A SURVEY AND ANALYSIS OF GOVERNMENT OWNERSHIP IN MARKET ECONOMY COUNTRIES: A STUDY OF STEEL, AUTOMOBILES AND IRON ORE

STAFF RESEARCH STUDY

13

Office of Industries
Office of Economic Research
United States
International Trade Commission

May 1978

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Daniel Minchew, Chairman
Joseph O. Parker, Vice Chairman
George M. Moore
Catherine Bedell
Italo H. Ablondi
Bill Alberger

Kenneth R. Mason, Secretary to the Commission

This report was prepared principally by

Ronald J. DeMarines, William L. Hanlon,
Thomas J. O'Connell, and Harold A. Taylor,
Office of Industries

and

Susan B. Daniel
Office of Economic Research

Office of Industries
Norris A. Lynch, Director

Address all communications to
Office of the Secretary
United States International Trade Commission
Washington, D.C. 20436

NEWS
UNITED STATES INTERNATIONAL TRADE COMMISSION • Office of the Secretary • Washington, D.C. 20436

FOR RELEASE

May 1, 1978

CONTACT: Hal Sundstrom
(202) 523-0161 or
Ron DeMarines
(202) 523-0259

USITC 78-036

USITC REPORTS RESULTS OF SURVEYS OF GOVERNMENT-OWNED INDUSTRIES IN FREE-MARKET-ECONOMY COUNTRIES

A report issued today by the United States International Trade Commission concludes that output from the government-owned firms producing automobiles, steel, and iron ore in 21 free-market-economy countries was not the primary determinant in trade flow among these countries and the United States. The report also concludes that, with the exception of the United Kingdom, the countries exhibiting the highest degrees of government ownership are not generally among the United States' major trading partners.

The report's conclusions pertain to the period 1971-75 for steel and iron ore, and for the period 1972-75 for automobiles. Because of changing world economic conditions, the conclusions may not apply to years subsequent to 1975.

The report specifically examines the extent of government ownership in the three industrial sectors and measures the impact that this ownership has had on the international trade of the United States. For the purposes of the study, a firm is considered government-owned if 25 percent or more of the equity holdings of a firm are owned by its government.

According to the report, there are 15 countries with government-owned steel companies. These are Argentina, Austria, Brazil, Canada, Finland, Ireland, Italy, Mexico, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom, and West Germany. Output from foreign government-owned steel producers in 1974 accounted for 66 million metric tons, or 14 percent of the total raw steel output of the 21 countries sampled. U.S. steel imports from these same firms constituted only a minor share of total U.S. steel consumption for the period 1971-75, ranging from a high of 2.7 percent in 1971 to a low of 1.4 percent in 1974.

Automobile production by 6 countries with government-owned firms--West Germany, France, Italy, United Kingdom, Spain, and Argentina--accounted for approximately 13 percent of the 25 million automobiles produced in 1974 by the 21 countries sampled. U.S. automobile imports from foreign government-owned firms hovered between 2 and 3 percent of U.S. automobile consumption throughout the period 1972-75.

Twelve countries with government-owned firms--Brazil, Sweden, Norway, Mexico, Canada, Austria, West Germany, United Kingdom, Finland, Spain, Italy, and Argentina--accounted for about 37 percent (on an iron content basis) of the 340 million metric tons of the iron ore mined in 1974 in the 21 free-market-economy countries. U.S. imports of government-owned iron ore supplied a small but increasing share of U.S. iron ore consumption during the period 1971-75, ranging from a low of 0.9 percent in 1972 to a high of 5.6 percent in 1975.

The Commission report is entitled A Survey and Analysis of Government Ownership in Free-Market-Economy Countries: A Study of Steel, Automobiles, and Iron Ore (USITC Publication 870). Copies may be obtained by calling (202) 523-5178 or from the Office of the Secretary, 701 E Street NW, Washington, D.C. 20436.

C O N T E N T S

CONTENTS

CONTENTS

Tables

Executive Summary

In an effort to provide a measure of clarity to the controversial question of the role of government-owned firms in the arena of world trade, the United States International Trade Commission examined three industrial sectors of substantial importance to the U.S. economy with specific reference to the issue of government ownership in 21 market economy countries. The steel, iron ore, and automobile sectors were selected for several reasons. First, these sectors represent pockets of significant commercial activity contributing in excess of 5 percent to the U.S. GNP in recent years. Second, these sectors are of topical interest within the realm of trade affairs. Third, these sectors were initially thought to embody a substantial number of government-owned firms and as such were suited to a study of this nature.

Inasmuch as data for government-owned firms were not readily available nor comparable, considerable energy was directed toward establishing a reasonable framework as a basis for valid comparison. Subsequently, the output of the government-owned firms for these three sectors was quantified relative to the total sectoral output of the 21 countries sampled. Based upon trade data collected, an assessment was then made of the aggregated impact of U.S. imports from these government-owned firms relative to these U.S. markets. Conclusions drawn from the data contained within this report apply exclusively to the period 1971-75 and relate only to market economy countries. It should be emphasized that these conclusions may not apply for years subsequent to 1975 because of changing world economic conditions.

The results suggest that for the time period examined, government ownership was not a primary determinant in explaining the trade between 20 market economy countries and the United States in these three industrial sectors. With the exception of the United Kingdom, the countries exhibiting the highest degrees of government ownership are not generally among the United States' major trading partners.

In general, the raw steel production of the 21 countries sampled accounted for the vast preponderance of the total raw steel output of the market economies of the world. For example, in 1974, 492 million metric tons of raw steel were produced by the market economies of the world, of which 459 million metric tons, or 93 percent of this total, were accounted for by the 21 countries encompassed by this study. Somewhat surprisingly, only 66.0 million metric tons, or 14 percent of the total sample production, were actually produced by government-owned firms. The United Kingdom and Italy accounted for 51 percent of the 1974 government-owned raw steel output.

Similarly, U.S. steel imports from government-owned firms constituted only a minor share of total U.S. steel consumption for the period 1971-75, ranging from a high of 2.7 percent, by quantity, in

1971 to a low of 1.4 percent in 1974. U.S. steel imports from foreign government-owned firms accounted for only a moderate share of total U.S. steel imports for the period 1971-75, ranging from a high of 15.5 percent, by quantity, in 1971 to lows of 11 percent in 1974 and 1975.

For the period 1972-75, the production of automobiles by the market economies of the world ranged from a high of 30 million units in 1973 to a low of 25 million units in 1975. Virtually all of this production was accounted for by 21 countries included in this study. Again, government-owned firms contributed only a moderate share to the above totals--approximately 13 percent in 1974. The output from these government-owned firms was even more concentrated than in the steel industry; the United Kingdom and France collectively accounted for the vast majority of these government-owned automobiles--roughly 72 percent in 1974.

U.S. automobile imports from foreign government-owned firms were not a substantial factor in the U.S. automobile market for the period 1972-75, hovering between 2 and 3 percent, by quantity, of U.S. automobile consumption throughout this period. Moreover, these government-owned imports constituted less than an eighth of total U.S. imports throughout this period.

In general, the iron ore mined by the 21-country sample accounted for substantially less of the total iron output of market economy countries throughout the period 1971-75 than did the other two industrial sectors. For example, in 1974, the total output of iron ore by market economies amounted to 591 million metric tons (gross ore weight) of which 340 million metric tons, or 58 percent, was actually mined by the sample countries. The government-owned firms of the 21 countries contributed a substantially higher percentage of the total iron ore output of these countries than they contributed to the total outputs of the other products included in this report. In 1974, approximately 37 percent (on an iron-content basis) of the ore mined in these 21 countries was government-owned. Brazil and Sweden were predominant in the total of government-owned ore mined, accounting for 87 percent of the total government-owned sample output of iron ore.

In terms of gross weight, U.S. imports of government-owned iron ore supplied a small, but increasing, share of U.S. iron ore consumption during the period 1971-75, ranging from a low of 0.9 percent in 1972 to a high of 5.6 percent in 1975. Likewise, U.S. imports of iron ore from government-owned firms constituted a small, but increasing, share of total U.S. iron ore imports, ranging from a low of 3 percent in 1972 to a high of 13.2 percent in 1975. Brazil and Sweden were the principal sources of these government-owned imports, supplying over 90 percent of such imports in both 1974 and 1975.

Introduction

This report, prepared by the United States International Trade Commission, identifies the government-owned industrial firms of 21 market economy countries. It specifically examines the extent of government ownership in three industrial sectors--steel, automobiles and iron ore--and measures the impact that this ownership has had on the international trade of the United States.

Data for 21 countries are examined cross-sectionally for 5 years spanning 1971 to 1975 for steel and iron ore, and for 4 years spanning 1972 to 1975 for automobiles. The conclusion drawn from the data pertain exclusively to these periods.

For the purpose of this study, a firm is considered government-owned if 25 percent or more of the equity holdings of a firm are owned by its government. Admittedly, any such percentage designation of government ownership is by its very nature arbitrary. Nonetheless, 25 percent was selected to include situations in which governments exercised substantial control over firms and yet were not majority stockholders. The assumption was made that in situations where government ownership is less than 25 percent of the equity of a firm, the government does not control the actual policy decisions of the firm. Care was taken to insure that there were no serious omissions of generally recognized government-owned firms for the three sectors by virtue of this 25-percent criteria.

A listing of major government-owned industrial firms, by country, is attached as appendix A to this report. This list is, in effect, a snapshop of a dynamic and fluid situation. As such, it is subject to change within a brief time span. Nonetheless, it should be useful as a basic reference for further detailed study for a considerably longer time frame.

Foreign Government Ownership of the World Steel Industry

Introduction

This section addresses the specific issue of the role of government ownership in the postwar evolution of the world steel industry with a primary emphasis upon the period 1971-75. Although it is recognized that there are numerous mechanisms, aside from direct government onwership, whereby governments may exert strong influence upon the growth and direction of their respective steel industries, they will be largely outside the focus of this study. Japan is the exception. Although there is no outright government ownership of Japan's steel industry, its importance as a world steel producer and its impact upon the United States is such that it was included in this section.

In general, world governments have played active roles in facilitating the growth and development of their respective steel industries. Government interventions have, on the whole, been commonplace and are manifest in numerous forms, as for example, the direct government ownership of all or part of this industry in the United Kingdom, Italy, and Austria. Indirect interventions through financial institutions as in West Germany, France, and Japan, and the formation of economic unions as in Belgium and Luxembourg, have also been effectively used by world governments. In fact, economic communities such as the European Coal and Steel Community were established to facilitate favorable competitive climates for participating countries. These interventions have by and large been reflective of the basic economic and political philosophies of the respective countries and have been responsive to the pressures and the dictates of the times. Moreover, these interventions have been motivated by a host of factors, which singly and in combination were appraised to be crucial to the objectives and priorities of the various parties in power throughout the postwar era. As such, these interventions exhibit disparate characteristics not only among countries but in the same countries through time.

Summary of steel findings

Excluding steel produced by nonmarket economy countries, the data gathered in the course of this study reveal that government-owned production was not generally a major factor in world steel trade during 1971-75. Government-owned raw steel production constituted only a minor share (14.4 percent in 1974) of the raw steel production of 21 market economies encompassed by this study. 1/ Moreover, the bulk of this government-owned raw steel production was concentrated in the hands of a relatively few nations. The United Kingdom and Italy, together, accounted for 51.2 percent of the government-owned raw steel produced by these 21 countries in 1974. It is relevant to note that Italy's world trade balance in steel was negative from 1971 to 1974 and the United Kingdom's declined steadily from 1971 to 1975, with negative balances in the last 2 years.

1/ For the purpose of this section, government-owned production was calculated by multiplying a country's steel output by the percentage of output accounted for by government-owned firms. With the exception of the Netherlands, the American Iron and Steel Institute publication entitled "Steel Industry Economics and Federal Tax Policy," June 1975, Table 11, p. 54, was the source for government ownership percentages. Further, the definition of steel is identical to that used by the United Nations Economic Commission for Europe, Statistics of World Trade in Steel.

United States imports of government-owned steel accounted for only a minor share of U.S. steel consumption for the period 1971-75, ranging from a high of 2.7 percent in 1971 to a low of 1.4 percent in 1974. 1/ Although the ratio of total steel imports to U.S. consumption ranged from a high of 17.3 percent in 1971 to a low of 11.9 percent in 1973, the ratios of government-owned U.S. steel imports to U.S. consumption were substantially less. As such, U.S. imports of government-owned steel do not appear to be a major influence in U.S. steel markets for this period.

Production

In 1974, the estimated total world production of raw steel was 707.7 million metric tons, of which 491.6 million metric tons, or nearly 70 percent, was accounted for by market economy countries. 2/ The remainder was produced by nonmarket economies, of which the Soviet Union was by far the most important, accounting for approximately 61 percent of the raw steel production of these nonmarket economies.

The share of 1974 world steel production encompassed by this 21-country sample is shown in the tabulation below:

Item	Production	Percent of world total
	Millions of metric tons	
World	707.7	100.0
Market economy	491.6	69.5
Nonmarket economy	216.1	30.5
Sample coverage	458.8	64.8

1/ It is important to note that government-owned exports (imports) were calculated by multiplying exports, both to the United States and to the world, by the percent of government ownership in the industry.

2/ 1974 was selected as the reference year because it was more representative of normal trading patterns than was the recession year of 1975. Trade data for 1976 were not used since they were not available for all countries.

Of the 491.6 million metric tons of raw steel produced by the market economy countries in 1974, the selected sample of 21 countries accounted for 458.8 million metric tons, or 93 percent of market economy production. Thus, this sample is representative of the major share of raw steel production of the market economies, and thus the preponderance of steel trade among market economies.

In 1974, only 66.0 million metric tons, or 14 percent of the total steel production of this sample, was actually government-owned. A list of major government-owned steel firms for the countries with government ownership of their steel industries is attached as appendix B to this report. The breakdown of government-owned production in 1974 is depicted in the following table.

Government-owned production of raw steel, by countries, 1974

Country	Government-owned production	
	Quantity	Share of country's total production
	1,000 metric tons	Percent
United Kingdom	20,183	90
Italy	13,568	57
West Germany	5,855	11
Spain	5,241	45
Austria	4,699	100
Brazil	4,530	60
Mexico	2,412	47
Canada	2,310	17
Netherlands	1,927	33
Argentina	1,661	72
Sweden	1,258	21
Finland	1,093	66
Norway	746	79
Portugal	368	100
Ireland	10	100
Belgium-Luxembourg	0	0
Denmark	0	0
Japan	0	0
Switzerland	0	0
France	0	0
United States	0	0
Total	65,961	-

Source: Compiled from data in table C-1, app. C.

More extensive data are available for the years 1971-75 in appendix C, table C-1, of this report. The rankings, however, are generally the same throughout the entire 5-year period.

Trade Impact on the United States

When viewed in the aggregate, U.S. imports of government-owned steel constituted only a minor share of U.S. steel consumption during the period 1971-75, ranging from a high a 2.7 percent in 1971 to a low of 1.4 percent in 1974, as shown below:

Year	Total U.S. steel consumption	U.S. consumption of government-owned imports of steel	Ratio of government-owned imports to total U.S. consumption
	1,000 metric tons	1,000 metric tons	Percent
1971	92,345	2,480	2.7
1972	95,923	2,295	2.4
1973	110,553	1,901	1.7
1974	108,101	1,566	1.4
1975	80,545	1,214	1.5

In addition, U.S. imports of government-owned steel accounted for only a moderate share of total U.S. steel imports during the period 1971-75; from a high of 15.5 percent in 1971, they declined steadily to a low of slightly over 11 percent in 1974 and again in 1975, as shown below:

Year	Total U.S. steel imports	U.S. imports of government-owned steel from 21 countries	Ratio of government-owned steel imports to total U.S. imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	2,480	15.5
1972	15,246	2,295	15.1
1973	13,145	1,901	14.5
1974	14,154	1,566	11.1
1975	10,767	1,214	11.3

In 1974, for example, 82 percent of total U.S. steel imports were supplied by five countries, Japan, France, Belgium-Luxembourg, Canada, and West Germany. The first three have no outright government ownership, and yet collectively they accounted for 58.1 percent of total U.S. imports. The last two have minimal government ownership in their steel industries and accounted for the remainder of the 82 percent. By comparison, three of the prominent steel producing nations with high degrees of government ownership in their economies--Austria, the United Kingdom, and Italy—accounted for only 6.2 percent of U.S. steel imports in 1974.

As shown in the following table, 15 of the 21 market economy countries exhibited varying degrees of government ownership. Seven of the 15 registered a decline in their export volume to the United States from 1971 to 1974, whereas 12 of the 15 registered a similar decline in export volume from 1971 to the recession year, 1975. Similarly, of the 5 remaining market economies (excluding the United States) with no government ownership of their steel industries, 3 exported less to the United States in 1974 than in 1971, and four exported less in 1975 than in 1971. Japan, the leading steel exporter to the United States, shipped approximately the same tonnage of steel to U.S. markets in 1974 as in 1971, although it too registered a decline in export volume in 1975. It is worth noting that those countries which actually increased their export volumes to the United States in 1974 and 1975 were, as a rule, small-volume exporters, and the extent of increase in their respective export volumes was therefore marginal. The most notable exception was Canada; its exports to the United States increased by approximately 134,000 metric tons in 1974 over 1971, constituting an 11.4-percent increase. However, Canadian exports declined substantially in 1975 to an estimated 908,000 metric tons.

A synopsis of the world steel industry

There have been dramatic changes in the world steel industry, both in technology and in structure, since the post-World War II reconstruction efforts. For example, in 1950, there were 32 nations producing raw steel; by 1975, this figure had jumped to 71, 21 of which are encompassed by this study. In 1950, the United States produced 88 million metric tons of raw steel representing nearly 47 percent of the total world output for the year; as of 1975, the United States produced 106 million metric tons of raw steel, but accounted for only 16.3 percent of the total world output for the year. Although the U.S. consumption of steel declined erratically as a percent of world steel consumption throughout the period 1955-74, it still remained the largest steel consuming nation in the world as of 1974, accounting for an estimated 20 percent of the world steel consumption.

The United States greatly expanded its capacity for the production of steel both during World War II and in the immediate postwar period

The 21 countries' steel exports to the United States, 1971, 1974, 1975, their relative changes between 1971-74 and 1971-75, and the percent government owned, 1974

Source	Exports to United States			Changes in exports		Percent government owned
	1971	1974	1975	1971-1974	1971-1975	
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	
Austria	10.5	23.2	13.4	+12.7	+2.9	100
Ireland	0.4	1.4	1.5	+1.0	+1.1	100
Portugal	.1	0.5	0.3	+.4	+.2	100
United Kingdom	1,269.5	546.9	474.8	-722.6	-794.7	90
Norway	7.2	10.0	1.2	+2.9	-5.0	79
Argentina	132.0	135.2	9.7	+3.2	-122.3	72
Finland	33.1	7.6	7.7	-25.5	-25.4	66
Brazil	67.0	59.0	39.0	-8.0	-28.0	60
Italy	517.8	301.0	416.3	-216.8	-101.5	57
Mexico	317.5	114.9	47.3	-202.6	-270.2	47
Spain	185.1	64.6	155.1	-120.5	-30.0	45
Netherlands	486.0	529.2	409.0	+43.2	-77.0	33
Sweden	81.0	112.8	74.0	+31.8	-7.0	21
Canada	1,214.8	1,348.8	907.9	+134.0	-306.9	17
West Germany	2,293.5	2,003.1	921.2	-290.4	-1,372.6	11
Belgium and Luxembourg	1,583.0	1,305.0	437.0	-278.0	-1,146.0	0
Denmark	.2	1.5	1.0	+1.3	+.8	0
France	1,404.2	1,139.0	546.8	-265.2	-857.4	0
Japan	5,787.0	5,791.0	5,125.6	+4.0	-661.4	0
Switzerland	8.8	2.1	1.1	-6.7	-7.7	0

Source: Compiled from data in table C-1, app. C.

to meet the increased world demand for steel. Unfortunately, the most economic technology of this period was the open-hearth technology, which has since been largely replaced by the more economic electric-arc and oxygen furnaces.

European countries and Japan were generally more fortunate in the timing of their postwar reconstruction of their steel industries in that the preponderance of their new plant and equipment used the more efficient technologies. Although the oxygen furnace and electric-arc technologies were recognized as being better adapted to large scale

operations so critical to an industry which relies heavily upon economies of scale, the United States was unable to rapidly convert to these technologies because of the huge capital outlays that were associated with prior expansions using the open-hearth technology. Thus, to some extent, the U.S. steel industry was, and to a lesser degree still is, operating at a competitive disadvantage in terms of technology, compared with several of its major competitors. It should be noted, however, that during the 1960's and 1970's the United States has made substantial advances in the upgrading of its process technology, to the point where 82 percent (1976) of U.S. steel production is from oxygen or electric-arc furnaces. The United States still ranks below several of its major competitors, such as Japan, West Germany, and Belgium, in terms of plant capacity using the more advanced technologies.

The United Kingdom

In recent years the United Kingdom, through its British Steel Corporation (BSC), was the leading producer of the government-owned raw steel of the market economies of the world. The BSC, which is about 90-percent Government owned, produced 20.2 million metric tons of raw steel in 1974, or 30.6 percent of the total government-owned raw steel production encompassed by this study. The United Kingdom, however, accounted for a steadily decreasing percentage of the 21 country government-owned raw steel production for the period 1971-75, as shown on the following tabulation:

Year	Total production	Percent Government owned	Government owned-production	Ratio of United Kingdom's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	24,174	90	21,757	38.2
1972	25,321	90	22,789	36.8
1973	26,649	90	23,984	36.2
1974	22,426	90	20,183	30.6
1975	20,198	90	18,178	30.0

Government-owned exports to the United States from these 21 countries accounted for only 11.1 percent of total U.S. steel imports during 1974. The United Kingdom alone accounted for approximately

31.4 percent of the total government-owned steel exports in that year, but for only 3.5 percent of total U.S. steel imports. The United Kingdom's share of total government-owned exports to the United States, however, declined erratically from 1971 to 1975, as shown below:

Year	Total U.S. steel imports	United Kingdom's Government-owned exports to the United States	United Kingdom's Government-owned exports as a share of U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	1,143	7.2
1972	15,246	977	6.4
1973	13,145	825	6.3
1974	14,154	492	3.5
1975	10,767	427	4.0

The British Steel Corp., a historical perspective.—The British Steel Corp. is the third leading raw steel producer in the world behind Nippon Steel of Japan, and United States Steel Corp. of the United States. The BSC was established under the Nationalization Act of 1967, in which Britain's 14 largest steel companies and their nearly 200 subsidiaries were nationalized. Collectively, these companies accounted for over 90 percent of Britain's raw steel production, owned all 20 of Britain's integrated steel works, controlled 60 percent of Britain's iron ore resources, and employed nearly 70 percent of the industry's labor force.

From its inception in 1967, the BSC was to be managed in accordance with commercial principles and headed by nonpolitical appointees who, through a minister, would be ultimately responsible for the strategic policy decisions of the corporation. The BSC was prohibited from diversifying outside the iron and steel industry, as well as from acquiring the equity shares of other firms, without first securing ministerial approval. The minister's role was legislated to provide both policy direction over the long-range development of the BSC and to govern the capital structure of the firm. In general, however, there was to be an arm's-length arrangement between the management of the BSC and the British Government. This arrangement characterized the relationship between the BSC and the British Government until 1971 when the BSC was beset with a financial crisis in which it recorded losses of $173 million for the year.

In 1971, a "Joint Steering Group" composed of representatives from the Department of Trade and Industry and the BSC was commissioned to examine the fundamental causes underlying this short-term financial crisis that had befallen the BSC. This quasi-government task force was provided greater access to the BSC's books and investment strategy than had previously been accorded to the British government. From this consultative process emerged a mutually agreed upon 10-year development strategy involving an estimated public outlay for the period in excess of $7.2 billion.

BSC's 10-year development strategy was issued in December 1972. The plan called for a major restructuring of the British steel industry. Essentially, it provided for the relocation of the industry along coastal sites and for its centralization.

One of the more significant developments to affect the BSC in recent years was the United Kingdom's entry into the European Community (EC) on January 1, 1973. Until that time, the BSC's prices were significantly below those of the EC member countries. Since then, the BSC has endeavored to eliminate these price differences without fueling the fires of inflation which have plagued Britain in the 1970's. 1/

The rationalization program necessitated plant closures and, consequently, the displacement of British steel workers. With the reemergence of a Labor government, new "job teams" were established in June of 1974 under the direction of the BSC to assist in the development of new jobs for those communities most adversely affected by plant closures. Redeployment and retraining of displaced steel workers were the primary instruments used in rectifying these unemployment difficulties arising from the restructuring of the BSC. How this will ultimately affect the BSC's efforts to reduce its employment level is unclear.

An assessment of the Government's role in the steel industry.--The renationalization of the British steel industry in 1967 has had a tremendous impact upon both the operations and the development of this industry. There is evidence to suggest that the British steel industry of the 1960's lacked the financial wherewithal to rationalize the industry. The Labor government indicated that without Government intervention of one form or another, the sprawling nature of the British steel industry would persist. The 10-year government development strategy of 1972 was an attempt to rationalize this industry.

An important feature of this is the upgrading of the technology for the production of raw steel that has occurred in recent years. For example, as of 1960 the open-hearth technology accounted for approximately 86 percent of the United Kingdom's raw steel capacity; by 1975,

1/ Public Enterprise in the Community, CEEP Directory, 1975, p. A-17.

this figure had declined to 26 percent. The difference is accounted for by significant additions of plant capacities using the more economical electric-arc and oxygen furnace technology.

The British steel industry is not without its critics. A recurring complaint directed at the industry in the 1960's and the 1970's was its high manning levels and its associative labor costs which its critics claim reduced the competitiveness of British steel products in world markets. In a recent U.S. Department of Labor, Bureau of Labor Statistics (BLS) report issued in October of 1976, five countries (Japan, the United States, West Germany, France, and the United Kingdom) were examined in a comparative productivity study. In this study, the United Kingdom recorded the lowest output per hour for 1964 and for the period 1972-75 (see table C-2). Moreover, the United Kingdom registered the smallest increase in output per hour relative to its 1964 level. The United Kingdom registered only a 2-percent-per-year growth in productivity over the period 1964-74. During this same period, according to the BLS data, productivity increased by 3.0 percent in the United States, 5.6 percent in France, 7 percent in West Germany, and 11 percent in Japan. However, British hourly labor costs were the lowest of these five countries in 1975, and British unit labor costs were the second lowest with only Japan surpassing the United Kingdom in this respect. From these BLS data, it would appear that it may not be so much the wage levels or the unit labor costs of the British steel workers which appear to be the root cause of Britain's difficulties, but rather the low productivity stemming from the size of its labor force which is a major concern.

There are areas in which the Government's involvement in the British steel industry very likely had an impact on the growth and profitability of the industry. The Government, in its counter-inflationary policies of the early 1970's, held the prices of its raw steel well below prevailing world market prices; so much so, that when Great Britain joined the EC in 1973, it faced the real problem of eliminating its low price differences with other member countries. The profit-and-loss picture of the BSC is shown in the following tabulation:

Year	British Steel Corp. profit (loss) 1/
	Million dollars 2/
1971	($173)
1972	7
1973	116
1974	172
1975	(515)
1976	(438)

1/ After taxes and extraordinary items.

2/ Converted from British pounds to U.S. dollars using the appropriate exchange rates obtained from International Financial Statistics, line ae, market rate, International Monetary Fund, February 1977, p. 366.

Trade.—The United Kingdom's overall trade balance in steel has been negative in recent years. Its steel trade balance, by quantity, declined steadily from 1971 to 1975, both with the world and with the United States. The United Kingdom's world trade balance in steel declined from a high of 2.9 million metric tons in 1971, to a deficit of 584,000 tons in 1975, as shown in the following tabulation (in thousands of metric tons):

Year	Total exports	Total imports	Net trade balance
1971	4,976	2,055	2,921
1972	4,646	2,684	1,962
1973	4,257	2,812	1,445
1974	3,350	3,850	-500
1975	3,190	3,774	-584

The United Kingdom's steel trade balance with the United States showed a similar decline for the period 1971-75, although its trade balance remained positive throughout, as shown in the following tabulation (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	1,270	41	1,229
1972	1,086	32	1,054
1973	916	85	831
1974	547	118	429
1975	475	54	421

Italy

In recent years, Italy was second only to the United Kingdom in the production of government-owned raw steel. In 1974, Italy, principally through the Finsider group of the state holding company, Istituto Pe La Ricostruzione Industriale (I.R.I.), produced an estimated 13.6 million metric tons of government-owned raw steel. Italy's share of the total government-owned raw steel production of this sample increased erratically from 17.5 percent in 1971 to a high of 20.6 percent in 1974 and again in 1975, as shown in the following tabulation:

Year	Total production	Percent Government-owned	Government-owned production	Ratio of Italy's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	17,452	57	9,948	17.5
1972	19,814	57	11,294	18.2
1973	20,995	57	11,967	18.0
1974	23,803	57	13,568	20.6
1975	21,900	57	12,483	20.6

Italy accounted for approximately 11.0 percent of the government-owned steel exports to the United States in 1974, or approximately 1.2 percent of total U.S. imports of steel in that year. In general, Italy's government-owned steel exports to the United States were not substantial in recent years, reaching a high in 1975 of only 2.2 percent of total U.S. steel imports, as shown in the tabulation on the following page:

Year	Total U.S. steel imports	Italy's Government-owned steel exports to the United States	Italy's Government-owned exports as a share of total U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	295	1.8
1972	15,246	215	1.4
1973	13,145	95	0.7
1974	14,154	172	1.2
1975	10,767	237	2.2

Italy's steel industry, a historical perspective.—Italy's Government involvement in its iron and steel industry began in 1937 with the establishment of the Finsider group of I.R.I., whose function it was to promote the growth and development of Italy's iron-and-steel sector. Finsider's activities were largely curtailed with the outbreak of World War II and remained so until the immediate postwar period during which a resurgence of activity was evident. Since then, the Finsider group has been a major force in the development of Italy's iron-and-steel sector, so much so, that in 1974 it controlled 98 percent of Italy's pig iron production and an estimated 57 percent of Italy's raw steel production.

The Finsider group is estimated to be 55-percent Government-owned and is under the general policy direction of the public holding corporation, I.R.I. As of 1975, the Finsider group comprised 23 major operating units, each with varying degrees of Government ownership. As of 1973, it is estimated that collectively these companies employed 105,000 people, with sales in excess of $2.6 billion, 20 percent of which was from exports. 1/ The Finsider group is currently operating under a 10-year plan for the 1970's which calls for a doubling of its 1974 level of production by the end of the decade. To facilitate this, the plan envisions continued rationalization of Italy's iron-and-steel sector, the enlargement of the Italsider plant at Tarento, and the construction of a fifth integrated steel complex. To date, the enactment of this plan has been somewhat hampered by trade union unrest. In 1974, for example, 4.9 million working hours were lost from strikes. 2/

An assessment of the Government's role in the steel industry.—Because it was economically sound to construct steel complexes in southern Italy due to preferred costal sites there, Finisider was

1/ The I.R.I. Group Yearbook 1974, Rome, 1974, p. 4.
2/ I.R.I., 1974 Annual Report, p. 15.

used, in part, as an instrument of public policy. Construction of steel complexes in this economically depressed region of Italy, contributed somewhat to its regional development. It would appear that, in part, the melding of public policy objectives with industry objectives is an important feature of Italy's state holding enterprise system.

Trade.--Italy's world trade balance in steel was consistently negative throughout the period 1971-74, although its deficits declined erratically from 878,000 metric tons in 1971 to 63,000 metric tons in 1974, as shown below (in thousands of metric tons).

Year	Italy's total steel imports	Italy's total steel exports	Net trade balance
1971	4,009	3,131	-878
1972	4,668	3,777	-891
1973	5,003	3,451	-1,552
1974	4,812	4,749	-63
1975	1/	1/	1/

1/ Not available.

Italy maintained a small but consistent trade surplus in its steel trade with the United States during 1971-75, as shown below (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	518	302	216
1972	377	180	197
1973	166	136	30
1974	301	186	115
1975	416	201	215

During the voluntary restraint arrangement with the United States, particularly from 1972 to 1974, Italy sought a greater allocation of total EC exports to the United States than the other member countries were willing to concede. This may, in part, explain the lower volume of exports to the United States during this period.

West Germany

Although only 11 percent of West Germany's raw steel output for 1974 was actually Government-owned, it ranked third among government-owned raw steel producers, with West German Government-owned production bordering on 5.9 million metric tons. This Government-owned raw steel was produced by Salzgitter/Peine, a large West German Government-owned steel complex formed in 1970 by the merger of Salzgitter Huttenwerk AG and Ilseder Hutte. West Germany's share of the total government-owned raw steel production of the 21-country sample remained fairly constant throughout the period 1971-75, ranging from a high of 8.9 percent in 1974 to a low of 7.3 percent in 1975, as shown below.

Year	Total production	Percent Government-owned	Government-owned production	Ratio of West Germany's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	40,313	11	4,434	7.8
1972	43,705	11	4,808	7.8
1973	49,521	11	5,447	8.2
1974	53,232	11	5,856	8.9
1975	40,415	11	4,446	7.3

West Germany accounted for approximately 14 percent of the government-owned steel exports to the United States in 1974, or approximately 1.6 percent of total U.S. steel imports for that year. In general, West Germany's Government-owned steel exports to the United States were not substantial throughout the period 1971-75, reaching a high of only 1.7 percent of total U.S. steel imports in 1973, as shown in the following tabulation:

Year	Total U.S. steel imports	West Germany's Government-owned exports to the United States	West Germany's Government-owned exports as a share of U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	252	1.6
1972	15,246	229	1.5
1973	13,145	219	1.7
1974	14,154	220	1.6
1975	10,767	101	0.9

The West German steel industry, a historical perspective. 1/-- The West German Government owns the entire assets of one large steel company, Salzgitter/Peine AG. This firm was formed in 1970 by the merger of Salzgitter Huttenwerk AG and Ilseder Hutte. Prior to the merger, Salzgitter was 100-percent Government-owned and was the sixth largest raw steel producer in the Federal Republic of Germany. Ilseder, the smaller of the two companies, was 25-percent Government-owned and ranked eighth. By 1973, the Salzgitter/Peine steel works produced 5.2 million metric tons of raw steel, making it the third leading West German producer in that year.

The Salzgitter/Peine works are located near low-grade ore deposits in the North of Germany away from the Rhine-Ruhr area, where the bulk of German steelmaking is situated. Salzgitter was completely destroyed during World War II, but was rebuilt during the 1950's. Prior merger attempts among Salzgitter, Ilseder, and Klockner, the largest steel producer in northern Germany, collapsed because of the unprofitability of Salzgitter and Ilseder and the emerging question as to who would control the merged corporation. Salzgitter and Ilseder ultimately merged, and collectively they have diversified into numerous areas such as the mining and processing of ores, minerals, oil and natural gas.

In 1972, another merger, between Hoesch of Germany and Hoogovens of the Netherlands took place. The firms maintained their own distinct identities, but coordinated their activities through a jointly-owned company, ESTEL. The significance of this merger lies in the fact that Hoogovens, and thus ESTEL, is partly owned by the Dutch Government. Even though the West German Government has no financial interest in

1/ The staff of the U.S. International Trade Commission is indebted to Mr. Richard Rossello for his unpublised USITC work entitled, Public Ownership and Participation in Foreign Steel Industries: The Effects on the American Industry, 1976.

Hoesch, the company is influenced by government ownership--in this case a foreign government. The formation of ESTEL is particularly important since Hoesch is one of the largest West German steel producers and Hoogovens is the largest Dutch steelmaker, having 89 percent of the 5-million-ton annual capacity of the Netherlands. This merger was primarily motivated by logistical considerations; Hoogovens was favorably situated along coastal sites with port facilities, and Hoesch was centrally situated with easy access to indigenous raw materials and distribution channels.

