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Despite the public attention directed at U.S. multinational corporations and their investments abroad, confusion continues to exist about the effects of such investment on the U.S. economy and security. The impact of foreign direct investment has centered around the question of whether foreign investment displaces or enhances U.S. exports. Recent discussion has focused on: technology flows through investment abroad and their impact on U.S. trade competitiveness, host-country demands and incentives that could contribute to reduced U.S. exports, and joint U.S.-foreign ventures and their impact on trade and competition. Findings/Conclusions: Public concern has been expressed about the number of jobs foreign investment either creates or destroys. Available studies have been unable to agree on this issue, but analysts tend to agree that what would have happened in the absence of foreign investment is important in determining the job loss and/or gain from foreign investment. By extending its jurisdiction over domestic business investment abroad in order to protect its interests, the United States has taken actions which have caused and may continue to cause conflicts with host countries. The United States' dependence on foreign raw materials is increasing, making it more vulnerable to sudden shifts in supplies. Transfers of U.S. military technology through coproduction and licensing agreements have economical, political, and security implications. Host-country demands, changes in corporate philosophies, and new and evolving economic and political situations are causing shifts in investment patterns which could affect the U.S. economy and security. (RRS)

REPORT TO THE SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION BY THE COMPTROLLER GENERAL OF THE UNITED STATES

Domestic Policy Issues Stemming From U.S. Direct Investment Abroad

The impact of U.S. business investment abroad on the U.S. economy and security is subject to considerable speculation and debate.

This report discusses some investment issues confronting U.S. policymakers, such as job creation or loss, capital and technology outflows, and raw materials costs and availability. It also offers observations concerning the need for new data and analyses and comments on new trends in overseas investment and profitability.

ID-78-2

JANUARY 16, 1978

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-172255

The Honorable Daniel K. Inouye, Chairman
Subcommittee on Merchant Marine and Tourism
Committee on Commerce, Science, and Transportation
United States Senate

Dear Mr. Chairman:

This report is in response to your request that we study and report on the domestic policy issues stemming from U.S. direct investment abroad.

As requested by your subcommittee staff, we are simultaneously distributing this report to other interested parties.

Sincerely yours,

Elmer B. Staats

Comptroller General
of the United States

Contents

ABBREVIATIONS

GAO	General Accounting Office
OPEC	Organization of Petroleum Exporting Countries

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

DOMESTIC POLICY ISSUES STEMMING FROM U.S. DIRECT INVESTMENT ABROAD

D I G E S T

Over the last two decades, considerable attention has focused on U.S. multinational corporations' direct investment abroad. Despite this interest and the numerous studies which have ensued, much speculation exists concerning what U.S. policies need to be addressed and the issues affecting those policies.

This report discusses the domestic issues as perceived by the academic, public, and private sectors. It provides insights into traditional and emerging concerns that have been expressed about U.S. direct investment's impact on the Nation's economy and security.

BALANCE OF PAYMENTS

Greater uses of reinvested earnings for investment financing and inflows of U.S. subsidiaries' repatriated capital and other countries' investment capital have helped to allay concerns over the effects of investment capital outflows on the U.S. economy. However, concerns have been raised about (1) possible future difficulties in generating corporate earnings abroad and repatriating these earnings, (2) the net effect of reinvestments abroad on U.S. capital formation and productive capacity, and (3) the impact of foreign investors on the U.S. economy. (See pp. 6 to 11.)

The impact of foreign direct investment on U.S. trade has centered around the question--does foreign investment displace or enhance U.S. exports? Although the question has never been resolved, recent discussion has focused on:

--Technology flows through investment abroad and their impact on U.S. trade competitiveness.

--Host-country demands and incentives that could contribute to reduced U.S. exports.

--Joint U.S.-foreign ventures and their impact on trade and competition. (See pp. 11 to 21.)

The United States allows profits earned by U.S. subsidiaries operating abroad to remain untaxed to the parent corporation until remitted to the United States. Also, a credit is allowed against U.S. tax for foreign taxes paid. This approach aims at tax neutrality by taxing foreign investment at rates at least as high as prevailing U.S. tax rates. Critics of U.S. direct investment abroad argue that these tax provisions are incentives that favor foreign over domestic investment and, thus, should be eliminated. Proponents of foreign investment argue that all tax "loopholes" have been closed by legislation and that changes to present tax laws would not necessarily increase domestic investment and would place the U.S investor at a competitive disadvantage abroad. (See pp. 21 to 24.)

The cost of raw materials imports to the United States, except for oil, has not been a matter of much concern. However, recent perceived trends, such as the (1) placement of smelting and refining facilities abroad, (2) use of producer-country mechanisms to control commodity prices, and (3) separation of exploration from exploitation rights by host governments, could signal much higher costs for non-energy raw materials to the United States. (See pp. 24 to 28.)

EMPLOYMENT

Issues centering around employment have received considerable public attention in the debate over foreign investment. The greatest public concern has been expressed about the number of jobs foreign investment either creates or destroys. Studies available have been unable to agree on this issue, and the assumptions underlying these

studies are often in sharp disagreement. Analysts do tend to agree, however, that what would have happened in the absence of a foreign investment is important in determining the job loss and/or gain from foreign investment. Two interrelated issues involve changes in job skills and distribution of income derived from foreign investment. Some analysts have argued that foreign investment creates higher skilled better paying jobs; others fear that the U.S. industrial base is being narrowed and that foreign investment income is accumulating to corporate investors to the detriment of labor. (See ch. 3.)

NATIONAL SECURITY

To protect its interests, the United States has chosen to extend its jurisdiction over domestic business investment abroad. And to protect its private investors, it imposes sanctions against countries which take over properties in which U.S. citizens hold 50 percent or more interest without taking reasonable action to compensate the former owners. These actions have caused and may continue to cause conflicts between the United States and other countries. Moreover, host-country actions to shift the balance of investment benefits to itself may force the United States to take a more active role in negotiations between a host country and the U.S. investor, possibly leading to economic and/or political conflicts. (See pp. 49 to 55.)

The United States' dependence on foreign raw materials is increasing, making it more vulnerable to sudden shifts in supplies. And although the imposition by producer countries of embargoes for raw materials other than oil are unlikely, disruptions could occur because of producer country or areas': (1) desires to increase or stabilize prices, (2) production being affected by political or military actions, and (3) materials conservation programs. Also, increasing worldwide competition for raw

materials and a decreasing diversity of supply could negatively affect availability as well as concentrate available supplies within a select group of countries. (See pp. 55 to 63.)

Transfers of U.S. military technology through coproduction and licensing arrangements with U.S. allies and of commercial technology through contracts and agreements with the Soviet bloc countries have important economical, political, and security implications for the United States. (See pp. 64 to 70.)

OBSERVATIONS

Despite the public attention directed at U.S. multinational corporations and their investments abroad, confusion continues to exist about the effects of such investment on the U.S. economy and security. Such effects cannot be adequately measured, however, because of data voids and the lack of acceptable quantitative techniques and models.

