45 percent. In general, the tariff reductions offered by other countries are too selective or too small to provide significant benefits to the U.S. industry. As with the U.S. industry, foreign producers enjoy advantages in their domestic markets (i.e., familiarity with local customs and idioms and favorable legislation concerning proprietary material) which tend to limit import trade.

Some members of the U.S. industry have complained about the existence of Canadian duties on certain printed matter that are considerably more than the U.S. duties on comparable products. The proposed NTM tariff concessions do not eliminate these differentials, which reportedly favor Canadian printers who compete with U.S. firms for business in the U.S.-Canadian border areas.

The proposed NTM agreements are not expected to significantly affect the international trade of the printing and publishing industry. Therefore, the overall impact of the proposed tariff reductions and the NTM agreements on U.S. exports is expected to be negligible.

ISAC SUBGROUP 26G: PRINTING AND PUBLISHING SUBSECTOR ANALYSIS**IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements**

No foreign trade factors outside the scope of the proposed MTN tariff concessions and the NTM agreements are known that presently significantly affect, or could potentially significantly affect, the economic health of the U.S. printing and publishing industry.

V. Overall impact on subsector

The overall impact of the proposed MTN tariff concessions and the NTM agreements on the U.S. printing and publishing industry is expected to be negligible. Neither the tariff reductions proposed by the United States and other countries nor the adoption of the proposed NTM agreements will be significant enough to result in substantial shifts in international trade. The duty savings on the MTN tariff concessions are expected to slightly benefit the intermediate consumer, but not the ultimate consumer to any great extent. The effect of the NTM agreements on the intermediate consumer and ultimate consumer is expected to be negligible.

ISAC Subgroup 26G: Printing and Publishing Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	30,467	33,428	35,652	40,001	1/ 44,800
Imports-----do-----	250	294	303	346	368
Exports-----do-----	395	490	552	613	674
Apparent consumption-----do-----	30,322	33,232	35,403	39,734	1/ 44,500
Ratio, imports to consumption--percent-----	1	1	1	1	1/ 1
Ratio, exports to shipments----do-----	1	1	2	2	1/ 2
Total employment--1,000 workers-----	1,038	1,031	1,027	1,043	1/ 1,068

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

ISA SUBGROUP 26H: WRITING INSTRUMENTS SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

The commodities included in ISAC subsector 26H are pens, mechanical pencils and parts; lead pencils, crayons and artists' materials; marking devices, such as hand stamps, dies and seals; and carbon paper and inked ribbons. 1/ As shown in the attached table, the value of shipments for all of the products included herein increased steadily from \$1.0 billion in 1973 to an estimated \$1.4 billion in 1977, or by 40 percent. However, the value of shipments by the writing instrument industry (SIC 3951), the most important within this subsector in terms of value, increased by 63 percent over the period. In 1977, there were an estimated 350 establishments producing the products covered by this subsector. Total employment in these industries decreased irregularly from 33,000 workers in 1973 to 32,000 in 1977 (3 percent). Total U.S. exports increased from \$112 million in 1973 to \$171 million in 1977 (53 percent), while the ratio of exports to producers' shipments increased by 14 percent, from 10.7 to 12.2 percent, over the period. The U.S. writing instrument industry, which has traditionally been a large net exporter of its products, accounted for an average of 60 percent of total annual exports of all the products included herein during 1973-77, and has exported about 20 percent of its production in recent years. Japan, the EEC and Canada have been important markets for U.S. exports of all the products included in this subsector.

Total imports of all the products in this subsector have more than doubled over the period, rising from an estimated \$23 million in 1973 to \$49 million in 1977; however, the ratio of imports to consumption remained below 4 percent annually during the period. The bulk of imports, which enter from Japan and the EEC, consisted of inexpensive ball-point pens and mechanical pencils (SIC 3951).