An assessment of the Government's role in the steel industry.—It would seem that the West German private sector in conjunction with West Germany's large banks, was reasonably successful in rationalizing the domestic steel industry through a series of cooperative agreements. As such, West Germany was not forced into large-scale government ownership of this industry. It should be noted that it was concerted planning among industry, labor, and government which facilitated the growth of the West German steel industry in its postwar period. The success of West Germany's rationalization program is, in part, revealed by the relative output per hour of its steel industry as shown in statistics contained in the U.S. Department of Labor, Bureau of Labor Statistics study previously cited in this report. This study places West Germany third in output per hour in 1974, behind Japan and only marginally behind the United States. Moreover, based on BLS data in the 10 years from 1964 to 1974, West Germany registered a 7-percent-per-year increase in its productivity, second only to Japan. The success of the rationalization program was further manifest in West Germany's positive steel trade balance, with both the United States and the world, throughout the period 1971-75.

The West German Government's ownership of the Salzgitter group seems to stem largely from its desire to reconstruct this war-ravaged plant and later to aid in placing it on a more sound financial footing.

Trade.—West Germany has consistently maintained comparatively large favorable steel trade balances with both the United States and the world as a whole. West Germany's world trade balance in steel increased erratically from 1971 to 1975, reaching a high of 13.6 million metric tons in 1974, and a low of 2.9 million metric tons in 1972, as shown in the following tabulation (in thousands of metric tons):

Year	West Germany's total steel exports	West Germany's total steel imports	Net trade balance
1971	13,202	9,518	3,684
1972	13,890	11,037	2,853
1973	17,264	10,449	6,815
1974	22,324	8,720	13,604
1975	16,272	8,458	7,814

On the contrary, West Germany's trade balance with the United States declined erratically from 1971 to 1975, from a high of 2.3 million metric tons in 1971 to a low of 912,000 metric tons in 1975, as shown in the following tabulation (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	2,294	20	2,274
1972	2,083	98	1,985
1973	1,994	99	1,895
1974	2,003	12	1,991
1975	921	9	912

Spain

In 1974, Spain was the fourth leading producer of government-owned raw steel, with production of 5.2 million metric tons, or 7.9 percent of the total government-owned production of this sample. Although Spain's steel production is estimated to be only 45-percent Government-owned, its Government-owned production volume was comparable with that of West Germany and exceeded most of the countries encompassed by this study. Raw steel production increased steadily from a low of 8.0 million metric tons in 1971 to a high of 11.6 million metric tons in 1974, but declined slightly in the recession year of 1975, as shown on the following page:

Year	Total production	Percent Government owned	Government-owned production	Ratio of Spain's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	8,025	45	3,611	6.3
1972	9,525	45	4,286	6.9
1973	10,808	45	4,864	7.3
1974	11,646	45	5,241	7.9
1975	11,100	45	4,995	8.2

Government-owned steel exports to the United States were insignificant from 1971 to 1975, reaching a high of only 83,000 metric tons in 1971, or 0.5 percent of total U.S. imports for that year, as shown below:

Year	Total U.S. steel imports	Spain's Government-owned exports to the United States	Spain's Government-owned exports as a share of U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	83	0.5
1972	15,246	40	0.3
1973	13,145	44	0.3
1974	14,154	29	0.2
1975	10,767	70	0.6

Spain's steel industry, a historical perspective.--Spain's initial involvement in its iron-and-steel sector began on September 15, 1941, with the establishment of the autonomous state holding company, Instituto Nacional de Industries (INI). From its limited beginnings, INI steadily expanded its influence to the point where it now has operations in a number of industrial sectors. Currently, INI has direct holdings in 60 companies and indirect participations in another 185. INI now controls an estimated 45 percent of Spain's steel output through its 82-percent holding in ENSIDESA, a major iron-and-steel concern in Spain.

INI, a post-Spanish civil war creation, was initially chartered with the task of directing the rebuilding of Spain's industries. INI's basic mission was, and continues to be, the promotion, management, and financing of those commercial and industrial enterprises which were by and large neglected by the private sector for reasons of capital rationing and profitability constraints.

As with so many other European countries, INI was initially most active in the reconstruction and development of Spain's basic industries but is now involved in many facets of the Spanish economy. INI now participates in 36 of Spain's 300 largest corporations and in 6 of the 10 largest.

From its inception in 1941, INI was directly involved with the reconstruction and development of Spain's steel industry. The ENSIDESA group of INI formed in 1960 was certainly instrumental in the successful postwar development of Spain's iron-and-steel sector to the point where, in 1974, Spain ranked fourth in government-owned raw steel production and ninth in overall production among the countries represented by this study. During that year, the ENSIDESA group recorded profits of $53.5 million and employed nearly 27,000 workers. Financial data reveal that of the $303 million in 1976 real investment in Spain's iron-and-steel sector, more than one-fourth was actually contributed by the INI group.

Spain is now engaged in a political and economic transition, and as it moves closer to full membership in the European Community, it is unclear what new role, if any, INI will assume.

An assessment of the Government's role in the steel industry.—Although Spain is basically a private enterprise system, government influence is felt in many spheres of Spanish economic activity. INI, which is the chief implementing agency of Spain's industrial and public policy, has expanded its influence in many spheres of Spain's economy. In so doing, INI has not escaped its critics, who have accused it of violating sound economic principles in its attempts to foster regional development and full employment goals. There are indications that several INI firms are plagued by high costs of production and low levels of efficiency relative to other world producers. Although productivity data are not available for ENSIDESA, there is little to suggest, given ENSIDESA's 1974 profit picture, that this group would be included among the above firms. There are estimates, however, that investment subsidies of approximately $90 million were granted to Spain's "steel and other metals and mining" sector in 1976. INI contributed another $78.4 million in investment capital to this sector during 1976.

Indications are that INI has embarked upon a major investment program for the period 1976-79 in which a total of $7.5 billion in investments is projected. More than one-fourth of this investment

capital are expected to be directed to the electrical energy sector. Heavy investments are also expected in energy-related industries, such as hyrocarbons, coal and uranium.

Trade.—Spain's world trade balance in steel fluctuated considerably from 1971 to 1975, from a high of 626,000 metric tons in 1973 to a deficit of 403,000 metric tons in 1974, as shown below (in thousands of metric ton):

Year	Spain's total steel exports	Spain's total steel imports	Net trade balance
1971	918	845	73
1972	1,463	1,120	343
1973	1,712	1,086	626
1974	806	1,209	-403
1975	1,561	1,866	-305

In general, Spain's steel trade with the United States has been limited. Spain's steel trade balance with the United States remained positive from 1971 to 1975, principally because of the low volume of exports shipped to Spain by the United States, as shown below (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	185	30	155
1972	88	7	81
1973	98	16	82
1974	65	45	20
1975	155	34	121

Austria

In 1974, Austria was the fifth leading producer of government-owned raw steel, with an estimated production of 4.7 million metric tons. Austria's iron-and-steel industry, as with so many other of its industries, is 100-percent Government-owned. Austria's production

of raw steel increased from 4.0 million metric tons in 1971 to a high of 4.7 million metric tons in 1974 and then declined to approximately 4.1 million metric tons in the recession year of 1975. Austria's percent of the total government-owned production remained relatively stable from 1971 to 1975, ranging from a low of 6.4 percent in 1973 to a high of 7.1 percent in 1974, as shown in the following tabulation:

Year	Total production	Percent Government owned	Government-owned production	Ratio of Austria's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	3,960	100	3,960	6.9
1972	4,070	100	4,070	6.6
1973	4,238	100	4,238	6.4
1974	4,699	100	4,699	7.1
1975	4,069	100	4,069	6.7

Austria's steel trade with the United States was limited from 1971 to 1975. At no time during that period did Austria's steel exports to the United States account for more than 1.2 percent of the total government-owned exports to the United States. Likewise, Austria's steel exports to the United States were negligible when compared with total United States steel imports, as shown in the following tabulation:

Year	Total U.S. steel imports	Austria's Government-owned exports to the United States	Austria's Government-owned exports as a share of U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	10.5	0.1
1972	15,246	31.2	.2
1973	13,145	17.1	.1
1974	14,154	23.2	.2
1975	10,767	13.4	.1

Austria's steel industry, a historical perspective.—There is little doubt that Austria's postwar economic development was profoundly affected by the ravages of World War II. The industrial plant and equipment which existed in Austria prior to the war was largely destroyed, leaving the country faced with a massive reconstruction effort. However, unlike many of her European neighbors, Austria was forced to contend with Soviet occupation forces which controlled 44 of the 70 key industrial enterprises until 1955. It was amid this turbulence that the postwar Austrian economic policy of government ownership of vast segments of its industries was forged.

Austria's iron-and-steel industry was nationalized very early in accordance with the first nationalization law of 1946 which nationalized many of Austria's basic industries. Other industries were subsequently nationalized as this umbrella of government ownership spread over much of Austria's economy. In recent years, an estimated 60 percent of Austria's total investment was accounted for by public enterprises. 1/

In 1970, the state holding company, OIAG, was established to consolidate and administer the various public holdings of Austria. The iron-and-steel sector is now largely under the general direction of the VOEST ALPINE concern of OIAG.

The formation of the VOEST ALPINE group was greatly facilitated by a series of mergers in the early 1970's. The States's two largest iron and steel mills were merged to form VOEST ALPINE Montan A.G. In addition, two nationalized specialty steel producers subsequently became wholly owned subsidiaries of the new VOEST ALPINE combine; three other nationalized specialty steel producers merged to form the firm of Vereinigte Edelstahlwerke A.G., which is also under the general direction of the VOEST ALPINE group.

An assessment of the Government's role in the steel industry.—The Austrian Government was instrumental in the development of Austria's iron-and-steel industry throughout its postwar era. Given the condition of the economy in the immediate postwar era, the Government assumed the primary role as the driving force in Austria's reconstruction efforts.

Throughout Austria's postwar period, there has been a marked tendency toward increasing concentration of Austria's basic industries under this umbrella of government ownership. Austria's iron-and-steel sector is illustrative of this trend. In a broader sense, the formation of the state holding company, OIAG, is further evidence of this concentration phenomenon.

1/ U.S. Department of Commerce, International Economic Policy and Research, The Size and Economic Significance of the "Public Enterprise" Sector in Selected Countries, by Frederick Strauss, October. 1974, p. 16.

There are indications that the nationalized enterprises have, to a limited extent, maintained a policy directed toward full employment goals. This was especially evident during the recession of 1974-75 in which Austria's iron-and-steel labor force was not reduced despite significant declines in the level of operations of its iron and steel mills.

Trade.—Austria consistently maintained positive trade balances in steel with both the United States and the world as a whole from 1971 to 1975. Austria's world steel trade balance increased erratically from a low of 858,000 metric tons in 1971 to a high of 1.5 million metric tons in 1975, as shown below (in thousands of metric tons):

Year	Austria's total steel exports	Austria's total steel imports	Net trade balance
1971	1,415	457	858
1972	1,438	478	960
1973	1,436	676	760
1974	1,714	681	1,033
1975	1,967	501	1,466

Austria's steel trade with the United States was insignificant during 1971-75, as shown in the tabulation below (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	10.5	0.1	10.4
1972	31.2	.4	30.8
1973	17.1	1.0	16.1
1974	23.2	0	23.2
1975	13.4	.4	13.0

Brazil

In 1974, Brazil was the sixth leading producer of government-owned raw steel, with production of 4.5 million metric tons. It would appear that the Brazilian Government was deeply involved with the postwar

development of its steel industry. The Brazilian steel sector is currently estimated to be 60-percent Government-owned.

Brazil's total raw steel production steadily increased in recent years, from a low of 6.0 million metric tons in 1971 to a high of 8.4 million metric tons in 1975. Brazil's percentage of total government-owned production increased gradually from a low of 6.3 percent in 1971 and 1972 to a high of 8.3 percent in 1975, as shown in the following tabulation:

Year	Total production	Percent Government owned	Government-owned production	Ratio of Brazil's to total sample government-owned production
	1,000 metric tons		1,000 metric tons	Percent
1971	5,997	60	3,598	6.3
1972	6,518	60	3,911	6.3
1973	7,150	60	4,290	6.5
1974	7,550	60	4,530	6.9
1975	8,400	60	5,040	8.3

Brazil's steel exports to the United States were insignificant as a percentage of total U.S. steel imports for the years 1971-75. At no time during this period did Brazil's Government-owned exports exceed 0.9 percent of total U.S. imports, as shown below:

Year	Total U.S. steel imports	Brazil's Government-owned exports to the United States	Brazil's Government-owned exports as a share of U.S. steel imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,953	40	0.3
1972	15,246	134	.9
1973	13,145	84	.6
1974	14,154	35	.2
1975	10,767	23	.2

Brazil's steel industry, a historical perspective. 1/--As of 1975, there were eight publicly owned steel firms operating in Brazil and another two in planning or preoperational stages. Collectively, these firms produced an estimated 60 percent of Brazil's raw steel output in 1974. A list of these eight firms and some salient statistics are provided below:

Enterprise	Date founded	Raw steel output, 1975
		1,000 metric tons
Companhia Siderurgica Nacional (CSN)	1941	1,491
Companhia Siderurgica Paulista (COSIPA)	1953	789
Usinas Siderurgicas de Minas Gerais (USIMINAS)	1956	1,771
Companhia Ferro e Aco de Vitoria (COPAVI)	1942	102
Acos Especiais Itabira (ACESITA)	1944	283
Acos Finos Piratini	1960	71
Companhia Siderurgica de Mogi das Cruzes	1967	154
Usinas Siderurgicas da Bahia (USIBA)	1963	108

Unlike many of the countries encompassed by this study, Brazil is unique in that its entire steel sector, both public and private, is under the general supervision of the Federal agency, CONSIDER (the Council of Steel and Nonferrous Metals). CONSIDER, established in 1968, was in many respects an outgrowth of a 1967 Government Advisory report which was commissioned to address the problems which plagued Brazil's steel industry in the early 1960's.

CONSIDER, composed of representatives from various ministries, was chartered with the following goals: (1) To coordinate the developments in the Brazilian steel industry in a way that is consistent with the long-range economic policy objectives of the Government, (2) to advise and guide the expansion plans, marketing policies, and pricing practices of Brazil's public and private steel firms alike, and (3) to assist in the formulation of a state holding company to consolidate the operations of Brazil's public enterprises. In

1/ The U.S. International Trade Commission is greatly appreciative of, and indebted to, Mr. Thomas Trebat, of Vanderbilt University, for the use of a draft copy of his unpublished Ph. D. dissertation. His extensive write-up on this subject matter contributed greatly to the writing of this section.

accordance with a 1970 decree, CONSIDER was authorized to establish the priority status for steel expansion proposals, as well as to determine how they would be financed and when they would be scheduled. Through these added powers, CONSIDER was empowered with the wherewithal to exert a commanding influence over the growth and development of Brazil's steel sector. In CONSIDER's efforts to secure adequate financing for its steel expansion program, it was forced to relegate a portion of its authority to external sources. The World Bank and the Inter-American Development Bank jointly extended a loan of $320 million for phase two of Brazil's three-phased National Steel Plan. Because of the covenants attached to these loans, the above organizations restricted somewhat the operations of the firms receiving the loans to insure that repayment would be possible.

By 1973, CONSIDER was overburdened by the multiple responsibilities that were thrust upon it from its inception. The state holding company, SIDERBRAS, was finally established in 1973 and became operational in 1974. Its oversight function was restricted to Government-owned firms exclusively, and it was mandated to concentrate on the microeconomic considerations confronting Brazil's steel industry. Although still in its implementing stages, SIDERBRAS is viewed by many as the completion "of a decade of public institution-building in the steel industry." 1/

An assessment of the Government's role in the steel industry.— Brazil's Government is deeply rooted in the operations of its steel sector. In fact it would appear that, its span of control would seem to be proliferating given the creation of SIDERBRAS and its interlock with CONSIDER.

Productivity of Government-owned steel firms in Brazil far surpassed those of the private sector in recent years, as shown in the following table.

1/ Trebat, op. cit.

Comparison of labor productivity between the public and the private sectors of Brazil's steel industry, 1965-75

(In tons per man-year worked)

Year	Public	Private
1965	45.5	40.1
1966	64.5	45.3
1967	68.3	43.2
1968	83.7	49.6
1969	89.0	53.6
1970	94.0	58.0
1971	101.6	61.4
1972	112.8	59.5
1973	103.6	67.0
1974	88.6	68.2
1975	102.8	1/

1/ Not available.

Source: For public firms, Trebat, Thomas, "Organization and Control of Public Enterprises, unpublished, Vanderbilt University; for private firms, IBS: Annuario Estatistico, various years, and SENAI.

It should be noted that although Brazil's productivity does not compare favorably with the largest, most efficient world steel producers, it would appear to be comparable with world producers in its size class.

Brazil's Government was active in the pricing policies of its steel enterpises in the context of an overall anti-inflation strategy in the 1960's and 1970's. Because steel prices were artificially determined, profitability indexes of the Brazilian steel producers are unreliable indicators of the relative efficiencies of these firms. Three distinct pricing periods may be discerned in recent years in the Brazilian Government's policies on steel prices.

The first period from 1963 to 1966 was characterized by steel price suppression as part of an anticyclical program. The second period, spanning the years 1966 to 1973, was a time in which the price of steel was allowed to increase on a regular but contained basis. The final period, beginning in 1973, saw more marked increases in the price of steel to reflect its scarcity and to allow for a greater degree of capital formation on the part of steel producers. 1/

1/ Thomas Trebat, unpublished "Economic Performance of Public Steel Enterprises," Ph. D. draft on Brazilian steel, Chap. 5, p. 36. Vanderbilt University.

The average profitability of 6 percent of the Brazilian steel manufacturers for the years 1973-75 compares favorably with the profitability of many of the world steel producing nations. This situation is in part indicative of the Government's loosening rein on Brazil's steel prices.

Of great concern to the Brazilian Government in recent years was the dramatic influx in the volume of steel imports. In 1974, Brazil witnessed a 238-percent increase in the volume of steel imports over 1973. In response to these outside pressures, CONSIDER was charged with approving all steel imports. Indications are that since 1974, import volume has been declining.

Trade.— Brazil's world trade balance in steel markedly declined during the period 1971-74, from deficits of 447,000 metric tons to 3.9 million metric tons, as shown in the following tabulation (in thousands of metric tons):

Year	Brazil's total steel exports	Brazil's total steel imports	Net trade balance
1971	257	704	-447
1972	403	1,003	-600
1973	380	1,766	-1,386
1974	347	4,208	-3,861
1975	1/	1/	1/

1/ Not available.

In part, this deficit is attributable to the rapid increase in steel consumption in Brazil's home market. Brazilian demand for steel increased from 9.1 million metric tons in 1973 to 12.6 million metric tons in 1974. This increase was largely filled by increased imports. The Government, however, has since intervened to dampen this flow of imports.

Brazil's trade balance with the United States was negative from 1971 through 1975, with the exception of 1972 when Brazil registered a positive trade balance of 92,000 metric tons, as shown on the following page (in thousands of metric tons):

Year	Exports to the United States	Imports from the United States	Net trade balance with the United States
1971	67	174	-107
1972	223	131	92
1973	140	472	-332
1974	59	870	-811
1975	39	155	-116

The other nine countries with government ownership

Nine other countries exhibited varying degrees of government ownership of steel companies throughout 1971-75. (Six countries were previously analyzed; six others had no government ownership in their steel sectors.) These nine countries are listed below with their respective percentages of government ownership and their government-owned production for 1974.

Country	Percentage of steel industry that is government-owned	Government owned production for 1974
	Percent	1,000 metric tons
Argentina	72	1,661
Canada	17	2,310
Finland	66	1,093
Ireland	100	110
Mexico	47	2,412
Netherlands	33	1,927
Norway	79	746
Portugal	100	368
Sweden	21	1,258

In general, the collective impact of the above government-owned production was comparatively insignificant when viewed against the whole. At no time during the years 1971-75 did the government-owned production of these nine countries exceed 2.9 percent of the total production of the 21-country sample, as shown in the following tabulation:

Item	1971	1972	1973	1974	1975
Total government-owned production for the 21 countries 1,000 metric tons	57,001	61,958	66,318	65,962	60,624
Government-owned production for the 9 countries 1,000 metric tons	9,693	10,800	11,528	11,885	11,413
Government-owned production of the 9 countries as a share of total 21 countries production----------percent	2.6	2.7	2.5	2.6	2.9
Government-owned production of the 9 countries as a share of total government-owned production for the 21 countries-----percent	17.0	17.4	17.4	18.0	18.8

When viewed in the narrower context of government-owned production, these nine countries still accounted for a comparatively minor share of the government-owned production of the 21 countries, ranging from a low of 17.0 percent in 1971 to a high of 18.8 percent in 1975. Viewed individually, only one country—Mexico in 1975--accounted for more than 4 percent of the government-owned production.

In terms of trade with the United States, government-owned exports from these nine countries were negligible when compared with U.S. steel consumption for the period 1971-75. At no time during this period did government-owned exports from these countries exceed 0.7 percent of U.S. domestic consumption, as shown in the following tabulation:

Year	U.S. apparent consumption	Percent of U.S. consumption accounted for by government-owned exports from the nine countries
	1,000 metric tons	Percent
1971	92,345	0.7
1972	95,923	.7
1973	110,553	.6
1974	108,101	.6
1975	80,545	.4

Similarly, government-owned exports from these countries constituted only a minor share of total U.S. steel imports during 1971-75, ranging from a low of 3.7 percent in 1975 to a high of 4.7 percent in 1973.

Japan

Japan has no outright Government ownership of its steel industry; however, the intervention of its Government in guiding the operations of steel is pronounced. It is this issue of government intervention that will briefly be explored within the context of this discussion.

From 1971 to 1975, Japan ranked second only to the United States in the production of raw steel of market economy countries. During this period, Japan's production ranged from a low of 88.6 million metric tons in 1971 to a high of 119.3 million metric tons in 1973, as shown below.

Year	Production
	1,000 metric tons
1971	88,557
1972	96,900
1973	119,322
1974	117,131
1975	102,314

The preponderance of Japan's raw steel production is accounted for by five major integrated steel producers. In 1975, Nippon Steel, the world's largest producer, produced an estimated 32.5 million metric tons of raw steel, or 32 percent of Japan's total output. The following table shows a breakdown of each firm's share of Japan's total raw steel output in 1973.

Share of total steel output by the Japanese steel producers, 1973

Company	Approximate share of industry output
	Percent
Major integrated steel producers:	
Nippon Steel	35
Nippon Kokan	14
Kawasaki Steel	12
Sumitomo Metal	12
Kobe Steel	6
Total	79
Three middle-sized integrated producers:	
Nisshin Steel (largest stainless producer)	3
Nakayama Steel Works	1
Osaka Iron and Steel	1
Total	5
Nonintegrated open-hearth and electric furnace producers:	
About 34 companies	15
Total	100

Source: Peter Marcus, Internationalization of Steel, Mitchell, Hutchins, Inc., February 1974, p. 45.

As mentioned earlier, according to BLS data, Japan ranked first in productivity in 1975 among five major market economy countries (Japan, the United States, West Germany, France, and the United Kingdom). Moreover, in the 10 years from 1964 to 1974, Japan's yearly increase in productivity measured 11 percent, far surpassing the productivity increases registered by the other four countries.

Japan's inroads into world steel markets somewhat paralleled its growth in productivity and size. In 1975, for example, Japan, the leading steel exporter among Organization for Economic Cooperation and Development (OECD) nations, exported 28.9 million metric tons of steel, far surpassing the exports of its closest competitor, West

Germany. In general, Japan's world exports of steel fluctuated considerably during the years 1971-75, reaching a high of 32.2 million metric tons in 1974 and a low of 20.9 million metric tons in 1972, as shown below:

Year	Exports to world markets
	1,000 metric tons
1971	23,194
1972	20,922
1973	24,805
1974	32,228
1975	28,942

Japan's steel exports to the United States were substantial in recent years, ranging from a high of 5.8 million metric tons in 1974 to a low of 4.7 million metric tons in 1973, as shown below:

Year	Total U.S. steel imports	Japan's steel exports to to the United States	Japan's exports as a share of total U.S. imports
	1,000 metric tons	1,000 metric tons	Percent
1971	15,593	5,787	37.1
1972	15,246	5,658	37.1
1973	13,145	4,696	35.7
1974	14,154	5,791	40.9
1975	10,767	5,126	47.6

As is evident from the preceding table, Japan's share of total U.S. steel imports generally increased from 1971-75, reaching a high of 47.6 percent in 1975.

Japan's exports of steel to the United States, as a percentage of its total steel exports, declined steadily from 1972 to 1975, from a high of 26.5 percent in 1972 to a low of 17.7 percent in 1975, as shown in the following tabulation:

Year	Total exports	Exports to the United States	Exports to the United States as a share of total steel exports
	1,000 metric tons	1,000 metric tons	Percent
1971	23,194	5,787	25.0
1972	20,922	5,548	26.5
1973	24,805	4,696	18.9
1974	32,228	5,791	18.0
1975	28,942	5,126	17.7

In light of Japan's massive volume of steel exports, it is not surprising that it would maintain large positive trade balances with both the world and the United States. Shown below are Japan's steel trade balances for the period 1971-75 (in thousands of metric tons):

Year	Japan's steel trade balance with the world	Japan's steel trade balance with the United States
1971	23,148	5,774
1972	20,821	5,645
1973	24,587	4,683
1974	31,997	5,780
1975	28,840	5,122

The magnitude of these trade balances is somewhat accentuated by the low volume of Japan's steel imports. During the period 1971-75, Japan's steel imports reached a high of only 231,000 metric tons in 1974.

Japan's steel industry, a historical perspective.--The Government of Japan played an active role in the development of its steel industry. From 1930 until the end of World War II, the Government built, operated, and owned its steel plants. 1/ Although the Government relinquished its ownership of the steel industry in the immediate postwar period, it

1/ Eugene J. Kaplan, Japan, the Government-Business Relationship, U.S. Department of Commerce, February 1972.

nonetheless maintained a close government/business relationship with its steel sector through the Ministry of International Trade and Industry (MITI). The government/business relationship intensified with the increasing demand for postwar reconstruction.

Japan's steel industry, which was designated as a "target industry" by its Government, reaped the benefits inherent in this close-knit relationship between business and state. As a target industry, the Japanese steel industry was selected by Government planners for major growth opportunities. Steel producers were provided preferential access to capital markets and thereby the necessary funds to insure an orderly but rapid expansion. As of 1974, it was not uncommon to find Japanese steel companies with debt-to-total-capital ratios as high as 83 percent, the debt for which was indirectly financed through the Bank of Japan. Debt burdens of this magnitude would be very much out of the ordinary in the United States and would certainly not be financed through traditional banking channels. This high debt to total capital ratio, while quite effective in generating investment capital, creates a problem in financial liquidity. The interest charges incurred from this debt leverage are in effect fixed costs which are insensitive to the level of output. Inasmuch as these interest charges do not decrease as output declines, Japanese producers attempt to maintain as high a capacity utilization rate as feasible in order to maintain low unit costs.

Another secondary source of funds for Japan's steel industry was the Japanese Development Bank. Between 1951 and 1972, the Japanese Development Bank loaned approximately $120 million to its iron-and-steel industry. 1/

The picture is somewhat different for industrial research funds. On average, Japan's Government funds roughly 28 percent of total steel research expenditures, whereas in the United States this figure exceeds 60 percent, and in Europe it ranges between 40 and 60 percent. 2/

Foreign Government Ownership of the World Automobile Industry

Introduction

Government ownership in the world automobile industry 3/ is not entirely a European phenomenon, although the overwhelming share of the government-owned production of automobiles today occurs in West

---

1/ Richard C. Rossello, Public Ownership and Participation in Foreign Steel Industries: The Effects on the American Industry, USITC unpublished work, p. 80.

2/ Ibid.

3/ The term "automobiles", as used herein, includes passenger cars only.

European countries. Government equity holdings are common in many developing nations, most notably those in Latin America. Assembly operations in the developing nations usually result from a cooperation agreement between an American, European, or Japanese producer and the host government. With the exception of those in Brazil, these assembly operations tend to be extremely small relative to major world automobile producing facilities. Therefore, the focus on government ownership in this study will primarily concern itself with the European Community.

Government intervention in the national auto industries has been more commonly accomplished by means other than government ownership. The Japanese auto industry, which has a history of Government intervention, has nonetheless remained free of Government ownership. In Japan, Canada, and some of the European countries, the governments shaped and hastened the development of their automobile industries by systematically using a combination of tariffs, quotas, low-cost development loans, or special legislation. Normal trade flow of automobiles was altered through the use of import restraints and artificial production and export incentives.

To a great extent, government ownership in the European auto industry came about because of two major considerations. The first consideration was the desire to develop a domestically owned industry capable of competing with the U.S. automobile manufacturers. Initially, government protection in the European market was accomplished through import restraints. U.S. firms responded to these measures by setting up production facilities in Europe. The second consideration was the importance of this industry as a tool of war. It was imperative that the auto industry could switch production runs from passenger cars and commercial vehicles to military equipment without delay. Government ownership, therefore, allowed the state a greater degree of flexibility with respect to national defense policy. During World War I, such firms as Renault, Citroen, and Fiat proved their worth as builders of tanks, trucks, and aircraft engines. Volkswagen never saw commercial production before World War II, but the plant did manufacture vehicles for the military during that war.

In Italy, Government ownership of Alfa Romeo came about when the state saved the firm from bankruptcy in the 1930's. Under a program for regional development, the Government directed Alpha Romeo to build a new car-producing facility in Southern Italy, near Naples, for the purpose of providing employment for that region.

The following tabulation shows the percentage of government ownership in the auto firms of major producing countries in 1975:

Country	Firm	Percent of government ownership
West Germany	Volkswagen	40
France	Renault	100
Italy	Alfa Romeo	49
United Kingdom	British Leyland	95
Spain	Seat	36

Summary of automobile findings

From information in this report, it can be seen that foreign production of automobiles under government ownership accounted for a relatively small share of total world production. During the period 1972-75, government-owned automobile output averaged less than 3 million units, or less than 11 percent of annual world production. France, the United Kingdom, and West Germany dominated government-owned output of automobiles, accounting for over 90 percent of the total annual output of these vehicles during the period 1972-75.

U.S. imports of government-owned automobiles accounted for less than a fifth of total automobile imports into the domestic market during 1972-75. West Germany and the United Kingdom supplied an average of of 96 percent of these imports. Both of these countries have maintained positive trade balances with the United States (a yearly average of 595,000 and 58,000 vehicles, respectively, during 1972-75). On the surface, these data would seem to indicate a strong positive government-ownership/trade-balance relationship. However, such a conclusion does not take into consideration the fact that subsidiaries of the largest U.S. automobile producers have substantial production facilities in both West Germany and the United Kingdom.

Production

World automobile production, excluding that in Communist bloc countries, increased from about 28 million in 1972 to 30 million in 1973 and then decreased to 25 million in 1975, reflecting the worldwide recession during that period. Western Europe produced 10.3 million autos in 1975, down from 12.6 million in 1973. North America (including the United States and Canada) produced 7.8 million cars in 1975, 3.1 million less than in 1973. Japan's production during the 4-year period remained relatively stable, ranging from 3.9 million to 4.5 million vehicles, as shown in the following table.

Passenger cars: World production, by countries, 1972-75

(In thousands of units)

Country	1972	1973	1974	1975
Europe:				
France	2,993	3,202	3,045	2,953
West Germany	3,522	3,650	2,840	2,908
Italy	1,730	1,823	1,631	1,349
Spain	600	706	705	676
United Kingdom	1,921	1,747	1,534	1,268
Other	1,336	2,108	1,879	1,869
Total	12,104	12,530	10,929	10,347
North America:				
United States	8,828	9,667	7,323	6,738
Canada	1,147	1,235	1,143	1,056
Total	9,975	10,902	8,466	7,794
Asia and Oceania:				
Japan	4,022	4,471	3,932	4,568
Other	501	537	511	414
Total	4,523	5,007	4,442	4,982
Latin America	989	1,142	1,324	1,323
All other	183	229	227	229
Grand total	27,774	29,810	25,389	24,674

Source: Compiled from The World Automotive Market, several issues.

Note.--Because of rounding, figures may not add to the totals shown.

World production in autos is dominated by fewer than 10 countries. In fact, the top seven ranking countries--France, West Germany, the United Kingdom, Italy, the United States, Canada, and Japan--accounted for 84 percent of world production in 1975.

The relative shares of automobile production in 1974 under government ownership are shown in the following tabulation:

Country	Government-owned production	Government-owned production as a percentage of country's total production
	1,000 units	Percent
West Germany	574	20
France	1,356	45
Italy	101	6
United Kingdom	701	46
Spain	130	18

In 1974, government-owned production amounted to 2.9 million cars, or 11 percent of the world's output; of this, the United Kingdom and France together accounted for 72 percent. The ratio of total government-owned production to total world production remained rather stable during 1972-75, ranging from 10 percent in 1973 to 11.2 percent in 1974,as can be seen from the following tabulation:

Item	1972	1973	1974	1975
Government-owned:				
France--------1,000 autos--	1,202.5	1,293.0	1,355.8	1,293.2
United kingdom-------do----	870.2	832.2	701.1	575.5
West Germany---------do----	669.2	628.8	547.4	502.0
Italy----------do----	69.1	100.5	101.9	93.1
Spain----------do----	120.6	129.2	130.0	118.4
Total----------do----	2,931.6	2,983.7	2,863.2	2,582.5
Total world production 1,000 autos--	27,496.4	29,921.1	25,462.7	24,674.2
Ratio of total government-owned production to total world production--percent--	10.7	10.0	11.2	10.5

Trade impact on the United States

Exports of government-owned autos to the United States from all countries accounted for less than an eighth of total world exports to this market in each year during 1972-75, as shown below: 1/

Item	1972	1973	1974	1975
Exports to the United States from all countries 1,000 units	2,328	2,518	2,471	2,099
Ratio of government-owned exports to world exports to the United States percent	11.8	11.6	9.7	8.2

The drop in the government-owned share from 11.8 percent in 1972 to 11.6 percent in 1975 was heavily influenced by the decline in West German auto exports, particularly by Volkswagen.

In this connection, West Germany supplied by far the largest share of exports of government-owned automobiles to the United States. However, during the 4-year period, total West German exports of autos fell from 731,000 in 1972 to 374,000 in 1975. Similarly, its exports of Government-owned automobiles during this period fell from 208,000 to 102,000.

Future exports of government-owned automobiles to the United States may decline primarily for the following reasons. First, it is expected that the largest supplier of such autos, Volkswagen, will decrease its exports to the U.S. market when production of Volkswagens begins in the United States in late 1978. Secondly, U.S. manufacturers have begun to reduce the size and weight of domestic automobiles to meet energy conservation requirements. This may make domestic cars more attractive to the traditional small-foreign-car buyer in the United States and thereby limit imports of such cars somewhat. Although the impact of the downsizing of domestically produced cars is likely to decrease the overall level of imports, automobile imports from certain countries may actually increase.

1/ Compiled from The World Automotive Market, several issues, and Automotive Trade Statistics Series B, 1964-75.

France

Unlike many other governments whose support of their automobile industry has ended or has been diminished during the post-World War II period, the French Government has continued to maintain a strong influence over its automobile industry. It has done so by direct state ownership of some facilities and a broad national planning program.

Prior to the 1970's, the French Government acted to restrict imports of automobiles and also to restrict U.S. investments in its auto industry, much as did other European countries. As recently as 1964, France rejected a plan by General Motors to build an assembly plant in Strasbourg. The only significant ownership by a U.S.-based firm in France is the 99-percent control that Chrysler has in Chrysler France.

Exports to the United States have accounted for less than 2 percent of France's total exports of passenger autos in recent years. Annual exports to the United States by Renault, the only Government-owned producer, declined from the peak export level of 21,000 vehicles in 1970 to 5,800 in 1975.

During 1972-75, France had four major automobile manufacturers--Renault, Peugeot, Citroen, and Chrysler France. Peugeot and Citroen merged in 1976; however, for the purpose of this study, the four-producers situation will be the subject of consideration.

Of the four auto producers, only one is controlled outside the country—Chrysler France, which is a part of the Chrysler Corp.'s European network. Renault is France's and Western Europe's largest auto manufacturer, but its position is being challenged by the Peugeot-Citroen merger.

In 1974 the French auto industry replaced that of West Germany as the world's third largest manufacturer of automobiles--behind the United States and Japan.