Host-country demands, changes in corporate philosophies, and new and evolving economic and political situations are causing shifts in investment patterns which could significantly affect the U.S. economy and security. (See ch. 5.)

CHAPTER 1

INTRODUCTION

Large corporate entities, often referred to as multinational or transnational corporations, have been making direct investments abroad since the late 1800s, but it is only within the last several decades that significant public attention has focused on these activities. Ownership of 10 percent or more of a foreign corporation's voting stocks or control of a foreign business organization by a citizen or corporation is considered direct investment. Despite the interest in and numerous studies on direct investments which have ensued, little reliable data exists about the effect of this investment on the United States and the host countries. As a result, there is much speculation concerning what, if any, U.S. policies need to be addressed and the issues affecting those policies.

This report discusses the domestic issues as perceived by the academic, public, and private sectors, and, hopefully, provides a clearer insight into the concerns that have been expressed about U.S. direct investment abroad and its impact on the United States.

POLICY TOWARD DIRECT INVESTMENT ABROAD

The United States advocates the free flow of goods and capital between nations as the most efficient use of the world's economic resources. On occasion, however, it has deviated from this basic policy in order to protect the U.S. economy and national defense and to promote development in friendly countries. The following examples help to illustrate these deviations.

--U.S. balance-of-payments problems during the 1950s and 1960s and concurrent growth of U.S. investment capital outflows led to controls restricting U.S. parent financing of foreign affiliates being imposed for 6 years.

--To improve U.S. allies' military readiness, U.S. firms have been encouraged to share their military technology, such as with the F-16 aircraft coproduction arrangement.

--The Investment Guaranty Program encouraged the use of private U.S. funds in Europe's recovery after

World War II. Similarly, the Overseas Private Investment Corporation's insurance and loan guarantee programs encourage U.S. companies to invest in friendly developing countries for the purpose of economic development.

INTERNATIONAL INVESTMENT SURVEY ACT

The International Investment Survey Act of 1976 (Public Law 94-472) authorizes the President to

> "conduct such studies and surveys as may be necessary to prepare reports in a timely manner on specific aspects of international investment which may have significant implications for the economic welfare and national security of the United States."

The act requires the President, through his designee(s), to conduct:

--Comprehensive "benchmark surveys" of U.S. direct investment abroad and of foreign direct and portfolio investment 1/ in the United States at least every 5 years.

--A comprehensive "benchmark survey" of U.S. portfolio investment abroad within 5 years of the legislation's enactment and evaluate the feasibility and desirability of conducting similar surveys periodically.

--A regular data-collection program to secure current information on international capital flows and other information related to international investment, including, but not limited to, information necessary for computing and analyzing the U.S. balance of payments, employment and taxes of U.S. parents and affiliates, and the U.S. international investment position.

Executive Order 11961, issued January 19, 1977, assigned responsibility for studies of direct investment to the Secretary of Commerce and for portfolio investment to the Secretary of the Treasury.

1/Portfolio investment includes ownership of bonds, other U.S corporate securities, and/or less than 10 percent of the voting stock or equivalent interest.

Prior to the 1976 act, collecting information on foreign direct investment was authorized under Executive Order 10033 of February 8, 1949, issued pursuant to section 8 of the Bretton Woods Agreements Act, as amended (22 U.S.C. 286-286k-1). Statistics were collected under this act primarily for inclusion in the balance-of-payments data reported to the International Monetary Fund.

The limited data collection authority under this Executive order and the administration's and Congress' perceived need for more comprehensive data on direct and portfolio investment led to passage of the International Investment Survey Act of 1976. The act's potential value to U.S. policymakers was recognized in GAO's recent report on the Andean Common Market, which stated that:

> "The International Investment Survey Act of 1976 is a positive step toward accumulating the data needed to draw conclusions on the magnitude and impact of U.S. investment abroad. It gives the President wide latitude in collecting and analyzing the data for identifying issues affecting the U.S economic welfare and national security. Thus its purpose is to generate an information base sufficient for policy formulation and decisionmaking."

DATA ON U.S. DIRECT INVESTMENT ABROAD

The Bureau of Economic Analysis, Department of Commerce, functions as the domestic source of official information on U.S. direct investment abroad. Its primary method of data collection has been comprehensive benchmark surveys, performed infrequently since 1929 1/ supplemented by quarterly questionnaire samplings of selected firms in the United States. The last comprehensive survey was performed in 1966, and current statistics for the most part, are benchmarked to that survey. 2/

A Bureau official currently estimates that comprehensive survey questionnaires for a 1977 benchmark survey will be

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1/Under authority of the International Investment Survey Act of 1976, comprehensive benchmark surveys will be performed at least every 5 years.

2/The 1966 data was updated partially through a voluntary survey of 500 firms (only 298 responded) in 1971.

distributed in January 1978 and the final benchmark report will be available 2 to 3 years later. In the interim, however, topical reports will be issued (probably starting in 1979) on selected data elements of special interest.

Existing Commerce statistics are generally recognized to be incomplete, outdated, and of limited value to policymakers. They are, however, the best available at this time and are the most widely used by analysts of direct investment abroad to support their hypotheses.

Value

The book value of U.S. direct investment abroad at the end of 1976 was about $137.2 billion. Without adjusting for inflation, this represents approximately a 10-percent increase over the prior year and an increase of almost 2,000 percent since 1940. As can be seen in table 1, most of this growth occurred during the post-World War II period.

Table 1

Book Value of U.S. Direct Investment Abroad

Year	Book value (billions)	Growth over prior period (percent)
1929	$ 7.5	-
1940	7.0	-7
1945	8.4	20
1950	11.8	29
1960	32.8	178
1970	75.5	130
1976	137.2	82

Source: U.S. Department of Commerce

Although analysts of U.S direct investment abroad do not agree about the implications of the investment, few would disagree that it is a considerable force in world economy, including that of the United States, the home country for approximately 50 percent of the foreign investment throughout the world. Moreover, its potential impact on the U.S. balance of payments, employment, and national security is great.

SCOPE OF REVIEW

Our review was made in Boston and New York City and in Washington, D.C. It primarily entailed an extensive search

of pertinent documents and discussions on selected aspects of U.S. direct investment abroad with U.S. Government officials; representatives of the American financial, business, and labor communities; academicians; corporate executives; and representatives of private study and consulting groups.

This report discusses issues identified in the literature or through interviews as being important to the United States and worthy of further discussion. It is not an exhaustive study of all perceived issues nor a discussion of certain issues in their entirety. The complexity of the issues and the myriad published documents pertinent to them make an exhaustive study impracticable.