Products of the writing instrument industry compete favorably in foreign markets; a number of domestic writing instrument and art goods producers, which manufacture high quality products, operate foreign production facilities serving the markets in which they are located. Several have extensive joint-venture and licensing arrangements overseas. U.S. producers of lead pencils and marking devices, however, are at a competitive disadvantage with their foreign counterparts because of higher labor costs in the United States. However, imports of these products have not adversely affected the domestic industry because the shorter delivery time for domestic marking devices and the dependency by foreign producers of lead pencils, to a large extent, on U.S. wood (California incense cedar) for their pencil slats gives U.S. producers a slight competitive advantage in the domestic market. The U.S. carbon paper and inked ribbon industry has been declining in recent years because of declining worldwide demand due to the increased usage of photocopying machines and other methods of reproduction.

1/ The SIC product groups included are 3951, 3952, 3953, and 3955.

ISAC SUBGROUP 26H: WRITING INSTRUMENTS SUBSECTOR ANALYSIS

II. MTN import impact

The reductions in the rates of duty for all products included herein, and to a lesser extent, U.S. adoption of the proposed MTN agreements will probably cause a moderate to appreciable increase in imports. Based on information supplied by STR, the average depth of cut for this ISAC subgroup is 58 percent. However, because of efficient manufacturing techniques and aggressive and imaginative marketing practices by domestic producers, particularly those in the writing instrument industry, which accounted for about 75 percent of total imports in this subsector in 1977, the resultant increases in imports will probably have only a negligible adverse impact on U.S. producers and employment. Duty savings will likely benefit both the industrial and intermediate consumer, but the consuming public is not expected to benefit from the duty savings.

III. MTN export impact

The proposed foreign tariff concessions will probably not significantly increase the export potential for the products of the industries covered by this subsector. Based on information supplied by the STR, the average depth of cut for this ISAC subgroup is 53 percent for Japan, 39 percent for the EEC, and 44 percent for Canada.

The U.S. writing instrument and art goods industries are highly export competitive. It is not likely that the offers (which range from reductions of 0.2 to 12.5 percentage points) will improve the U.S. export potential, since the current rates of duty are not a significant factor limiting U.S. exports. Additionally, all of the countries that have offered duty reductions have one or more affiliates of U.S. writing instrument and art goods producers located in that country and these firms service the local markets.

With respect to lead pencils, high labor costs in a labor-intensive industry make the U.S. product noncompetitive in foreign markets. Therefore, the foreign duty reductions (ranging from 1.2 to 8.8 percentage points) will not appreciably increase U.S. exports.

The U.S. marking device industry (SIC 3953) is not export competitive because the products manufactured by this industry require considerable labor content. In addition, certain marking devices are specialty items that are required on very short notice; thus, most of these items are supplied by local firms with short delivery time capability. For these reasons, the foreign duty reductions (ranging from 0.2 to 2.1 percentage points) will not appreciably increase U.S. export potential for marking devices.

U.S. exports of carbon paper and inked ribbons are small. In view of the previously indicated decline in demand for these products, the foreign duty reductions, which average about 3 percentage points, will not likely increase U.S. exports.

ISAC SUBGROUP 26H: WRITING INSTRUMENTS SUBSECTOR ANALYSIS

The proposed NTM agreements do not cover any known foreign NTM's that significantly restrict U.S. exports of these products and, as such, the foreign adoption of the proposed agreements will probably have little effect on industries in this subsector. Therefore, the combined impact of foreign tariff concessions and the foreign adoption of NTM agreements will probably be negligible.

IV. Foreign trade factors outside the scope of MTN tariffs and NTM agreements

There are no other foreign trade factors outside the scope of the MTN tariffs and NTM agreements that are known to affect the economic health of the industries in this subsector.

V. Overall impact on subsector

U.S. tariffs are being cut by an average of 58 percent and foreign duty reductions range from 0.2 to 12.5 percentage points on all the products included herein. Industries that account for the bulk of shipments included in this subsector are large net exporters and have substantial direct investment in production facilities outside the United States. Therefore, the impact of the MTN tariff reductions and adoption of the NTM agreements on international and domestic trade, employment and consumers related to the products included in this subsector will probably be negligible.