During the period 1961-73, the French automobile industry grew at an average annual rate of 8.5 percent, compared with an overall industrial growth rate of 5.6 percent. However, in 1975, a recession year, total automobile production was about 3.0 million units, approximately 200,000 units below the 1973 level (see table C-3).

An assessment of the Government's role in the automobile industry.—The French Government nationalized Renault during World War II. In the postwar period this state-owned firm was used by the Government to direct car production toward inexpensive, mass-produced cars and, in general, to direct the development of the car industry in harmony with the goals of national planning.

The Government has been instrumental in influencing Renault's domestic operations in various ways. For example, new manufacturing facilities for the production of Renault cars or associated components have been located in areas which the state has designated for increased industrialization. In addition, Government pressure has limited price increases on Renault's new models.

The Government's ability to influence the operations of Renault has indirectly caused the other auto manufacturers to conform somewhat to the leadership role of this firm. In order to stay competitive with Renault, other auto producers had to limit increases in their prices. In addition, since the state controls many financial institutions, it has been able to influence domestic producers by providing needed low-interest loans. For example, in 1975 the Government granted Citroen a loan of $200 million to induce the Peugeot-Citroen merger. Also, the extensive state control over its banks insured that needed investments by Renault would be forthcoming.

Trade.--Although auto production fell in 1974 and again in 1975, total exports, which have been important to the industry, remained relatively constant. Approximately 75 percent of the growth in the industry's output between 1963 and 1973 was accounted for by the growth in export sales. During this period, auto exports grew at an average annual rate of about 11.3 percent. Exports equaled about a third of the industry's output in the early 1960's, by 1972 they equaled 55 percent of production, and by 1975 exports reached 60 percent. However, exports to the United States did not exceed 1.3 percent of France's total annual exports during 1972-75, as shown below:

Item	1972	1973	1974	1975
France's exports to the United States----------units--	15,475	12,658	22,501	19,192
Ratio of exports to the United States to total exports----------percent--	0.9	0.7	1.3	1.1

The potential exists for increased exports to the United States for two major reasons. First, the United States market for smaller, fuel-efficient cars is expanding and the predominant share of French auto production is specifically designed for such a market. Secondly, the French manufacturers are facing increased competition from Japan in the European auto market and could look toward the United States as a

possible market for French-made automobiles. These two conditions may have contributed to Renault's decision in 1976-77 to market the new Le Car in the United States. Le Car is competing in the subcompact market and is being promoted heavily in major markets in the United States.

Imports have supplied a small portion of France's domestic consumption of automobiles. The import share of France's consumption was 10 percent in 1961, grew to 15 percent in 1967, and then jumped dramatically in 1968 to about 22 percent where it has remained since that time.

United Kingdom

The British Government was instrumental in the early postwar period in influencing exports of British automobiles. During that period, steel was rationed and allocated according to the ability of automobile firms to meet export quotas. However, from the early postwar period until the late 1960's, the Government did not otherwise involve itself with the operations of the domestic auto industry. It appears, then, that exports to the United States or imports from the United States were not significantly affected by the relationship of the British Government to its auto industry during the period that is the focus of this study, i.e., 1972-75.

Except for its early postwar intervention, the British Government, for the most part, did not otherwise intervene in the operations of its automobile industry following World War II. It was not until 1966 when Chrysler was in the process of purchasing Rootes that the Government intervened. Even then, however, the Government only issued broad guidelines for the Chrysler-Rootes deal.

The United Kingdom's auto production is dominated by four companies-- British Leyland, Chrysler-United Kingdom, Ford, and Vauxhall (GM). Of these, three are owned and controlled by U.S. manufacturers, the exception being British Leyland. The largest of the four companies, British Leyland, is 95-percent Government owned.

The British automobile industry is now the world's fifth largest producer and ranked sixth in exports in 1975. During the 1972-75 period, exports from the United Kingdom fluctuated between 33 and 50 percent of total production.

After World War II, the United Kingdom's automobile industry output grew an average of 10.5 percent per year until 1963. From 1964 to 1971, production was essentially stable--about 1.7 million cars annually. This was due in part to the increasing saturation of the auto market. By 1970, the United Kingdom had one car for every 4.7 persons, with approximately 75 percent of passenger car sales destined for the replacement market. The expansion of the market was deterred by the high cost of buying and operating a car. In addition, high

taxes and consumer credit restrictions by the Government also slowed the expansion.

After 1971, the Government, reacting to economic conditions, lowered taxes on automobiles and removed credit restrictions. In 1972, domestic car sales jumped by almost 400,000 units from a year earlier to 1.7 million units.

Despite this increase in demand, domestic production rose only 19 percent during 1970-72. The British auto industry was hit by labor stoppages and a lack of capacity. The auto industry continued to suffer in 1973-75--production was down, huge losses were reported, and investment plans were uncertain, leading to questions about the survival of the industry.

An assessment of the Government's role in the automobile industry.—As indicated earlier, the British Government did not intervene to restrict foreign investments in its domestic automobile industry until the late 1960's. It was not until 1968-70 that the Labor government acted to develop formal guidelines for dealing with multinational companies. These guidelines sought to assure the government that British economic policy would be taken into account when international decisions were made. Also, the government sought assurance that reasonable powers would be delegated to the local operation.

The British Government feared that more foreign takeovers would occur if the automobile industry continued to be composed of small producers. A number of mergers had occurred over the years, but the producers remained more diversified and individualistic in comparison to their foreign competitiors. The drive came from the Government to merge British Motor Holding and Leyland, and in 1971 the merger was accomplished through pressures from the Prime Minister and the Chairman of the Industrial Reorganization Corp. (IRC), a Government-controlled financial institution. This seems to have been the first automobile merger initiated by the Government, although the Monopolies Commission had approved previous mergers.

Government support of the new firm, British Leyland, began with its inception. For example, the company received a revolving credit from the IRC. The merger, however, did not end the Government's role in the auto industry. In 1971, the Government saved Rolls Royce from financial difficulties by providing it with low-interest loans.

Trade.—British exports of automobiles reached 772,000 units in 1969, their highest level ever. Since that time, British exports remained relatively stable, ranging from 550,000 to 650,000 units in 1972-75 (see table C-3). Nevertheless, the United Kingdom's share of the world market declined because the benefits of the growing world automobile market during this period were accruing largely to Japan.

The United Kingdom exported approximately 40 percent of its total automobile production in 1975. Its export-to-production ratio rose slightly from 33 percent in 1972 to 34 percent in 1973 and to 37 percent in 1974. Its share of exports to the United States as a percentage of total exports fell from 15 percent in 1972 to 11 percent in 1975. This drop was a result of Chrysler-United Kingdom's decision to discontinue exports to the United States after 1974.

Import penetration of the United Kingdom's automobile market rose from 15 percent in 1969 to 27 percent in 1972. The principal cause for this increased import penetration stemmed, in part, from the industry's inability to increase production. By 1973, imports accounted for 31 percent of domestic consumption. However, this trend was reversed somewhat in the following year when imports accounted for 28 percent of consumption. One reason for this was the greater availability of some popular British models; another reason was an increase in the price of foreign cars due mostly to the declining value of the pound. This improved situation, i.e., the decrease in import penetration, proved only temporary. The British auto industry was again beset by economic troubles in 1975, and import penetration soared to 42 percent of consumption in that year.

Italy

Government ownership of Italy's automobile industry is currently limited to one producer--Alfa Romeo. In recent years, Alfa Romeo accounted for about 14 percent of total annual automobile output. Privately owned Fiat has dominated domestic production, accounting for over 80 percent of recent total annual output. Fiat has also dominated automobile exports, accounting for about 95 percent of recent exports from Italy to the United States.

The Italian Government's use of Alfa Romeo as a tool of national policy was limited to developing the production base in Southern Italy by placing an automobile assembly plant in that region in 1968. Government ownership in Italy has little effect on that country's exports to the United States.

The Italian Government's influence over the U.S.-Italy automobile trade balance is exerted through the structure of taxes on passenger cars. These taxes, which increase with greater engine displacement, weigh heavily against the larger, more powerful cars such as those exported from the United States. For example, in 1975, the tax would have added approximately 87 percent to the ex-factory price of a Ford Torino entering Italy. Therefore, the price of the Torino would be the equivalent of $7,400 in Italy, compared with only $4,000 in the United States. The same tax structure applies to Italian-produced automobiles; however, the taxes on the average are considerably less since the Italian-produced cars have smaller engine displacement. This taxing

structure was highly effective in discouraging Italy's imports from the United States during 1972-75, when Italy imported less than 400 American cars annually.

Of the major West European auto producing countries, Italy is unique in that so far it has not had a major facility controlled by any of the big three U.S. companies. The only foreign interest of any consequence during 1972-75 was British Leyland's ownership of Innocenti.

The Italian motor vehicle industry is the world's sixth largest. Its production in 1972-75 ranged from a high of 1.8 million automobiles in 1973 to a low of 1.4 million in 1975, as shown below (in thousands of automobiles):

Company	1972	1973	1974	1975
Fiat Group 1/	1,525	1,559	1,360	1,125
Alfa Romeo	141	205	208	190
Innocenti	63	58	61	33
Others	4	1	1	1
Total	1,733	1,823	1,630	1,349

1/ Includes Lancia, Autobianchi, and Ferrari.

An assessment of the Government's role in the automobile industry.—The Italian Government became directly involved with the auto industry when it acquired Alfa Romeo in the early 1930's, an action to save the firm from bankruptcy. The use of Alfa Romeo by the Government in the past two decades was confined to the goal of industrial development of Southern Italy. An Alfa Romeo production facility initiated in the South in the late 1960's induced Fiat and other companies to initiate or expand investments in this region.

Although the Italian Government was successful with its regional development program, it was unsuccessful in its attempt to keep out imported automobiles in the late 1960's and early 1970's. Before and immediately after World War II, the Italians relied on high tariffs and on direct quotas to keep out imports. The quotas during this period were set at about 3 percent of domestic production. In 1967, only 4 out of every 1,000 cars sold in Italy were imported. Since that time, imports have climbed to as high as 35 percent of domestic consumption.

Unlike the situation for certain other European automobile industries, the Italian industry's growth has been heavily dependent upon sales in its domestic market. The industry during 1960-71 exported

less than a third of its domestic production. However, in the period 1973-75, exports climbed from 36 percent to 42 percent of domestic output. Over 60 percent of the industry's production growth during 1960-73 was due to increased sales in the Italian market.

From 1960 to 1970 the volume of car sales (registrations) in Italy grew at a high rate of 13.6 percent per year, so that by 1970 there was one car for every 5.3 people. Nevertheless, the Italian car market had not reached maturity, as expansion demand still outpaced replacement demand.

Apparent domestic consumption was about 1.6 million units in 1972, grew to 1.7 million in 1973, and then fell to 1.3 million in 1974 and to 1.1 million vehicles in 1975. Thus, annual domestic consumption of cars in the Italian market fell by almost 600,000 units during the period 1973-75. Economic conditions would appear to be responsible for much of the decline in domestic consumption; real disposable income fell while consumer prices, including car prices, rose rapidly.

Trade.—Prior to 1968, Italy's exports grew about 11 percent per year. In 1968, they rose by a phenomenal 37 percent and then settled to a growth rate of about 7 percent per year in 1969 and 1970. Since 1970, the annual export volume has been relatively unchanged, ranging from 651,000 to 678,000 (see table C-3).

Until 1974, automobile exports to Western Europe composed about 75 percent of Italy's total annual exports of these vehicles. In 1974, Italy's share of that market dropped to 61 percent as a recession and rapid increases in fuel prices hit the European Continent. This drop in the share of exports to Western Europe was somewhat offset by increased exports to the United States, as indicated below (in percent):

Item	1972	1973	1974	1975
Ratio of Italy's exports to the United States to total exports	9.2	8.1	15.9	16.5
Ratio of Italy's exports to Western Europe to total exports	74.9	75.1	60.9	67.8

Most of the increase in Italy's exports to the United States was accounted for by automobiles produced by Fiat. Exports to the United States by state-owned Alfa Romeo also increased during this period; however, exports by Alfa Romeo accounted for only about 6 percent of Italy's total automobile exports to the United States.

Imports of passenger cars into Italy declined from 540,000 automobiles in 1973 to 335,000 in 1974, and then grew slightly in 1975 to 370,000 automobiles (see table C-3). Imports accounted for 32 percent of Italy's apparent consumption in 1973, for 26 percent in 1974, and for 35 percent in 1975. One factor that depressed Italy's automobile imports in 1974 was the requirement for an advanced import deposit of 50 percent of the value of the imported product. This requirement was dropped in 1975.

West Germany

West Germany has five major automobile manufacturers--Volkswagen (including Audi-NSU 1/), Opel (GM), Ford, Daimler-Benz, and BMW. Volkswagen's European production was topped only by Fiat in 1972, and Renault in 1975. 2/ Opel and Ford are both owned by U.S. firms, and Daimler-Benz and BMW have maintained their independent status, with most of the ownership held by West Germans.

Government ownership of the West German automobile industry is limited to a 40-percent shareholding in Volkswagen, equally divided between the central Government and the State of Lower Saxony. During the mid-1970's, Government influence actually hindered Volkswagen's automobile penetration in the United States market. The management wanted to build an assembly plant in the U.S. market so that it could offset the rapidly rising cost of Volkswagen's cars sold in the United States, a situation caused in part by the revaluation of the deutsche mark in relation to the dollar. Further, Volkswagen was losing its acquired share of the U.S. import market to Japanese and other European cars. A political debate lasted many years over whether to permit Volkswagen to produce in the United States. Certain factions within the Government feared the loss of jobs in the home market because of the move to offshore production. As a result of this delay, Volkswagen did in fact lose a significant share of the U.S. auto market.

Government intervention in the auto industry was most pronounced in the years preceding World War II. The German Government directed the industry as to overall production and export goals. During this time, Ford and General Motors had assembly operations in Germany, and their existence in the domestic market was not subject to serious challenge as long as they conformed to the will of the Government. This situation lasted until just before the outbreak of the war.

After the war, the Government never seriously intervened in the operation of the auto industry; although in the early 1970's,

---

1/ Volkswagen owns 91 percent of Audi-NSU.

2/ Production data for Volkswagen and Fiat showed their output as being greater than that of Renault's; however, Renault's data does not account for a sizable number of "knocked down" units.

the West German Socialist Party unsuccessfully attempted to direct the operation of Volkswagen toward national objectives.

The trade balance in automobiles between the United States and West Germany has favored the latter country over the past two decades, but the extent of the balance has narrowed in the past few years. During the 1972-75 period, West German imports into the United States fell from 731,000 vehicles in 1972 to 371,000 vehicles in 1975, while U.S. auto exports to Germany increased from 3,000 to 6,000 vehicles. Thus, the resulting trade balance favoring West Germany declined from 728,000 units in 1972 to 365,000 units in 1975 (see table C-3). This decline resulted, for the most part, from waning demand for the Volkswagen Beetle in the U.S. market.

During the 1960's, automobile production grew slightly faster than the rest of the economy. In the 1972-75 period the overall trend in production has been one of decline. West German auto production reached a peak of 3.7 million units in 1973 and fell to 2.9 million units in 1975. West Germany was the third largest auto producer in the world until 1974, when France assumed that position. In 1975, West Germany accounted for approximately 12.6 percent of the world production of autos, compared with France's 12.8 percent. The West German production slowdown in 1973 and 1974 can be traced to market developments at home and abroad. The domestic demand for passenger cars has been declining since 1971, when the domestic automobile market reached maturity.

During 1974, production fell to 2.8 million units, its lowest level in the 4-year period. This decline in motor vehicle production of 22.2 percent from the 1973 level compares unfavorably with a total West German industrial decline of 1.7 percent. Production increased slightly in 1975 to 2.9 million vehicles.

An assessment of the Government's role in the automobile industry.—The West German Government's involvement in the auto industry began in the 1930's when it established Volkswagen. The company produced military vehicles for the war effort, but mass production of automobiles did not materialize until after World War II.

A program was instituted to denationalize Volkswagen in 1961. However, the Christian Democratic Union and the State of Lower Saxony could not agree on total denationalization. Therefore, an agreement was reached between the two factions that gave each a 20-percent share of the ownership of the firm. The remaining shares were sold to the private sector. Still, the two Governments have effective control of the company. After the sale of Volkswagen shares, Government intervention became less pronounced. However, Federal and especially State influence has been instrumental in the decisions as to where new plants should be located.

During 1972-75, the percentage of auto vehicle output in West Germany under Government ownership ranged between 17 percent in 1975 to 20 percent in 1973 and 1974. The Government-controlled share of West German auto exports fell three percentage points from 22 percent in 1974 to 19 percent in 1975. In terms of absolute units, the Government's share of all West German exports in 1975 dropped by 118,000 units from the 1973 peak of 220,000 units.

Trade.—During 1963-73, West Germany was the world's largest exporter of motor vehicles, shipping roughly 58 to 60 percent of its production to foreign markets. In 1974, West Germany's exports of autos fell to 54 percent of production, and the decline continued in 1975 when only 47 percent of the production went for exports. The export sales were adversely affected by the deutsche mark revaluations in 1973-74--West German exports of automobiles fell from 2.2 million in 1973 to 1.4 million in 1975 (see table C-3).

As mentioned earlier, total West German exports during 1972-75 experienced a rapid decline. Individual companies that experienced significant declines included Opel, whose exports fell by 32 percent from 1973 to 1975; Ford, with a 29-percent decrease in the same period; and Volkswagen-Audi NSU, with a 40-percent decline. Only BMW recorded an increase in its exports during this period. In absolute units, Volkswagen exported 471,000 fewer vehicles in 1975 than in 1973; Opel, 140,000 fewer; and Ford, 93,000 fewer, as shown below (in thousands of units):

Company	1972	1973	1974	1975
Volkswagenwerk-Audi NSU	1,077	1,161	929	690
Daimler-Benz	155	152	172	159
Ford	217	314	207	221
Opel	423	435	296	295
BMW	89	97	94	102

Source: World Motor Vehicle Data, several issues.

West Germany's exports of autos to the United States were most severely affected during 1972-75. Exports to the United States fell by almost 50 percent, whereas all exports showed a 33-percent decrease. One of the main reasons for the decline in exports to the United States was, as mentioned earlier, the revaluation of the deutsche mark in relation to the dollar. Another significant cause in the export drop was the waning demand for the Volkswagen Beetle model in the United States.

The Government-owned share of automobiles exported to the United States was approximately 27 to 28 percent of all West German exports to the United States during 1972-75, as shown below:

Item	1972	1973	1974	1975
Total West German exports to the United States------1,000 units--	732	786	655	374
Volkswagen exports to the United States------1,000 units--	520	550	445	254
Government-owned exports to the United States 1/--1,000 units---	208	220	178	102
Ratio of Government-owned exports to total exports to the United States----------percent--	28	28	27	27

1/ Estimated based on the ratio of new auto sales of West German imports in the United States to new auto sales in the United States of Volkswagen.

The ratio of Government-owned exports of autos to total West German automobile exports, remained relatively stable throughout this period of declining exports because most of the major producers experienced similar declines in their exports.

Canada

Canada's domestic automobile industry has been dominated by the American "Big Four"--General Motors, Ford, Chrysler, and American Motors. These four combined own over 95 percent of the automobile production capacity in Canada. The remainder is held by Volvo of Sweden. Government ownership, therefore, is not a factor affecting the Canadian-United States trade balance in automobiles. Nevertheless, the Canadian Government has been instrumental in the development of its domestic auto industry by other means.

In the early 1960's, the Government sought to increase the share of Canadian-made components used in foreign-owned domestic automobile assembly facilities and to increase exports by instituting a duty remission program for exports. This measure resulted in a formal complaint to the Treasury Department by the United States automobile industry. Prior to any U.S. Government action, the two countries entered into the United States-Canadian Automotive Agreement; this agreement was later implemented by the enactment by the U.S. Congress of the Automotive Products Trade Act (APTA). The effect of the agreement provided Canada with the opportunity to gain a greater share of the North American auto market.

Passenger cars make up roughly three-fourths of the total Canadian motor vehicle production; this production is completely dominated by subsidiaries of the four major U.S. auto producers. Ford and General Motors are the largest manufacturers in Canada; others include Chrysler, American Motors, and Volvo. The operations of Volvo are extremely small in comparison with those of the U.S.-based firms.

Large-scale automotive manufacturing has existed in Canada since the 1920's, although the industry has experienced its strongest growth since the 1960's. From 1950 until 1962, the output of automobiles fluctuated between 280,000 and 370,000 vehicles per year. Production jumped in 1962 and, with the exception of strike-troubled 1970, grew rapidly and consistently through 1973, averaging just less than 12-percent annual growth.

Production of the Canadian automobile industry decreased by 5 percent in 1974, compared with 1973, but it fared better than the automobile industries in most other countries where production declined by 10 to 15 percent. Two factors that helped the Canadian industry were (1) continued strong demand for its automobiles and (2) a decrease in imports of 27 percent from countries other than the United States. This dropped the corresponding import-penetration ratio for such vehicles from 18 percent in 1973 to 15 percent in 1974. The Canadian vehicles made up the difference from the indicated decline in imports. In 1975, Canadian automobile production decreased again--it was down by 8 percent from 1974; this reduction reflected, in part, sharp drops of 12 percent in exports to the United States and 18 percent in domestic demand.

An assessment of the Government's role in the automobile industry.—The tariff policies in Canada over the years are reflected in the pattern of automobile production in that country. U.S. firms originally were attracted to producing in Canada because of the tariff advantage Canada received in certain countries owing to its membership in the British Commonwealth. In the post-World War II period, foreign markets for North American autos declined significantly. Commonwealth preferences, therefore, were no longer of much importance. What remained an important inducement for U.S. production in Canada was Canada's own tariffs on vehicles and parts imports from the United States. Prior to the APTA, tariffs on automobiles were 17.5 percent. Canada's original tariff on passenger autos was 35 percent. The duty on parts prior to the agreement was also 17.5 percent, if the product was of a "class or kind" produced in Canada. If the part was not produced in Canada but a certain specified level of Canadian content was involved in the part, the product came into Canada duty free.

This type of tariff structure induced foreign producers to increase component-part assembly operations in Canada and to ship the components to a foreign assembly facility where the components would be incorporated in a major auto component or used in the final assembly of an automobile.

The major component or automobile could then be imported into Canada duty free if the Canadian content of the component or automobile amounted to at least 60 percent of the factory price.

Under the circumstances, however, this method of expanding the domestic industry did not contribute to the efficiency of production. Given the relatively small Canadian market and consumer preference for full and diverse lines of auto models, economies of scale could not be realized. An alternative was to have the Canadian producers concentrate on a relatively narrow range of models, mainly geared for export, and thus achieve economies of scale. Imports would, in part, satisfy demand for diversity of models. This was a significant factor underlying APTA.

Late in 1962, the Canadian Government attempted to increase auto exports for the purpose of raising the efficiency of its auto industry. The program offered a duty-remission plan on imported automotive products when specific increased export requirements were met. By 1974, the duty-remission plan threatened to become a critical issue in trade relations between the United States and Canada. The U.S. Treasury began a process of formal review of the Canadian plan. An affirmative finding would have resulted in the imposition of a countervailing duty and, thus, would have eliminated what the Canadian Government had hoped to achieve. Before any finding was reached, however, the automotive agreement was signed.

The United States-Canadian Automotive Agreement provided duty-free trade between the two countries in most new vehicles and parts to be used as original equipment. The agreement also has built-in safeguards that insure a specified level of Canadian automobile production in the future.

Trade.—Prior to the United States-Canadian Auto Agreement, Canada's exports of automobiles averaged below 8 percent of the total industry output. After the agreement, exports rose rapidly from the 1965 level of 11 percent of total output to 77 percent in 1973. In 1975, however, the export share of total auto output fell to 74 percent.

Since 1965, most of Canada's auto exports were shipped to the United States; for example, exports to this market during the 1972-75 period averaged 96 percent of total Canadian auto exports. Canada exported 874,000 autos to the United States in 1973; that number fell slightly in 1974 to 810,000. In 1975, automobile export demand was further depressed by economic conditions in the United States, and the level of Canadian auto exports fell to 10 percent below the 1974 level.

As mentioned previously, prior to the Automotive Products Trade Act of 1975, Canada's exports were relatively low. For example, in the 1953-63 period, total Canadian exports averaged less than 13,000 units

per year. During this period, there was little worldwide demand for the large North American automobiles. The United States presented the main potential export market for the type of automobile products produced in Canada. But given the U.S. tariff, Canadian production costs would have to be lower than those in the United States in order for Canadian-made automobiles to compete in the U.S. market; hence, exports to the United States during the 1953-63 period accounted for less than 2 percent of annual Canadian car exports.

The majority of imports of automobiles into Canada have come from the United States. During 1972-75, U.S. auto producers increased their share of the total Canadian import market from 63 percent to 99 percent. Much of the growth in the United States' share of Canadian imports is the result of the United States-Canadian Auto Agreement.

Japan

Japan has no outright Government ownership of its automobile industry. However, it was through the Government's intervention in the late 1950's and 1960's that the auto industry was able to develop into its current position as the world's second largest producer. During those years, domestic industry had the advantage of import protection in the form of high tariffs and quantitative restrictions, as well as protection from the establishment of foreign-owned facilities. Also, the Japanese Government allowed foreign firms to license technology for domestic manufacturers' use under favorable terms. Automobile development was further facilitated through financial assistance from the Government and allowance for quicker depreciation of assets; also recapitalization requirements were dropped.

In the late 1960's and early 1970's, these protectionary influences were gradually withdrawn. Today the Japanese auto manufacturers are fully autonomous and competitive in all parts of the world.

Japan's highly integrated auto industry has exhibited spectacular growth and competitive success in the last 15 years. It currently ranks second behind the United States in the production of autos. In 1975, Japan's output of automobiles reached 4.6 million units. The industry has risen from the world's fifth largest producer of motor vehicles in 1961 to fourth in 1964, third in 1966, and it reached its present ranking in 1967. A significant part of this growth is attributable to Japan's success in international markets. From a minor exporter in the mid-1960's, Japan became the world's third largest exporter of automobiles in 1970, second largest in 1971, and the largest in 1975, when it replaced France.

The growth of the domestic market for automobiles has been equally impressive. Total automobile registrations in Japan more than doubled between 1968 and 1975. In 1965, there was only one car for every

45 persons, but by 1975 there was one car for every 7. Replacement demand in 1975 accounted for only one-third of new car sales.

In 1972, Japanese production of automobiles was approximately 4 million units. Production increased to 4.5 million in 1973 and then declined to 3.9 million in 1974. This decline in output can be related to the fall in domestic demand; exports actually increased in 1974 and imports retained their 5-percent share of total domestic demand.

An assessment of the Government's role in the automobile industry.—Government activity in the Japanese auto industry did not occur until World War II. The need for motor vehicles for war purposes induced the Government to directly subsidize the development and production of military vehicles, almost entirely trucks. Commercial use of trucks soon followed, and production continued after the war's end while automobiles remained undeveloped. In fact, trucks dominated Japanese automotive output until very recently. Even though automobile demand grew dramatically in the 1960's, annual passenger car production surpassed combined truck and bus output in Japan for the first time in 1969.

Japan's current largest producers, Toyota and Nissan, began producing in the late 1930's. Although both entered under Government incentives, neither was established with direct Government investments. The Government's usual role has been to protect and encourage the development of domestic firms, but not to start them. During the post-World War II period, the Government-controlled Bank of Japan rescued Toyota from financial collapse by approving large credit extensions.

In 1951, MITI defined its immediate role in the development of the auto industry. Basically, MITI's involvement consisted of the following:

(1) Protection of domestic manufacturers from foreign vehicles through special legislation;

(2) Coordination and admission of foreign technology for domestic use; and

(3) Financial assistance from the Government.

Protection from imported autos was accomplished by quotas, tariffs, and commodity tax. Also foreign exchange quotas for automobiles were put into effect. The commodity tax penalized large cars and, therefore, was designed in part to keep larger autos from entering the country.

During the early and mid-1950's, MITI was involved in negotiating licensing agreements whereby the industry obtained foreign auto assembly technology. Further, under MITI's coordination, the Japan Development Bank extended reconstruction loans to auto producers in this period.

The Japanese Government's role in the auto industry through the late 1950's was one of protection and guidance. MITI, however, did not dominate the producers' initiative for development. Its policy of protection was essential for the development of the auto industry. By the late 1950's, MITI's role among auto producers was significantly less than earlier in the same decade. By 1958, the highly-protected industry was producing 50,000 automobiles and making a profit.

In the 1960's, Japan's auto production increased from 100,000 units per year to the world's second largest. At the beginning of this period of rapid expansion, the Japanese Government tried to increase the concentration in the auto industry so that production level efficiencies through economies of scale could be achieved. However, these efforts were generally unsuccessful. Five of the smaller producers--Togo Kogyo, Mitsubishi, Fuji, Daihatsu, and Honda--gained or maintained their market shares during 1963-65. MITI tried further to stimulate concentration by removing quantitative restrictions on automobile imports in 1965. Only one merger of any consequence occurred during the 1960's--Nissan and Prince in 1966. The Japanese Development Bank responded quickly to the merger by granting a $15 million loan for the Nissan-Prince consolidation efforts. For the most part, industry consolidated efforts were a result of financial considerations between producers rather than a result of bureaucratic pressures.

Further lessening of restrictions was accomplished in 1969 when the Government reduced the tariff on imported autos from 35 percent to 17.5 percent. The tariff was again reduced in 1971 to 10 percent. U.S. auto producers were still prohibited from capital investment in Japan until Mitsubishi, against Government wishes, "tied up" with Chrysler. Ford and General Motors soon followed with deals with Toyo Kogyo and Isuzu, respectively. In 1971, MITI discontinued several tax regulations favorable to auto exports, including accelerated depreciation and tax-free income reserves for overseas markets.

Trade.--Japanese automakers turned to foreign markets to a greater degree in 1974 to supplement sagging domestic demand. Exports of automobiles increased from 1.4 million in 1972, 35 percent of total output, to 1.8 million in 1975, 40 percent of output, as shown in the following tabulation:

Item	1972	1973	1974	1975
Production----------1,000 units--	4,022	4,471	3,932	4,568
Exports----------do----	1,416	1,451	1,727	1,827
Ratio of exports to production percent--	35.1	32.4	43.9	39.9

Japan's exports of autos to the United States increased from 584,000 in 1973 to 712,000 in 1975 (see table C-3). Exports of autos to the United States, Canada, and Western Europe accounted for approximately 70 percent of total Japanese auto exports in the 1972-75 period. Exports of automobiles to the United States as a percentage of total Japanese auto exports declined slightly from 41.6 percent to 38.9 percent over the same 4-year period, as shown below:

Area or country of destination	1972	1973	1974	1975
Western Europe	327,623	357,379	339,707	482,597
United States	590,150	583,861	683,580	711,902
Canada	143,053	75,182	111,989	73,463
Exports to the United States, Western Europe, and Canada as a percentage of total Japanese auto exports----------percent--	74.9	70.0	65.7	69.4
Exports to the United States as a percentage of total Japanese auto exports----------percent--	41.6	40.2	39.5	38.9

The Japanese auto producers have been successful in recent years in expanding export markets to make up for slumping domestic demand. However, there are indications that some markets may become less accessible to Japanese autos. For example, Australia, a large market for Japanese automobiles, introduced quantitative restrictions and raised tariffs on auto imports in 1974 in an attempt to reduce imports. In addition, Japanese auto import penetration in Western Europe is an increasing concern and voluntary export controls may be forthcoming.

Foreign Government Ownership in the World Iron Ore Industry

Introduction

This section examines the role of government ownership in the iron ore industry of 21 selected market economy countries, primarily during the period 1971-75. Specifically, it focuses on the extent of government ownership in these countries and assesses the impact of such ownership on the United States. Since Brazil and Sweden are, by far, the most important countries in this respect, they will be discussed in detail.

In general, the long-term competitiveness of the various countries' iron ore industries is largely dependent upon the country's iron ore reserves and resources, as well as the relative efficiency of its mining operations.

Reserves, as they are used here, are defined as the amount of iron ore that is available to make a usable product under existing economic and local conditions. Resources are defined as the amount of iron ore that could be extracted under more favorable than existing economic conditions. The grade of the ore on hand is an equally important determinant in a nation's iron ore competitiveness. Low-grade ores cannot be efficiently used in the form in which they are extracted because of the greater fuel requirements necessary to process such ores into pig iron; they are first beneficiated (upgraded) into a high-iron-content product. The ores which are low grade or difficult to beneficiate include (1) Minette and (2) Bilbao. High-grade ores, or ores which are easily beneficiated, include (1) Lake Superior, (2) Kiruna, and (3) Magnitnaya.

Summary of iron ore findings

The data collected during the course of this study reveal that in 1974, 32 percent (on a gross-weight basis), or 37 percent (on an iron-content basis) of the iron ore mined by these 21 countries was government-owned. 1/ The bulk of this government-owned production was concentrated in the hands of a relatively few producing nations. Brazil and Sweden together accounted for 80 percent, on a gross-weight basis, or 87 percent on an iron-content basis, of the iron ore mined by these 21 countries.

In terms of gross weight, U.S. imports of government-owned iron ore supplied a small, but increasing, share of U.S. iron ore consumption during the period 1971-75, ranging from a low of 0.9 percent in 1972 to a high of 5.6 percent in 1975, as shown on the following page:

1/ Gross weight is the dry weight as measured; iron content is the weight of the iron contained in the iron ore.

Year	Total U.S. consumption	Government-owned imports	Government-owned imports as a share of total consumption
	1,000 metric tons	1,000 metric tons	Percent
1971	112,400	1,700	1.5
1972	122,900	1,100	0.9
1973	142,100	3,000	2.1
1974	133,700	6,130	4.6
1975	113,200	6,290	5.6

Brazil and Sweden were the principal sources of these government-owned imports, supplying over 99 percent of such imports in both 1974 and 1975. Brazil alone supplied over 95 percent of government-owned imports in those years. With the exception of Brazil, U.S. imports of government-owned iron ore were insignificant during the period 1971-75.

Production

In 1974, total world iron ore production amounted to 895 million metric tons, of which 591 million metric tons, or 66 percent, was accounted for by market economy countries. The remaining 34 percent was mined by nonmarket economy countries, of which the Soviet Union was the most important. Approximately 340 million metric tons, or 58 percent of the total market economy production on a gross-weight basis was accounted for by the 21 countries, as shown on the following page:

Item	Production gross weight	Percent of world total, gross weight	Production, iron content	Percent of world total, iron content
	1,000 metric tons		1,000 metric tons	
World	895,000	100.0	526,000	100.0
Market economy	591,000	66.0	356,000	67.7
Nonmarket economy	304,000	34.0	170,000	32.3
Sample coverage:				
Government-owned	108,000	12.1	74,000	14.1
Private sector	232,000	25.9	124,000	23.6

Gross production of government-owned iron ore totaled 108 million metric tons, or 32 percent of the total ore mined by these 21 countries, in 1974.

Because the iron content of the ore mined varies considerably from region to region, production figures in terms of gross weight were converted to an equivalent iron-content basis to account for this variation. These figures better reflect the marketability of the various grades of iron ore.

The tabulation on the following page shows the production of government-owned iron ore on an equivalent iron-content basis for 1974:

Country	Government-owned production	
	Equivalent iron-content basis, 1974	As a percentage of total production
Brazil	44,600	75
Sweden	19,656	86
Norway	2,444	96
Mexico	2,437	73
Austria	1,311	100
West Germany	1,130	80
United Kingdom	949	100
Finland	614	100
Spain	479	12
Italy	261	100
Argentina	66	100
Total	73,957	-

In 1974, approximately 37 percent (on an iron-content basis) of the ore mined in these 21 countries was government-owned, of which Brazil and Sweden accounted for 87 percent. In all, 11 of the 21 countries exhibited at least some degree of government-ownership of their iron ore mining industries. More extensive data are available for the years 1971-75 in table C-4.