Dr. Richard E. Caves, Harvard professor of economics, succinctly stated the problem of evaluating complex issues, such as the international transfer of technology. 1/

> "Any attempt to fully evaluate the relationship between international transfers of technology and the United States economy--even as a survey of the state of our information--would require its author to command an enormous knowledge of the determinants and consequences of research in American industry (including the domestic invention-innovation-diffusion cycle), U.S. international trade, foreign direct investment (and technology transfers within the multinational firm), international licensing and the market for proprietary technology, and the ingestion and modification of innovations by industry abroad."

1/"Effect of International Technology Transfers on the U.S. Economy," a paper presented by Dr. Richard E. Caves at a colloquium sponsored by the National Science Foundation on Nov. 17, 1973.

CHAPTER 2

BALANCE OF TRADE AND PAYMENTS

Over the last two decades, the United States has experienced persistent balance-of-payments problems and consistent growth in private direct investment abroad. The simultaneity of these two trends led to increased concerns about the possible negative effects of direct investment abroad on the balance of trade and payments.

CAPITAL OUTFLOWS AND INFLOWS

U.S. capital is often used to finance U.S. direct investment abroad. In the past, during periods of substantial increases in foreign direct investment by U.S. corporations, questions were raised concerning the effect of capital outflow on the balance of payments. During the 1960s controls (initially voluntary, but later mandatory) were imposed to curtail the movement of direct investment capital abroad by restricting U.S. parent financing of foreign affiliates. 1/ The controls were not intended to discourage direct investment per se, but reflected a desire to shift the financing of investment to foreign capital markets and to help alleviate U.S. balance-of-payments problems.

Data developed by the Department of Commerce while investment controls were in force indicated that a shift to other financing arrangements had taken place. Commerce surmised that the shift was due primarily to U.S. corporate officials' increased knowledge of and involvement with foreign financial institutions and markets. Moreover, the establishment of overseas branches of U.S. banks and development of the Eurobond market (securities underwritten and marketed by groups of international institutions) helped decrease the need for capital outflows from the United States.

Indications are that this trend has continued. As table 2 shows, U.S. direct investment abroad increased from about $51.8 billion in 1966 to $137.2 billion in 1976. During this same period, the incremental investment financed through U.S. capital outflows decreased from 64 to 35 percent.

1/Mandatory controls were imposed in January 1968 and removed in January 1974.

Table 2

Year	Direct investment position at yearend	Increment over prior year	U.S. capital outflow	Percent of increment financed through capital outflow
	(millions)			
1966	$ 51,792	(a)	$3,625	(a)
1967	56,583	$ 4,791	3,073	64
1968	61,955	5,372	2,880	54
1969	68,201	6,246	3,190	51
1970	75,456	7,255	4,281	59
1971	83,033	7,577	4,738	63
1972	90,467	7,434	3,530	47
1973	103,675	13,208	4,968	38
1974	118,819	15,144	7,653	51
1975	124,212	5,393	6,424	100
1976	137,244	13,032	4,596	35

a/Commerce estimates for 1957 to 1966 were calculated on basis of a 1957 benchmark survey whereas estimates for 1966 and subsequent years were calculated on basis of a 1966 benchmark survey. Hence, computations using estimates computed on different bases would suffer distortions.

Source: U.S. Department of Commerce

According to Commerce officials, the termination of controls on capital outflows in early 1974 probably caused foreign affiliates to adjust their capital structures, leading to greater U.S. capital outflows in 1974 and 1975. However, it is interesting to note that capital outflows decreased in 1976 and indications are that they will be lower in 1977. Hence, it may be that predictions of large U.S. capital outflows to retire foreign debts will not be fulfilled. 1/

1/Some analysts thought that retirement of "debt overhang"--the outstanding foreign debt U.S. firms had accumulated while investment regulations were in effect--would result in significant outflows of U.S. capital as soon as outflow restrictions were lifted.

From 1966 to 1975, increases in (1) repatriated capital generated by foreign affiliates and branches of U.S. business enterprises, (2) the use of reinvested earnings for foreign investment financing, and (3) foreign capital inflows into the United States probably helped to allay concerns over U.S. capital outflows. These developments have also raised new and evolving concerns, as discussed in the following sections.

Repatriated capital

For balance-of-payments purposes, U.S. direct investment capital invested abroad is returned through dividends, interest, and branch profits. 1/ Over the last several years, the amount of such funds has exceeded outflows, as table 3 shows.

Table 3

Year	U.S. Direct Investment Capital Flows		
	Outflows	Inflows	Difference
	(millions)		
1966	$3,625	$ 3,467	$ -158
1967	3,073	3,847	774
1968	2,880	4,152	1,272
1969	3,190	4,819	1,629
1970	4,281	4,992	711
1971	4,738	5,983	1,245
1972	3,530	6,416	2,886
1973	4,968	8,841	3,873
1974	7,653	a/17,849	10,196
1975	6,264	8,567	2,303
1976	4,596	11,127	6,531

a/Substantial increase attributable to exceptionally high petroleum affiliates' profits and participation payment by a Middle East country in a U.S. oil company's operations in the country.

Source: U.S. Department of Commerce

1/Additional returns can be achieved through fees, royalties, and transfer pricing.

Recent host-country actions have contributed to new concerns that U.S. corporations may experience future difficulties in generating and repatriating foreign capital. These actions could encourage further U.S. balance-of-payments problems.

Developing countries, such as Brazil, Mexico, and those belonging to the Andean Common Market (Bolivia, Colombia, Ecuador, Peru, and Venezuela) have placed restrictions on capital transfers to the home country. Some of these same countries are requiring divestiture of foreign enterprises to host-country interests, thus further diluting U.S. parent companies' control over their foreign subsidiaries. Moreover, some European countries are forcing "worker participation" in the corporate decisionmaking process; for example, Swedish labor laws compel management to consult with unions on investment decisions.

Reinvested earnings

A U.S. parent company's share of its overseas subsidiary's after-tax-profits are either distributed as dividends or reinvested in the same or affiliated enterprises. Since U.S. taxes are not assessed against foreign corporate earnings until such earnings are repatriated, it might be in the parent corporation's interest to retain foreign earnings abroad to finance new venture or expansions. Data developed by the Department of Commerce indicates that reinvestments of these earnings increased from about 34 percent in 1971 to 41 percent in 1976. On the surface, this would appear to benefit U.S. balance of payments by further decreasing the need for U.S. capital outflows. However, other factors such as effect on U.S. capital formation and productive capacity need to be considered.

According to the President's January 1977 International Economic Report, the United States continues to lag behind other nations in the proportion of gross national product devoted to capital formation. During 1970-75 the ratio of U.S. fixed capital formation to gross national product was half that of Japan and far below that of West Germany and France. Although several factors affect the amount of capital available for domestic investment, including public policies and private consumption and savings, the effect of foreign investment on capital needed for domestic investment cannot be discounted.