ISAC Subgroup 26H: Writing Instruments Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	1,049	1,135	1,159	1,293	1/ 1,400
Imports-----do-----	1/ 23	25	22	33	49
Exports-----do-----	112	106	112	131	171
Apparent consumption-----do-----	960	1,054	1,069	1,195	1,278
Ratio, imports to consumption--percent-----	2.4	2.4	2.1	2.8	3.8
Ratio, exports to shipments----do-----	10.7	9.3	9.7	10.1	12.2
Total employment--1,000 workers-----	33	33	31	32	1/ 32

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce and industry data.

ISAC SUBGROUP 26I: OTHER MANUFACTURES SUBSECTOR ANALYSIS

I. Subsector profile and conditions of competition

Subsector 26I includes industries manufacturing a wide range of commodities covered in miscellaneous manufactures such as brooms and brushes, signs and advertising displays, burial caskets, hard-surface floor coverings, and manufacturing industries not elsewhere classified (n.e.c.). In addition, the industries producing the following items are also included: feathers, plumes, and artificial trees and flowers, buttons, and needles, pins, and fasteners. 1/ The total number of firms producing the products included in this subsector is unknown, but probably numbers in the thousands with particular concentration in firms producing such products as signs and advertising displays and burial caskets (515 establishments).

In the total subsector from 1973 to 1977, producers' shipments, imports, exports, and apparent consumption increased (ranging from 30 to 37 percent) while employment decreased (by 14 percent). The import to consumption ratio and the export to production ratio both remained relatively stable over the period and were 10 and 7 percent, respectively, in 1977 (see attached table).

Domestic production by industry breakdown between 1973 and 1977, however, fell in both the manufacture of feathers, plumes, and artificial trees and flowers (by 20 percent), and the manufacture of buttons (by 8 percent). Over the same period, the market share of imports in manufacturing industries, n.e.c., also deviated from the trend and decreased from 17 to 12.6 percent, as did the share of domestic output exported, from 16.4 to 12.1 percent. Among the sharpest increases in market share of imports were hard-surface floor coverings, brooms and brushes, feathers, plumes, and artificial flowers and trees. The largest percentage increases in the share of domestic output exported were found in the button industry and in the needles, pins, and fasteners industry.

Employment decreased for every item group in 1973-77, except for hard-surface floor coverings.

With respect to aggregate trade in products encompassed by this subsector, the United States had a negative trade balance in the period 1973-77, imports exceeding exports by as much as 45 percent (in 1973). However, as stated earlier, both the ratios of imports to consumption and exports to production remained stable during the period.

The competitive position of the U.S. producers in foreign markets varies substantially depending on the product. Those domestic industries in particular that are less competitive in foreign markets are brooms and brushes; burial caskets; feathers, plumes, and artificial trees and flowers;

1/ The SIC product groups included are 399, 3962, 3963 and 3964.

ISAC SUBGROUP 26I: OTHER MANUFACTURES SUBSECTOR ANALYSIS

buttons; and needles, pins, and fasteners. The U.S. manufacturers of hard-surface floor coverings, however, are competitive in the world market, exporting an average of 15.7 percent of their shipments in 1973-77.

II. MTN import impact

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 51 percent. It is not expected that the U.S. tariff concessions on products within this subsector in the aggregate will have any overall adverse effect. However, certain industries will experience an adverse impact from duty cuts. Although the increase in imports resulting from duty reductions on common pins and safety pins will be modest, such reductions will have a significant adverse impact on those producers in the industry, particularly the four in New England which produce only a single product line. Duty savings will likely benefit the industrial and intermediate consumer, but the consuming public is not expected to benefit from the duty savings, which are expected to be absorbed in the trade.

The reduction in duty on toilet brushes, valued not over 40 cents each, would probably result in a substantial increase in imports. Imports have increased substantially in recent years under the current duty, and since the imported and domestic products compete on a price basis, such a reduction in duty would further enhance the competitive position of the imported product in the marketplace. This increase would probably result in a significant adverse impact on the U.S. industry and employment. Duty savings will likely benefit both the industrial/intermediate consumer and the consuming public, which are expected to benefit by slower rises in prices. For toilet brushes, valued over 40 cents each, there probably would be only a modest increase in imports, with only a negligible adverse impact on the U.S. industry and employment. Duty savings are expected to be absorbed by the foreign supplier or importer and will not likely benefit the industrial/intermediate consumer or the consuming public.