Four important government-owned iron ore producers can be identified from the tabulation on the following page. The largest is the rapidly expanding Companhia Vale Do Rio Doce (CVRD) of Brazil, with a projected 1977-78 capacity of 52.8 million metric tons of iron. Next is the slowly expanding Luossavaara-Kiirunavaara AB (LKAB) of Sweden, with an estimated 1977-78 capacity of 23.1 million tons. Third is the newly-created Sidemex of Mexico, with a 1977-78 capacity of 5.0 million tons. Last is Companhia Siderurgica Nacional of Brazil, with a 1977-78 capacity of 4.6 million tons. Most of the other central government-owned iron ore producers are much smaller, having capacities under 2.0 million tons, as shown on the following page:

Company	Country	Productive capacity
		Millions of metric tons, iron content
Companhia Vale Do Rio Doce (CVRD)	Brazil	52.8
Luossavaara-Kiirunavaara AB	Sweden	23.1
Sidemex	Mexico	5.0
Companhia Siderurgica Nacional	Brazil	4.6
Sidbec-Normines, Inc. 1/	Canada	4.0
Salzgitter A.G	West Germany	1.9
British Steel Corp	United Kingdom	1.8
A/S Sydvaranager	Norway	1.7
FABMIL 2/	Argentina	1.4
VOEST-Alpine AG	Austria	1.4

1/ This producer, formed in 1976, is 50.1-percent owned by Sidbec, the Government-owned steel producer owned by the Province of Quebec.
2/ New capacity not in operation in 1974-75.

Trade impact on the United States

When viewed in the aggregate, U.S. imports of government-owned iron ore, constituted only a minor share of U.S. iron ore consumption (on a gross-weight basis) during the period 1971-75. Imports ranged from a low of 0.9 percent in 1972 to a high of 5.6 percent in 1975.

When viewed in the context of total U.S. iron ore imports, government-owned imports constituted a small but increasing share of this total during the period 1971-75. Imports ranged from a low of 3 percent in 1972 to a high of 13.2 percent in 1975, as shown on the following page:

Year	Total U.S. iron ore imports	Government-owned imports from 21 countries	Government-owned imports as a share of total U.S. imports
	1,000 metric tons	1,000 metric tons	Percent
1971	40,766	1,700	4.2
1972	36,333	1,100	3.0
1973	44,025	3,000	6.8
1974	48,798	6,130	12.6
1975	47,490	6,290	13.2

To a large extent this increase in government-owned exports to the United States was attributable to increased shipments from Brazil, much of which was government-owned as shown in the following tabulation (in thousands of metric tons, gross-weight basis):

Country	1971	1972	1973	1974	1975
Brazil	1,801	1,132	3,234	6,677	7,646
West Germany	0	0	0	17	0
Mexico	21	0	0	0	54
Norway	0	0	0	0	0
Sweden	181	176	278	340	185
United Kingdom	1/	0	0	0	0
Other	38,763	35,025	40,512	41,763	39,605
Total	40,766	36,333	44,024	48,797	47,490

1/ Less than one-half unit.

U.S. imports of iron ore from Brazil increased steadily from 1.8 million metric tons (gross weight) in 1971 to 7.6 million metric tons (gross weight) in 1975. In 1974, Brazil shipped 6.7 million metric tons of iron ore to U.S. markets, of which 5.8 million metric tons were supplied by the Government-owned firm, CVRD. These Government-owned shipments from Brazil accounted for 95 percent of

government-owned U.S. iron ore imports from these 21 countries. The remaining 5 percent was supplied largely by Sweden.

Brazil

Brazil is the principal producer of government-owned iron ore in the world. This ore comes mostly from the Companhia Vale do Rio Doce (CVRD), which has a 1977-78 productive capacity of 53 million metric tons of contained iron.

The Brazilian iron ore industry is composed of a number of Government-owned and private-sector companies. Five of these companies are significant producers--CVRD, which is 85-percent government-owned, Companhia Siderurgica Nacional (CSN), which is 87-percent Government-owned, and Mineracoes Brasilieras Reunidas S.A. (MBR), Ferteco Mineracao S.A. (Ferteco), and S.A. Mineracao da Trinidade (Samitri), each of which is entirely from the private sector.

A proposed joint venture of CVRD with U.S. Steel Corp. could result in additional production of iron ore. This venture, Amazonia Mineracao S.A. (AMZA), would involve a 50-million-ton-a-year mine at Carajas in the Amazon Basin, a 1,000-kilometer railroad, and port facilities near Itaqui. The total cost would be over $2 billion. The resources total 16 billion tons, averaging 66-percent iron--enough for centuries. However, U.S. Steel Corp. is withdrawing from the project. CVRD believes that the departure of U.S. Steel from the venture will have little effect and plans to go ahead with or without a partner.

Production of iron ore in Brazil, which has doubled in the last 5 years, is heavily centered in the Iron Quadrilateral of Minas Gerais, although this dominance is declining. Iron ore production and exports in 1974 from the largest company to the smallest significant producer are as follows: CVRD produced 48.5 million metric tons, 95 percent of which was exported; MBR, 8.3 million metric tons, 83 percent of which was exported, Samitri and Ferteco together produced about 8 million metric tons, 80 percent of which was exported; and CSN about 3 million metric tons, almost none of which was exported. The following tabulation shows the dominant role of CVRD in the Brazilian iron ore industry from 1971 through 1975:

Year	Brazilian production	CVR iron ore sales	CVRD exports	Share of CVRD exports shipped to United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent
1971	42,672	26,613	25,296	6
1972	46,469	28,054	26,178	4
1973	50,506	39,630	37,513	8
1974	73,955	48,458	46,214	12
1975	71,724	50,102	47,260	12

Brazil's iron ore industry, a historical perspective.—The Brazilian Government created CVRD by Law 4352 on June 1, 1942 for the principal purpose of increasing exports of iron ore. CVRD was created by the merger of Companhia Brasileira de Mineracao e Siderurgia S.A. and Cia Brasileira Itabira de Mineracao S.A. The Government holds all shares of the common stock and 53 percent of the preferred stock. The ore deposits CVRD was chartered to develop are located at Itabira in the State of Minas Gerais. Iron ore was first exported from the port of Vitoria in 1942, and as CVRD has grown, initial annual exports of about 35,000 metric tons increased to over 47 million metric tons by 1975.

Over the years CVRD has become a very large, diverse, and profitable corporation. Its scope has been enlarged to include other commodities in addition to the mining, transportation, and marketing of iron ore. Total revenues were $732 million in 1975, up 59 percent from 1974. Net profits were $204 million in 1975, up 39 percent from 1974. Net profits as a percentage of revenue was 28 percent in 1975, down from 32 percent for the previous year. The investment allocation for 1975 showed how diverse an operation CVRD has become--64 percent went to activities related to iron ore, 14 percent to wood and pulp, 12 percent to other mining activities and the balance to research and other activities.

CVRD markets through long-term fixed-quantity sales contracts, usually through its subsidiaries. Long-term contracts cover about 85 percent of CVRD's exports and about 95 percent of total sales. Usually the contracts are for a period of 10 years and specify annual deliveries of fixed quantities of ore by product type. CVRD and the buyer have the option of varying the scheduled annual quantities by no more than 10 percent. Reductions in delivery and early termination of the contract are not allowed, except under highly unusual circumstances. CVRD usually exports about 35 percent of its ore to

Japan, 40 percent to Western Europe, and the balance elsewhere. Contract deliveries of the 1975-83 period already total 522 million tons, an average of 58 million tons per year; this situation greatly assists CVRD's planning and fund-raising position.

CVRD has developed and equipped a number of modern mines. It has a high-intensity wet magnetic separation plant at the Caue mine, the first of its type in the world; similarly its other mines also have modern equipment. CVRD's properties include the Caue mine with a capacity of 46 million metric tons, the Conceicao mine with a capacity of 11 million metric tons, the Dos Corregos mine with a capacity of 4 million metric tons (soon to be merged with the Conceicao mine into an expanded 25-million-metric-ton-capacity mine), and the Picarrao mine with a capacity of 3 million metric tons. The Periquito mine is new and will begin production with a capacity of 7 million metric tons this year. Other new projects are also planned.

CVRD has large investments in iron ore transportation. Most of its ore travels over its own railroads to its own port facilities, after which about 16 percent of the ore is shipped overseas in CVRD ore carriers. Private-sector companies also use CVRD's railroad and port facilities, which will handle 250,000 ton ore carriers. CVRD has a modern railroad stretching 548 kilometers from Itabira to the port of Tubarao. The Tubarao ore terminal now has a capacity of 80 million metric tons per year. CVRD is having 17 bulk cargo and ore carriers built to add to its existing 14 ships.

CVRD is expected to increase the capacity of its mining/railroad/port complex to handle exports of 90 to 100 million metric tons per year by 1980 and 130 million metric tons by 1984. The total investment in new facilities by 1980 will be $10 billion. According to CVRD reports, this represents 10 percent of the total expected investment in Brazil in this period.

An assessment of the Government's role in the iron ore industry.— CVRD exhibits a high degree of competitiveness because of its new equipment and modern technology, and because it has more than a century's supply of iron ore (without including Carajas reserves) at the proposed 100 million metric ton capacity level. The proportion of U.S. imports shipped from CVRD alone has more than doubled in the last 5 years. About 85 percent of the Brazilian iron ore imported into the United States in 1974-75 came from CVRD properties. The principal benefits of government ownership which accrue to CVRD are the economies of scale resulting from the merger. It benefits even more from its long-term contracts, which allow for better planning and easier access to capital; contracts, which allow for better planning and easier access to capital; such contracts are also fairly common in the industry among private-sector producers.

Companhia Siderurgica Nacional (CSN), the operator of the large Volta Rendonda steel plant, is the other significant Government-owned

iron ore producer. Its principal mine is the 3-million-metric-ton-capacity mine, the Casa de Pedra, located in the Congonhas district. Under present plans, this mine will be expanded to a capacity of 7 million metric tons by 1978 with the help of Kaiser Engineering. A 10-million-metric-ton-capacity beneficiating plant will also be installed. CSN's iron ore reserves total 282 million metric tons, containing 183 million metric tons of recoverable iron, a 40-year supply. When compared with CVRD, however, CSN is a minor exporter of iron ore.

The role of the Government in CSN is mixed. In earlier days the Government benefitted CSN by providing the investment that the private sector did not and leaving it under competent technical management which allowed it to operate efficiently and to expand. In more recent times, however, the Government may have had a detrimental effect on CSN's steel operations by helping to build its competitors, such as USIMINAS and COSIPA, while allowing CSN's management to deteriorate, by lowering Brazilian tariffs on steel products in 1967, by requiring all capital equipment purchases to be made domestically, and by instituting price controls on steel products.

Trade.—Brazil's iron ore producers, both Government owned and private sector, are highly competitive in world markets. Most of the producers are interested in exporting, exemplified by the fact that Brazil's portion of U.S. iron ore imports increased from 4 percent in 1971 to 16 percent in 1975, as shown in the following tabulation (gross-weight basis):

Year	Brazil's total iron ore exports	Brazil's total iron ore imports	Net trade balance	U.S. imports from Brazil	Total U.S. imports	Ratio of U.S. imports from Brazil to total imports
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent
1971	31,020	0	31,020	1,800	40,766	4
1972	30,512	0	30,512	1,132	36,332	3
1973	44,963	0	44,963	3,234	44,024	7
1974	59,439	0	59,439	6,677	48,797	14
1975	1/ 59,000	0	1/ 59,000	7,646	47,490	16

1/ Estimated.

The similarities in export trade that exist between the Government-owned Brazilian companies and privately owned iron ore companies located in other countries, suggest that the Government-owned producer may have had no significant advantage over the private sector producer. For example, Australia, a major world iron ore producer, with no Government ownership, increased its iron ore output by 22 times from 1960 to 1975, while CVRD multiplied its output 11 times; all Brazilian producers combined multiplied their output by only 8 times.

Sweden

Sweden's iron ore industry, which is approximately 86-percent government-owned, produced 36 million metric tons (gross weight) in 1974. Because it has immense iron ore reserves of good quality, it is a major iron ore exporter, especially to the European market. Although Sweden is the second largest exporter of government-owned iron ore to the United States, its exports accounted for only 0.4 percent of total U.S. iron ore imports in 1975.

Sweden has three important iron ore producers, the most important being Luossavaara-Kiirunavaara AB (LKAB), which is 96-percent Government-owned; Tuolluvaara Gruv AB (TGA), a separate Government-owned producer before 1974, is now part of LKAB. Next in importance is the private sector producer, Granges AB, which holds the remaining 4 percent of LKAB. Third in importance is Stora Kopparbergs Bergslags AB (SKB), a large diversified private-sector corporation. Total shipments and the percentage of the total that was exported, by companies, are shown in the following tabulation:

Year	LKAB		Granges		SKB	
	Shipments	Share of total shipment exported	Shipments	Share of total shipments exported	Shipments	Share of total shipments exported
	1,000 metric tons	Percent	1,000 metric tons	Percent	1,000 metric tons	Percent
1971	26,800	90	3,670	39	954	1/
1972	25,805	94	3,297	54	921	0
1973	30,600	94	3,836	61	874	0
1974	32,151	93	3,385	49	1,718	1/
1975	1/	1/	1/	1/	1/	1/

1/ Not available.

Sweden's iron ore industry, a historical perspective.—LKAB, the second largest government-owned iron ore producer in this study, operates quite similarly to a private company, except that its profits are generally diverted to areas throughout the entire Swedish economy for research and development, particularly to develop industry in northern Sweden. LKAB, a vertically integrated producer, owns iron ore mines, concentrating and pelletizing plants, railroads, and ship-loading facilities. Majority Government ownership dates from 1907 and the proportion has not changed since 1957.

LKAB is a financially viable, slow-growth company. It is under financial pressure from the high costs of mining its deep underground mines. Its sales arrangements are medium-term and fairly flexible. With the exception of a pelletizing plant constructed in 1973, its physical plant does not appear to be expanding rapidly. LKAB operates extensive transportation facilities with its own railroad line to the Norwegian port of Narvik, and has ship-loading facilities there, including a new quay under construction. The Swedish port of Lulea also houses some of LKAB's facilities. It has interests outside Sweden, such as providing technical assistance in studying iron ore deposits in Guinea and Algeria.

LKAB is definitely a competitive producer with very large iron ore reserves. It has an efficient and modern technology, although at present it is not rapidly expanding production. LKAB exports jointly with Granges through Malmexport, an iron ore sales agent which is equally owned by the two companies.

Granges, although privately owned, is detailed here for comparison with the Government-owned firm of LKAB. Granges was incorporated in 1896. Currently, it operates two underground mines, the Grangesberg and the Strassa. Like LKAB, Granges, has equipped its mines with modern machinery. Over half of the iron ore pellets made by Granges are produced by using its own cold-bonding process (Grangcold). Iron ore reserves for the Grangesberg mine total 165 million metric tons of Kiruna-type ore, averaging 57-percent iron, and for the Strassa mine, 310 million metric tons of Lake Superior-type ore, averaging 33-percent iron. Reserves for the two mines probably represent an 80-year supply at present production rates, allowing for concentration. This compares with iron ore reserves for LKAB of 2.46 billion metric tons of Kiruna-type ore, averaging 60-percent iron, also an 80-year supply.

An assessment of the Government's role in the iron ore industry.—Sweden's iron ore industry is internationally competitive. The producers have large reserves of good iron ore. Both the Government-owned and private-sector producers have modern and efficient technologies, although they both tend to be high-cost producers. They regularly update their facilities, although large expansions are uncommon.

Trade.—Sweden's trade balance in iron ore decreased from 1971 to 1975, reaching a maximum of 33.4 million metric tons in 1974, as shown in the following tabulation:

Year	Sweden's total iron ore exports	Sweden's total iron ore imports	Trade balance	Government-owned exports
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent
1971	26,180	2	26,178	88
1972	27,610	0	27,610	88
1973	32,917	0	32,917	87
1974	33,503	82	33,421	89
1975	23,081	318	22,763	1/

1/ Not available.

Sweden's iron ore trade with the United States is limited, accounting for only 0.4 percent of total U.S. iron ore imports in 1975. Sweden markets most of its iron ore in Europe, typically sending 35 percent to West Germany, 30 percent to Belgium-Luxembourg, 15 percent to the United Kingdom, and the remaining 20 percent to its other trading partners.

Ten countries exhibiting government ownership

Ten countries in the sample have government-owned iron ore producers of lesser importance than those in Brazil and Sweden. 1/ The ten countries in the sample account for 13 percent of government-owned iron ore production on an iron-content basis and 20 percent on a gross-weight basis. In general, the government-owned exports of these countries had almost no impact on the U.S. market in 1971-75, accounting for less than 1 percent of annual U.S. imports.

Of these 10 countries, Mexico is the most important when examined in terms of potential impact on the U.S. market and in terms of an active and growing role for the Government. Norway is much less important in terms of both the U.S. market and the Government-role criteria.

1/ Mexico, Norway, Canada, Austria, West Germany, United Kingdom, Finland, Spain, Italy, and Argentina.

Mexico has an important iron ore industry which has been expanding rapidly in recent years. Iron ore is produced by a variety of companies, most of them Government-owned or influenced. These companies are likely to be consolidated into Sidemex, a holding company. 1/ Altos Hornos de Mexico S.A. (AHMSA) is 80-percent Government-owned and produces through La Perla Minas de Fierro S.A., its subsidiary. Siderurgica Lazaro Cardenas Las Truchas, S.A. (SICARTSA), which started production in 1976, was 88-percent Government-owned when formed. Fundidora de Monterrey, which is currently 40-percent owned by the Government's Nacional Financiera, is going through a financial reorganization that could result in additional Government ownership. Hojalata y Lamina S.A. (HYLSA) a privately owned firm, produces iron ore through its subsidiary Las Encinas, S.A. The relative importance of these companies can be shown by their 1974 production: AHMSA produced 2.4 million metric tons, Fundidora produced 1.6 million metric tons, and HYLSA produced 1.5 million metric tons. The Concorcio Minero Pena Colorada S.A., a consortium composed of AHMSA, Fundidora, Nacional Financiera, and HYLSA, now produces ore from the Pena Colorada deposits at Manzanillo. This consortium will probably be under heavy Government influence because its membership is mostly Government-owned. The ownership situation is quite fluid at this time.

The iron ore producers are all integrated steel companies that usually have their own coal and manganese mines, except for the Pena Colorada consortium. HYLSA's production of prereduced iron ore (sponge iron) is unique in Mexico. HYLSA was a pioneer producer worldwide with its direct reduction process using natural gas, which Mexico has in abundance as a result of recent discoveries.

The Mexican iron ore industry has been expanding rapidly and has the reserves to continue expansion. SICARTSA has just begun operating its 2-million-metric-ton-iron ore pelletizing plant, and Pena Colorada has also begun operating its 1.5-million-metric-ton pellet plant. The other producers are also expanding their operations; in particular, HYLSA is building a 400,000-metric-ton prereduced iron ore plant. The expansion can continue because Mexico has enough iron ore to last 75 years, based on total reserves of 680 million metric tons, gross-weight basis and total productive capacity of 9.1 million metric tons, gross-weight basis, or 5.4 million tons iron-content basis. Increasing production to displace imports, which usually total about 1 million tons of iron (mostly scrap), would make the supply last only 60 years. The producers have been planning further expansion, particularly Pena Colorada, but most are likely to be delayed for a few years because of an unfavorable balance-of-payments situation.

1/ The new entity will be called Sidemex in this report, although the Government has not yet made a final decision about its title.

The Mexican Government interacts vigorously with the iron ore and steel producers, in addition to its efforts to gain greater ownership and control. It discourages exports of prereduced iron ore (sponge iron) by taxing such exports and by prohibiting long-term export contracts. A new mining law that provides for a larger Government role in mining may also increase the role of Government in iron ore.

The Government has recently devised a coordination plan for its steel industry. The intent of the plan is to increase Mexican competitiveness in world markets by avoiding duplication among product lines, balancing the supply and demand for each kind of product, and dividing up the market on a geographic basis.

Mexico has not been an iron ore exporter. However, short-term export markets are now being sought for 250,000 metric tons of prereduced iron ore. The most likely destination is the United States. Substantial exports of steel, prereduced iron ore, or possibly iron ore are likely during periods of domestic oversupply, such as a recession.

Norway has three moderate-sized producers plus some other minor producers not mentioned. The largest producer is A/S Sydvaranger, which is 51-percent owned by the Government but operates as a private company. Next is A/S Norsk Jernverk, which is entirely Government-owned. Last is Fosdalens Bergverks A/S, which is also entirely Government-owned. The minor producers are private-sector companies. The relative importance of these largest companies can be shown by their production: Sydvaranger produced 2.36 million metric tons in 1973 (2.38 million in 1972), Norsk Jernverk's Rana mine produced 0.95 million metric tons in 1973 (0.83 million in 1972), Fosdalens Bergverks produced 0.51 million metric tons in 1973 (0.50 million in 1972), and the minor producers combined produced 0.15 million metric tons in 1973 (0.18 million in 1972). Norway is of minor importance in the U.S. market because 96 percent of its iron ore exports typically go to European destinations and because relatively small iron ore reserves will limit expansion possibilities for production and exports. Production has not been expanding during the 1971-1975 period.

Other nations

A number of countries have important government-owned iron ore industries, in addition to the ones selected for this study. 1/ Important government-owned iron ore industries that ship significant quantities of iron ore to the United States are found in Venezuela and Liberia.

1/ These countries were excluded from the 21 sample countries for reason of overall report uniformity.

The iron ore industry of Venezuela is now Government-owned and has been since the local iron ore mining subsidiaries of U.S. steel companies were nationalized in late 1974. The ore is still being sold to the former parent companies and shipped to the United States. Venezuela is planning to multiply its steel output and thus increase domestic iron ore consumption. Present capacity is 33 million metric tons, gross-weight basis, and iron ore reserves total 2.1 billion metric tons, a 60-year supply.

Many of the Liberian iron ore producers are half Government-owned. These companies are the German Liberian Mining Co. and the National Iron Ore Co.; they account for about 40 percent of total productive capacity. The LAMCO venture also has substantial Government ownership. Present capacity is 30 million metric tons, gross-weight basis, and iron ore reserves total 2.0 billion metric tons, a 65-year supply.

Appendix A

List of major government-owned industrial firms, by countries

le A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and sales in 1974

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
(OSTERREICHISHE NDUSTRIEVERWALTUNGS- KTIENGESELLSCHAFT: HE STATE HOLDING OMPANY)		100.0		2/ 89,604	2/ 5,231
	SECTOR: IRON AND STEEL			3/ 37,510	3/ 2,190
	(VOEST-ALPINE)	100.0	371	21,604	1,261
	Gebr. Bohler & Company (GBC) Vienna	100.0	371	4,030	235
	St. Egyder Eisen-und Stahlindustrie-Gesell-schaft	100.0	371		
	Gebr-Bohler & Company AG., Dusseldorf	100.0	371		
	Wiener Bruckenbau-und Eisenkostruktions-AG (WRB)	100.0	371		
	Hutte Krems Ges. m.b.h., Krems	100.0	371		
	Steirische Gussstahlwerke AG (Styria)	100.0	371		
	Ewen-Handels-Und Industrie-AG, Greinitz	99.2	371		

ee footnotes at end of table.

Table A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and sales in 1974

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
ÖIAG--Continued	SECTOR: IRON AND STEEL (Cont.)				
	Johann Einricher, Eisen - handels - AG, Klagenfurt	100.0	371		
	Schoeller - Bleckman Stahlwerke AG (SBS)	100.0	371	2,841	166
	Eisen - Und Stahl AG (ESTAG)	100.0	371		
	Karnterische Eisen - und Stahlwerks AG (KESTAG)	100.0	371		
	'RISTA' Drahtwerk Hufnagl & Company Ges. m.b.H.	75	371		
	Vereingte Osterreichische Edelstahlwerke AG	100.0	371		
	Binder & Company				
	SECTOR: COAL MINING			4/ 1,074	4/ 63
	Wolfsegg - Traunthaler - Kohlenwerks - AG (WTK)	100.0	210		
	Graz - Koflacher Eisenbahn - und Besgbaugesellschaft (GKB)	100.0	210	931	54

See footnotes at end of table.

Table A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and sales in 1974

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
IAG--Continued	SECTOR: NON FERROUS METALS			5/ 4,652	5/ 272
	Vereinigte Metallwerke Ranshofen - Berndorf	100.0	372	3,458	202
	Metallwerke Mollersdorf AG	100.0	372		
	Folienwalzwerk Brudes Teich AG, Vienna	30	372		
	Beliberger Bergwerks - Union AG (BBU), Klagenfurt	100.0	372	1,102	64
	Metallund Farben Ges. m.b. H., Vienna	100.0	372		
	Feinsand Industrie Muhlbachy Hoch Konig Ges. m.b.H., Muhlbach	50	372		
	SECTOR: MECHANICAL ENGINEERING AND SHIP BUILDING:			6/ 3,239	6/ 189
	Simmering - Graz - Pauker AG für Maschinen, Kessel - und Waggonbau (SGP)	100.0	372	2,009	117
	SGP - Vertriebsges - m.b.H., Vienna	100.0	372		
	G. Rumpel Ges. m.b.H., Vienna	100.0	372		
	Osterreichische Schiffs - werften AG (OSWAG)	100.0	372		

See footnotes at end of table.

Table A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and sales in 1974

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
ÖIAG-Continued	SECTOR: CHEMICALS AND PETROLEUM		351	7/ 39,018	7/ 2,283
	Chemie Linz AG	100.0		7,742	452
	Rigips Baustoffwerke Bad Aussee Ges. m.b.H.	33.			
	Dynamit Nobel Wien Ges. m.b.H., Vienna	50.	351		
	Interplastic - Werk Ges. m.b.H., Wels	26.	351		
	Heilmittelwerke Wien Ges. m.b.H. (HMW)	100.	351		
	Chemische Fabrik Dr. Eric Hessle Ges. m.b.H.	100.	351		
	Leopold & Company, chem. - pharm Fabrik KG.	100.	351		
	'Merx' Dunge mittel -und Chemikalienhandels Ges. m.b.H.	100.	351		
	Kurt Hirsh Ges. m.b.H., Wiener Neustadt	31.5	351		
	Petrochemie Schwechat Ges. m.b.H. (PCS)	100.	351		
	Danubia Olefin - Werke Ges. m.b.H. (DOW)	50.	351		

See footnotes at end of table.

A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock ticipation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and es in 1974

ame of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
-Continued	SECTOR: CHEMICALS AND PETROLEUM (Cont.)				
	OMV AG, Vienna	100.	353	21,933	1,280
	MARTHA - Erdol Ges. m.b.H.	100.	353	4,254	248
	ELAN Mineralovertrieb AG (KDAG)	74.	371	4,315	252
	Adria - Wien - Pipeline Ges. m.b.H. (AWP)	51.	410		
	Trans - Austria Gasleitung Ges. m.b.H. (TAG)	51	410		
	SECTOR: ELECTRICAL ENGINEERING			8/ 4,111	8/ 240
	ELIN - UNION AG fur elektrische industrie (ELIN)	100.		3,344	195
	EHT Gesellschaft fur Elektro - Heizung - stechnik m.b.H.	100.	383		
	Kabel - und Drahtwerke AG (KDAG)	92.	383		
	'Asta' Eisen - und Metal-warenerzeugungs Ges. m.b.H.	100.	383		

footnotes at end of table.

ible A-1.--Austria: List of major companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, International Standard Industrial Classification, and sales in 1974

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	International Standard Industrial Classification (ISIC)	Sales	
				1974 Foreign currency	1974 Converted to U.S. dollars 1/
				Million schillings	Millions
G--Continued	SECTOR: ELECTRICAL ENGINEERING --Continued				
	Siemens AG osterreich (SAGO)	43.6	383		
	Uber AG fur Zahler und elektrische Gerate, Vienna	100.	383		
	Siemens Bauelemente OHG (SBE), Deutschlandsberg	100.	383		
	Wiener Kabel - und Metallwerk Ges. m.b.H. (WKM)	100.	383		
	Leopolder & Sohn OGH, Vienna	99.	383		
	Hansaton Rudolf G.E. Fischer KG, Salzburg	49.	383		
	'NORMA' Messtecknik Ges. m.b.H., Vienna	35.9	383		

/ International Financial Statistics, International Monetary Fund, Jan. 1977, 1974 exchange rate - 17.130 schillings per dollar.
/ Represents the total 1974 turnover for the state holding company - OIAG.
/ Represents the total 1974 turnover for the iron and steel subsidiaries of OIAG.
/ Represents the total 1974 turnover for the coal mining subsidiaries of OIAG.
/ Represents the total 1974 turnover for the nonferrous metal subsidiaries of OIAG.
/ Represents the total 1974 turnover of the mechanical engineering and shipbuilding subsidiaries of OIAG.
/ Represents the total turnover of the chemical and petroleum subsidiaries of OIAG.
/ Represents the total turnover of the electrical engineering subsidiaries of OIAG.

ource: Jane's Major Companies of Europe - 1976.

A-2.--Belgium: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participa-
, and exports exceeding $1 million per year ratio of government-held shares to total common stock shares, type of industry,
rnational Standard Industrial Classification, and sales in 1974

Name of company	Subsidiaries	Ratio of government held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Cash flow	
					1975-76 Foreign currency	1975-76 Converted to U.S. dollars
		Percent			Million Francs	Millions
é nationale vestissement (S.N.I.)						
	Goossens Gebroeders, N.V.	25 or more		321	23.245	.616
	T.A.S. S.A.	25 or more		321	13.432	.356
	Westhoek Spinning, S.A.	25 or more		321	4.484	.118
	Samuel Moore Europe, S.A.	25 or more		356	4.017	.106
	Illochroma			351	35.948	.953
	UCB-FTAL S.A.			351	97.869	2.595
	S.A. Montefiore	25 or more	Non-ferrous metals	372	4.374	.116
	Ateliers Belges Reunis- A.B.R. S.A.	25 or more	Metal mfg. Plastic mfg.	36 38	28.2	.748
	Electricité et electro-mecanique, S.A.	25 or more	Electric equipment manufacture	383	18.940	.502
	Etablissements Lachaussee	25 or more	Design and construc-trion of machinery		3,813	101.1
Belge, S.A. (Dutch ned)	Fabelta (51 percent Belgian owned)	25 or more	Mfg. synthetic fibers	32		.848
. Lambert		100	Luxury glass works manufacture	362		9.60

n average of 1975 and 1976 Belgian francs per U.S. dollar of 37.7 used as an exchange rate. Rates are published in the Interna-
Financial Statistics, IMF, March 1977 vol. XXX.

ce: Compilation by staff or U.S. International Trade Commission using data supplied by American Embassy, Brussels.

Table A-3.--Brazil: List of companies that are government-owned or have at least 25 percent government stock participation, company's rank by sales, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974

Name of company	Company's national rank by sales	Ratio of government-held shares to total common stock shares 1/	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 2/
		Percent			Million cruzeiros	Millions
Cia Vale do Rio Doce (CVRD)	9	C	Mining-Iron ore	230	3,906.18	525.38
Artex S.A. Fab. de Artefatos Texteis	175	P	Textiles	321	479.77	64.53
Petroleo Brasileiro S.A. Petrobras	1	C	Chemicals	351	27,896.09	3,617.50
Orinex S.A. Org. Nac. de Imp. e Exp.	401	C	Chemicals	351	243.79	32.79
Cia Nacional de Alcalis	424	W	Chemicals	351	231.13	31.09
Petrofertil Petrobras Quimica Fert S.A.	877	C	Chemicals	351	114.89	15.45
Cia Siderurgicas de Mg. S.A. Usiminas	15	C	Metals (iron and steel)	371	3,475.06	467.39
Usinas Siderurgicas de Mg. S.A. Usiminas			Metals (iron and steel)	371	2,333.48	313.85
Cia Siderurgicas Paulista Cosipa	30	C	Metals (iron and steel)	371	1,756.99	236.31
Cia Acos Especiais Itabira Acesita	136	C	Metals (specialty steel)	371	580.52	78.08
Embraer Emp. Bras. de Aeronautica	214	C	Metals	371	424.40	57.08
Cia Siderurgica de Mogi das Cruzes Cosim	242	C	Metals (iron and steel)	371	370.07	49.77
Material Ferroviario S.A. Mafersa	348	C	Metals	371	277.88	37.38
Metalflex S.A. Ind. e Com.	369	P	Metals	371	265.20	35.67
Usina Sid. da Bahia S.A. Usiba	641	C	Metals	371	153.34	20.62
Bicicletas Calio S.A.	734	P	Metals (bicycles)	371	134.66	18.11
Cia Usinas Nacionais	423	C	Food	311	232.51	31.27
Cia Riograndense Laticinios	880	W	Food	311	114.50	15.40
Realcafe Soluvel du Brasil S.A.	988	P	Food (coffee)	311	101.83	13.70
Artex S.A. Fab. de Artefatos Texteis	175	P	Textiles	321	479.77	64.53
Coperbo Cia. Pemambucana de Borr. Sintet	496	C	Rubber & hides	355	196.80	26.47
Bergamo S.A. Preds. Manufs de Madeira	652	P	Wood products	331	151.26	20.35
Celulose Nipo-Brasileria S/A			Pulp	331		
Rio Grande Companhia de Cellulose de Sol (RIOCEL)			Pulp	331		
Cia Siderurgia Nacional (CSN)			Iron and steel	331		

1/ W = Wholly owned by the federal or state government.
C = Controlled by the federal or state government.
P = Government is a minority shareholder.

2/ 1974 Exchange rate = 7.435 cruzeiros per dollar.

irticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1975

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Canadian dollars	Millions
dian Arsenals mited						
dian National (West Indies) eamships Limited						
nce Construction mited						
dian Saltfish rporation						
Canada Inc.						
ium Canada Ltd.						
rado Aviation nited						
rado Nuclear nited		100.0	Uranium refining, nuclear fuels production	3511		
eaway Interna-ional Bridge poration, Ltd.						
Canada globe Canada la Development Corporation						
	Polysar Ltd.	100.0	Rubber, latex, plastics, chemicals (styrene, butadiene)	3513 3511	392.1	385.8
	Polysar's subsidiaries in Canada					
	Kayson Plastics Div.					
	Com-Share Limited		Computer services			
	General Plastics Co. Ltd.					
	Trent Rubber Services Ltd.					