During 1970-75, U.S. direct investment abroad increased from about $75.5 billion to $124.2 billion and reinvested earnings abroad totaled about $35 billion. Initial U.S.

capital and reinvested earnings needed to finance the increase in total investment did not contribute in a direct way to capital needed for domestic investment, and the retention of U.S. corporate earnings abroad may have contributed to the shortfall in domestic capital formation. However, the increased foreign capacity resulting from the reinvested earnings could indirectly contribute more significantly to domestic capital formation and investment through the return of increased foreign earnings.

The International Economic Report also points out that during 1970-75, the United States had one of the lowest industrial growth rates of the industrialized free world countries. One contributor to industrial growth is domestic investment in property, plant, and equipment. During the 5-year period, U.S. expenditures for property, plant, and equipment abroad, as a percentage of U.S. property, plant, and equipment expenditures in the United States, grew from 20 percent to 24 percent. Thus, it may be that foreign-generated U.S. funds retained abroad have helped to increase foreign production capabilities. The net effect on our domestic economy is a matter of concern.

Capital inflows

Investing abroad is not a phenomenon associated strictly with U.S. corporations. Other countries' investors account for about half of the world's total foreign direct investment. This realization becomes more evident as the United States attracts more foreign direct investors.

Foreign direct investment in the United States, although minor when compared to U.S. investment abroad, totaled $30.8 billion at the end of 1975. This represented an increase of $4.3 billion, or 16 percent, over 1974 and about 44 percent since 1973.

From a balance-of-payments standpoint, the inflows of foreign capital have helped to mitigate the effect of capital outflows in U.S. direct investment abroad, but have also raised concerns about their impact on the U.S. economy. Concerns intensified in 1973 and 1974, with the enormous rise in oil countries' revenues and resources available for foreign investment. As a result, national issues were raised as to whether foreign investments are sufficiently monitored and whether some may be adverse to the national interest.

This led to numerous congressional proposals addressed to various aspects of foreign investment in the United States. It also led to the passage of the Foreign Investment Study Act

of 1974 (Public Law 93-479), which required the Secretaries of Commerce and the Treasury to study and submit reports to the Congress on foreign direct and portfolio investment in the United States. Results of the studies were reported by Commerce on May 3 and by Treasury on August 4, 1976.

Our objective in this discussion is not to dwell on domestic concerns of foreign direct investment in the United States, but simply to point out that direct investment inflows and outflows are interrelated and need to be considered jointly in policy discussions.

BALANCE OF TRADE

U.S. direct investment abroad and its impact on U.S. trade has been and continues to be of interest to U.S. policymakers. Over the years, arguments have centered around the question--does foreign direct investment displace or enhance U.S. exports? Numerous econometric studies have supported one position or the other, depending upon variables used in the models. Some contend that U.S. corporate production facilities abroad displace exports from the United States. Others maintain that U.S. direct investments abroad (1) are defensive because the export markets would be lost to foreign competitors who would have the advantages of producing in the host country and (2) help to stimulate U.S. exports of equipment, parts, and components.

This issue received new impetus over the last few years as the United States registered large trade deficits. 1/ Although the argument of "displace or enhance" has never been resolved, the issue of trade and investment appears to have focused on new concerns, including: technology flows, developing host-country demands, and joint ventures.

Technology transfer

Some attribute the recent trade deficits to a growing weakness in U.S. technological competitiveness brought about as a result of the transfer of its technological advantage. Critics see the U.S. multinational corporation as the culprit who transfers technology through its operations abroad or sells technological innovations for financial gain.

1/The United States registered its first trade deficit of the century in 1971. Deficits were also registered in 1972, 1974, and 1976. Projections are that this year's deficit could exceed $25 billion.

The most vocal group supporting this position is organized labor. The AFL-CIO has accused U.S. multinational corporations of closing the technology gap and eroding America's competitive advantage by combining U.S.-developed technology with efficient, low-cost foreign operations based on cheap labor. They consider the multinationals as major contributors to the rapid and substantial loss of U.S. production in radios, televisions, other electrical products, and shoes and apparel.

More recently, the AFL-CIO has expounded on the sale of U.S. commercial and military technology to trade competitors which they see as a growing and potentially more serious problem of technology transfer. Such views were expressed in a statement before the Subcommittee on International Economic Policy, House Committee on International Relations, during hearings on U.S. multinational corporations, March 5, 1976.

> "Now, technology is flowing even faster. Today, so-called 'package' or 'turnkey' technology--building the facility, installing the machinery, training the workforce and providing skills for marketing and managerial knowhow--is sold to foreign countries by American firms--for production abroad and export from those countries. These are the latest kinds of exchanges, moving even faster--far ahead of the economists and the policymakers in the United States."

Dr. Michael Boretsky, Senior Policy Analyst of Commerce's Office of Policy Development, sees a progressive weakening of the U.S. technological advantage vis-a-vis most other industrialized countries as a result of (1) lower growth of investment in new industrial plant and equipment in the United States than in other industrialized countries since the early 1950s, (2) underinvestment in economically relevant (non-military) research and development compared with other industrialized countries since the early 1960s, and (3) a worldwide and practically one-sided diffusion of existing U.S. advanced technology in a "naked" 1/ form since the end of World War II, especially since the 1950s. The

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1/Dr. Boretsky refers to "naked" transfers as "sales of patent rights and licenses together with appropriate instructions, blueprints, and other technical assistance on the part of the seller which permit the buyer, independent foreign company, or forein subsidiary of the selling company a quick and full exploitation of the know-how either for a fixed fee or for the more usual running fee (proportional to sales or cost of relevant products)."

weakened technological advantage, according to Dr. Boretsky, is apparent not only in the U.S. deteriorating trade position but also its lower rate of growth of productivity compared with other developed countries.

Dr. Robert Gilpin, Princeton professor of public and international affairs, sees the declining trade position as part of an overall decline in the U.S. economy. According to him, the U.S. multinational corporations' policy of investing in foreign economies rather than in the United States has accelerated this decline by:

--Promoting old products in new markets instead of investing in the innovation of cost-reducing technologies and new products.

--Accelerating the diffusion of American technology abroad in a period when "Improvements in communication and transportation as well as the increasingly systematic nature of technology and know-how have greatly accelerated the ease with which knowledge and innovations can be diffused to foreign competitors."

Dr. Gilpin draws significant consequences from the fact that the United States had to resort to dollar devaluations in the past few years to improve its balance of trade, stating that:

"price competition had become increasingly important precisely because the United States had lost much of its former technological lead in many products and industrial processes. The United States had lost many of its technological advantages and had to compete against other industrial countries on the basis of price with declining profit margins."

Other individuals, although agreeing that some U.S. technology is necessarily transferred through U.S. direct investment abroad and licensing agreements, believe that available information indicates that the benefits to the United States outweigh the costs. The argument is presented that technology flow channels are numerous and serve as substitutes for one another; hence, attempts to prohibit the export of technology though U.S. corporate investment abroad would be ineffective over the long term. Also, U.S. firms invest abroad to reap the benefits of their technological advantages and foreign competitors would eventually acquire the technology without the United States having had the benefits of full exploitation.