The reduction in duty on toothbrushes from a 15.3 percent AVE to a 6.1 percent AVE, would probably lead to an appreciable increase in imports. However, the ratio of imports to apparent consumption was less than two percent in recent years. The domestic industry is highly efficient, and extensive advertising and superior packaging have created a consumer preference for the principal domestic brands, the resultant increase in imports will probably have only a negligible adverse impact on U.S. producers and employment. Duty savings will likely benefit both the industrial/intermediate consumer and the consuming public, which are expected to benefit by slower rises in prices.

In the umbrella industry, the proposed U.S. duty rate modification will result in a modest increase in U.S. imports of umbrellas. Such an increase would have only a modest effect on U.S. production due to the high market share already held by imports. The modifications could effectively eliminate the lower cost articles from domestic production and create further pressure

ISAC SUBGROUP 261: OTHER MANUFACTURES SUBSECTOR ANALYSIS

on U.S.-produced middle and higher priced items. Duty savings will likely benefit the intermediate consumer, but the consuming public is not expected to benefit from the duty savings, which are expected to be absorbed in the trade.

The sole U.S. manufacturer of umbrella frames would also be affected by reducing the duty from the current rate of 30 percent to 12 percent. Imports of frames can be expected to rise appreciably, which could cause a substantial decline in domestic production. Duty savings will likely benefit the industrial consumer, but the consuming public is not expected to benefit from the duty savings, which are expected to be absorbed by the trade.

The proposed reduction for fireworks from 11.8 percent to 4.7 percent ad valorem could result in a substantial rise in imports due to the excess capacity of foreign producers. This increase may benefit consumers, to some extent, by expanding available quantities; duty savings will likely benefit the intermediate consumer, but the consuming public is not expected to benefit from the duty savings, which are expected to be absorbed in the trade. However, the level of U.S. production of fireworks would fall because distributors, the principal purchasers of fireworks, would find the imported products that much cheaper, and consequently more profitable. Since U.S.-produced fireworks are reputed to be far safer and of higher quality than imported items, the net result may be detrimental to the ultimate consumer.

The proposed duty rate modification for ferrocium and other pyrophoric alloys is likely to cause an appreciable increase in the level of U.S. imports. This increase may have significant adverse impact on the sole U.S. producer resulting in an idling of some productive equipment at its facility, or may result in the shift to production of more profitable articles at that facility, thus eliminating the U.S. ferrocium industry. Obviously, some unemployment, or underemployment would result. Duty savings will likely benefit the industrial and intermediate consumers, but the consuming public is not expected to benefit from the duty savings, which are expected to be absorbed in the trade.

The proposed duty reductions on brier and meerschaum pipes will result in a modest increase in imports which will result in a corresponding decline in U.S. production of these pipes. A significant adverse impact on U.S. producers of brier and meerschaum pipes will result. Duty savings are expected to be absorbed by the foreign supplier and will not likely benefit the intermediate consumer or the consuming public.

A duty reduction on pipes composed of woods other than brier and pipes of clay would cause an appreciable increase in imports of these articles which could force some small domestic firms out of the industry; the five larger U.S.

ISAC SUBGROUP 261: OTHER MANUFACTURES SUBSECTOR ANALYSIS

firms would likely be unaffected. Duty savings will likely benefit both the intermediate consumer and the consuming public, which are expected to benefit by lower prices and greater availability of the ultimate product.

Since NTM's have not been significant factors in limiting imports, the U.S. adoption of the proposed NTM agreements will not have any discernible effect on this subsector.

III. NTM export impact

Based on information supplied by the STR, the average depth of cut for this ISAC subsector is 30 percent for the EEC, 27 percent for Japan, and 41 percent for Canada. The impact of foreign duty concessions is not expected to significantly increase the overall export potential of the many products covered by this subsector. However, certain industries are expected to gain increased export potential as a result of foreign duty reductions.