Table A-4.--Canada: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Canadian dollars	Millions
Canada Development Corp. (Cont.)	Polysar's subsidiaries in the United States					
	Mammoth Plastics Inc.					
	Polysar Inc.					
	Poly Plastics Inc.					
	Polytherm Division					
	Decorative Components Division					
	Polysar Rubber Services Inc.					
	Solar Chemical Corporation					
	Resin Division					
	Polysar Latex Division					
	Polysar's subsidiaries and affiliates in Europe and the rest of the world					
	Bellaplast GmbH, Fed. Rep. Germany					
	Bellaplast Nederland B.V., Netherlands					
	Com-Share Limited, England					
	Distribudora Adanac, Venezuela					
	Komfortplast GmbH, Fed. Rep. Germany					
	Polysar Australia Pty. Ltd., Australia					
	Polysar Belgium N.V., Belgium					
	Polysar Deutschland GmbH, Fed. Rep. Germany					
	Polysar De Venezuela, Venezuela					
	Polysar Do Brazil Produtos Quimicos Ltda., Brazil					
	Polysar Europa S.A., Belgium					
	Polysar France S.A., France					

Table A-4.--Canada: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
					Million Canadian dollars	
Canada Development Corp. (Cont.)	Polysar's subsidiaries and affiliates (Cont.)	Percent				Millions
	Polysar GmbH, Fed. Rep. Germany					
	Polysar Handelmaatschappij B. V., Netherlands					
	Polysar International S.A., Switzerland					
	Polysar Italiana S.P.A., Italy					
	Polysar Skandinaviska A.B., Sweden					
	Polysar Technical Service Centre N.V., Belgium					
	Polysar (U.K.) Limited, England					
	Societe Francaise Polysar, France					
	Bellaplast Maschinenbau GmbH, Fed. Rep. Germany					
	Bellaplast Maschinenverkaufs A.G., Switzerland					
	Bellaplast Kunststoffverpack-ungenesmbH, Austria					
	Hules Mexicanos S.A., Mexico					
	Petrosar Limited, Ontario, Canada					
	Bellaplast Kunststoffverpack-ungen GmbH, Switzerland					
	Other CDC subsidiaries:					
	Texasgulf Inc.	30.4	Minerals, oil, gas, metals, agricultural chemicals	220, 351		
	Canadair Ltd.					
	Ventures West Capital Ltd.	49.0				
	Innocan Investments Ltd.	40.0				
	Venturetek International Ltd.	30.6				

able A-4.--Canada: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Canadian dollars	Millions
anada Development Corp. (Cont.)	Connlab Holdings Ltd.	100.0				
	Connlab's subsidiaries					
	Connaught Laboratories	100.0	Biological products			
	A/S Dumex	75.0	Pharmaceuticals	3522		
	Omnimedic Inc.	70.0	Pharmaceuticals	3522		
	Raylo Chemicals Ltd.	70.0	Fine Chemicals			
e Havilland Aircraft		100.0	Airframe manufacturing	3845		
adio Engineering Products Ltd.						
elesat Canada			Satellite communication	720		
narctic Oils, Ltd.		45.0	Arctic oil and gas exploration	220		
derurgie du Quebec (Sidbec)			Owns the steel operations of Dominion Steel and Coal in Quebec and Ontario	371		
neral Investment Corp.		Majority interest	Holding company			
	Marine Industries, Ltd.	----do----------	Engineering and shipbuilding	3841, 8324		
minion Steel (Sydney Steel mill, Nova Scotia)		100.0	Steel	371		
sco--		20% owned by Province of Saskatchewan				

:le A-4.--Canada: List of companies and subsidiaries that are government-owned or have at least 25 percent goverment stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Canadian dollars	Millions
s.. - Sydney Steel		A Crown Corp. 100% owned by Nova Scotia.		371		
..irtone Sound		Majority interest by the province of Nova Scotia	Electronics	383		
..uterium of Canada, Ltd.		----do----------	Heavy water	351		
..lumbia Cellulose		79% (province of British Columbia)	Pulp and paper	341		
..aheen Natural Resource Corp.		Minority interest by province of Newfoundland	Petroleum refinery (valued at C $175 million)	353		
..nadian Javelin Ltd.		Majority interest	Linerboard plant (valued at C $150 million)	341		
..urchill Forest Industries		Majority interest by the province of Manitoba	Pulp and paper	341		
etrosar Limited (Petrosar)		40% (Polysar) 20% (Canada Development Corp.) 2/	Petrochemical refinery	353		

Table A-4.--Canada: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Canadian dollars	Millions
Donohue-St. Felicien Inc. 3/			Bleached kraft paper			
Labrador Linerboard Ltd. 4/			Linerboard			
Canadian Cellulose Co., Ltd. 5/			Bleached softwood sulphate pulp			
Ocean Falls Corp. 6/			Numerous paper grades			
Eurocan Pulp and Paper Co., Ltd. 7/			Pulp, paper and board			
Papier Cascade Inc. (Cabano) 8/			Corrugating medium			
Manitoba Forest Development Corp. 9/			Pulp, kraft paper			
Tembec Forest Products 10/			Dissolving pulp, sulphate paper			

1/ International Monetary Fund, International Financial Statistics, January 1977. The rate of 1.0164 Canadian dollar per U.S. dollar is used (line ae).

2/ American Chemical Society meeting, 1975, Chemical Marketing and Economics Section, paper by Robert B. Dahl, Business Development, Plastics, Dow Chemical of Canada, Ltd. According to Mr. Dahl, Petrosar is a joint venture of Polysar, Union Carbide of Canada, Limited and Dupont of Canada, Limited. The Polysar project will cost about $430 million and is due on-stream in 1977. The project will generate a revenue in excess of $700 million per year.

3/ May not be operation yet. Government supplied 1/6 of construction funds.

4/ Acquired by government about a couple years ago.

5/ Stephenville, NF.

6/ British Columbia owned.

7/ British Columbia owned.

8/ Enso-Gutzeit, a government controlled Finnish company is 50% owner.

9/ Quebec. Began operation in 1976.

10/ Quebec owned.

Table A-5.--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
/ Alko Ab		100.0	Production of alcoholic beverages, beer, wine, and liquor	313	1,223.7	317.8
	Kantaravintolat Oy	99.99			47.9	12.4
	Oy Yhtyneet Ravintolat Ab	99.99			124.6	32.4
ıso-Gutzeit Osakeyhtio		76.7 (shares held by Finnish state, National Pensions Institute, and the Bank of Finland)	Pulp, paper, and timber	331 341 351	2,069.5	537.5
	Finnish subsidiaries and affiliates:					
	Oy Abborfors Ab	52.3			1.6	0.4
	Enso-Talo Oy	100.0			0.06	0.02
	Enso-Valmet Oy	50.0			4.2	1.1
	Oy Finnlines Ltd.	100.0			22.3	5.8
	Kuurnan Voima Oy	55.7			3.8	1.0
	Marivienti Oy	100.0			150.7	39.1
	Pamilo Osakeyhtio	60.5			2.7	0.7
	Suomen Liimapuu Oy	70.0			2.5	0.6
Finnair		100.0	Air transport.		n.a.	n.a.

See footnotes at end of table.

ible A-5.--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
so-Gutzeit Osakeyhtio (Con.)	Finnish subsidiaries and affiliates:					
	Vakuutusosakeyhtio Pankavara	100.0				
	Oy Blomberg Ab	32.4			3/ 23.6	6.1
	Oy A.E. Erickson Ab	31.2			3/ 9.3	2.4
	Finnish Chemicals Oy	33.3			4/ 134.9	35.0
	Oy Kotka Stevedoring	27.8			36.3	9.4
	Kotka Woodexporters	33.3			1.7	0.4
	Sakkivaline Oy	25.0			10.4	2.7
	Oy Vaasa-Umea Ab	35.2			3/ 36.5	9.5
	Oy Akerman Ab	30.5			17.6	4.6
	Foreign subsidiaries and affiliates:					
	Eurocan Pulp and Paper Co. Ltd., Vancouver, Canada	50.0				
	Boise-Griffin Steamship Co., Inc., New York	42.5				
	Enso AG, Zurich	95.0				
	Enso Italia S.P.A., Milan	100.0				
	Enso Marketing Company Ltd, London	100.0				

See footnotes at end of tables.

Table A-5--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
ıso-Gutzeit Osakey-htio (Cont.)						
	Foreign subsidiaries and affiliates (cont.)					
	Enso Trading Handelsgesellschaft m.b.H., Vienna	100.0				
	Enso Trading AB, Stockholm	100.0				
	Finntransit Ltd, Felixstowe	100.0				
	Speter S.p.A., Milan	100.0				
ɛmira Oy		100.0 (shares held by the Finnish state and the National Pensions Institute)	Synthetic fibres and yarns, titanium dioxide, ferrosulphate, explosives, firearms, inorganic acids, industrial chemicals, fertilizers, pesticides, personal safety equipment	321 322 351	1,584.0	411.4
	E Priha Oy	50.0			74.1	19.2
	Fermion Oy	50.0			17.5	4.5
	Kemira Svenska AB	100.0	Kemira Oy's sales firm	610 620	0.3	0.08
	Nestesailiot Oy 5/	33-1/3			1.0	0.3
	Oumet Oy	25.0			18.3	4.8

See footnotes at end of tables.

ble A-5.--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
ira Oy (Cont.)						
	Stymer Oy 6/	25.0			29.9	7.7
	Tietorivi Oy	50.0			1.8	0.5
	Tikurilan Varitehtaat Oy	99.99			125.7	32.6
	Viljavuuspalvelu Oy	80.66			2.5	0.6
	Sateri Oy	Majority interest				
e Oy		100.0 (shares held by the Finnish state and 2 state-companies)	Importation and sales of oil, natural gas; refineries, shipping, production of fuel oils, motor fuels	220 712 353 610 620	3,885.9	1,009.3
	Ajoksen Oljy Oy	98.0			1.1	0.3
	Nestepalvelu Oy	98.0				
	Neste Exploration Ltd.	100.0				
	E-oljyt Oy	50.0			433.4	112.6
	Kesoil Oy	49.9			604.7	157.1
	Finngulf Oy	33-1/3				
	Tehokaasu Oy	40.0			23.4	6.1
	Pekema Oy	41.5			224.4	58.3

ee footnotes at end of table.

e A-5.--Finland: List of companies and subsidiaries that are government-owned or have [illegible] participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
e Oy (Cont.)						
	Vaskiluodon Kalliovarasto Oy	50.0			1.2	0.3
kumpu Oy		100.0 (shares held by the Finnish state and the Social Insurance Institution)	Mining (pyrite and lead concentrate); production of ferro-chromium, sulfur, iron pyrite residues and purple ore, cobalt, zinc, cadmium, cathode nickel, cathode copper, gold, silver, selenium, and electric energy.	2902 2302 410	7/ 8/ 886.0	230.1
aruukki Oy		99.5 (shares held by the Finnish state and 2 state-companies)	Iron and steel industry, semi-finished products, mining and milling production (iron ore, vanadium pentoxide)	2301 2302 3710	9/ 833.1	216.4
	Oy Etnaror Ab		Steel pipe and tube production	3710		
Suomen Autoteollisuus		10/ 69.5	Manufactures chassis for medium and heavy trucks, for buses, cross country vehicles, and terminal trucks. Components for trains and hydraulic motors, distributor for British Leyland and Rolls-Royce cars and engines in Finland	3843 610 620	11/ 272.2	70.7

able A-5--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
lmet Oy		100.0 (shares held by the Finnish state, the National Pensions Institute, and the Bank of Finland)	Machines for wood working and processing industries, shipbuilding, materials handling equipment and tractors, instruments, meters, arms, automatic lathes.	3823	12/1,101.4	286.1
	Oy Saab-Valmet AB Oy	50.0	Produces SAAB automobiles	3843	380.3	98.8
	Oy Scan-Auto AB	50.0	Produces SAAB cars and Scania trucks	3843	867.6	225.4
	Oy Datasaab-Valmet AB	50.0	Minicomputers	383	32.5	8.4
	Valmet Traktor AB	100.0	Valmet Oy's marketing company in Sweden	610 620	13/	
	Valmet do Brasil S.A	55.2	Tractor sales in Brazil	610 620	14/ 410.0	106.5
	Oy Laivateollisuus Ab	100.0	Shipbuilding	3841	99.0	25.7
	Oy M. Fuchs Ab	100.0	X-ray equipment and generators	3832	11.7	3.0
	Oy Rontgentekno Ab	100.0	Sales of examination equipment for hospitals	620	13.3	3.5
	Metrovaunut		Mass transit cars	3843		

ee footnotes at end of table.

ble 5.--Finland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales 1/	
					1975 Foreign currency	1975 Converted to U.S. dollars 2/
		Percent			Million marks	Millions
met Oy (Cont.)						
	Velsa Oy	100.0	Tractor trailers, snowmobiles, frame parts for wood harvesting machines	3843 3823	25.2	6.5
tsiluoto sakeyhtio		100.0 (shares held by the Finnish state and the National Pensions Institute	Lumber, pulp, and paper	331 341	15/ 616.4	160.1
	Kemi Oy	25.0			378.9	98.4
	Oy Kemi Federation Stevedores Ltd.	30.0			3/ 6.7	1.7
	Oulu Osakeyhtio	49.0			389.1	101.1
kki Oy		100.0 (shares held by the Administration of Post and Telegraphs of Finland, Valmet Oy, and the State Railways)	Production of vehicle chassis buses, vans, and special vehicles	3843	16/ 22.5	5.8
eva Oy		100.0	Telecommunications.			
co Oy	State established firm with joint venture--Salora Oy (private) and Hitachi, Japan owned.	60.0	Color TV picture tubes and components.			

ee footnotes on following page.

Footnotes for Table A-5
Finland

1/ Includes export sales. The sales figure (turnover) includes gross sales less rebates, indirect taxes, and other correction items.
2/ International Monetary Fund, International Financial Statistics, January 1977. The rate of 3.8500 marks per U.S. dollar (line ae) is used.
3/ Turnover for the period April 1, 1974 to March 31, 1975.
4/ Turnover for the period October 1, 1974 to September 30, 1975.
5/ Neste Oy (100 percent state-owned) also holds a 33-1/3 percent share.
6/ Neste Oy (100 percent state-owned) also holds a 25 percent share.
7/ Corporate export sales were 593 million marks (67 percent of total sales).
8/ Of total gross sales of 915.8 million marks, the contribution by each department was: Mining and Metallurgical Division (47.1 percent), Copper and Copper Alloy Division (34.1 percent), Stainless Steel Division (9.6 percent), and Technical Export Division (9.2 percent).
9/ Export sales accounted for 20.6 percent of total sales. About two-thirds of the exports went to EFTA countries.
10/ British Leyland International Ltd. holds 20.0 percent of the shares; British Leyland is 94 percent owned by the British government.
11/ Export sales were 17.8 million marks, or 6.5 percent of the total, in 1975.
12/ Export sales accounted for 34.2 percent of the total.
13/ Sales in 1975 totaled 75 million Swedish crowns ($17 million).
14/ The company accounted for 26 percent of all 4-wheel tractor sales in Brazil in 1975.
15/ Export sales were 556.4 million marks, or 90.3 percent of the total, in 1975.
16/ Export sales were 5.2 million marks, or 23.1 percent of the total, in 1975.

Source: The State Owned Companies Advisory Board, Helsinki, Finland, State Owned Companies in Finland, 1975, and Business International Corp., "State Role in Finnish Industry," April 1976.

A-6.--France: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and average annual gross assets, 1971-1973

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Average annual gross assets, 1971-1973	
					Foreign currency	Converted to U.S. dollars 1/
		Percent			Million francs	Millions
anatory note A 2/ d B 3/						
e nationale des ines Renault (R.N.U.R.)	Saviem (89.6 %) - trucks	100	Automotive	3843	5,539	24,618
	Aciers-fins de L'Est- (S.A.F.E.) (86.7%) - steel			3710		
	S.E.R.I. (95.9%) - engineering					
	Societe Nouvelle de Roulements (99.9%) S.N.R. (bearings)			3843		
	Societe Bretonne de Fonderie et de Mecanique SBFM	Majority interest	Steel	3710	45	200
	Compagnie des Produits Industriels de l'Ouest C.P.I.O.	Majority interest				
	Societe Mecanique d' Irigny - S.M.I.	Majority interest	Machine tools	3811		
S. (H. Er ault- ma Ratier- rest			Machine tools			
eté des Acieries e Temple - S.A.T.						
France des troles (CFP)						

footnotes at end of table.

ble A-6.--France: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and average annual gross assets, 1971-1973, continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Average annual gross assets, 1971-1973	
					Foreign currency	Converted to U.S. dollars 1/
		Percent			Million francs	Millions
arbonnages de France (CdF)	Societe chimique des charbonnages (S.C.C.)	Majority interest	Chemicals	3511	4/ 540	
itreprise minere et chimique (E. M. C.)	Mines de Potasse d'Alsace	Majority interest	Mining chemicals	3511		
	Azote Produits Chimiques	Majority interest			2,897	12,879
	Societe commerciale des Potasses et de l'Azote (SCPA)	Majority interest	Fertilizers	3512		
istitut national de recherche chimique appliquee (IRCHA)		Majority interest	Chemicals	3511		
ffice national inter-professionel des cereales (ONIC)		Majority interest	Agriculture	111		
onds d'orientation et de regularisation des marches agricoles (FORMA)		Majority interest	Agriculture	111	5/ 4,397	19,543

ee footnotes at end of table.

ble A-6.--France: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and average annual gross assets, 1971-1973, continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Average annual gross assets, 1971-1973	
					Foreign currency	Converted to U.S. dollars 1/
		Percent			Million francs	Millions
S.N.P.A.	L'Ammoniac Sarro - Lorrain A.S.L.	-	Mining, chemicals	3511	-	-
	ERAP - plastics		Plastics	3513		
	ELF - Aquitaine		Ethylene production	3513		
Societé tionale des Poudres et Explosifs (S.N.P.E.)	Celtite		Explosives, gasoline	35		
	Davey-Bickford-Smith, & Co.	80% or more	Synthetic chemical products			
	Societé Francaise des Explosifs et la S.A. des Poudres de surete		Plastics pyrotechnical dispositions "ingenierie" research			
rvice d' Exploitation des Tabacs et Allumettes		80% or more	Tobacco, matches	314		
te: 0.6 percent of services industry in France is government-owned.						
ıompson, CSF			Computers			

ee footnote at end of table.

able A-6.--France: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and average annual gross assets, 1971-1973, continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Average annual gross assets, 1971-1973	
					Foreign currency	Converted to U.S. dollars 1/
		Percent			Million francs	Millions
omic Energy: Commissariat A L'Energie Atomique	Compaznie internationale de Services en information (C.I.S.I.)	40-80%	Atomic energy research		34,722	154,322
	Etude et Fabrication des circuits integres speciaux (E.F.C.I.S.)		Integrated circuitry	38		
	Societé d'ingenierie Technicatome		Engineering			
ciete Industrielle des Minerais de l'Ouest (SIMO)				21	79,314	352,513
mpagnie Francaise des Minerais d'uranium (C.F.M.U)			Uranium mining	23	40,800	181,336
ECMA (Societe Nationale d'etude et de construction de moteurs d'aviation)		47.9 (14.6%-privately owned; 37.5% foreign owned)	Airplane motor construction	3845	912	4,053
M			Electrical			
lsthom-Group						
roy-Somer						
amont-Sneider						

e footnotes at end of table

Table A 6. France: List of companies and subsidiaries [illegible] participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and average annual gross assets, 1971-1973, continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Average annual gross assets, 1971-1973	
					Foreign currency	Converted to U.S. dollars 1/
		Percent			Million francs	Millions
Societe Nationale Industrielle Aerospatiale		Majority interest	Aeronautical	3845	2,797	12,431
Etablissements Saint-Charmond Granat		Majority interest	Aeronautical	3845	17	77
Societe d'Exploitation et de Constructions Aeronautiques (S.E.C.A.)		Majority interest	Aeronautical	3845	9	40
Electronique Aerospatiale (EAS)		Majority interest	Aeronautical	3845	6	29
Societe de Construction d'Avions de Tourisme et d'Affaires (SOCATA)		Majority interest	Aeronautical	3845	21	97
Societe Girondine d'Intretien et de Reparation (SOGERMA)		Majority interest	Aeronautical	3845	35	157
Societe Charentaise d'Equipements Aeronautiques (SOCEA)		Majority interest	Aeronautical	3845	7	31

1/ Exchange rate taken from International Financial Statistics, IMF, Jan. 1977 (line ac) is French francs 4.4445 = $1.

2/ The state owns or has holdings in about 120 companies, with about 800 subsidiaries. According to the Minister of France, in 1975 state-owned firms accounted for 7 percent of all employed persons and 20 percent of capital investment in France. In 1972 state-owned companies accounted for 40.2 percent of passenger car production, 95.5 percent of coal mining, 56 percent of banking deposits, 80.5 percent of electric power production, 99 percent of cigarette production, and 23 percent of oil refining.

The state also strongly influences private companies by granting financing, tax concessions, and other types of assistance. For example, in 1974, companies agreeing to increase exports by fixed amounts could gain access to credits on favorable terms, various kinds of financial assistance, exemption from price controls (in 1975), research aid or other favors in return.

3/ Government-owned companies in France producing electrical energy, transport, communications; credit-granting institutions, banks, and insurance companies will not be listed at this time because these companies generally do not export. Information on the above does exist and is available to the Commission upon request, by the staff.

4/ Capital.

Table A-7.--Great Britain: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974

Name of company 3/	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. collars 1/
		Percent			Billion pounds	Billion
lational Enterprise Board (NEB)--------	4/ Reed & Smith, Ltd. NEB owns 30 percent		Holding company for equity shares owned by state.			
			Paper			
ritish Steel Corp.--		100	Steel (responsible for 2/3 United Kingdom's output.	371	2/ 2.0	4.697
ost Office----------		100	Postal----------		2/ 4.9	11.508
ational Coal Board--		100	Energy----------	354	2/ 0.6	1.409
ritish Gas----------		100	Energy----------	353	2/ 2.2	5.167
ritish Railways-----		100	Transport----------		2/ 0.9	2.114
ational Freight-----		100	Transport----------		2/ 0.2	0.470
ational Bus---------		100	Transport----------		2/ 0.2	0.470
ondon Transport-----		100	Transport----------		-	
olls Royce----------		5/ 100	Automobiles, aero-engine.	3843 3845		
arland and Wolff----		100	Shipbuilding----------	3841		
able and Wireless---		100	Telecommunications equipment.	3832		
hort Brothers-------		100	Aircraft mfg.---------	3845		
ritish Petroleum----		49	Oil----------	3530		
ritish Leyland------		94	Automobiles----------	3843		
TM----------	KTM represents a merger between British Marwin Machine Tools and United Kingdom's subsidiary of United State's Kearny and Trecker.	50	Machinery, tools------	38		
lfred Herbert Co.---			Machine tools---------			
ppledore Ship- builders, Ltd.-----		100	Shipbuilding----------	3841		
eagle Aircraft, Ltd.----------		100	Aircraft, Mfg.--------	3845		
ritish Nuclear Fuels, Ltd.----------		100	Nuclear Fuel Mfg.-----	35	6/ 0.073	0.171

See footnotes at end of table.

ble A-7.--Great Britain: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company 3/	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
Yarrow Shipbuilders, Ltd.		100	Shipbuilding	3841		
John Hastie & Co., Ltd.		63				
Marconi			Computers			
British Broadcasting Corp. (BBC)			Telecommunications			
British National Oil Co.		100	Petroleum (North Sea Explor).			
Harland & Wolff Shipbuilding & Engineering Co., Ltd.		52	Shipbuilding	3841		
National Nuclear Corporation		35	Nuclear energy mfg.	35		
North East Coast Ship Repairers, Ltd.		74	Ship repair	3841		
Upton Villiers Triumph, Ltd.		48				
Biochemical Centre, Ltd.		100				
BSC (Realisations), Ltd.		100				
Sunderland Shipbuilders, Ltd.		100	Shipbuilding	3841		
Thornycroft-Pedigree, Ltd.		95				
Upper Clyde Shipbuilders		49	Shipbuilding	3841		
General Electric, Ltd.			Electrical			
Baker-Siddeley			Electrical			
Ferranti, Ltd.			Electrical			
C.A. Parsons			Electrical			
Association Electric Industries			Electrical			
Data Recording Instrument Co., Ltd.			Scientific Instruments.			

Table A-7.--Great Britian: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

1/ United Kingdom pound = $2.3485 U.S. dollars, as noted in International Financial Statistics, IMF, January 1977 (line ac).
2/ Assumed to be 1974 sales figure.
3/ Source for data: U.S. Department of State, IL&T, 1976.
4/ In Britain, the state owns 90 percent of crude steel-making capacity; a couple of shipyards; all aero-engine capacity (through Rolls Royce), a minority holding in ICL, the biggest computer company outside the United States; 49 percent of British Petroleum; plus investments in engineering companies. Source: European Studies, 12, 1971.
5/ Or substantial equity holdings.
6/ 0.073 million pounds = 1971-1973 yearly average gross assets.

Classification, and sales in 1973.

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Thousands of Pounds	Thousands
nstitute of Public Administration 2/	B&I Line (British and Irish Steam-packet Company Ltd.)	100.0	Shipping (passenger and freight between Ireland and Britain)	712	12,944	30,069
	The Irish Peat Development Authority	100.0	Manufacture of peat for energy production-about one-quarter of Ireland's energy is derived from peat	290	14,329	33,444
	Irish Sugar Co., Ltd.	100.0	Foodstuffs (sugar, vegetables, potatoes) and fertilizers	311, 290	40,635	94,842
	The Dairy Disposal Company Ltd.	100.0	Bacon factory and butter wholesaling	311,	30,112	69,950
	Electricity Supply Board 3/	100.0	Electricity generation ownership of some fisheries (eels, salmon, trout)	410, 130	74,079	172,900
	Foir Teoranta	about 100.0	Provide assistance to industrial concerns in financial difficulty	810		
	Irish Shipping Ltd.	about 100.0	Shipping	712	10,237	23,893
	Irish Steel Holdings Ltd	100.0	Steel manufacture	371	14,007	32,692
	Nitrigin Eireann Teoranta	100.0	Manufacture of nitrogenous fertilizers, anhydrous ammonia, and other chemicals	351	13,999	32,674

1/ International Monetary Fund, International Financial Statistics, January 1977. The conversion rates in 1973 and 1974 were 2.323 U.S. dollars per pound and 2.346 U.S. dollars per pound, respectively. For companies reporting sales on a 1973-74 basis, an average rate (2.334 U.S. dollars per pound) was derived from the 1973 and 1974 conversion rates.

2/ According to the 1974 Administration Yearbook and Diary "state-sponsored boards and companies are defined as autonomous public bodies, other than universities, which are neither temporary in character nor purely advisory in their function, most of whose staff are not drawn from the civil service, and to whose board or council the Government or Ministers in the Government appoint directors, council members, etc.

3/ Since the company's main activity is electricity generation, it does not generally compete with U. S. companies. Competition may result from the fisheries operation.

Source: Institute of Public Administration, Dublin, Ireland, 1976 Administration Yearbook and Diary.

ble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
dustrial Reconstruction Institute (IRI), STET Group (Societa Finanziaria Telefonica p. A.)		57.7	Electrical and telephone	383,720	-	-
	SIT Siemens (Societa Italiana Telecomunicazioni Siemens, S.p.A.)	100	Telephone equipment	383,720	248,000	$382
	Italtel	100	Export of SIT Siemens' products	383,720		
	Selenia-Industrie Elettroniche Associate S.p.A.	93.8	Electronics	383		
	USEA - Ufficio Studi Elettro-acustici-S.r.I.	50	Electronics for underwater use	383	50,800	78
	Selenia Venezuela S.p.A.	100	Electronics	383		
	SGS-ATES, Componenti Elettronici S.p.A.	60	Electronics	383	47,600	73
	SGS-ATES, International S.A.	80-100	Foreign representation of SGS-ATES	383		
	Elettronica San Giorgio ELSAG-S.p.A.	100	Electronics	383	10,500	16
F.I.R.S. 16/	Suber Sarda		Cork	331		

See footnotes at end of table.

ble A-9.--Italy. List of companies and subsidiaries that are government ...
participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974 --Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales: 1974 Foreign currency	Sales: 1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
I (Cont.)						
STET (Cont.)	Unidata S.p.A.	50		–	–	–
	Italdata	50		–	–	–
	CSELT (Centro Studi E Laboratori Telecomunicazioni S.p.A.	100	R and D -electronics	932	–	–
	SIRTI (Societa Italiana Reti Telefoniche Interurbane S.p.A.	50	Telecommunications	383,720	–	–
	SEIRT (Sociedad Espanola Instalaciones Redes Telefonicas	50	Telephone installation	720	–	–
	SIRI International S.A.	100		–	–	–
	S.T.S. S.p.A. - Consorzio Per Sistemi Di Telecomunicazioni Via Satelliti	66.66	Telecommunications	383,720	–	
	ILTE - Industria Libraria Tipografica Editrice S.p.A.	100	Printing	342	–	–

See footnotes at end of table.

Table A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
IRI (Cont.)						
STET (Cont.)	ILTE France Imprimeurs S.A.R.L.	97.75	Publishing in France	342	-	-
	Fonit-Cetra S.p.A.	99.99	Musical records, cassettes, cartridges	383	-	-
	SAIAT	100		-	-	-
	Consultel	70		-	-	-
Finmare (Societa Finanziaria Marittima p.A.)		75.45	Shipping	712	2/ 192,188	2/ 296
	Italia S.p.A. Di Navigazione	100	Shipping - American routes	712	2/ 62,835	2/ 97
	Italmar - S.A. Brasileira De Empresas Maritimas	100	Shipping - Brazil	712	-	-
	Italmar - S.A. De Empresas Maritimas	100	Shipping - Argentina, Bolivia, Chile, Paraguay, Uruguay	712	-	-
	S.A.E.M.A.R. - S.A. Espanola De Empresas Maritimas	100	Shipping - Spain	712	-	-

See footnotes at end of table.

articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial lassification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
nmare (Cont.)	Suisse Italie S.A.	100	Shipping - Switzerland	711,712	-	-
	Italian General Shipping Ltd.	100	Shipping - Great Britain	712	-	-
	Lloyd Triestino S.p.A. Di Navigazione	100	Shipping -non-Mediterranean routes in Africa, Asia, and Australia	712	2/ 74,310	2/ 114
	Adriatica S.p.A. Di Navigazione	100	Shipping - eastern Mediterranean routes	712	2/ 20,084	2/ 31
	Tirrenia S.p.A. Di Navigazione	100	Shipping - western Mediterranean and northern European routes	712	2/ 31,983	2/ 49
	Toremar	51		-	-	-
	Siremar	51		-	-	-
	Caremar	51		-	-	-
	Almare	51		-	-	-
	Continentalmare	51		-	-	-
	Sovitalmare	51		-	-	-

ee footnotes at end of table.

le A-9--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial lassification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
Inmare (Cont.)	S.I.R.M. - Societa Italiana Radio Marittima Per Azioni	68.79	Marine communication equipment	383	-	-
	Societa Di Assicurazioni Gia Mutua Marittima Nazionale S.p.A.	99.54	Shipping insurance	820	-	-
	S.A.S.A. - Sicurta Fra Armatori S.p.A.	86.74	Marine and aircraft insurance	820	-	-
Insider p.A. (Societa Finanziaria Siderurgica)		54.99	Iron and steel	-	2,708,400	4,173
	Italsider S.p.A.	79.32	Pig iron, crude steel	371	-	-
	Acciaierie Di Piombino S.p.A.	50	Steel products, rails	371	-	-
	Dalmine S.p.A.	55.1	Metal and plastic pipes	371,356	-	-
	Tubificio Dalmine Italsider	100		-	-	-

participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
I (Cont.)						
nsider (Cont.)	Terni - Societa Per L' Industria E L'Elettricita - S.p.A.	70.02	Raw steel	371		
	Terninoss Acciai Inossidabili S.p.A.	50.0	Steel sheets, stainless steel	371		
	Cementir - Cementerie Del Tirreno S.p.A.	77.11	Cement production (Portland, white)	369	56,200	87.
	Sidermar S.P.A. - Societa Di Armamento Noleggi E Agenzia Marittima	100.0	Sea transport for Finsider	712		
	A.T.B. - Societa Per Azioni Acciaieria E Tubificio Di Brescia	50.0	Crude steel	371		
	C.M.F. Costruzioni Metalliche Finsider S.p.A.	100.0	Construction, study, design, and sale of steel structures	500		
	Ponteggi Dalmine Societa Per Ponteggi Tubolari E Strutture Metalliche p.A.	100.0	Construction	500		
	Andamios Tubulares Dalmine De Mexico	90.0	Construction - Mexico	500		
	Andamios Tubulares Dalmine De Venezuela S.A.	100.0	Construction - Venezuela	500		

See footnotes at end of table.

A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock
:icipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial
:sification, and sales in 1974--Continued

ime of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
Cont.)						
ler (Cont.)	S.A.I.P. - Semilavorati Acciai Inossidabili Profilati S.p.A.	26.2	Steel products	381		
	Compagnia Italiana Montaggi Industriali S.p.A.	100.0	Construction	381		
	Innocenti - Santeustacchio S.p.A.	100.0	Industrial steel products	381, 382		
	Ing. Leone Tagliaferri e.C. S.p.A.	50.0	Construction of steel furnances and plants	381		
	Italimpianti - Societa Italiana Impianti p.A.	100.0	Construction of industrial plants	381		
	Morteo - Soprefin S.p.A.	100.0	Construction - civil and industrial	381		
	Deriver (Societa Italiana Derivati Vergella - Deriver Per Azioni)	100.0	Wire - rod products	381		
	Tubi Ghisa S.p.A.	95.0	Pig - iron casting	371		
	Armco - Finsider Applicazioni Prodotti Piatti S.p.A.	50.0	Steel structures	381		
	Siderurgica Commerciale Italiana - Sidercomit - S.P.A.	100.0	Sale in Italy of steel products	610		
	Siderexport S.P.A.	100.0	Export of steel products	610		

footnotes at end of table.

rticipation, ratio of government-held shares to total common stock shares, type of industry, [illegible]
ssification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
Ider (Cont.)	Sidercom S.A.	55.0	Export sales of steel	610		
	Sideriberica S.A.	55.0	----do----------	610		
	Siderius Inc.	100.0	----do----------			
	Socomar - Societa Commerciale Del Mar Rosso, S.A.	75.0	----do----------	610		
	SANAC - Societa Per Azioni Refrattari Argille E Caolini	100.0	Refractory materials	369		
	I.C.R.O.T. -Lavorazioni Sussidiarie Finsider S.p.A.	100.0	Ferrous materials processing	371		
	C.P.R. Commercio E Preparazione Rottami S.p.A.	100.0	Collection of scrap iron	371		
	Rifornimenti Finsider S.P.A.	100.0	Purchasing of raw materials for FINSIDER group	610		
	SICAI - Societa Di Ingegneria E Consulenza Attivita Industriali S.p.A.	60.0	Industrial engineering	832		
	Centro Sperimentale Metallurgico S.P.A.	77.5	Metallurgical research	932		
	Rivestubi	100.0				

See footnotes at end of table.

le A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont., sider (Cont.)	Sidermontaggi	100.0				
neccanica Group Societa Finanzia- ia Meccanica nmeccanica p.A.)		99.99	Mechanical industry		1,353,200	2,085.
	Alfa Romeo S.P.A. 3/	99.99	Automotive manufacture	384	437,400	674.
Nazionale Cogne				371		

ee footnotes at end of table.

e A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent g... rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.) meccanica (Cont.)	Alfasud - Industria Napoletana Costruzioni Autoveicoli Alfa Romeo S.p.A.	100.0	Automotive manufacturer	384	See Alfa Romeo	
	SPICA S.p.A.	100.0	Automotive parts production	384	See Alfa Romeo	
	Ansaldo Meccanico Nucleare - S.p.A.	100.0	Production of nuclear and thermoelectric power plants	410		
	Progettazioni Meccaniche Nucleari S.p.A.	100.0	Nuclear engineering	832		
	NIRA - Nucleare Italiana Reattori Avanzati S.p.A.	50.0	Nuclear engineering	832		
	G.I.E. - Gruppo Industrie Elettromeccaniche Per Impianti All Estero S.p.A.	50.0	Construction of power plants	500,381		
	Breda Termomeccanica S.p.A.	100.0	Manufacture of thermal and nuclear power stations	500,381		
	Thermod S.p.A.	100.0	Engineering and boiler making	381,935		
	SAIGE S.p.A.	100.0	Industrial architects	832		
	San Giorgio Elettrodomestici S.p.A.	100.0	Household electric appliances	383		

ee footnotes at end of table.

ble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
I (Cont.)						
meccanica (Cont.)	Ansaldo Soc. Gen. Elettromecc	92.9				
	Italtrafo S.p.A.	100.0	Manufacture of electrical transformers	383		
	SIMEP S.p.A.	100.0	Construction of electrical power plants	500		
	Aerimpianti S.p.A.	100.0	Air conditioning, ventilation and heating equipment	383		
	Aeritalia S.p.A.	50.0	Production of aerospace instruments	383,832		
	FMI Mecfond S.p.A.	100.0	Manufacture of sheet-working pressers, other industrial equipment	382,383		
	Termomeccanica Italiana S.p.A.	100.0	Pump and compressors manufacture	383		
	S.A.1.M.P. S.p.A.	100.0	Machine tools	383		
	CMI Genovesi, S.p.A.	100.0	Industrial lifting equipment	382		
	FAG Italiana S.p.A.	49.0	Ball-bearings	381		
	Merisinter Meridionale Prodotti Sinterizzati S.p.A.	49.0	Powder metallurgy	381,369		
	SAFOG S.A.	100.0	Carbon and alloy steel	371		

ee footnotes at end of table.