The "product cycle" theory advanced by Dr. Raymond Vernon of Harvard University helps explain his and others' perceptions of the relationship between U.S. technological innovation and trade, foreign direct investment, and licensing. According to the theory, the

> "high-income U.S. market induces the innovation in the United States of certain types of new products. * * * Later, the United States becomes an exporter of the product as a market develops abroad. Exports are followed by production abroad, initially in developed countries and later in less developed countries. U.S. firms are involved in some of this production in two ways: initially through wholly-owned plants or joint ventures with foreign companies, and later by sales of know-how usually through licensing to unaffiliated foreign companies.
>
> Parallel with the commencement of production abroad, trade patterns begin to change. Exports commence from developed countries and later from less developed countries. Late in the product life cycle, the United States becomes a net importer of the product." 1/

Analyses by the former U.S. Tariff Commission, Department of Commerce, and Council on International Economic Policy support the position that U.S. direct investment abroad plays an important role in the transfer of U.S. technology but that such transfers may not necessarily be detrimental to U.S. trade and economy. The January 1973 Tariff Commission Study, "Implications of Multinational Firms for World Trade and Investment and for U.S. Trade and Labor," was made at the request of the Subcommittee on International Trade, Senate Committee on Finance. The study concludes that the multinational corporations do not appear to have a bad effect on U.S. trade in high technology goods. Instead, the reverse may be true. The multinationals in high technology industries continue to generate a better ratio of new exports to new imports than do all firms in the same industries, and a better ratio than multinationals in medium or low technology industries. Moreover, the adverse effect on the U.S. economy via the

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1/Presented by Dr. Robert Stobaugh of Harvard University at a colloquium sponsored by the National Science Foundation on "The Effects of International Technology Transfers on U.S. Economy," Nov. 17, 1973.

erosion of U.S. export markets by the foreign sales of the multinationals is, at worst, small.

The January 1972 Department of Commerce study, "Policy Aspects of Foreign Investment by U.S. Multinational Corporations," surveys the role and significance of the multinational corporations and discusses their interaction with government and labor in the areas of employment, technology transfers, investment controls, and balance of payments. With regard to technology and trade, the study concludes that:

--The United States has been a net supplier of new technologies to the world. However, it has benefited substantially from the free international flow of technology by acquiring foreign scientific inventions, foreign innovations, and an unquantifiable amount of technology through the acquisition of foreign firms and the "grant-back" of improvements made by foreign firms on licensed U.S. technology. 1/

--There was a "technology gap" between the United States and Europe some years ago, but it was probably never as large as some alleged and has been narrowed, in part by technology transfers of U.S.-based multinational companies and in part by the innovative capacities of the Europeans themselves.

--The United States might conceivably delay the transfer of its technology to the benefit of its exports through technology transfer controls; however, in the long run such controls could be detrimental to the U.S. economy by preventing firms from fully exploiting their technological advantages. By reason of its foreign investments, the multinational corporation has been able to extend the useful life of its technologies beyond the time when its exports, because of cost considerations, would no longer be competitive.

The President's International Economic Report states that,

1/The results of an Organization for Economic Cooperation and Development study lends credibility to this by pointing out that 60 percent of the 140 important technological innovations had originated in the United States but that there were more American innovations based on foreign scientific breakthroughs than foreign innovations based on U.S. scientific discoveries.

"increased foreign research expenditures and the transfer of U.S. technology abroad through direct foreign investment, licensing, and other chanels [sic] during the past decade have tended to reduce the U.S. technological lead over other industrial nations. * * * Thus, the topic of technology and its transfer are of continuing policy interest."

The report concludes, however, that:

--Technology is one of many elements influencing U.S. trade; an overvalued dollar during 1964-72 appears to be the main reason for the declining trade balance.

--Despite differences over what constitutes technology-intensive trade, all three definitions (two by Commerce and one by the National Science Foundation) show that the U.S. position generally stagnated or declined between 1968-72 but that the subsequent U.S. performance has become one of unprecedented strength.

--The bulk of U.S. exports of technology-intensive products are capital goods, and investment growth abroad has been one of the slowest sectors in the foreign recovery. Moreover, capital goods typically have long lead times between order and delivery. The less developed countries also are an important factor in the slow growth of U.S. exports in 1976, since they buy 40 percent of U.S. technology intensive exports. Serious financial constraints on the non-oil-exporting developing countries left them with little choice but to curtail imports. At the same time, the Organization of Petroleum Exporting Countries sharply reduced their import growth from their previously high rate.

Recent remarks 1/ by the Assistant Secretary of the Treasury for International Affairs on "The U.S. Trade Balance and American Competitiveness in the World Economy" reinforced the position described above. According to the Assistant Secretary, the competitiveness of U.S. products, as measured by U.S. manufacturers' share of world exports, declined during the late 1960s and reached a historic low in 1972. However, since the early 1970s, when the dollar

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1/Delivered before the American Iron and Steel Institute in New York City on May 26, 1977.

was devalued and a more flexible exchange rate system adopted, U.S. competitiveness has strenghtened. Table 4 illustrates this improvement.

The dramatic changes in the U.S. trade balance over the last few years--1972-$6.4 billion deficit, 1973-$0.9 billion surplus, 1974-$5.4 billion deficit, 1975-$9.0 billion surplus, and 1976-$9.2 billion deficit--according to the Assistant Secretary, largely resulted from increases in the price of imported oil. On the positive side of the trade balance was a renewed strength in agricultural exports which averaged about 22 percent of total U.S. exports from 1973 through 1976.

The price of a barrel of crude oil increased more than 500 percent, from an average $2.53 in 1972 to an estimated average of about $13.25 this year. And the dollar cost of U.S. oil imports could skyrocket by some 960 percent, from $4.7 billion in 1972 to an estimated $45 billion this year. Oil's increased price accounts for more than $30 billion in increased U.S. import costs from 1972 through 1977.

Excluding oil imports, the U.S. trade balance has shown a very large surplus since the exchange rate changes of 1971 and 1973. Non-oil trade was in deficit by $2 billion in 1972, but has been in strong surplus ever since. As noted above, a significant contributor to the surplus has been U.S. agricultural exports. That surplus peaked at $36 billion in the recession year of 1975 and is estimated at $20 billion in 1977. But including oil, the United States may have a deficit of $25 billion plus in 1977.