The proposed foreign reductions in the duties on coin-operated amusement machines will probably cause a moderate increase in the export potential to markets in the EEC and Japan with corresponding beneficial impact on the U.S. industry and employment. In the button industry, duty reductions will probably cause an appreciable increase in the export potential of metal buttons and certain parts, buttons of acrylic and polyester resins, and buttons of vegetable ivory to Canada; a moderate increase in the export potential of these buttons to the EEC, and a moderate increase in the export potential of metal buttons to Japan, with a corresponding beneficial impact on U.S. industry and employment.

In the notions industry, the duty reductions will probably moderately increase the export potential of zippers, needles, pins, buckles, snap fasteners, and handbag frames incorporating clasps to the Canadian market, and snap fasteners to both the EEC and Japan, with corresponding beneficial impact on the U.S. industry and employment.

U.S.-made hard-surface floor coverings are already export competitive in the world market, as stated earlier, primarily because of the wide range of styles and quality offered by the U.S. manufacturers and their marketing expertise. Presently, the greatest barrier to increased U.S. exports is the relatively high duty rates imposed by Canada, the EEC, and Japan (15.6 percent and 17.5 percent ad valorem in Canada and 17.6 percent and 15 percent ad valorem in the EEC and Japan, respectively). The offered duty rate reductions, to 13.5, 8.4, and 7.2 percent ad valorem, for Canada, the EEC, and Japan, respectively, would probably result in modest to appreciable increases in export potential to these countries with a corresponding beneficial impact on the U.S. industry and employment. This is particularly true for exports to the EEC and Japan, where the duty reductions are greatest. An increased U.S. export potential is particularly significant since this industry has lost a substantial portion of the U.S. floor covering market to the carpet industry.

ISAC SUBGROUP 261: OTHER MANUFACTURES SUBSECTOR ANALYSIS

Since NTM's have not been significant factors in limiting U.S. exports, the foreign adoption of the proposed NTM agreements will not benefit the U.S. industries in this subsector to an appreciable extent.

IV. Foreign trade factors outside the scope of NTM tariffs and NTM agreements

There are no other known foreign trade factors which presently affect or could potentially affect the economic health of this U.S. subsector.

V. Overall impact on subsector

In summary, the combined probable economic effects from the domestic and foreign duty reductions and adoption of the proposed NTM agreements on this subsector in the aggregate would not be significant. However, certain industries within the subsector would be adversely affected to some extent, while others would benefit. Industries that would probably be adversely affected include those producing umbrellas, fireworks, ferrocerium and other pyrophoric alloys, certain tobacco pipes, the common pin and safety pin industry, and certain segments of the brush industry.

Among the industries expected to benefit are those that produce coin-operated amusement machines, buttons, certain notions, and hard-surface floor coverings. As mentioned, the adoption of the proposed NTM agreements will have little impact on trade.

The consuming public in most cases is not expected to benefit from the combined effect of domestic and foreign duty reductions and adoption of NTM agreements with the exception of two items, i.e., toothbrushes and certain smoking pipes.

ISAC Subgroup 261: Other Manufactures Subsector Analysis

U.S. shipments, imports, exports, apparent consumption, ratios of imports to consumption and exports to shipments, and employment, 1973-77.

Item	1973	1974	1975	1976	1977
Producers' shipments--millions of dollars----	4,518.7	4,646.9	4,761.9	5,391.4	1/ 6,012.0
Imports-----do-----	1/ 459.1	459.1	436.5	521.9	597.1
Exports-----do-----	1/ 316.3	331.4	344.5	403.5	432.3
Apparent consumption-----do-----	1/ 4,661.5	4,774.6	4,853.9	5,509.8	1/ 6,176.8
Ratio, imports to consumption--percent-----	1/ 9.8	9.6	9.0	9.5	1/ 9.7
Ratio, exports to shipments----do-----	1/ 7.0	7.1	7.2	7.6	1/ 7.2
Total employment--1,000 workers-----	180.6	167.1	152.6	153.3	1/ 154.9

1/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--No export or import data for SIC 3995 (burial caskets) are available, so both ratios are somewhat understated. However, imports and exports of this item are believed very small.