A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock ticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial ssification, and sales in 1974--Continued

ame of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
Cont.) ccanica (Cont.)	San Giorgio Pra S.p.A.	50.0	Iron and steel radiators, boilers and castings	381		
	Walworth Aloyco and Grove, International S.p.A. (WAGI)	33.0	Industrial steel values	381		
	Grove Italia S.p.A.	4/	Steel valve manufacture	381		
	Stabilimenti Meccanici VM S.p.A.	50.0	Manufacture of Diesel engines	384		
	Italtractor-ITM-S.p.A.	50.0	Tractor and excavator tracks	382		
	Italtractor Sud - ITS - S.p.A.	50.0	----do----------	382		
	I.O.R. S.p.A.	100.0	Eye lenses	385		
	Officine Meccaniche Goriziane S.p.A.	100.0	Tractor and excavator units	382		
ntieri - S.p.A. cieta Finanzia- Cantieri Navali)		100.0	Shipbuilding	384	380,500	586
	Italcantieri S.p.A.	100.0	----do----------	384		
	CNTR S.p.A.	99.9	----do----------	384		
	Bacini Siciliani S.p.A.	73.5	Dry-dock operation	384		
	Bacino Di Palermo S.p.A.	5/	----do----------	384		
	MGN S.p.A.	99.99	Marine engine repair	384		

footnotes at end of table.

ble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
Cantieri (Cont.)	MCN S.p.A.	99.99	Marine engine repair	384		
	Arsenale Triestino - San Marco S.p.A.	100.0	Ship repairing, building of offshore rigs	384		
	C.N.O.M.V. S.p.A.	98.0	Ship repairing	384		
	O.A.R.N.	100.0	-----Do----------	384		
	S.E.B.N. S.p.A.	100.0	-----Do----------	384		
	Stabilimenti Navali Taranto S.p.A.	100.0	-----Do----------	384		
	Cantiere Navale Muggiano S.p.A.	100.0	Shipbuilding, repairing	384		
	CNLO S.p.A.	100.0	-----Do----------	384		
	GMT S.p.A.	50.0	Construction of Diesel engines	384		
	Grandi Motori - Progetti E Assistenza -Trieste S.p.A.	70.0	Diesel engine design, repair	384		
	Lips Italiana	50.0	Ship propellers	384		
	Industria Triestina Gas Compressi S.p.A.	72.7	Industrial gases	351		
	Ente Bacini S.p.A.	92.0	Dry dock operation	384		
Group (Societa eridionale inanziaria per zione)	Alivar	50.0	Foodstuffs		184,200	284

ble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
Group (Cont.)	STAR S.p.A.	50.0	Foodstuffs	311,312	164,100	253
	STARLUX S.A.	6/	Foodstuffs, Spain	311,312	23,300	36
	SO.PR.AL. S.p.A. - Mogadisco	7/	Canned meat products	311		
	Motta - Societa Per Azioni Per L'Industria Dolciaria E Alimentare 8/	35.1	Confections and foodstuffs	311	108,600	167
	Alemagna S.p.A. 9/	50.0	Foodstuffs	311	87,100	134
	Surgela S.p.A.	100.0	Frozen foodstuffs	311	9,800	15
	Cirio S.p.A.	50.0	Foodstuffs		59,400	92
	Societa Mellin D'Italia S.p.A.	50.0	Foodstuffs		6,900	11
	Generale Supermercati	100.0	Food mass-retailing		156,900	242
	SEBI S.p.A.	99.2	Operation of farms			
	Cartiere ItalianeRiunite S.p.A.	81.8	Paper production		69,500	107
	Alfacavi	60.0	Production of power and telephone cables		26,500	41
	FAR S.p.A.	33.3	Manufacture of starter batteries		26,100	40

See footnotes at end of table.

ıble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
ıI (Cont.)		Percent			Million lira	Millions
SPA Group (Societa Finanziaria di Partecipazioni Azionarie S.p.A.)	Maccarese S.p.A.	100.0	Farming			
	SAIVO S.p.A.	100.0	Production of glass products			
	Societa Mercantile Internazionale "Intersomer" S.p.A.	100.0	International trading exchange			
	Incar (Cote D'Ivoire) S.A.	80.0				
	Incar (Nigeria) Ltd.	51.0	Concessionaries for the sale of Italian cars and vehicles			
	Incar (Zambia) Ltd.	100.0	Concessionaries for the sale of Italian autos			
	Incar Ltd.	66.66	Sales distributor in Tanzania for Italian autos			
ıtedison		(ENI) 12.5 (IRI) 3.6	Chemicals, pharmaceuticals, fibres, retailing, miscellaneous		10/4,029,000	10/6,204
(Ente Nazionale drocarburi)		100.0	Italian Hydrocarbons Authority			11/8,980.2

footnotes at end of table.

rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
IC (Cont.)						
	STIR (Tunisia)	50	-	-	-	-
	TIPER (Tanzania)	50	-	-	-	-
	United Refineries (U.K.)	50	-	-	-	-
he following ANIC	companies produce chemicals:			355,351,369		
	ALTA	50		-	-	-
	Archifar-Industrie Chimiche			-	-	-
	Del Trentino (Rovereto)	25		-	-	-
	Archifar-Laboratori Chimici					
	Farmacologici (Milan)	25		-	-	-
	Carburo Di Calcio	50		-	-	-
	Carpefin	49		-	-	-
	Carpol	49		-	-	-
	Chimica del Tirso	50		-	-	-
	Cucirini Internazionale	50		-	-	-
	Fibra del Tirso	50		-	-	-
	Filpes	49		-	-	-
	Fimat	100		-	-	-
	ICM-Industries Chimiques					
	Maghrebines (Tunisia)	26.4		-	-	-
	Iganto	51		-	-	-
	Industria Resine Biccari	75		-	-	-
	Industria Siciliana Cementi	50		-	-	-
	Intersol	51		-	-	-
	ISAF	26		-	-	-
	Italproteine	50		-	-	-
	Itres	100		-	-	-
	Manifattura Del Basento	50		-	-	-

le A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
NIC (Cont.)	Pesfin	49		-	-	-
	Phillips Carbon Black Italiana	50		-	-	-
	Prodeco	65		-	-	-
	Repes	49		-	-	-
	Saras Chimica	60		-	-	-
	Sclavo	50		-	-	-
	Sclavo Inc., USA	100		-	-	-
	Sicet	25		-	-	-
	Societa Chimica Dauna	50		-	-	-
	Societa Chimica Larderello	100		-	-	-
	Societa Chimica Ravenna	74		-	-	-
	Terni Industrie Chimiche	100		-	-	-
	Valbelice	26		-	-	-
AGIP Nucleare		100	Nuclear fuel cycle (except mining and milling)	290,500,351		
	Combustibili Nucleari	50		-	-	-
	Fabricazioni Nucleari	40		-	-	-
	Inter Nuclear (Belgium)	30		-	-	-
	NIRA	50		-	-	-

ee footnote at end of table.

ble A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
I (Cont.)						
AGIP (Cont.)	AGIP (Somalia)	100.0				
	AGIP Tailandia	100.0				
	AGIP Trinidad and Tobago	100.0				
	AGIP (Tunisia)	100.0				
	AGIP (United Kingdom)	100.0				
	COPE (Egypt)	50.0				
	DELPCO (Egypt)	50.0				
	IEOC (Egypt)	99.8				
	NAOC (Nigeria)	100.0				
	Norsk AGIP (Norway)	100.0				
	Nucleare Somala	100.0				
	SIRIP (Iran)	50.0				
	SITEP (Tunisia)	50.0				
	SOMICEM	100.0				
The following AGIP companies are involved in petroleum product marketing.				610,620		
	AGIP A.G. Monaco (Munich)	100.0				
	AGIP Argentina	100.0				
	AGIP Austria	100.0				
	AGIP (Bangui)	90.0				
	AGIP (Brazzaville)	50.0				
	AGIP (Cameroun)	100.0				
	AGIP Casablanca (Morocco)	50.0				
	AGIP (Cote D'Ivorie)	100.0				
	AGIP (Dahomey)	100.0				
	AGIP Espana	100.0				
	AGIP (Ethiopia)	100.0				
	AGIP Francaise	100.0				
	AGIP (Gabon)	100.0				
	AGIP (Hellas)	100.0				
	AGIP (Kenya) Ltd.	100.0				

See footnotes at end of table.

able A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
ENI (Cont.)						
Summary of activities - 1974						
AGIP, SNAM Group		100.0	Oil, gas, engineering and construction			11/ 7,687.2
ANIC, AGIP Nucleare Group		12/	Chemical, nuclear			11/ 918.5
Snamprogetti, Saipem Group		100.0	Mechanical			11/ 99.0
Nuovo Pignore, Tescon Group		100.0	Textile			11/ 222.5
Sofid Group		100.0	Miscellaneous			11/ 53.0
The following AGIP companies are involved in oil, gas, and other mineral exploration and production.						
	AGIP (Bolivia)	100.0				
	AGIP (Burma)	100.0				
	AGIP (Canada)	100.0				
	AGIP Erdoelgewinnung (F.R. Germany)	100.0				
	AGIP (Indonesia)	100.0				
	AGIP (Iran)	100.0				
	AGIP Iran Petroleum	100.0				
	AGIP Malta	100.0				
	AGIP Mining Co. (U.S.A.)	100.0				
	AGIP Netherlands)	100.0				
	AGIP (North Africa and Middle East)	100.0				
	AGIP Nucleare, Australia	100.0				
	AGIP Petrolera, Argentina	100.0				
	AGIP Petroleum Co., Inc. (U.S.A.)	100.0				
	AGIP (Qatar)	100.0				
	AGIP Recherches, Congo	80.0				
	AGIP Recherches Et Exploitation (Mauritania)	100.0				
	AGIP Recherches Et Exploitation Petrolieres (Madagascar)	100.0				

See footnotes at end of table.

articipation, ratio of government-held shares to total common stock shares, type of industry, [illegible]
lassification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
GIP (Cont.)	AGIP (Liberia)	100.0				
	AGIP Lubricants Pty (South Africa)	50.0				
	AGIP (Madagascar)	80.0				
	AGIP (Nigeria)	100.0				
	AGIP (Sierra Leone)	100.0				
	AGIP (Sudan)	100.0				
	AGIP (Suisse)	100.0				
	AGIP (Tanzania)	50.0				
	AGIP (Togo)	100.0				
	AGIP Tunis	50.0				
	AGIP (Uganda)	50.0				
	AGIP (Zaire)	100.0				
	AGIP (Zambia)	50.0				
	Aviation Fuelling Services S.A. (Greece)	25.0				
	Chepromin Mineraloel GmbH (F.R. Germany)	100.0				
	Covengas	100.0				
	I.I.P. - Industria Italiana Petroli	100.0				
	Ilicini	75.0				
	Maroc AGIP Motel	50.0				
	Motel Egerkingen (Switzerland)	50.0				
	Neusser Tanklager (F.R. Germany)	52.5				
	OR.DI. Gas	25.0				
	Romagas	100.0				
	SEMI	100.0				
	SERAM	25.0				
	SOI - Societa Oleodotti Italiana	95.0				
	SOP - Societa Oleodotti Padani	50.0				
	Stockage (Switzerland)	100.0				
	VADOIL	49.0				
	Chepromin Mineraloel GmbH and Co. KG (F.R. Germany)	100.0				

ee footnotes at end of table.

e A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
e following SNAM companies are involved in natural s transport and marketing.				711,712		
				610,620		
	Italgas	34.4				
	Metano Arcore	50.0				
	Metano Borgomanero	50.0				
	Metano Casalpusterlengo	50.0				
	Metano Correggio	50.0				
	Metano S. Angelo Lodigiano	50.0				
	Terminale GNL Monfalcone	51.0				
	Trans Austria Gasleitung	49.0				
	Trans Europa Naturgas Pipeline (F.R. Germany)	49.0				
	Transitgas (Switzerland)	49.0				
e following SNAM companies are involved in the ansport of crude and petroleum products.				711,712		
	Oleoduc Du Rhin (Switzerland)	48.4				
	Oleoduc Du Rhone (Switzerland)	49.0				
	Siciloil	100.0				
	SIPeM	60.3				
	Suedpetrol A.G. fur Erdoelwirt-schaft (F.R. Germany)	100.0				
	TEPEA	61.5				
e following ANIC are involved in crude oil refining.				353		
	ERIAG (F.R. Germany)	50.0				
	GHAIP (Ghana)	100.0				

footnotes at end of table.

irticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
C (Cont.)	Indeni Petroleum Refinery (Zambia)	50.0				
	IROM	50.0				
	ISAB	40.0				
	Raffineria Alto Adriatico	100.0				
	Raffineria Del Po	100.0				
	Raffineria Rheintal (Switzerland)	80.0				
	Societa Idrocarburi Laziale	80.0				
	SOZIR (Zaire)	50.0				
	STANIC	50.0				

e footnotes at end of table.

Table A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
ENI (Cont.)						
SNAMPROGETTI		100				
			Engineering, contracting, and R and D laboratories	832		
	Alrid S.A. (Algeria)	49		-	-	-
	Comerint	50		-	-	-
	Haldor Topsoe AB (Sweden)	100		-	-	-
	Haldor Topsoe AS (Denmark)	50		-	-	-
	Haldor Topsoe Inc. (U.S.A.)	100		-	-	-
	Haltops Inter. Eng. AS (Denmark)	100		-	-	-
	C. Lotti and Associati Societa Di Ingegneria	25		-	-	-
	SNAM Auxini Proyectos (Spain)	49.5		-	-	-
	Snamprogetti France s.a.r.l.	100		-	-	-
	Snamprogetti Ltd. (U.K.)	99.9		-	-	-
	Snamprogetti S.A. (Spain)	46		-	-	-
	Snam Progetti (U.S.A.)	99		-	-	-
	Snam Progetti (Zurich)	100		-	-	-
	Snamprojetos Engenharia S.A. (Brazil)	49.9		-	-	-
	Turkish Eng. Cons. and Cont. Co. (Turkey)	40		-	-	-

See footnote at end of table.

Table A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
INI (Cont.)						
SNAMPROGETTI (Cont):						
			Environmental and regional engineering	832		
	Tecneco	100		-	-	-
	Ecoimpianti	34		-	-	-
	Ecosol	33.3		-	-	-
	Geotecneco	100		-	-	-
	Idrotecneco	100		-	-	-
	Tecnomare	25		-	-	-
	Teknepiani	50		-	-	-
SAIPEM		100	Construction and drilling contracting	220	-	-
	Alcip Algeria	49		-	-	-
	Intermare Sarda	40		-	-	-
	Iran Saipem Construction Co.	39		-	-	-
	Redpath Dorman Long (North Sea) Ltd. (U.K.)	35		-	-	-
	Saipem Argentina	99.9		-	-	-
	Saipem Australia	99.9		-	-	-
	Saipem Nigeria	100		-	-	-
	Saipem Zurich	100		-	-	-
	The National Drilling Co. (Libya)	49		-	-	-
NUOVO PIGNONE		100	Mechanical manufacturing	382,383	-	-
	Pignone Engineering (U.K.)	100		-	-	-
	Pignone Espanola	50		-	-	-
	Pignone France	99		-	-	-
	Pignone Inc. (U.S.A.)	100		-	-	-
	Pignone Sud Argentina	99.8		-	-	-

See footnote at end of table.

e A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
(Cont.)						
UOVO PIGNONE						
(Cont.)	Pignone Sud Iberica	50		-	-	-
	Turbomeccanica	100		-	-	-
	Turbotecnica	50		-	-	-
ESCON		100	Textile manufacture	321,322	-	-
	M.C.M.	99.9		-	-	-
	M.C.M.-Spugna	50		-	-	-
	Nuova Saccardo	100		-	-	-
	Rosabel	100		-	-	-
	S. Palomba	25		-	-	-
	Sartex	100		-	-	-
	Tessile di Distribuzione	100		-	-	-
	Tirsotex	40		-	-	-
	Nuovo Fabricone	50				
SOFID 13/		100	Miscellaneous	-	-	-
	AGI	100		-	-	-
	AGIP Assicurazioni	100		-	-	-
	AGIP U.S.A.	100		-	-	-
	Arti Grafiche Della Lombardia	25		-	-	-
	Deltaglass	50		-	-	-
	Edilnovi	100		-	-	-
	Isvet	100		-	-	-
	Padana Assicurazioni	100		-	-	-
	Seredit	50		-	-	-
	SIV	50		-	-	-
	Sogesta	100		-	-	-
	TEMA	100		-	-	-
	Vetrexport	50		-	-	-

See footnotes at end of table.

able A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
FIM (Ente Partecipazioni e Finanziamento Industria Manifatturiera)			Mechanical engineering			
	Finanziaria E. Breda					
	Breda Ferroviaria					
	MCS					
	SOPAL					
	INSUD					
NEL (Ente Nazionale per l' Energia Elettrica)			Produces about 75 percent of total Italian electricity and all of its distribution.			
GAM (Ente Gestione Aziende Minerarie e Metallurgiche)			Mining, metal-working and metallurgy			
INAM (Finanziaria Agricola del Mezzogiorno)			Industrial processing, marketing and promotion of agricultural products in Southern Italy.			
EPI (Gestione Partecipazioni Industriali) 14/						

See footnotes at end of table.

ible A-9.--Italy: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Million lira	Millions
EPI (Cont.)	Falconi 15/		Elevators.			
	Confitex 15/					
	San Remo 15/					
	Monti 15/		Wearing apparel			
	Cini 15/		Paper			
	Lesa 15/		Electric appliances			
IME (Finanziaria Meridionale)			Financing of government - private joint ventures.			

1/ International Monetary Fund, International Financial Statistics, January 1977. The market rate (line ae) is used. For 1974, 1.00 = 649 lira.
2/ According to the Italian Embassy in Washington, the figure (192,188 million lira) represents the invoice value of Finmare's shipments n 1974 and not the value of the company's services during the year.
3/ Alfa Romeo S.p.A. has 22 wholly or partially-owned subsidiaries in Australia, the Netherlands, Canada, Spain, Austria, Great Britain, he United States, Luxembourg, Belgium, South Africa, Sweden, Switzerland, Italy, West Germany, Brazil, and France.
4/ A wholly-owned subsidiary of WAGI, S.p.A.
5/ A partially-owned subsidiary (50 percent) of Bacini Siciliani S.p.A.
6/ STAR owns 54.9 percent of STARLUX.
7/ The company is a wholly-owned subsidiary of STAR.
8/ Motta has eight subsidiaries in Italy, Western Europe, and South America.
9/ The company has subsidiaries in France and Italy.
10/ The Economist, January 22, 1977.
11/ Gross sales, including excise taxes but excluding value added taxes.
12/ AGIP Nucleare is fully-owned by the government while ANIC is 73.1 percent owned by the government.
13/ Excludes eight finance companies. For the companies listed under SOFID, the "type of industry" is not known.
14/ The capital base for GEPI was supplied by government-holding companies in these proportions: Istituto Mobiliare Italiano 50 percent), ENI (16-2/3 percent), and IRI (16-2/3 percent).
15/ It is reported that GEPT holds shares in these companies but the degree of ownership is not known.
16/ Compiled by the staff of the U.S. International Trade Commission.

Sources: The Industrial Reconstruction Institute (IRI), The IRI Group Yearbook, 1974; IRI Organizational chart outlining "View of direct nd indirect share participations, May 1976"; IRI 1974 Annual Report; ENI Annual Report - 1974; and Business International Crop., "The tate Role in Italian Industry", January 1976.

ıble A-10.--Japan: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars
		Percent			Billion yen	Millions
ıpan Salt and Tobacco Public Corp.		Monopoly share (Probably 100%)	Salt and tobacco production.	2903 314		
ppon Telephone and Telegraph Corp.		Semiofficial shareholder (Probably 100%)	Supervises telephone, telegraph operation.	-		
coholic Enterprises Division of MITI			Supervises private companies making industrial alcohol.	-		
pan National Railways		Semiofficial corporation (percentage government owned unknown)	Supervises railway transportation.	-		
pan Petroleum Development Corp. (JPDC)		100	Supervises, promotes, and helps to expand overseas petroleum development activities.	-	133	1/ 443.5
D (Japan International Telephone and Telegraph)			Telex calls, telegrams, and telephone.	-	7	22.9
pan Electronic Computer Co.				-		

See footnotes at end of the table.

le A-10.--Japan: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial .assification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars
		Percent			Billion yen	Millions
an Development ank----------		100		-		
k of Japan--------		100		-		
I (Japan's inister of Inter- ational Trade and ndustry----------		100		-		

/ Conversion made by Japan Development Petroleum Corp. for its March 1975 total capital figure.

ote: There are no major Japanese government-owned companies in the export sector, according to the Department of Commerce Japanese c analyst. Japanese embassy, Washington, D.C., states that direct government-ownership of firms is quite limited.

ble A-11.--Mexico: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, and export at least $1 million ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975

Name of company	Subsidiaries	Ratio of government held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Export value	
					1976 Foreign currency	1976 Converted to U.S. dollars 1/
		Percent			Million pesos	Millions
esel Nacional, S.A.					46.8	3.0
tos Hornos de Mexico, S.A.					285.5	18.3
ssini Rhemm, S.A. de C.V.					425.8	27.3
ion Nacional de Productories de Azucar, S.A.					636.5	40.8
a Minera Autlan, S.A. de C.V.					78.0	5.0
troleos Mexicanos					6,458.4	414.0
ronaves de Mexico, S.A.					31.2	2.0
mision Federal de Electricidad					40.6	2.6
squera del Pacifico, S.A.					43.7	2.8
squera Bahia Tortugas, S.A.					96.7	6.2
stituto Mexicano del Cafe					1,464.8	93.9
rdemex, S.A. de C.V.					433.7	27.8
a Minera Rio Colorado, S.A.					45.2	2.9
ncamex, S.A.					29.6	1.9
mentos Anahuac Del Golfo, S.A.					24.9	1.6

1/ Banco de Mexico used an average 1976 exchange rate of 15.6 pesos to $1. All export figures were rounded to the nearest hundred ousand.

Source: Compilation by the staff of the U.S. International Trade Commission using information given by the American Embassy, Mexico ty. [Note.--This list is incomplete but represents the Embassy's efforts to acquire data not rountinely released to the public.]

le A-12.--Netherlands: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial lassification, and sales in 1973

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million guilders	Millions
rlandse Staatsmij-n (Dutch State nes - DSM)		100	Petrochemicals and fertilizer, melamine	351	4,621.0	1,636.3
nklije Nederlandse ogovens en Staal-brieken (Hoogov-s, part of tel)		29	Iron and Steel	371	3,902.0	1,381.7
. Nederlandse sunie		2/	Natural gas	410	3,456.4	1,223.9
tsdrukkerij-en tgeverijbedrijf		2/	Publishing and printing	342	812	28.75
/VBN		50	Construction	500	3/	3/
		80	Cutlery	381	3/	3/
a-Centrifuge derland		55	4/		4/	4/
netaal		70	Metals	372	4/	4/
niale Mijn-atschappij		100	Mining	210	4/	4/
- Lignostone		92	4/	4/	4/	4/
ronic		40	4/	4/	4/	4/

International Financial Statistics, International Monetary Fund, January 1977; the 1973 exchange rate (lineae) - 2.8240 guilders per dollar.
The extent of government ownership is not currently known.
Goverment ownership began in 1976 and as such sales data for these government-owned firms are not currently available.
Information is unavailable.

urce: Business International Corp., "The State Rose in the Netherlands Industry," July 1976; European Center for Public Enterprise, ; and Jane's Major Companies of Europe 1976.

e A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1975

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
Raufoss munisjonsfabrikk		100.0	Munitions and explosives, aluminum products.	3829 3720	2/ 418.0	74.8
Kongsberg apenfabrikk		100.0	Small arms guns rockets, machine tools, gas turbines, car parts.	3821 3829 3823 3843	3/ 575.0	103.0
	Robertson A/S Radio-Elektro					
	Norsk Verktoyindustri A/S		Tools			
	IKO Software Service A/S					
	North America Turbine Co. (Houston)					
Horten Verft		100.0	Shipyard	3841	4/ 430.5	77.1
Norsk Jernverk		100.0	Iron and steel works	371	5/ 811.0	145.2
sk Koksverk A/S		100.0	Coke ammonia, coal tar, benzene	3540 351	6/ 164.0	29.4
dalens Bergverks-sticselskab		100.0	Iron ore concentrates, pyrites	2301 2902	7/ 56.0	10.0
norske stats ljeselskap A/S Statoil)		100.0	Oil production	220		
Olivin		99.98	Sand for steel and iron foundries, bricks.	2901, 3691	26.5	4.7
Aluminium A/S		99.9	Aluminum production	3720		

footnotes at end of table.

ible A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
'S Aardal og Sunndal Verk		75.0	Aluminum production	3720	1,534.0	274.7
	In Norway:					
	A/S Nordisk Aluminiumsindustri					
	Metallemballasje A/S					
	Tubefabrikken A/S					
	il-o-Van Aluminiumsvarefabrikk A/S					
	Emalex A/S					
	Polaris Fabrikker A/S, Sandnes					
	Kloverblad Aluminium A/S					
	In Denmark:					
	Scandia Paper A/S					
	In Sweden:					
	Aluminord A/S					
	AB AI-Forpackning					
	Johnson Metal Aluminium AB					
	AB Nordiske Tubfabriken					

ee footnote at end of table.

ble A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
rsk Hydro A/S 8/		51.33			4,131.0	739.7
			Fertilizers, aluminum, magnesium, oil, petrochemicals, plastics	3720		
				351		
				353		
				220		
	A/S Carl Engstrom, Sweden					
	Hydros Tankskips A/S, Oslo					
	A/S Industriforsikring, Oslo					
	A/S Laminatprodukter, Gulskogen					
	A/S Norpetrol, Oslo					
	Norsk Hydro Laminater A/S Notodden					
	Norsk Hydro Sales Corp., New York					
	Norsk Hydro (UK) Ltd., London					
	Norsk Hydro Verksteder A/S, Notodden					
	Norsk Hydros Handelsselskap A/S, Oslo					
	Norsk Hydros Handelskontor for Denmark A/S, Copenhagen					
	Norsk Hydros Svenska Forsoljningsaktiebolag, Stockholm					

footnote at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Kronor	Millions
Statsforetag Group		100.0			8,000	1,800
	Abene AB	100.0	Vertical and horizontal milling machines	382		
	ACO Lakemedel AB	100.0	Non-proprietary drugs, hospital solutions, personal hygiene preparations	352		
	ASSI	100.0	Lumber, board, pulp, paper, wood chemicals	122, 331, 341, 351	1,700	400
	Berol Kemi AB	100.0	Organic chemicals	351, 352		
	Ceaverken AB	100.0	X-ray film and chemicals; photographic paper and chemicals	352		
	Edstroms Industrier AB	100.0	Finished wood products	331		
	Ekstrons Livsmedelsprodukter AB	100.0	Foodstuffs (soups, creams, beverages)	311	50	12

See footnotes at end of table.

Table A-19.--Sweden: List of companies and subsidiaries that are government owned or have at least 25 percent participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
Statsforetag Group --Continued		Percent			Million Kronor	Millions
	Elkasling AB	100.0	Metal casings for instruments	381		
	Etri Fonster AB	100.0	Windows, doors	331		
	Flexer Sacks Ltd. (England)	100.0	Paper and plastic sacks	341, 356		
	AB Forshammars Bergverk	100.0	Mining of quartzite, feldspar; produces refractory materials, ceramic fibers, and bricks			
	AB Forbandsmaterial	100.0	Wholesaling of medical products	610		
	Forenade Well AB	100.0	Corrugated board, plastic containers, packaging machines, plastic film	341, 356, 383		
	AB Grummebolgen	100.0	Leading Swedish producer of dishwashing liquids, and shaving lotion.	352		
	Hema Industrier AB	100.0	Auto roof racks for skis and luggage, snow shovels	381		

See footnote at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kronor	Millions
Statsforetag group--Continued	Hvilans Mekaniska Verkstads AB	100.0	Electric hoisting equipment	383		
	Kabi Blood Products Division	100.0	Blood proteins	352		
	AB Kabi Diagnostica	100.0	Radiopharmaceuticals	352		
	Kabli Pharmaceuticals Division	100.0	Pharmaceuticals	352		
	AB Kalmar Kok	100.0	Home furniture and fixtures	352		
	Kalmar Verkstads AB	100.0	Railroad diesel engines: engines, freight and passenger cars, industrial transport vehicles	384, 382		
	Karlskronavarvet AB	100.0	Warships, ship parts, shipyard repairs.	384		
	Kryotherm AB	100.0	Heat recovery and air conditioning plants	382, 383		
	Kumla Mekaniska Verkstads AB	100.0	Metal plate-rolling machines	3823		
	Liber Forlag	100.0	Publishing	342		
	Liber Grafiska	100.0	Publishing	342		
	Liber Kartor	100.0	Mapmaking	342		
	Liber Laromedel	100.0	Publishing	342		
	Liber Tryck	100.0	Mapmaking	342		
	Lidhults Mekaniska Verkstad AB	100.0	Forklift trucks - lifting capacity up to 88,000 lbs.	382		

See footnote at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
Statsforetag Group --Continued.		Percent			Million Kronor	Millions
	Por-Pac Plast AB	100.0	Cellular polystyrene products, work gloves	356		
	Pullmax AB	100.0	Metal plate fabricating machines	3823		
	AB Recip	100.0	Drugs	3522		
	Rockwool AB	100.0	Mineral wool or polystyrene insulation	3699, 3560		
	Scanfors AB	100.0	X-ray film, photographic chemicals and paper	3529		
	Sinjet AB	100.0	Brushes, plastic household products, office equipment	3560, 3812		
	Skandiaverken AB	100.0	Diesel engines for ships and other uses	3821, 3841		
	SMT Machine Company AB	100.0	Computer-controlled lathes	3823		
	AB Sonab	100.0	High fidelity products, receivers, amplifiers, mobile electronic communications	3832		

See footnotes at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
Statsforetag Group --Continued		Percent			Million Kronor	Millions
	AB Statsgruvor	100.0	Mining of lead, zinc, iron, tungsten, fluorspar, and copper concentrate	2301, 2302		
	Stigtex AB	100.0	Yarn, dyed or natural, of wool or synthetic fibers	3211		
	AB Svensk Torvforadling	100.0	Peat and peat moss	111		
	Svenska Bromsbandsfabriken AB	100.0	Brake linings, clutch facings, disc brake pads	3845		
	Svenska Tobaks AB	100.0	Tobacco products	3140		
	AB Thorns Mekaniska Verkstad	100.0	Construction of tools and machines to order	382, 383		
	Tuolluvaara Gruv AB (TGA)	100.0	Mining of iron ore (magnetite)	2301		
	Toreboda Limtra AB	100.0	Laminated wood structures, construction	331, 500		
	Uddcomb Sweden AB	2/	Heavy machinery for the nuclear petrochemical, and mechanical engineering industries	382		

See footnotes at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
Statsforetag Group --Continued		Percent			Million Kronor	Millions
	Uddevallavarvet AB	100.0	Shipbuilding	3841		
	Ursvikens Mekaniska Verkstad AB	100.0	Sheet metal working machinery	3823		
	Vitrum AB	100.0	Preparations for intravenous nutrition	3522		
	AB Broderna Wikstroms Mekaniska Verkstad	100.0	Hydraulic punching and cutting units	3823		
	Orebro Pappersbruks AB	100.0	Kraft pulp and paper, gypsum board, plastic products	341, 356		
Pripps		60.0	Brewery	3133, 6100, 6200		
Svenska Navigator		3/	State investment company -holdings in 30 companies in electronics, furniture, and tools	383, 332		
Government-private joint ventures:						
Svensk Petrokemisk Utveckling			Petrochemical	35		

See footnotes at end of table.

Table A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
Government-private joint ventures--Continued		Percent			Million Kronor	Millions
OPAB			Oil prospecting	220		
Petroswede			Oil prospecting	220		
Ostgas			Natural gas	220		
Statsolja			Oil purchasing for Swedish defense reserves; plans to supply private and State-owned chemical companies	610		
Astra (private)-KABI(state)			Jointly owned penicillin plant	3522		
U.S.Tobacco Co.(private)-Svenska Tobaks AB (state)			Worldwide marketing of Swedish and U.S. snuff	610, 620		
FFV Airports Administration (state)-Philips (Netherlands)			Production of steam-powered auto engines	384		
Hylte Bruk		4/	165,000-ton newsprint mill	341		
ASEA - ATOM		50	Construction of atomic power plants			

able A-15.--Sweden: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million Kroner	Millions

otnotes:

1/ International Monetary Fund, International Financial Statistics, January, 1977. The rate of 4.3655 kronor per dollar (line ae) is used to lculate sales for the Statsforetag group as a whole. The sales (in kronor and dollars) for the Statsforetag subsidiaries were supplied in e Statsforetag Group of Sweden 1976.

2/ According to Business International (Sept. 1976), Uddcomb Sweden AB is owned 25 percent by Combustion Engineering of the U.S. and 75 percent Statsforetag.

3/ Svenska Navigator (SN) is owned by the state tobacco monopoly and its employees, by LKAB (state-owned), ASSI (state-owned) and by KF (the nsumer cooperative movement). SN's 1976 sales are expected to reach Swedish kronor 500 million (or $114 million, based on the IMF exchange te for the first three quarters of 1976.)

4/ Owned 55 percent by Skandinaviska EnskildaBanken, 20 percent by ASSI, and 25 percent by West Germany's Feldmuhle.

Sources: The Statsforetag Group of Sweden 1976; Business International Corp., "State Role in Swedish Industry," September 1976.

Table A-16.--Switzerland: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1974--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1974 Foreign currency	1974 Converted to U.S. dollars 1/
		Percent			Swiss francs	Millions
Postal Office (Post-telephone-telegraph)--------		100	Postal----------			
Swiss Air----------		30	Airplane----------			
All Hydro-electrical facilities of Switzerland--------						
Swiss National Bank (Similar to U.S. Federal Reserve)--						
Railroads----------						
ASUAG----------		(Small number of shares).	Watchmaking-holding company for Swiss watch industry.		1,600	610.69
Salt mines in the canton of VAUD, Bex, Switzerland---		51				

1/ According to the Swiss Embassy, Washington, D.C., government-owned companies in Switzerland are limited to the listed areas. According to Business International Corp's reference service, Switzerland's role as entrepreneur is limited to public services and defense.

ble A-17.--West Germany: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and turnover in 1973

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
ines--						
Saarbergwerke AG, Saarbruecken					1,273.2	471.0
BHS Bayerische Berg-, Huetten- und Salzwerke AG, Muenchen					124.3	46.0
Rheinische Braunkohlewerke AG, Koeln			Coal mining		1,017.7	376.5
Salzgitter Erzbergbau AG, Salzgitter		100	Iron ore mining		134.8	49.9
Bayerische Braunkohlen-Industrie AG, Schwandorf			Coal mining		70.5	26.1
Suedwestdeutsche Salzwerke AG, Heilbronn					67.0	24.8
anufacturing enterprises--						
Gelsenberg AG, Essen					2,730.0	1,010.0
Salzgitter AG, Berlin/ Salzgitter		100	Iron, steel, iron ore		6,844.1	2,532.0
Salzgitter Huettenwerk AG, Salzgitter 2/		100	do.		NA	

ee footnotes at end of table.

e A-17.--West Germany: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial ssification, and turnover in 1973--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
facturing enter-prises--Continued						
alzwerke Peine-Salzgitter AG, Peine		100	Steel		2,217.4	820.3
lzgitter Maschinen AG, Salzgitter-Bad		100			77.9	28.8
itpoldhuette AG, Ansberg					72.5	26.8
waldtswerke-Deutsche Werft AG Hamburg und Kiel, Kiel					869.2	321.6
ald AG, Recklinghausen					NA	
Eisenhuette Prinz Rudolph, Duelmen					31.4	11.6
reinigte Industrie-Unternehmungen AG (VIAG), Berlin/Bonn					2,203.5	815.2
reinigte Aluminium-Werke AG, Berlin und Bonn					815.0	301.5
W Folien AG, Grevenbroich					NA	
W Leichtmetal GmbH, Bonn					690.8	255.6

footnote at end of table.