Table 4

U.S. Share of World Exports of Manufacture
(percentage shares) (note a)

	Chemicals	Nonelec. mach.	Elec. mach.	Transport equip.	Basic manu.	Misc. manu. articles	Total manu.
1958	29.6	35.0	32.8	35.3			27.7
1959	29.1	33.8	30.6	32.0			25.6
1960	29.6	32.7	28.2	33.2			25.3
1961	28.2	31.1	27.0	30.5			24.1
1962	27.9	30.9	27.3	31.9			24.6
1963	28.9	30.2	26.8	28.2			23.6
1964	27.1	31.4	26.2	28.4			24.0
1965	24.7	30.9	24.0	28.4			22.8
1966	24.6	30.1	25.2	26.7			23.0
1967	23.7	30.2	25.8	31.8			23.3
1968	24.2	29.4	25.1	34.3			23.6
1969	21.9	28.8	24.4	32.4			22.5
1970	21.9	28.1	22.7	29.0			21.3
1971	20.0	25.6	21.0	29.8	10.8	16.3	20.0
1972	18.7	25.1	20.9	26.4	10.6	15.9	19.2
1973	19.0	25.1	21.6	27.0	11.4	16.0	19.5
1974	18.5	26.4	23.1	29.2	12.3	17.3	20.3
1975	20.3	27.6	22.6	28.2	12.6	17.6	21.3
1976 (note b)	21.3	26.9	23.3	23.9	12.1	18.0	20.5

Source: Department of Commerce, Commerce America.

Note: Term "manufactures" refers to chemicals, machinery, transport equipment and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war and ammunition. World markets are defined as exports, excluding shipments to United States, from 15 major industrial countries which account for approximately 80% of world exports of manufactures: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Fed. Rep. of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom and Japan.

a/Shares are calculated from values of exports of the six commodity groups from each of the 15 countries. Beginning 1971 when exchange rates began to fluctuate widely, share calculation is based on export-weighted exchanged rate indexes for each supplier, using official rates of exchange vis-a-vis 67 principal markets.

b/Figures for 1976 are averages of first 3 quarters, the latest date for which these data are available.

Developing country demands

U.S. trade deficits have been associated with certain developed countries (namely Canada and Japan) and oil-exporting developing countries. Collectively, other developing countries have consistently imported more from the United States than they export. Hence, the United States has experienced trade surpluses with these countries which has helped to finance its large trade deficits with others. However, recent changes in some of these developing countries affect U.S. investment there and could affect this positive U.S. trade balance.

Our recent report to the Congress on the Andean Common Market countries concluded that they were demanding that foreign investors incorporate a greater percentage of locally produced components in finished products. Also, Andean countries were eager to negotiate favorable terms with foreign companies that offer needed technology, complement national industries, and produce exportable products. This trend could eventually affect the U.S. balance of trade with these countries and, ultimately, could be expected to have an impact on U.S. exports to other markets.

The demands and special privileges observed in the Andean countries are not unlike those in other developing countries. Mexico and India have insisted that foreign investors, to have access to local markets, must export some of their production. Taiwan, Korea, Hong Kong, and Singapore have provided special government exemptions or other advantages to firms that export.

Combined with this emphasis on exports, developing countries have demanded changes in the type of technology that they will accept. Called "appropriate technology," it basically entails modifying labor-saving techniques, processes, equipment, etc. to make use of abundant, low-cost, host-country labor. The countries believe that unemployment will be reduced and their products will be more competitive in world markets if they can incorporate a higher labor content into the finished products.

U.S. subsidiaries abroad have consistently shown a preference for components, supplies, and equipment from the United States. Direct investment abroad often takes the form of, or is associated with, the export of capital equipment needed in the new production facilities. Also, parts and components are often produced by the parents who, therefore, have a direct interest in selling them to their foreign affiliates.

Host-country demands and incentives leading to greater local production of these items could reduce exports from the United States and host-country inducements to stimulate exports could result in greater exports to the United States and reduced U.S. exports to other markets.

Joint ventures

Joint U.S.-foreign business ventures are increasing. In some developing countries, joint ventures between foreign investors and local partners (either private or public entities) are mandatory. In the Andean Common Market countries new foreign investors in the manufacturing sector who want to participate in the common market generally must agree to a majority local ownership. In developed countries, joint ventures may be advantageous to the U.S. corporation from a cost and strategic standpoint (knowing what your competitor is doing). Such joint ventures may also be beneficial to the United States for some of the same reasons that they are advantageous to the U.S. participant, e.g., sharing of costs and technologies and reduction of political risks.

As mentioned earlier, the United States has been concerned about the effects of capital and technology outflows; it would appear that some joint ventures would minimize the need for U.S. funds and would provide a reciprocal flow of foreign technology. Moreover, joint ownership with host-country entities would lower the profile of U.S. companies, thus making them less susceptible to adverse actions that could have diplomatic implications for the United States.

For U.S. trade, however, joint ventures could have important adverse consequences; for example, they could:

--Allow for possible greater foreign influence over corporate decisions dealing with sales markets and supply sources; this becomes important for U.S. companies who have (1) practiced selective marketing of their products in order to avoid competing with corporate affiliates in other countries and in the United States and (2) shown a preference for purchasing components, parts, and equipment from U.S. suppliers.

--Help to reduce worldwide competition, which can lead to supply and price manipulations.

--Accelerate the flow of U.S. technology to foreign competitors, thus reducing the U.S. technological advantage; U.S. firms participating in such ventures

are likely to protect the technology which is central to their company's business, but the release of non-critical technology could adversely affect other U.S. firms.

TAXES

With certain exceptions, profits earned by U.S. corporate subsidiaries abroad are not taxed to the parent company until remitted to the United States. 1/ Also, a credit is allowed against U.S. tax for foreign taxes paid. This approach aims at tax neutrality for investment, thus taxing foreign investment at rates at least as high as prevailing U.S. tax rates. However, there are some exceptions to this general objective of neutrality.

The Western Hemisphere Trade Corporation deduction was originally enacted in 1942 during a period of high U.S. wartime taxes and generally low taxes in other Western Hemisphere countries. It was aimed at insuring that U.S. corporations did not operate at a disadvantage in competing with foreign corporations within the Western Hemisphere. Since 1942, Western Hemisphere country taxes have been substantially increased, with the result that many U.S. companies which qualify receive little or no benefit from the deduction after taking the foreign tax credit into account. Also, substantial litigation and administrative difficulty has been generated by the deduction. The Tax Reform Act of 1976 provides for repealing the deduction for taxable years beginning after December 31, 1979. Under this act, the tax reduction will be phased out over a 4-year period.

Dividends from less developed country corporations were also given preferential treatment. However, this changed with the Tax Reform Act of 1976, which amended the Internal Revenue Code to provide that dividends received by a qualifying U.S. parent corporation from a controlled, less developed country subsidiary be taxed in the same manner as dividends received from other foreign corporations.

1/Foreign source earnings retained abroad in a controlled foreign subsidiary of a U.S. parent may, in certain circumstances, be taxed to the parent on an accrual basis if little or no foreign tax is paid on such earnings. This is called the tax haven exception.

This uniform treatment is effective for taxable years beginning after December 31, 1975. However, the act does not apply to dividends received from a less developed country corporation before January 1, 1978, and attributable to earnings and profits accumulated in taxable years beginning before January 1, 1976.