A-17.--West Germany: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock ticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial ssification, and turnover in 1973--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
acturing enter-						
rises--Continued						
ddeutsche Kalkstick- toff-Werke AG, rostberg					299.8	110.9
ustrieverwaltungs- esellschaft m.b.H., onn-Bad Godesberg					84.0	31.1
KLA-SEISMOS GmbH, annover					88.5	32.7
tsche Industriean- agen GmbH, Berlin					434.9	160.9
on Rheinische raunkohlen Kraftstoff: G, Koeln					1,127.8	417.2
delberger Druckmas- hinen AG, Heidelberg					468.2	173.2
ert-Frankenthal AG, rankenthal/Pfalz					78.1	28.9
rttembergisches Portland-Cement-Werk zu Lauffen am Necker, eilbronn					73.8	27.3

footnote at end of table.

le A-17.--West Germany: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial lassification, and turnover in 1973--Continued

Name of Company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
ıufacture enter-prises--Continued						
:oeppritz AG, Heidenhein/ Mergelstetten					68.9	25.5
;tierlen-Maquet AG, Rastatt					69.6	25.7
'apierfabrik WeiBenstein AG, Pforzheim					21.3	7.9
Badische Staatsbrauerei Rothaus AG, Rothaus/ Schwarzwald					15.0	5.6
Staatliche Majolika-Manufaktur Karlsruhe AG, Karlsruhe					2.8	1.0
mmerce-- Wirtschaftliche Vereinigung deutscher Versorgungsunternehmen AG, Frankfurt/M					173.8	64.3
BA-Volkswagenwerk AG-- VEBA AG, Bonn/Berlin					12,466.5	4,612.1
PreuBische Elektrizitaets AG, Hannover					1,095.6	405.3

e footnote at end of table.

ble A-17.--West Germany: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and turnover in 1973--Continued

Name of company	Subsidiaries	Ratio of government-held shares of total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
BA-Volkswagenwerk AG--Continued:						
Nordwestdeutsche Kraftwerke AG, Hamburg					861.1	318.6
Thueringer Gasgesellschaft Koeln					8.4	3.1
					8.4	3.1
AG fuer Gas und Elektrizitaet, Bad Oeynhausen					NA	
Fraenkische Licht- und Kraftversorgung AG, Bamberg					51.8	19.2
AG fuer Licht- und Kraftversorgung, Muenchen					60.7	22.5
Paderborner Elektrizitaetswerk und StraBenbahn AG, Paderborn					119.0	44.0
Hannover-Braunschweigische Stromversorgungs AG, Hannover					482.2	178.4
Schleswig-Holsteinische Stromversorgungs AG, Rendsburg					522.8	193.4

e footnote at end of table.

e A-17.--West Germany: List of companies and subsidiaries that are government-owned of have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and turnover in 1973--Continued

Name of company	Subsidiaries	Ratio of government-held shares of total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Turnover	
					1973 Foreign currency	1973 Converted to U.S. dollars 1/
		Percent			Million deutsche marks	Million
-Volkswagenwerk AG--Continued:						
BA KRAFTWERKE RUHA AG, Gelsenkirchen-Buer					576.4	213.2
BA CHEMIE AG, Gelsenkirchen-Buer					2,840.1	1,050.7
BA GLAS AG, Essen-Karnap					364.5	134.9
go Stinnes AG, Muehlheim/Ruhr					2,471.4	914.3
Braunschweigische Kohlen-Bergwerke, Helmsted					217.9	80.6
Herland-Zentrale Helmstedt AG, Helmstedt					139.8	51.7
OLKSWAGENWERK AG, Wolfsburg					11,563.3	4,277.9

International Monetary Fund, International Financial Statistics, January 1977, the exchange rate of 2.703 Deutsche marks per U.S. r (line ae) is used.

ITC report says Huettenwerk merged with Ilseder Hutte to form the government owned Stablwerke Peine in 1970.

rce: The Evolution of the Public Enterprises in the Community of Nine (European Economic Community), European Centre for Public prises, Brussels, 1975.

.e A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent [illegible] participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial .assification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
sk Hydro A/S Cont.)	Norsk Transportaktieselskab, Oslo					
	A/S Rjukanfos, Tinn					
	A/S Svaelgfos, Oslo					
Sydvaranger		51.0	Iron ore pellets and concentrates.	2301		
:er Batterier A/S		52.0				
:re norske :pitsbergen :ullkompani A/S		90.0				
:sk Olje A/S		71.1				
:ion A/S		37.63	Textiles	32		
:am A/S		25.0	Electric lamps	383		
)rnoen		100.0	Petroleum			
ıendselolje		9/	Petroleum marketing			
:ske OK		9/	-do-			
ınmore Fiskein- dustri A/S, Ale sund		100	Fish processing	3114, 130		
S FI-NO-TRO, Homningsvag		88	-do-	-do-		
S Svolvaer Kjoleanlegg, Svolvaer		57	-do-	-do-		

e footnotes at end of table.

ıble A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
/S Froya Fiskeindustri, Dyrvik, Froya		62	Fish processing	-do-		
/S Arendal Fryseri, Arendal		54	-do-	-do-		
:istiansand Kjoleanlegg A/S, Kristiansand S		46	-do-	-do-		
/S Iglo, Haugessund		44	-do-	-do-		
S Egersund Fryseri, Egersund		44	-do-	-do-		
msdal Havprodukter, Molde		45	-do-	-do-		
omso Fryseri og Kjoleanlegg A/S, Tromso		40	-do-	-do-		
S Vadso Sildoljefabrikk, Vadso		31	-do-	-do-		
S Melbu Fiskeriindustri, Hadsel		38	-do-	-do-		
dje Fryseri A/S, Fedje		46	-do-	-do-		
S Sjobruk, Bo i Vesteralen		31	-do-	-do-		

e footnote at end of table.

e A-13.--Norway: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Sales	
					1975 Foreign currency	1975 Converted to U.S. dollars 1/
		Percent			Million kroner	Millions
Skude Fryseri, udenshavn		46	Fish processing	130, 3114		
Karmoy Kjolelager pervik		26	-do-	-do-		
Kjolelageret, do, Bodo		41	-do-	-do-		
Oksnes-Langenes yseri og oleanlegg, Myre		33	-do-	-do-		
Smola Fiske- dustri, Dyrnes, ola		25	-do-	-do-		

International Monetary Fund, International Financial Statistics, January 1977. The rate of 5.5850 kroner per U.S. dollar (line ae) was used 1975.

Exports accounted for 49 percent of sales of the military division and for 52 percent of the sales of the civil division.

Exports accounted for 72 percent of total sales.

Exports accounted for 80 percent of total sales.

Exports accounted for 61 percent of total sales.

Exports accounted for 5 percent of total sales.

Exports accounted for nearly 100 percent of sales.

According to a Norsk-Hydro official, the company accounts for about 20 percent of the 200,000 tons per year of magnesium produced in non-munist countries.

/ These two companies will be merged with the oil products marketing divisions of Norsk Hydro. The resulting firm will be held 71.1 cent directly by the state, 15 percent by Statoil, 6.7 percent by Norsk Hydro, 2 percent by the Norwegian Co-op Society and 5.2 cent by Saga Petroleum.

rces: Letter of February 17, 1977, and report from Lars Tangeraas, First Secretary of the Royal Norwegian Embassy, Washington, D.C., isiness International Corp.'s "State Role in Norwegian Industry," January, 1976, and

le A-14.--Spain: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock articipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial lassification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Gross Capital	
					1975 Foreign currency	1975 Converted to U.S. dollars
		Percent			Pesetas	Millions
(Institute acional de ndustria)---------	Miscellany:	INI--7.33%	Banking (Particular	-	721,105	12,063.8
	Arfsbank, Banco Arabe Espanol, Espanol, S.A.	Government-32.67% Foreign--60%	Arab investments).		1,500	25.095
	Empresa Auxiliar de la Industria, S.A.	INI--100%	Research and sponsorship of exploiting hydrocarbons, pyrites.	220	300	5.02
	Extebank----------	INI--9.51% other government--90.49%	Promotion of international commerce.	-	3,783.3	63.30
	Musini (Security Mutual of the National Institute of Industry)----------	100	Research----------	-	396	6.63
	Petroleum:					
	COPISA Iberian Petro-chemical Company, S.A.	INI--48.75% other government--51.25%	Exploitation of hydrocarbons.	220		
	EMPASA--National Enterprise of Aragon Petroleum, S.A.	INI--67% foreign--33%	Exploitation and prospecting of hydrocarbons.	220	10	0.167
	ENPENSA--National Enterprise of Navarra Petroleum, S.A.	INI--67% foreign--33%	Exploitation and prospecting of hydrocarbons.	220	10	0.167
	ENPETROL--National Enterprise of Petroleum, S.A.	INI--71.8% other--6.2% foreign--22%	Importing, transport of crude, refineries.	220	5,969	99.86
	HISPANOIL--Petroleum of Hispania, S.A.	INI--70% other--30%	Investigation, exploitation, industrialization, and transport of hydrocarbons.	220	1,200	20.08

e footnotes at end of the table.

participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Gross capital	
					1975 Foreign currency	1975 Converted to U.S. dollars
		Percent			Pesetas	Millions
--Continued	Siderurgy, metals, and minerals:					
	ENDESA--National Enterprise of Aluminum, S.A.	INI--54.48% other--20.52% foreign--25%	Production of aluminum	37	2,039.2	34.12
	ENSIDESA--National Siderurgical Enterprise.	INI--81.71% other--11.29%	Construction and operation of siderurgy.	371	16,232.6	271.57
	ENADIMSA--National Enterprise of Mineral Investigation.	100	Mineral investigation-	2902 2909	560	9.37
	ENCASUR--National Enterprise of Carbon.	INI--82.96 other--17.04%	Exploitation of carboniferous materials.	210	270	4.52
	FODINA	100	Sales of potassium	-	80	1.34
	FOSBUCRAA	100	Phosphates	2902	5	0.084
	HUNOSA	100	Coal mining	210	3,900	65.25
	MASA--Almagrera Mines, S.A.	INI--95.56% 4.44%	Lead, copper mining	2301	235	3.93
	MIFERGUI-NIMBA--Iron mines of Guinea for exploiting Aimba Mountains, S.A.	INI--4% foreign--96%			120	2
	POTASAS--Navarra Potassium Mines, S.A.	100	Exploitation and commercialization of potassium.	2902	2	0.017
	Shipyards, factories:					
	AESA--Spanish shipyards	INI--50% other--50%	Shipbuilding	3841	5,402.4	90.38
	ASTANO--Shipyards of Noroeste-	INI--60% other--40%	Shipbuilding	3841	2,000	33.46
	ASTICAN--Shipyard at Canarios-	INI--50% other--50%	Shipbuilding	3841	500	8.37
	BAZAN--National Enterprise of Naval Military Construction.		Naval Military Construction.	3841	1,400	23.42
	ENASA--National Enterprise of Motor Trucks.	INI--66.6% other--33.4%	Truck production	3843	2,100	35.13
	MEVOSA--Spanish--German Co. for construction of Mercedes -Benz and Volkswagen.	INI--24.75% other--21.57 foreign--53.68	Auto construction	3843	972	16.26

See footnotes at end of table.

Table A-14.--Spain: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock participation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial Classification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Gross capital	
					1975 Foreign currency	1975 Converted to U.S. dollars
		Percent			Pesetas	Millions
INI--Continued	Shipyards, factories:--Continued					
	SEAT--Spanish Society of Touring Cars, S.A.	INI--34.78% other--29.69% foreign--35.53%	Auto construction-----	3843	4,140.6	69.27
	EISA--Industrial Experiments, S.A.	100	Hydraulic systems, electromechanical.	3831	150	2.51
	ENOSA--National Optical Enterprise.	100	Manufacturers of optical materials.	3852	300	5.02
	La Maquinista----------	INI--55.36% other--32.40% foreign--12.24%	Machinery construction	382	700.4	0.017
	Santa Barbara----------	100	Military industry-----	-	300	5.02
	SFK----------	INI--40.76% other--10.34% foreign--49%	Machine parts---------	382	800	13.38
	Aeronautics:					
	CASA--Aeronautical Construction.	INI--65.62% other--9.88% foreign--24.5%	Aeronautical construction.	3845	373.8	6.25
	AVIACO--Commercial Aviation---	INI--67% other--33%	Aeronautical construction.	3845	600	10.04
	IBERIA----------	INI--97.74% other--2.26%	Airlines----------	3845	5,000	83.65
	Chemicals, Agriculture:					
	ENCE--National Cellulose Enterprise.	INI--80.98% other--19.02%	Manufactures pulp for paper fibers of cellulose.	3411 3419	2,087.3	34.92
	ENFERSA--National Fertilizer Enterprise.	100	Fertilizer manufacturer.	3512	2,000	33.46
	CARCESA----------	INI--76.39% other--23.61%	Meat refrigeration and transport.	3111	750	12.55
	LESA--Milk Manufacturer of Spain.	INI--57.5% other--42.5%	Milk manufacturer-----	3112	560	9.37

See footnotes at the end of the table.

e A-14.--Spain: List of companies and subsidiaries that are government-owned or have at least 25 percent government stock rticipation, ratio of government-held shares to total common stock shares, type of industry, International Standard Industrial assification, and sales in 1975--Continued

Name of company	Subsidiaries	Ratio of government-held shares to total common stock shares	Type of industry	International Standard Industrial Classification (ISIC)	Gross capital	
					1975 Foreign currency	1975 Converted to U.S. dollars
		Percent			Pesetas	Millions
PSA (Compania rrendataria del onopolio de etroleos, S.A.)		100	Energy production (gas and petroleum).	3530		
E, railroads-----		100			654	72,000
ecalera		Note.--is a government designated monopoly.	Tobacco industry		92	
pania Telefonica acional de spana						

/ Exchange rate taken from the International Financial Statistics, IMF, January, 1977--time s.a. market rate where 59.744 pesetas dollar.

ote.--Electric, gas, and transport companies will not appear here, although statistics on these industries are available upon request.

Appendix B

List of Major Government-Owned Steel Companies

Table B.--List of major government -owned steel companies, by countries

Country	Company
Argentina	Aceros Ohler SA
	Propulsora Siderurgica SA
	SAMISA
	Altos Hormes Zapla
Austria	OIAG (Osterreichishe Industrieverwaltungs-Aktiengesellschaft: The State holding company)
	Subsidiaries:
	Voest-Alpine
	Gebr. Bolher & Company (GBC) Vienna
	St. Egyder Eisen-und Stahlindustrie-Gesellschaft
	Gebr-Bohler & Company AG., Dusseldorf
	Wiener Bruckenbau-und Eisenkostruktions-AG (WRB)
	Hutte Krems Ges. M.b.h., Krems
	Steirische Gussstahlwerke AG (Styria)
	Ewen-Handels-Und Industrie-AG, Greinitz
	Johann Einricher Eisen - handels - AG, Klagenfurt
	Schoeller - Bleckman Stahlwerke AG
	Eisen - Und Stahl AG (ESTAG)
	Karnterisvhe Eisen - und Stahlwerks AG (KESTAG)
	'RISTA' Drahtwerk Hufnagl & Company Ges. m.b.H.
	Vereingte Osterreichische Edelstahlwerke AG
	Binder & Company
Brazil	Companhia Siderurgica Nacional (CSN)
	Companhia Siderurgica Paulista (COSIPA)
	Usinas Siderurgicas de Minas Gerais (USIMINAS)
	Companhia Ferro e Aco de Vitoria (COPAVI)
	Acos Especiais Itabira (ACESITA)
	Acos Finos Piratini
	Companhia Siderurgica de Mogi das Cruzes
	Usinas Siderurgicas da Bahia (USIBA)
Canada	IPSCO
	Sidbec - Dosco
	Sysco - Sydney Steel Corp.

Table B-1.--List of major government-owned steel companies, by countries--Continued

Country	Company
Finland	Rautaruukki Oy
Ireland	Irish Steel Holdings, LTD.
Italy	Instituto per la Reconstruzione Industriale (IRI)
	The Finsider Group:
	Italsider S.p.A.
	Acciaierie Di Piombina S.p.A.
	Dalmine S.p.A.
	Tubificio Dalmine Italsider
	Terni - Societa Per L' Industria E L'Elettricita - S.p.A.
	Terninoss Acciai Inossidabili S.p.A.
	Cementir - Cementerie Del Tirreno S.p.A.
	Sidermar S.p.A. - Societa Di Armamento Noleggi E Agenzia Marittima
	A.T.B. - Societa Per Azioni Acciaieria E Tubificio Di Brescia
	C.M.F. Costruzioni Metalliche Finsider S.p.A.
	Ponteggi Dalmine Societa Per Ponteggi Tubolari E Strutture Metalliche p.A.
	Andamios Tubulares Dalmine De Mexico
	Andamios Tubulares Dalnine De Venezuela S.A.
	S.A.I.P. - Semilavorati Acciai Inossidabili Profilati S.p.A.
	Compagnia Italiana Montaggi Industriali S.p.A.
	Innocenti - Santeustacchio S.p.A.
	Ing. Leone Tagliaferri e.C. S.p.A.
	Italimpianti - Societa Italiana Impianti p.A.
	Morteo - Soprefin S.p.A.
	Deriver (Societa Italiana Derivati Vergella - Deriver Per Anioni)
	Tubi Ghisa S.p.A.
	Armco - Finsider Applocazioni Prodotti Piatti S.p.A.
	Siderurgica Commerciale Italiana - Sidercomit - S.p.A.

Table B-1.—List of major government-owned steel companies, by countries--Continued

Country	Company
Italy (Continued)	Siderexport S.p.A.
	Sidercom S.A.
	Sideriberica S.A.
	Siderius Inc.
	Socomar - Societa Commerciale Del Mar Rosso, S.A.
	SANAC - Societa Per Azioni Refrattari Argille E Caolini
	I.C.R.O.T. - Lavorazioni Sussidiarie Finsider S.p.A.
	C.P.R. Commercio E Preparazione Rottami S.p.A.
	Rifornimenti Finsider S.p.A.
	SICAI - Societa Di Ingegneria E Consulenza Attivita Industriali S.p.A.
	Centro Sperimentale Metallurgico S.p.A.
	Rivestubi
	Sidermontaggi
Mexico	Altos Hornos de Mexico SA
	Fundidora de Monterrey
	SICARTSA
Netherlands	Hoogovens Ijmviien, B.V.
Norway	A/S Norsk Jernverk
Portugal	Siderurgica Nacional Sarl
Spain	ENSIDESA
Sweden	Norrbottens Jarnverk AB
United Kingdom	The British Steel Corporation
West Germany	Stahlwerke Peine-Salzgitter AG

Appendix C

Statistical Tables

Table C-1.--Raw steel: Selected production and trade data for major market economy producing countries, 1971-75

Country	Production	Percent government owned	Government owned production	Total exports	Total imports	World trade balance
	1,000 metric tons		1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1971:						
Argentina	1,915	72	1,378	234	1,554	-1,320
Austria	3,960	100	3,960	1,415	457	958
Belgium/ Luxembourg	17,686	0	0	12,316	2,228	10,088
Brazil	5,997	60	3,598	256	703	-446
Canada	11,040	17	1,876	1,528	1,865	-336
Denmark	471	0	0	259	1,208	-949
Finland	1,025	66	676	406	689	-283
France	22,859	0	0	7,687	6,598	1,089
Ireland	77	100	77	15	273	-258
Italy	17,452	57	9,948	3,131	4,009	-887
Japan	88,557	0	0	23,194	46	23,148
Mexico	3,821	47	1,796	344	168	166
Netherlands	5,083	33	1,677	3,217	2,243	974
Norway	881	79	696	503	1,107	-603
Portugal	408	100	408	33	394	-360
Spain	8,025	45	3,611	918	845	72
Sweden	5,271	21	1,106	1,443	1,605	-162
Switzerland	532	0	0	106	1,728	-1,621
United Kingdom	24,174	90	21,756	4,976	2,055	2,921
United States	109,265	0	0	2,590	15,953	-13,363
West Germany	40,313	11	4,434	13,202	9,518	3,684

	Imports from the United States	Exports to the United States	Trade balance with the United States	Government-owned exports to the United States	Government-owned exports to world markets
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1974:					
Argentina	77	132	55	95	168
Austria	1/	10	10	10	1,415
Belgium/ Luxembourg	15	1,583	1,568	0	0
Brazil	174	67	-107	40	154
Canada	697	1,215	518	206	260
Denmark	1	1/	-1	0	0
Finland	1/	33	33	22	268
France	36	1,404	1,368	0	0
Ireland	1	1/	-1	1/	15
Italy	302	518	216	295	1,785
Japan	12	5,787	5,775	0	0
Mexico	70	318	248	149	157
Netherlands	7	486	479	160	1,062
Norway	3	7	4	6	398
Portugal	1/	1/	1/	1/	33
Spain	30	185	155	83	413
Sweden	15	81	66	17	303
Switzerland	2	9	7	0	0
United Kingdom	41	1,270	1,229	1,143	1,478
United States	0	0	0	0	0
West Germany	20	2,294	2,274	252	1,452

See footnote at end of table.

Table C-1.--Raw steel: Selected production and trade data for major market economy producing countries, 1971-75

Country	Production	Percent government owned	Government owned production	Total exports	Total imports	World trade balance
	1,000 metric tons		1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1972:						
Argentina	2,151	72	1,549	242	1,553	-1,311
Austria	4,070	100	4,070	1,438	478	960
Belgium/ Luxembourg	19,989	0	0	14,245	2,249	11,816
Brazil	6,518	60	3,911	403	1,003	-600
Canada	11,868	17	2,018	1,341	2,030	-689
Denmark	498	0	0	260	1,409	-1,149
Finland	1,456	66	961	566	737	-171
France	24,054	0	0	8,263	8,024	239
Ireland	86	100	86	48	346	-298
Italy	19,814	57	11,294	3,777	4,668	-891
Japan	96,900	0	0	20,922	101	20,821
Mexico	4,431	47	2,083	372	174	198
Netherlands	5,600	33	1,848	3,790	2,420	1,370
Norway	931	79	721	614	1,158	-544
Portugal	431	100	431	5	467	-462
Spain	9,525	45	4,286	1,463	1,120	343
Sweden	5,257	21	1,104	1,647	1,904	-257
Switzerland	543	0	0	122	2,010	-1,888
United Kingdom	25,321	90	22,789	4,646	2,684	1,962
United States	120,876	0	0	2,631	15,246	-12,615
West Germany	43,705	11	4,808	13,890	11,037	2,853

	Imports from the United States	Exports to the United States	Trade balance with the United States	Government-owned exports to the United States	Government-owned exports to world markets
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1972:					
Argentina	115	134	19	96	174
Austria	1/	31	31	31	1,438
Belgium/ Luxembourg	44	1,439	1,395	0	0
Brazil	131	223	91	134	242
Canada	651	1,029	378	175	228
Denmark	3	1/	-3	0	0
Finland	1	18	17	12	373
France	30	1,258	1,228	0	0
Ireland	1/	1/	1/	1/	48
Italy	180	377	197	215	215
Japan	13	5,658	5,645	0	0
Mexico	139	344	205	162	175
Netherlands	59	593	534	196	1,251
Norway	5	4	-1	4	485
Portugal	67	1/	-67	1/	5
Spain	7	88	81	40	658
Sweden	29	127	98	27	346
Switzerland	3	9	6	0	0
United Kingdom	32	1,086	1,054	977	4,181
United States	0	0	0	0	0
West Germany	98	2,083	1,985	229	1,528

See footnote at end of table.

Table C-1.--Raw steel: Selected production and trade data for major market economy producing countries, 1971-75

Country	Pro-duction	Percent govern-ment owned	Government owned production	Total exports	Total imports	World trade balance
	1,000 metric tons		1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1973:						
Argentina	2,152	72	1,549	466	1,912	-1,446
Austria	4,238	100	4,238	1,436	676	760
Belgium/ Luxembourg	21,446	0	0	15,968	2,824	13,144
Brazil	7,150	60	4,290	380	1,766	-1,386
Canada	13,386	17	2,276	1,232	1,903	-671
Denmark	453	0	0	272	1,554	-1,282
Finland	1,615	66	1,066	525	768	-243
France	25,264	0	0	8,292	8,546	-254
Ireland	116	100	116	54	405	-351
Italy	20,995	57	11,967	3,451	5,003	-1,552
Japan	119,322	0	0	24,805	218	24,587
Mexico	4,709	47	2,213	133	329	-196
Netherlands	5,624	33	1,856	4,073	2,649	1,424
Norway	963	79	761	629	1,326	-697
Portugal	502	100	502	29	560	-531
Spain	10,808	45	4,864	1,712	1,086	626
Sweden	5,663	21	1,189	1,932	2,128	-196
Switzerland	584	0	0	122	1,963	-1,841
United Kingdom	26,649	90	23,984	4,257	2,812	1,445
United States	136,804	0	0	3,708	13,145	-9,437
West Germany	49,521	11	5,447	17,264	10,449	6,815

	Imports from the United States	Exports to the United States	Trade balance with the United States	Government-owned exports to the United States	Government-owned exports to world markets
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1973:					
Argentina	229	198	-31	143	336
Austria	1	17	16	17	1,436
Belgium/ Luxembourg	33	1,072	1,039	0	0
Brazil	472	140	-332	84	228
Canada	848	1,085	237	184	209
Denmark	4	1/	-4	0	0
Finland	1	11	10	7	347
France	25	896	871	0	0
Ireland	5	1/	-5	1/	54
Italy	136	166	30	95	1,967
Japan	13	4,696	4,683	0	0
Mexico	210	112	-98	53	63
Netherlands	15	598	583	197	1,344
Norway	4	3	-1	2	497
Portugal	43	0	-43	1/	29
Spain	16	98	82	44	770
Sweden	34	143	109	30	406
Switzerland	5	3	-2	0	0
United Kingdom	85	916	831	825	3,831
United States	0	0	0	0	0
West Germany	99	1,994	1,895	219	1,899

See footnote at end of table.

Table C-1.--Raw steel: Selected production and trade data for major market economy producing countries, 1971-75

Country	Production	Percent government owned	Government owned production	Total exports	Total imports	World trade balance
	1,000 metric tons		1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1974:						
Argentina	2,307	72	1,661	1,486	1,867	-381
Austria	4,699	100	4,699	1,714	681	1,033
Belgium/ Luxembourg	22,673	0	0	16,631	3,226	13,405
Brazil	7,550	60	4,530	347	4,208	-3,861
Canada	13,591	17	2,310	1,778	2,883	-1,105
Denmark	535	0	0	314	1,648	-1,334
Finland	1,656	66	1,093	447	884	-437
France	27,023	0	0	9,670	7,700	1,970
Ireland	110	100	110	68	394	-326
Italy	23,803	57	13,568	4,749	4,812	-63
Japan	117,131	0	0	32,228	231	31,997
Mexico	5,132	47	2,412	742	659	83
Netherlands	5,840	33	1,927	4,334	2,975	1,359
Norway	944	79	746	590	1,705	-1,115
Portugal	368	100	368	21	804	-783
Spain	11,646	45	5,241	806	1,209	-403
Sweden	5,989	21	1,258	2,032	2,280	-248
Switzerland	593	0	0	209	1,779	-1,570
United Kingdom	22,426	90	20,183	3,350	3,850	-500
United States	132,196	0	0	5,392	14,154	-8,762
West Germany	53,232	11	5,856	22,324	8,720	13,604

	Imports from the United States	Exports to the United States	Trade balance with the United States	Government-owned exports to the United States	Government-owned exports to world markets
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1974:					
Argentina	142	135	-7	97	1,070
Austria	0	23	23	23	1,714
Belgium/ Luxembourg	29	1,305	1,276	0	0
Brazil	870	59	-811	35	208
Canada	1,415	1,349	-66	229	302
Denmark	4	2	-2	0	0
Finland	1	8	7	5	295
France	12	1,139	1,127	0	0
Ireland	2	1	-1	1	68
Italy	186	301	115	172	2,707
Japan	11	5,791	5,780	0	0
Mexico	406	115	-291	54	349
Netherlands	30	529	499	175	1,430
Norway	12	10	-2	8	466
Portugal	75	1	-74	1	21
Spain	44	65	21	29	363
Sweden	25	113	88	24	427
Switzerland	5	2	-3	0	0
United Kingdom	118	547	429	492	3,015
United States	0	0	0	0	0
West Germany	12	2,003	1,991	220	2,456

See footnote at end of table.

Table C-1.--Raw steel: Selected production and trade data for major market economy producing countries, 1971-75

Country	Production	Percent government owned	Government owned production	Total exports	Total imports	World trade balance
	1,000 metric tons		1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1975:						
Argentina	2,200	72	1,584	100	1,700	-1,600
Austria	4,069	100	4,069	1,967	501	1,466
Belgium/ Luxembourg	16,208	0	0	12,624	2,228	10,396
Brazil	8,400	60	5,040	200	2,800	-2,600
Canada	13,206	17	2,245	1,265	1,403	-138
Denmark	559	0	0	290	2/	2/
Finland	1,618	66	1,068	441	710	-269
France	21,530	0	0	8,185	7,741	444
Ireland	110	100	110	55	2/	2/
Italy	21,900	57	12,483	6,263	2/	2/
Japan	102,314	0	0	28,942	102	28,840
Mexico	5,300	47	2,491	2/	2/	2/
Netherlands	4,823	33	1,592	4,036	2,575	1,461
Norway	919	79	726	586	1,397	-811
Portugal	419	100	419	24	497	-473
Spain	11,100	45	4,995	1,561	1,866	-305
Sweden	5,611	21	1,178	1,681	2,242	-561
Switzerland	590	0	0	239	1,111	-872
United Kingdom	20,198	90	18,178	3,190	3,774	-584
United States	105,945	0	0	2,778	10,767	-7,989
West Germany	40,415	11	4,446	16,272	8,458	7,814

	Imports from the United States	Exports to the United States	Trade balance with the United States	Government-owned exports to the United States	Government-owned exports to world markets
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1975:					
Argentina	56	10	-46	7	2/
Austria	1/	13	13	13	1,967
Belgium/ Luxembourg	9	437	428	0	0
Brazil	155	39	-116	23	2/
Canada	713	908	195	154	215
Denmark	6	1	-5	0	0
Finland	1	8	7	5	291
France	6	547	541	0	0
Ireland	1	2	1	2	55
Italy	201	416	215	237	3,570
Japan	4	5,126	5,122	0	0
Mexico	319	47	-272	22	2/
Netherlands	9	409	400	135	1,332
Norway	10	1	-9	1	463
Portugal	23	1/	-23	1/	24
Spain	34	155	121	70	702
Sweden	6	74	68	16	353
Switzerland	2	1	-1	0	0
United Kingdom	54	475	421	427	2,871
United States	0	0	0	0	0
West Germany	9	921	912	101	1,790

1/ Less than 500 metric tons
2/ Not available

Source: Compiled by the staff of the U.S. International Trade Commission using data from the following sources:

Primary sources:

Production data 1971-75:

Organization for Economic Co-operation and Development [OECD], Annual Report on The Iron and Steel Industry and Trends, Paris, 1972-75.

American Iron and Steel Institute, Steel Industry Economics and Federal Income Tax Policy, June 1975.

Supplemental Production data for Argentina, Brazil, Mexico derived from Metal Bulletin, June 1975 [American Iron and Steel Institute carries virtually the equivalent data in millions of net tons].

Export and import data 1971-75:

United Nations Economic Commission for Europe, Geneva, Annual Bulletin of Statistics of World Trade in Steel for Europe, 1975. (Name of SITC Commodities are included in table 2 for exports.)

United Nations Economic Commission for Europe, Annual Bulletin of Steel Statistics for Europe, table 3 (imports and exports).

United Nations Yearbooks of International Trade Statistics, 1974, 1975.

United Nations Economic Commission, Quarterly Bulletin of Steel Statistics.

International Iron and Steel Institute, World Steel Imports and World Crude Steel Production, publications 103 and 162; 1976.

American Iron and Steel Institute, Steel Industry Economics and Federal Income Tax Policy, June 1975.

Anuario Estatistico de Industria Siderurgica Brasileira, 1977.

Secondary sources:

U.S. Department of State; Communiques through United States' overseas posts of the countries emcompassed by this study.

Foreign government embassy officials of the respective countries included in this study.

Numerous academicians, bankers, and economists familiar with the steel sector.

five countries, 1964 and 1972-75 1/

(Indexes: 1964=100)

Year	Output per hour	Hourly labor cost		Unit labor costs		Output	Total hours	Total labor cost
		National currency	U.S. dollars 2/	National currency	U.S. dollars 2/			
United States:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	120.7	101.2	161.2	133.6	133.6	107.2	88.8	143.2
1973	133.1	173.4	173.4	130.3	130.3	127.6	95.9	166.3
1974	134.2	202.1	202.1	150.6	150.6	127.5	95.0	192.0
1975	120.2	238.3	238.3	198.3	198.3	96.5	80.3	191.4
Japan:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	217.7	277.7	331.7	127.6	152.4	254.1	116.7	324.2
1973	271.5	342.1	457.1	126.0	168.4	313.5	115.5	395.1
1974	278.6	455.8	565.8	163.6	203.1	312.3	112.1	510.9
1975	277.1	540.5	659.4	195.1	238.0	271.6	98.0	529.2
France:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	159.2	231.6	225.0	145.5	141.3	130.0	81.7	180.2
1973	169.1	272.6	301.1	161.2	178.1	137.7	81.5	222.0
1974	173.0	341.3	348.0	197.2	201.1	147.2	85.1	290.4
1975	124.1	408.4	407.5	329.1	376.7	96.1	79.1	322.9
Germany:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	166.4	198.8	247.8	119.5	149.0	142.7	85.8	170.5
1973	184.8	225.5	338.5	122.0	183.1	162.6	88.0	198.4
1974	196.5	262.9	404.7	133.8	205.9	171.0	87.0	228.8
1975	175.2	295.1	477.8	168.5	272.8	133.5	76.2	255.0
United Kingdom:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	126.6	205.5	184.0	162.3	145.4	94.6	74.7	153.5
1973	134.3	231.3	203.1	172.3	151.2	105.3	78.4	181.3
1974	122.2	277.7	232.7	227.2	190.5	93.7	76.7	212.8
1975	105.7	366.0	291.2	346.4	275.8	78.7	74.5	272.6

1/ With the exception of a few items, the indexes for 1964 and 1972 are based on the U.S. definition of the Iron and Steel Industry. For the four foreign countries, they are based on the midpoint of minimum and maximum, estimates for each year. Indexes for 1973 to 1975--unadjusted for strict comparability among countries--have been linked at 1972.

2/ Indexes in national currencies adjusted for changes in prevailing exchange rates.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Division of Foreign Labor.

Table C-2.--Iron and steel industry: Preliminary estimates of output per hour, hourly labor cost, and unit labor cost, all employees, five countries, 1964 and 1972-75

(United States =100 1/)

Year	United States	Japan		France		Germany		United Kingdom	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
	Output per hour								
1964	100	48	55	48	52	55	63	48	51
197_	100	85	101	62	69	77	85	50	53
1973	100	96	114	60	67	77	86	48	51
1974	100	97	116	61	68	81	90	44	46
1975	100	108	129	49	54	81	90	42	45
	Hourly labor cost 2/								
1964	100	16	16	34	35	37	39	29	30
1972	100	33	34	48	48	58	58	33	34
1973	100	42	43	60	60	74	74	34	35
1974	100	44	46	59	59	76	76	33	34
1975	100	44	45	67	67	76	76	35	36
	Unit labor cost 2/								
1964	100	29	34	66	72	60	70	57	61
1972	100	32	40	69	77	68	76	62	67
1973	100	37	45	89	100	86	96	66	71
1974	100	38	47	87	98	84	93	72	78
1975	100	34	42	124	139	84	94	80	86

1/ With the exception of a few items (wire and wire products are excluded for the United Kingdom and wheels and axels are excluded for Germany), the estimates for 1964 and 1972 are based on the U.S. definition of the iron and steel industry. In addition, the output of each country's industry has been adjusted for differences in product mix among countries and over time by weighting the component products with U.S. 1967 labor requirements (hours of labor required per ton of each product). The weights used are cumulative, that is, for each end product, they reflect all stages of production within the industry from coke through the end products. No adjustments have been made for possible differences amoung countries in the degree of vertical integration on the quality of steel produced. The results are presented in ranges with minimum and maximum estimates relative to the United States because of gaps in the data.

The estimates for 1973-75 were obtained by applying trend indexes for each country--unadjusted for strict comparability among countries--to the 1972 relatives. While the 1973-75 output index for the United States is based on the 1967 labor requirements weights, the output indexes for the other countries are based on the weights underlying their own production indexes.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Division of Foreign Labor.

Table C-3.--Automobiles: Selected production and trade data for major market economy producing countries, 1972-75

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	Units		Units	Units	Units	Units
1972:						
Austria	381	0	0	146	236,918	-236,772
Argentina	207,623	1	2,076	10,000	86,340	-76,340
Belgium-Luxembourg	922,287	0	0	797,756	500,771	296,985
Brazil	408,712	0	0	30	1,477	-1,444
Canada	1,135,702	0	0	777,797	729,129	48,668
Denmark	0	0	0	100	126,980	-126,880
Finland	0	0	0	13,000	101,200	-88,200
France	2,992,959	45	1,346,832	1,641,585	412,516	1,229,069
Ireland	0	0	0	3,000	74,607	-71,607
Italy	1,732,379	6	103,943	659,157	509,773	149,384
Japan	4,022,289	0	0	1,415,540	25,164	1,390,376
Mexico	163,005	0	0	3,500	52,117	-48,617
Netherlands	87,396	0	0	51,000	489,645	-438,645
Norway	0	0	0	0	92,190	-92,190
Portugal	0	0	0	250	94,957	-94,707
Spain	600,559	12	72,067	75,000	248,077	-173,077
Sweden	317,962	0	0	196,305	146,908	49,397
Switzerland	33,693	0	0	98	275,506	-275,408
United Kingdom	1,921,311	48	922,229	630,018	478,329	151,689
United States	8,583,653	0	0	410,247	1,646,562	-1,236,315
West Germany	3,521,540	17	598,662	2,026,371	840,056	1,186,315

	Imports from the United States	Exports to the United States	Trade balance with the United States	Share of production exported to United States	Share of production exported to world	Government-owned exports to the United States
	Units	Units	Units	Percent	Percent	Units
1972:						
Austria	128	0	-128	0	38.32	0
Argentina	121	0	-121	0	4.81	0
Belgium-Luxembourg	1,649	52,205	50,556	5.66	86.49	0
Brazil	174	3	-171	0	0	0
Canada	376,428	842,391	465,963	74.17	68.48	0
Denmark	114	2	-112	0	0	0
Finland	206	0	-206	0	0	0
France	514	15,475	14,961	0	54.84	6,964
Ireland	0	0	0	0	0	0
Italy	196	60,300	60,104	3.48	38.04	3,618
Japan	5,246	590,150	584,904	14.67	35.19	0
Mexico	3,637	17	-3,620	.10	2.14	0
Netherlands	849	13	-836	.01	58.35	0
Norway	107	0	-107	0	0	0
Portugal	11	0	-11	0	0	0
Spain	178	0	-178	0	12.48	0
Sweden	545	64,454	63,909	20.27	61.73	0
Switzerland	1,593	15	-1,578	.04	.29	0
United Kingdom	1,879	67,880	66,001	3.53	32.79	32,582
United States	0	0	0	0	4.77	0
West Germany	2,914	730,872	727,958	20.75	57.54	124,248

	Government-owned exports to world markets	Exports to all other countries except the United States	Imports from all other countries except the United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	Units	Units	Units	Percent	Percent
1972:					
Austria	0	146	236,790	0	0
Argentina	100	10,000	86,219	0	.04
Belgium-Luxembourg	0	745,551	499,122	0	0
Brazil	0	0	1,303	0	0
Canada	0	1/	352,701	0	0
Denmark	0	98	126,866	0	0
Finland	0	13,000	100,994	0	0
France	738,713	1,626,110	412,002	.23	24.68
Ireland	0	3,000	74,607	0	0
Italy	39,549	598,857	509,577	0	.02
Japan	0	825,390	19,918	0	0
Mexico	0	3,483	48,480	0	0
Netherlands	0	50,987	488,796	0	0
Norway	0	0	92,083	0	0
Portugal	0	250	94,946	0	0
Spain	9,000	75,000	247,899	0	1.50
Sweden	0	131,851	146,363	0	0
Switzerland	0	83	273,913	0	0
United Kingdom	302,409	562,138	476,450	1.70	15.74
United States	0	0	0	0	0
West Germany	344,483	1,295,499	837,142	3.53	9.78

Table C-3.--Automobiles: Selected production and trade data for major market economy producing countries, 1972-75--Continued

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	Units		Units	Units	Units	Units
1973:						
Austria	329	0	0	107	210,315	-210,208
Argentina	233,660	1	2,337	10,000	91,329	-81,329
Belgium-Luxembourg	969,912	0	0	863,789	513,621	350,168
Brazil	456,077	0	0	11	1,562	-1,551
Canada	1,227,432	0	0	892,330	630,180	262,150
Denmark	0	0	0	100	185,874	-185,774
Finland	0	0	0	13,000	97,167	-84,167
France	3,202,391	45	1,441,076	1,750,824	461,898	1,288,926
Ireland	0	0	0	3,000	87,958	-84,958
Italy	1,823,333	6	109,400	651,221	539,752	111,469
Japan	4,470,500	0	0	1,450,497	36,926	1,413,571
Mexico	200,147	0	0	3,500	81,881	-78,381
Netherlands	94,906	0	0	51,554	504,302	452,748
Norway	0	0	0	0	91,139	-91,139
Portugal	0	0	0	250	106,963	-106,713
Spain	706,433	12	84,772	104,000	288,537	-184,537
Sweden	341,503	0	0	183,779	148,312	35,467
Switzerland	16,942	0	0	159	262,383	-262,224
United Kingdom	1,747,316	48	838,712	597,544	508,547	88,997
United States	9,667,152	0	0	524,028	2,439,435	1,915,407
West Germany	3,649,880	17	620,480	2,173,224	820,807	1,352,417

Country	Imports from the United States	Exports to the United States	Trade balance with the United States	Share of production exported to United States	Share of production exported to world	Government-owned exports to the United States
	Units	Units	Units	Percent	Percent	Units
1973:						
Austria	138	0	-138	0	32.52	0
Argentina	5	0	-5	0	4.28	0
Belgium-Luxembourg	2,735	71,505	68,770	7.37	89.06	0
Brazil	278	11	-267	0	0	0
Canada	452,370	871,581	419,211	71.01	72.70	0
Denmark	828	0	-828	0	0	0
Finland	308	0	-308	0	0	0
France	365	8,231	7,866	.26	54.67	3,704
Ireland	0	1	1	0	0	0
Italy	206	56,310	56,104	3.09	35.72	3,779
Japan	11,419	625,160	613,741	13.98	32.45	0
Mexico	1/	1/	1/	2.24	1.75	0
Netherlands	1,013	437	-576	.46	54.32	0
Norway	179	0	-179	0	0	0
Portugal	7	0	-7	0	0	0
Spain	201	32	-169	.01	14.72	4
Sweden	1,013	58,675	57,662	17.18	53.81	0
Switzerland	2,009	3	-2,006	.02	.94	0
United Kingdom	743	64,581	63,838	3.70	34.20	30,999
United States	0	0	0	0	5.42	0
West Germany	3,885	678,412	674,527	18.59	59.54	115,330

Country	Government-owned exports to world markets	Exports to all other countries except the United States	Imports from all other countries except the United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	Units	Units	Units	Percent	Percent
1973:					
Austria	0	107	210,177	0	0
Argentina	100	10,000	91,324	0	.04
Belgium-Luxembourg	0	792,284	510,886	0	0
Brazil	0	0	1,284	0	0
Canada	0	20,749	177,810	0	0
Denmark	0	100	185,046	0	0
Finland	0	13,000	96,859	0	0
France	78,787	1,742,593	461,533	.12	24.6
Ireland	0	2,999	87,958	0	0
Italy	39,073	594,911	539,546	0	.02
Japan	0	825,337	25,507	0	0
Mexico	0	1/	79,131	0	0
Netherlands	0	51,117	503,289	0	0
Norway	0	0	90,960	0	0
Portugal	0	250	106,956	0	0
Spain	12,480	103,968	288,336	0	1.77
Sweden	0	125,104	147,299	0	0
Switzerland	0	156	260,374	0	0
United Kingdom	286,821	532,963	507,804	1.77	16.42
United States	0	0	0	0	0
West Germany	369,448	1,494,812	816,922	3.16	10.12

Table C-3.--Automobiles: Selected production and trade data for major market economy producing countries, 1972-75--Continued

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	Units		Units	Units	Units	Units
1974:						
Austria	1,469	0	0	422	184,290	-183,868
Argentina	212,088	1	2,121	10,000	96,858	-86,858
Belgium-Luxembourg	738,000	0	0	695,639	429,568	266,071
Brazil	515,680	0	0	76	2,310	-2,234
Canada	1,165,635	0	0	840,802	644,841	195,961
Denmark	0	0	0	100	92,378	-92,278
Finland	0	0	0	13,000	84,257	-71,257
France	3,045,283	45	1,370,377	1,765,297	375,613	1,389,684
Ireland	0	0	0	3,300	69,119	-65,819
Italy	1,630,686	6	97,841	677,881	334,977	342,904
Japan	3,931,842	0	0	1,727,396	42,217	1,685,179
Mexico	248,574	0	0	1/	82,221	1/
Netherlands	69,234	0	0	53,000	478,920	-425,920
Norway	0	0	0	0	93,745	-93,745
Portugal	0	0	0	250	100,977	-100,727
Spain	704,574	12	84,549	101,000	301,102	-200,102
Sweden	326,743	0	0	163,970	178,778	-14,808
Switzerland	14,340	0	0	3,814	205,524	-201,710
United Kingdom	1,543,119	48	740,697	564,645	375,182	189,463
United States	7,324,504	0	0	600,902	1,757,100	-1,156,198
West Germany	2,839,596	17	482,731	1,540,808	590,346	950,462

	Imports from the United States	Exports to the United States	Trade balance with the United States	Share of production exported to United States	Share of production exported to world	Government-owned exports to the United States
	Units	Units	Units	Percent	Percent	Units
1974:						
Austria	342	0	-342	0	28.73	0
Argentina	17	0	-17	0	4.72	0
Belgium-Luxembourg	5,681	76,600	70,919	10.38	94.26	0
Brazil	699	76	-623	.01	0	0
Canada	516,588	817,567	300,979	70.14	72.13	0
Denmark	287	0	-287	0	0	0
Finland	247	1/	-247	0	0	0
France	451	21,331	20,880	.70	57.97	9,559
Ireland	0	0	0	0	0	0
Italy	201	107,234	107,033	6.58	41.57	6,434
Japan	13,347	791,791	778,444	20.14	43.93	0
Mexico	2,885	1/	1/	1.57	1.41	0
Netherlands	1,748	19	-1,729	.03	76.55	0
Norway	214	0	-214	0	0	0
Portugal	23	0	-23	0	0	0
Spain	194	0	-194	0	14.33	0
Sweden	1,393	60,817	59,982	18.61	50.18	0
Switzerland	2,914	0	-2,914	0	26.60	0
United Kingdom	542	73,063	72,521	4.73	36.59	35,070
United States	0	0	0	0	8.20	0
West Germany	4,577	620,921	616,344	21.87	54.26	105,556

	Government-owned exports to world markets	Exports to all other countries except the United States	Imports from all other countries except the United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	Units	Units	Units	Percent	Percent
1974:					
Austria	0	442	183,948	0	0
Argentina	100	10,000	96,841	0	.04
Belgium-Luxembourg	0	619,039	423,887	0	0
Brazil	0	0	1,611	0	0
Canada	0	23,235	128,253	0	0
Denmark	0	100	92,091	0	0
Finland	0	13,000	84,010	0	0
France	794,384	1,743,966	375,162	.32	26.08
Ireland	0	3,300	69,119	0	0
Italy	40,673	570,647	334,776	0	.03
Japan	0	935,605	28,870	0	0
Mexico	0	1/	79,336	0	0
Netherlands	0	52,981	477,172	0	0
Norway	0	0	93,531	0	0
Portugal	0	250	100,954	0	0
Spain	12,120	101,000	300,908	0	1.72
Sweden	0	103,153	177,385	0	0
Switzerland	0	3,814	202,610	0	0
United Kingdom	271,030	491,582	374,640	2.27	17.56
United States	0	0	0	0	0
West Germany	261,937	919,887	585,769	3.71	9.22

Table C-3.--Automobiles: Selected production and trade data for major market economy producing countries, 1972-75--Continued

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	Units		Units	Units	Units	Units
1975:						
Austria	284	0	0	134	186,917	-186,783
Argentina	190,000	1	1,900	10,000	66,215	-56,215
Belgium-Luxembourg	795,504	0	0	792,075	326,860	465,215
Brazil	524,203	0	0	20	832	812
Canada	1,053,817	0	0	777,374	556,875	220,499
Denmark	0	0	0	75	115,561	-115,486
Finland	0	0	0	13,000	102,655	-89,655
France	2,952,824	45	1,328,771	1,769,887	355,054	1,414,833
Ireland	0	0	0	3,600	55,553	-51,953
Italy	1,348,544	6	80,913	656,748	378,577	278,171
Japan	4,567,854	0	0	1,826,748	44,681	1,782,067
Mexico	238,743	0	0	3,500	76,659	-73,159
Netherlands	63,000	0	0	55,868	583,262	-527,394
Norway	0	0	0	30	113,036	-113,003
Portugal	0	0	0	250	60,477	-60,227
Spain	696,124	12	83,535	135,000	314,869	-179,869
Sweden	316,386	0	0	163,442	185,926	-22,484
Switzerland	9,047	0	0	1,706	178,986	-177,280
United Kingdom	1,267,695	48	608,494	652,150	448,702	203,448
United States	6,717,043	0	0	640,301	1,350,934	-710,633
West Germany	2,907,819	17	494,329	1,355,588	769,434	586,154

Country	Imports from the United States	Exports to the United States	Trade balance with the United States	Share of production exported to United States	Share of production exported to world	Government-owned exports to the United States
	Units	Units	Units	Percent	Percent	Units
1975:						
Austria	449	0	-449	0	47.18	0
Argentina	52	13	-39	.01	5.26	0
Belgium-Luxembourg	3,141	38,199	35,058	4.80	99.57	0
Brazil	106	20	-86	.03	0	0
Canada	550,929	733,801	182,872	69.63	73.77	0
Denmark	196	0	-196	0	0	0
Finland	209	0	-209	0	0	0
France	888	15,736	14,848	.53	59.94	7,081
Ireland	0	0	0	0	0	0
Italy	108	102,716	102,608	7.62	48.70	6,163
Japan	15,062	696,185	681,123	15.24	39.99	0
Mexico	3,272	22	-3,252	.01	1.47	0
Netherlands	3,652	9	-3,643	.01	8.68	0
Norway	518	3	-515	0	0	0
Portugal	186	1	-185	0	0	0
Spain	147	1	-146	0	19.40	0
Sweden	3,107	52,022	48,915	16.44	51.66	0
Switzerland	3,765	5	3,760	.05	18.86	0
United Kingdom	752	67,784	67,032	5.35	51.44	32,536
United States	0	0	0	0	9.53	0
West Germany	6,391	371,173	364,782	12.76	46.62	63,099

Country	Government-owned exports to world markets	Exports to all other countries except the United States	Imports from all other countries except the United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	Units	Units	Units	Percent	Percent
1975:					
Austria	0	0	186,468	0	0
Argentina	100	9,987	66,163	0	.05
Belgium-Luxembourg	0	753,876	323,719	0	0
Brazil	0	0	726	0	0
Canada	0	43,573	5,946	0	0
Denmark	0	0	115,365	0	0
Finland	0	0	102,446	0	0
France	796,449	1,754,151	354,166	.24	26.97
Ireland	0	0	0	0	0
Italy	39,405	554,032	378,469	0	.03
Japan	0	1,130,563	29,619	0	0
Mexico	0	3,478	73,387	0	0
Netherlands	0	55,859	579,610	0	0
Norway	0	0	112,518	0	0
Portugal	0	249	60,291	0	0
Spain	0	134,999	314,722	0	2.33
Sweden	16,200	111,420	182,819	0	0
Switzerland	0	1,701	175,221	0	0
United Kingdom	313,032	584,366	447,950	2.57	24.69
United States	0	0	0	0	0
West Germany	230,450	984,415	763,043	2.17	7.93

1/ Not available.

Source: Compiled by the staff of the U.S. International Trade Commission from Ward's Automotive Yearbooks; Automotive News Market Data, Book Issue; U.S. International Trade Publications; World Cars Annual; telegrams from American embassies, worldwide; World Automotive Market (Automobile International, Johnston Publication, Park Ave., So.); Automobile Facts and Figures (Motor Vehicle Manufacturers Association).

Table C-4.--Iron ore: Selected production and trade data for major producing countries, 1971-75

(Gross-weight basis)

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1971:						
Argentina	282	100	282	0	0	0
Austria	4,171	100	4,171	1	1,842	-1,841
Belgium Luxembourg	4,600	0	0	75	28,152	-28,007
Brazil	42,672	75	32,004	31,020	1/	1/
Canada	43,974	0	0	34,164	1,384	38,780
Denmark	15	0	-	108	0	108
Finland	878	100	878	28	892	-867
France	55,860	0	0	18,304	9,370	8,934
Ireland	0	0	0	0	0	0
Italy	683	100	683	1/	11,246	1/
Japan	1,420	0	-	0	114,914	114,914
Mexico	4,698	73	3,430	1/	87	1/
Netherlands	0	0	1/	21	5,991	-5,970
Norway	4,056	96	3,894	2,742	10	2,732
Portugal	99	100	99	5	340	-335
Spain	7,328	12	879	2,345	3,428	1,083
Sweden	34,635	86	29,554	26,180	2	26,178
Switzerland	0	0	0	0	0	0
United Kingdom	10,228	100	10,228	1/	17,473	1/
United States	82,504	0	0	3,061	40,766	37,705
West Germany	5,020	80	4,016	9	40,322	-40,313

	Imports from the United States	Exports to the United States	Trade balance with the the United States	Share of production exported to the United States	Share of production exported to world markets	Government-owned exports to the United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent	1,000 metric tons
1971:						
Argentina	0	0	0	0	0	0
Austria	0	0	0	0	.02	0
Belgium Luxembourg	0	0	0	0	1.63	0
Brazil	0	1,800	1,800	4.22	72.69	1,350
Canada	1,265	20,668	19,403	47.00	77.69	0
Denmark	0	0	0	0	720.00	1/
Finland	0	0	0	0	3.19	0
France	0	0	0	1/	32.77	1/
Ireland	0	0	0	0	1/	0
Italy	0	0	0	0	0	0
Japan	0	0	0	0	1/	0
Mexico	1,825	0	-1,823	1/	1/	1/
Netherlands	0	0	0	0	1/	0
Norway	0	0	0	0	67.60	0
Portugal	0	0	0	0	5.05	0
Spain	0	0	0	0	32.00	0
Sweden	0	181	181	.53	76.18	155
Switzerland	0	0	0	1/	1/	1/
United Kingdom	0	0	0	0.00	1/	0
United States	0	0	0	0.00	3.71	0
West Germany	19	0	-19	0.00	.18	0

	Government-owned exports to world markets	Exports to all other countries except United States	Imports from all other countries except United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent
1971:					
Argentina	0	0	0	0	0
Austria	1	1	1,842	0	2.40
Belgium Luxembourg	0	75	28,152	0	0
Brazil	23,265	29,220	1/	3.16	54.52
Canada	1/	13,496	119	1/	1/
Denmark	-	108	0	0	0
Finland	28	28	895	0	3.19
France	1/	18,304	9,370	1/	1/
Ireland	1/	0	0	0	1/
Italy	0	0	11,246	0	0
Japan	1/	1/	113,091	0	0
Mexico	1/	1/	87	1/	1/
Netherlands	0	21	5,991	1/	1/
Norway	2,632	2,742	10	0	64.90
Portugal	5	5	340	0	5.05
Spain	281	2,345	3,428	0	3.84
Sweden	22,515	25,999	2	.45	65.52
Switzerland	1/	1/	0	1/	1/
United Kingdom	1/	0	17,473	0	1/
United States	0	3,061	40,124	0	0
West Germany	720	9	40,303	0	.18

Table C-4.--Iron ore: Selected production and trade data for major producing countries, 1971-75

(Gross-weight basis)

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1972:						
Argentina	259	100	259	0	0	0
Austria	4,132	100	4,132	1	1,680	-1,679
Belgium Luxembourg	4,229	0	0	3	28,078	-28,075
Brazil	46,469	75	34,852	30,512	1/	1/
Canada	39,542	0	0	1/	1/	1/
Denmark	15	1/	1/	104	13	91
Finland	995	100	995	8	771	-762
France	54,243	0	0	19,192	11,648	7,544
Ireland	0	0	1/	1/	0	0
Italy	616	100	616	0	13,308	1/
Japan	1,346	0	0		111,501	111,501
Mexico	5,089	73	3,715	0	0	0
Netherlands	0	1/	1/	8	5,666	5,658
Norway	3,881	96	3,726	2,919	13	2,906
Portugal	44	100	44	1/	366	1/
Spain	6,773	12	812	1,896	4,147	-2,251
Sweden	33,977	86	29,220	27,610	29	1/
Switzerland	0	1/	1/	1/	1/	-29
United Kingdom	9,047	100	9,047	0	17,351	1/
United States	76,641	0	0	2,095	36,333	34,238
West Germany	4,825	80	3,860	5	40,670	-40,665

	Imports from the United States	Exports to the United States	Trade balance with the the United States	Share of production exported to the United States	Share of production exported to world markets	Government-owned exports to the United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent	1,000 metric tons
1972:						
Argentina	0	0	0	0	0	0
Austria	0	0	0	0	.01	0
Belgium Luxembourg	0	0	0	1/	.07	0
Brazil	0	1,115	1,115	02.40	65.33	836
Canada	1,465	18,460	16,995	46.68	1/	1/
Denmark	0	0	0	1/	.83	0
Finland	1/	1/	1/	0	35.38	1/
France	0	0	0	1/	1/	0
Ireland	0	0	0	0	1/	0
Italy	0	0	0	0	1/	0
Japan	618	0	-618	0	0	1/
Mexico	1/	0	1/	0	0	0
Netherlands	0	0	0	1/	1/	0
Norway	0	0	0	0	75.21	0
Portugal	0	0	0	0	1/	1/
Spain	0	0	0	0	27.99	1/
Sweden	0	277	277	0.82	81.26	238
Switzerland	0	0	0	1/	1/	0
United Kingdom	0	1/	1/	0	1/	0
United States	0	0	0	0	2.73	0
West Germany	45	0	0	0	.10	0

	Government-owned exports to world markets	Exports to all other countries except United States	Imports from all other countries except United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent
1972:					
Argentina	0	0	0	0	0
Austria	60	1	1,680	0	.14
Belgium Luxembourg	1/	3	28,078	0	0
Brazil	22,884	29,397	1/	1.80	49.25
Canada	0	18,460	1,465	1/	1/
Denmark	1/	104	13	0	0
Finland	8	1/	1/	1/	.83
France	0	19,192	11,648	0	0
Ireland	1/	0	0	1/	0
Italy	1/	1/	13,308	0	1/
Japan	0	0	110,883	0	1/
Mexico	0	0	0	0	0
Netherlands	1/	8	5,666	1/	0
Norway	2,802	2,919	13	0	72.20
Portugal	1/	1/	366	0	1/
Spain	228	1,896	4,147	0	3.36
Sweden	23,745	27,333	1/	.70	69.88
Switzerland	1/	0	29	1/	1/
United Kingdom	1/	1/	17,351	0	1/
United States	0	2,095	35,761	0	0
West Germany	4	5	40,625	0	.10

See footnote at end of table.

Table C-4.--Iron ore: Selected production and trade data for major producing countries, 1971-75

(Gross-weight basis)

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1973:						
Argentina	238	100	238	0	1,235	-1,235
Austria	4,210	100	4,210	1	2,111	-2,110
Belgium Luxembourg	3,898	0	0	77	32,417	-32,340
Brazil	50,506	75	37,880	44,963	1/	1/
Canada	50,213	0	0	37,668	517	37,151
Denmark	6	1/	1/	77	37	40
Finland	894	100	894	0	948	-948
France	54,229	0	0	19,563	11,644	7,919
Ireland	0	1/	1/	0	0	0
Italy	510	100	510	166	14,194	-14,028
Japan	1,007	0	0	1/	134,260	1/
Mexico	4,670	73	3,409	1/	0	0
Netherlands	0	1/	1/	497	6,973	-6,476
Norway	3,970	96	3,811	2,988	44	2,944
Portugal	36	100	36	1/	492	1/
Spain	6,621	12	794	1,661	5,116	-3,455
Sweden	34,726	86	29,864	32,917	0	32,917
Switzerland	0	1/	1/	0	28	-28
United Kingdom	7,105	100	7,105	1/	22,918	1/
United States	89,072	0	0	2,791	44,024	41,234
West Germany	5,069	80	4,055	6	50,308	-50,302

Country	Imports from the United States	Exports to the United States	Trade balance with the the United States	Share of production exported to the United States	Share of production exported to world markets	Government-owned exports to the United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent	1,000 metric tons
1973:						
Argentina	0	0	0	0	0	0
Austria	0	0	0		.02	0
Belgium Luxembourg	0	17	17	.43	1.98	0
Brazil	0	3,234	3,234	6.40	89.03	2,425
Canada	2,172	21,651	19,479	43.12	75.02	0
Denmark	0	0	0	0	1,283.33	1/
Finland	0	0	0	0	0	0
France	0	0	0	0	36.07	0
Ireland	1/	1/	1/	1/	1/	1/
Italy	0	0	0	0	32.54	0
Japan	464	0	-464	0	1/	0
Mexico	0	0	0	0	0	0
Netherlands	0	0	0	1/	1/	1/
Norway	0	0	0	0	75.26	0
Portugal	0	0	0	0	1/	0
Spain	0	0	0	0	25.08	0
Sweden	0	277	277	.80	94.79	238
Switzerland	0	0	0	1/	1/	1/
United Kingdom	0	0	0	0	1/	0
United States	0	0	0	0	3.13	0
West Germany	17	0	-17	0	.12	0

Country	Government-owned exports to world markets	Exports to all other countries except United States	Imports from all other countries except United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent
1973:					
Argentina	0	0	1,235	0	0
Austria	1	1	2,111	0	.02
Belgium Luxembourg	0	60	32,417	0	0
Brazil	33,722	41,729	1/	4.80	66.76
Canada	0	16,017	1,655	0	0
Denmark	1/	77	37	1/	1/
Finland	0	0	948	0	0
France	0	19,563	11,644	0	0
Ireland	1/	0	0	1/	1/
Italy	166	166	14,194	0	32.54
Japan	1/	1/	133,796	0	1/
Mexico	1/	1/	1/	1/	1/
Netherlands	1/	497	6,973	1/	1/
Norway	2,868	2,988	44	0	72.25
Portugal	1/	1/	492	0	1/
Spain	199	1,661	5,116	0	3.01
Sweden	28,308	32,640	0	.69	81.52
Switzerland	1/	0	28	1/	1/
United Kingdom	1/	1/	22,918	0	1/
United States	0	2,791	43,991	0	0
West Germany	480	6	50,291	0	.12

Table C-4.--Iron ore: Selected production and trade data for major producing countries, 1971-75

(Gross-weight basis)

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1974:						
Argentina	151	100	151	0	1,003	-1,003
Austria	4,245	100	4,245	0	3,011	-3,011
Belgium Luxembourg	2,809	0	0	242	33,926	-33,683
Brazil	73,955	75	55,466	59,439	0	59,439
Canada	49,974	0	0	37,448	2,333	35,115
Denmark	6	1/	1/	29	29	0
Finland	937	100	937	0	1,133	-1,133
France	54,262	0	0	19,862	15,953	3,909
Ireland	0	1/	1/	0	0	0
Italy	593	100	593	260	18,133	-17,873
Japan	777	0	0	0	141,951	-141,951
Mexico	5,007	73	3,655	1/	1	1/
Netherlands	0	0.	0	196	7,061	-6,865
Norway	3,918	96	3,761	2,809	36	2,773
Portugal	24	100	24	43	387	-344
Spain	8,238	12	988	3,478	5,280	-1,802
Sweden	36,153	86	31,092	33,503	82	33,421
Switzerland	0	1/	1/	0	40	-40
United Kingdom	3,602	100	3,602	0	20,292	-20,292
United States	85,705	0	0	2,360	48,798	46,438
West Germany	4,439	80	3,551	200	58,511	-58,310

	Imports from the United States	Exports to the United States	Trade balance with the the United States	Share of production exported to the United States	Share of production exported to world markets	Government-owned exports to the United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent	1,000 metric tons
1974:						
Argentina	0	0	0	0	0	0
Austria	0	0	0	0	0	0
Belgium Luxembourg	0	0	0	0	8.64	0
Brazil	0	6,677	6,677	9.02	80.37	5,007
Canada	1,843	20,018	18,175	40.06	74.93	0
Denmark	0	0	0	0	83.33	1/
Finland	0	0	0	0	0	0
France	27	0	-27	0	36.60	0
Ireland	0	0	0	1/	1/	1/
Italy	0	0	0	0	43.84	0
Japan	446	0	-446	0	0	0
Mexico	1	0	-1	0	1/	1/
Netherlands	0	0	0	1/	1/	1/
Norway	0	0	0	0	71.69	0
Portugal	0	0	0	0	179.16	0
Spain	0	0	0	0	42.22	0
Sweden	40	340	300	.94	92.67	292
Switzerland	0	0	0	1/	1/	1/
United Kingdom	0	0	0	0	0	0
United States	0	0	0	0	2.75	0
West Germany	0	17	17	.38	4.52	14

	Government-owned exports to world markets	Exports to all other countries except United States	Imports from all other countries except United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent
1974:					
Argentina	0	0	1,003	0	0
Austria	0	0	3,011	0	0
Belgium Luxembourg	0	242	33,926	0	0
Brazil	44,579	52,762	0	6.77	60.27
Canada	0	17,430	490	0	0
Denmark	1/	29	29	1/	1/
Finland	0	0	1,133	0	0
France	0	19,862	15,926	0	0
Ireland	1/	0	0	1/	1/
Italy	260	260	18,133	0	43.84
Japan	0	0	141,505	0	0
Mexico	1/	1/	0	0	0
Netherlands	1/	196	7,061	1/	1/
Norway	2,696	2,809	36	0	68.82
Portugal	43	43	387	0	179.16
Spain	417	3,478	5,280	0	5.06
Sweden	28,812	33,162	42	.81	79.70
Switzerland	1/	0	40	1/	1/
United Kingdom	0	0	20,292	0	0
United States	0	2.360	48,800	0	0
West Germany	147	184	58,511	.39	4.52

See footnote at end of table.

Table C-4.--Iron ore: Selected production and trade data for major producing countries, 1971-75

(Gross-weight basis)

Country	Production	Percent government-owned	Government-owned production	Total exports	Total imports	World trade balance
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
1975:						
Argentina	300	100	300	1/	1/	1/
Austria	3,833	100	3,833	0	2,578	-2,578
Belgium Luxembourg	2,408	0	0	70	25,520	-25,450
Brazil	71,724	75	53,793	1/	0	1/
Canada	46,868	0	0	39,720	5,338	34,382
Denmark	13	1/	1/	1/	1/	1/
Finland	908	100	908	0	1,206	-1,206
France	49,652	0	0	16,016	13,169	2,847
Ireland	0	1/	1/	1/	1/	1/
Italy	541	100	541	12	15,650	-15,638
Japan	779	0	0	0	131,749	-131,749
Mexico	4,897	73	3,574	1/	1/	1/
Netherlands	0	1/	1/	96	7,368	-7,272
Norway	4,089	96	3,925	3,267	38	3,229
Portugal	22	100	22	42	319	-277
Spain	8,218	12	986	1,960	6,135	-4,175
Sweden	32,639	86	28,069	23,081	318	22,763
Switzerland	0	1/	1/	0	38	-38
United Kingdom	4,491	100	4,491	0	15,783	-15,783
United States	80,132	0	0	2,900	47,490	-44,590
West Germany	3,288	80	2,630	144	44,322	-44,178

	Imports from the United States	Exports to the United States	Trade balance with the the United States	Share of production exported to the United States	Share of production exported to world markets	Government-owned exports to the United States
	1,000 metric tons	1,000 metric tons	1,000 metric tons			1,000 metric tons
1975:						
Argentina	0	0	0	0	1/	0
Austria	0	0	0	0	0	0
Belgium Luxembourg	0	0	0	0	2.90	0
Brazil	0	1/	1/	1/	1/	1/
Canada	4,385	21,267	16,882	45.38	84.75	0
Denmark	1/	1/	1/	1/	1/	1/
Finland	0	0	0	0	0	0
France	0	0	0	0	32.26	0
Ireland	1/	1/	1/	1/	1/	1/
Italy	0	0	0	0	2.22	0
Japan	44	0	-44	0	0	0
Mexico	1/	1/	1/	1/	1/	1/
Netherlands	0	0	0	1/	1/	1/
Norway	0	50	50	1.23	79.90	48
Portugal	0	0	0	0	190.91	0
Spain	51	0	-51	0	23.85	0
Sweden	182	0	182	.56	70.72	157
Switzerland	0	0	0	1/	1/	0
United Kingdom	0	0	0	0	0	0
United States	0	0	0	0	3.62	0
West Germany	0	0	0	0	4.38	0

	Government-owned exports to world markets	Exports to all other countries except United States	Imports from all other countries except United States	Government-owned exports to the United States as a share of domestic production	Government-owned exports to world markets as a share of domestic production
	1,000 metric tons	1,000 metric tons	1,000 metric tons	Percent	Percent
1975:					
Argentina	1/	1/	1/	0	1/
Austria	0	0	2,578	0	0
Belgium Luxembourg	0	70	25,520	0	0
Brazil	1/	1/	1/	1/	1/
Canada	0	18,453	953	0	0
Denmark	1/	1/	1/	1/	1/
Finland	0	0	1,206	0	0
France	0	16,016	13,169	0	0
Ireland	1/	1/	1/	1/	1/
Italy	12	12	15,650	0	2.22
Japan	0	0	131,705	0	0
Mexico	1/	1/	1/	1/	1/
Netherlands	1/	96	7,368	1/	1/
Norway	3,136	3,217	38	1.17	76.70
Portugal	42	42	319	0	190.90
Spain	235	1,960	6,084	0	2.86
Sweden	19,850	22,899	318	.48	60.82
Switzerland	0	0	38	1/	1/
United Kingdom	0	0	15,783	0	0
United States	0	2,900	46,800	0	0
West Germany	115	144	44,322	0	4.38

1/ Not available.

Source: United Nations. Commodity Trade Statistics, 1971-75, United Nations series D, Vol. XXIV, No. 1-34. U.S. Department of Interior, Bureau of Mines. Minerals Yearbook, Vol. I, Metals, Minerals and Fuels. Iron Ore, 1971-75.

Library Cataloging Data

U.S. International Trade Commission.
A survey and analysis of government ownership in market economy countries: a study of steel, automobiles and iron ore. Washington, [1978]

222 p. illus. (Staff research study, no. 13)

1. Steel industry and trade--Government ownership. 2. Automobile industry and trade--Government ownership. 3. Iron industry and trade--Government ownership. 4. Steel industry and trade. 5. Steel industry and trade--U.S. 6. Steel industry and trade--Gt. Britain. 7. Steel industry and trade--Italy. 8. Steel industry and trade--Germany (Federal Republic, 1949-) 9. Steel industry and trade--Spain. 10. Steel industry and trade--Austria. 11. Steel industry and trade--Brazil. 12. Automobile industry and trade--U.S. 13. Automobile industry and trade--France. 14. Automobile industry and trade--Gt. Britain. 15. Automobile industry and trade--Italy. 16. Automobile industry and trade--Germany (Federal Republic, 1949- 17. Automobile industry and trade--Canada. 18. Automobile industry and trade--Japan. 19. Iron and steel industry--U.S. 20. Iror and steel industry--Brazil. 21. Iron and steel industry--Sweden. 22. Iron ores. 23. Steel industry and trade--Statistics. 24. Automobile industry and trade--Statistics. 25. Iron industry and trade--Statistics. I. Title. II. Title: Government ownership in market economy countries: a study of steel, automobiles and iron ore.

UNITED STATES
INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C. 20436

OFFICIAL BUSINESS

ADDRESS CORRECTION REQUESTED

Postage And Fees Paid
U.S. International Trade Commission

ADDRESS CHANGE
- ☐ Remove from List
- ☐ Change as Shown

Please detach address label and mail to address shown above.