Critics of U.S. direct investment abroad have challenged this preferential treatment. They argue that the allowance of credits rather than deductions for foreign taxes paid goes against tax neutrality because only deductions are allowed for taxes paid to States within the United States. It is argued that, in cases where the credit for foreign tax paid yields the firms greater advantages than the deductions allowed for State payments, an incentive to invest abroad rather than in the United States is created. Moreover, foreign taxes paid on foreign investment income received from abroad are lost to the U.S. economy and national income.

Professor Peggy Musgrave of Northeastern University supports the above position. In an August 1975 study for the Subcommittee on Multinational Corporations, Senate Committee on Foreign Relations, "Direct Investment Abroad And The Multinationals: Effects On the United States Economy," Professor Musgrave concluded that the national net rate of return from foreign investment was negative as a result of the lost taxes.

Proponents of U.S. direct investment abroad argue that virtually all tax loopholes have been closed by legislation. Hence, reformers are talking about proposals to eliminate or modify the credit for foreign taxes paid--a universal principle of international taxation embodied in many tax treaties--and the U.S. practice of not taxing foreign profits until they are actually remitted to the United States, a practice also common to many other developed countries.

Mr. Timothy Stanley, President, International Economic Policy Association, elaborated on the proponents' position in a letter dated January 30, 1976, addressed to the Chairman of the Subcommittee on Multinational Corporations. According to Mr. Stanley:

--American companies pay foreign taxes to those jurisdictions where they do business and enjoy the protection of host-country laws and benefits of government services.

--Taxes paid to foreign governments are not gains to the U.S. national income, but they are not losses either because, to be losses, there must be an equally profitable domestic investment paying taxes, which is not made.

--To escalate the effective rate of tax on foreign investment (from some 40-plus percent to about 70 or 75 percent) by converting the foreign tax credit to a deduction would drastically affect the competitive viability of U.S.-based firms in capital-raising terms as well as in overseas markets.

--The tax deferral has an effect only when the foreign tax rate is lower than the U.S. rate, since otherwise the tax credit applies. This situation is found mostly in the developing countries where U.S. firms are competing under difficult and risky conditions with both local and other foreign companies. In virtually all cases, the income of other foreign (French, Japanese, German, etc.) firms are not taxed by their "home" jurisdictions until profits are remitted and in some cases not at all.

The discussion over U.S. tax treatment of corporate foreign-earned income is likely to escalate in years ahead if:

1. Host countries (including developing countries) continue to impose high tax rates on foreign business enterprises operating in their countries, thus producing high foreign tax credits. Andean country tax rates on corporate earnings retained incountry were, for the most part, lower than the U.S. statutory rate of 48 percent; however, when withholding rates on income remitted to the United States were added, the combined rate of income and withholding tax produced a tax rate (in most cases) higher than the U.S. statutory rate.

2. U.S corporate investors abroad continue to retain a large percent of foreign earned income abroad not subject to U.S. tax; as stated on page 9, reinvested earnings of U.S. foreign affiliates abroad in 1976 amounted to about 41 percent of adjusted earnings.

3. U.S. corporate affiliates abroad continue to earn a substantial percent of total corporate profits; in 1974, between 25 and 30 percent of total corporate

profits came from foreign operations, according to Professor Peggy Musgrave. 1/

RAW MATERIALS COSTS

An initial abundant supply of raw materials at a reasonable cost contributed greatly to U.S. development by servicing its expanding industrial base and earning important foreign exchange. However, the expanding economy and gradual depletion of economically extractable resources has forced the United States to rely to a greater extent on foreign supply sources. According to a recent report by the National Commission on Supplies and Shortages: 2/

> "While the resources exist that would allow the United States to become virtually self-sufficient in most basic minerals, self-sufficiency would have such a high social and economic cost as to render the option extremely unattractive. This implies that the United States is likely to become increasingly dependent on foreign sources for certain key materials."

For such raw materials as tin, platinum, and chromium, the United States has always had to rely on foreign sources because they have never been discovered in the United States in sufficient concentration to permit extraction at reasonable costs. Nickel, cobalt, and manganese have long been provided by foreign sources due to the small quantity supplied domestically. The continued U.S. dependence on foreign sources for some materials and growing dependence on others, none has had as great an impact nor received as much attention as oil.

In 1970, the United States imported 3.60 million barrels of oil a day; in 1976, imports had grown to about 7.79 million barrels a day, an increase of about 120 percent. The increase in volume, sizable though it is, would have raised U.S. oil import costs by about $3.2 billion had the

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1/"Tax Preferences to Foreign Investment," U.S. Congress, Joint Economic Committee, The Economics of Federal Subsidy Programs, part 2: International Studies.

2/National Commission on Supplies and Shortages, "Staff Conclusions on Long-Term Resource Outlook," Executive Memorandum from George C. Eads to Commission Members, July 22, 1976.

price of oil not risen. However, the price increased from an average of $2.23 per barrel to an estimated $12.14, or 444 percent. As a result, the cost of U.S. oil imports increased from $2.9 billion to about $34.6 billion, or an increase of $31.7 billion in the 6-year period.

Current estimates are that oil import costs could reach $45 billion in 1977. Hence, it is estimated that roughly 33 percent of U.S. total exports will be needed to pay for oil imports alone.

The dramatic increases in oil prices since 1972 and the oil embargo against the United States in 1973 helped to raise the level of concern over the economic and strategic consequences of U.S. dependence on foreign raw materials. Moreover, the Organization of Petroleum Exporting Countries' (OPEC) control over U.S. oil companies operating in their countries (1) helped to focus attention on other host-country-influenced developments affecting U.S. investment abroad that could have important economic consequences for the United States and (2) raised serious questions about the relationship between U.S. private investment in foreign raw materials sources and the availability of raw materials to the United States.

Some trends concerning U.S. direct investment abroad that could affect the cost of raw materials to the United States include the (1) placement of smelting and refining facilities abroad, (2) use of producer country mechanisms to control commodity prices, and (3) the separation of exploration from exploitation rights by host governments. (The strategic aspects of U.S. raw materials dependence is discussed in ch. 4.)

Placement of smelting and refining facilities abroad

Typically, U.S. corporate investors in foreign raw materials sources have been highly integrated producing and marketing organizations. The raw materials they extracted tended to be shipped, with little or no processing, to their refining and fabricating plants in industrialized countries. However, this is changing as the producing countries strive to capture a greater share of the value added through processing and to reduce the effects of raw materials' price fluctuations. Also contributing to the shift are corporate decisions which reflect profit maximizing efforts, other developed countries' competition for investment in foreign mineral resources, and pollution control requirements in the United States and other developed countries.

Our January 29, 1976, report to the Congress, "U.S. Dependence On Imports Of Five Critical Minerals: Implications And Policy Alternatives," states that:

> "U.S. imports of processed chromite (ferrochromium) are increasing, totaling about 168,000 tons in 1973. Some domestic ferrochromium producers have found it desirable to invest in new ferrochromium capacity overseas to be nearer the raw material source and to take advantage of cheaper energy and lower overall operating costs."

The report also states that imports of ferromanganese increased from 95,000 tons in 1951 to 303,000 tons in 1973, while domestic ferromanganese production decreased from 602,000 tons to 538,000 tons, and that:

> "The economics of production generally suggest construction of new ferromanganese capacity overseas. Also, many developed-country ore producers are actively promoting foreign investment in their ferromanganese industry for the greater revenues associated with exports of processed materials."

The Secretary of the Interior has projected that U.S. unrefined minerals imports will be valued at $64 billion by the year 2000. Such projections, which rely on past trends of demand and past production of raw materials, are misleading. Should processing facilities be located close to supply sources in important numbers, the U.S. bill for materials imports will rise enormously. Serious questions, therefore, are raised about how the United States would pay for these imports and the effect the cost would have on the economy.

Use of producer-country mechanisms to control commodity prices

Historically, the United States has encouraged, or at least not opposed, direct investment in natural resources development abroad, in the belief that this would help to assure the availability of resources at the lowest feasible cost and encourage the establishment of profitable export industries in the developing world. Recent developments in oil exporting countries as well as others, however, have helped to dispel this belief.

OPEC is the best known and most effective cartel of raw materials producers. Over the years, other countries have acted collectively to improve minerals and raw materials

prices and for other reasons with limited success. Emulating OPEC, however, an increasing number of nations are forming cartels with the hope of increasing and stabilizing their commodity export prices.

Owing to substantial investments in foreign raw materials sources, U.S. corporations have to some extent been made parties to cartel arrangements. U.S. oil companies with investments in OPEC countries, for example, were required to participate in the 1973 oil embargo against the United States and in the oil price increases over the last few years. Other more recent but less dramatic examples include U.S. company participation in the bauxite and uranium cartels.

Some U.S. companies have benefited financially from the price increases temporarily, but subsequent years' earnings have receded as producer country taxes have taken a larger bite of the increases. 1/ Moreover, later host country expropriations, nationalizations, and reductions in foreign equity participation have supported the position that U.S. corporations were unwilling participants in such cartels.

Producer country manipulations of commodity prices and supplies and U.S. investment in foreign raw materials sectors raise important policy questions for the United States concerning future raw materials costs, uninterrupted access to raw materials supplies, and U.S. Government control over its corporate investment abroad.

Separation of exploration from exploitation rights by host governments

> "Until very recent years, the search for foreign materials to satisfy the appetite of industrialization was almost exclusively in the hands of private companies. Generally, the companies concluded concession agreements with sovereign authorities that entitled them to explore for specified resources in given areas over a long period. Colonial powers tended to reserve for their own nationals concessions in territories under their control. Successful explorers were accorded minerals production and export rights in return for royalty payments, based on

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1/Oil company profits rose substantially in 1974, but receded in subsequent years; the same is true of bauxite producers.

price and volume of production. Foreign investors owned 100 percent of the equity in the producing company." 1/

Over the last several years, host-country governments have become more sophisticated in handling their raw materials deposits as shown by their taxes on profits and dividends and joint venture arrangements. They also arrange for foreign investors to shoulder the burden of exploration costs, but share the exploitation benefits. For example, foreign oil companies in Bolivia operated under performance contracts with the state-owned oil company. The contracts specified that companies would commit a minimum amount of money for exploration--$4 million to $5 million--over a period of about 3 years. If oil was found, production was to be divided between the government and the companies according to percentages specified in the contracts. All contracts had a maximum life of 30 years, with the government taking ownership of the facilities at that time.

Since corporations operate for a profit, costs of unproductive ventures will most likely be reflected in higher raw materials costs to consuming nations. If such costs cannot be transferred, a reduction in petroleum and mining ventures will most likely ensue.

1/"Raw Materials & Foreign Policy," International Economic Studies Institute, 1976.

CHAPTER 3

EMPLOYMENT

Of all the questions surrounding the domestic impacts of U.S. direct investment abroad, few have elicited as much debate and controversy as: When U.S.-owned multinational corporations invest abroad, do they displace American exports and, with them, American jobs? Various business groups and corporate officials claim that direct investment abroad has helped to create U.S. jobs. Organized labor, on the other hand, has argued that it has resulted in the wholesale export of American jobs. Academicians who have studied the issue have generally divided opinions.

The employment debate centers on (1) whether direct investment abroad creates or destroys jobs, (2) the composition and skill levels of the labor force generated, and (3) the distribution of income derived.

The literature on this subject has diverse conclusions and methods of analysis. These analyses often depend on two critical points--(1) the general assumptions on which the analysis is based and (2) what would have happened in the absence of a direct investment.

JOB CREATION OR DESTRUCTION

Given the recent high unemployment rate in the United States, a worsening balance of trade over the past several years, and a growing amount of U.S. direct investment abroad, it is not surprising that organized labor has been so vocal in opposing most U.S. direct investment abroad. From 1960 through 1976, the U.S. average unemployment rate was 5.3 percent compared with 1.3 percent for Japan, 2.5 percent for France, and 1.1 percent for West Germany. Also during the period, the U.S. balance of trade experienced frequent deficits and the 1977 deficit is projected to reach over $25 billion. As can be seen in table 5, U.S. trade performance during the period has been less than dynamic and has lagged behind those of some other developed countries.

Table 5

Trade Balances (note a)

Country	1960	1965	1970	1971	1972	1973	1974	1975	1976 (note b)
	(billions)								
United States	$4.9	$5.0	$2.6	$-2.3	$-6.4	$ 0.9	$ -5.4	$ 9.0	$-9.0
Canada	negligible	.2	2.9	2.4	1.6	3.7	1.6	-.8	.6
Japan	.3	1.9	4.0	7.8	9.0	3.7	1.4	5.0	9.2
United Kingdom	-1.1	-.7	negligible	.7	1.7	-5.7	-12.3	-7.2	-5.1
France	.1	.4	.7	1.1	1.3	.8	-3.9	1.9	-3.8
West Germany	2.0	1.3	5.9	6.6	8.2	15.2	21.9	17.1	13.1
Italy	-.6	.6	-.2	.6	.8	-4.0	-8.5	-1.1	-2.6

a/Balance of payments basis.

b/Estimated.

Source: International Economic Report of the President, Jan. 1977, p. 149.

In certain high-employment industrial sectors, import problems have been especially alarming. The United States has been a net importer of textiles, clothing, footwear, and consumer electronics since at least 1960; steel products since 1962; and motor vehicles and parts (excluding engines) since 1968.

In congressional testimony and in other forums, the AFL-CIO has charged that, with the assistance of U.S. tax preferences not available to domestic companies, U.S. investors abroad have exported their means of production--namely, American investment capital, production facilities, and advanced technology. Also, it has been charged that American companies use technology developed in the United States in a country with low wages and production costs. Manufactured products that could have been produced at home are then imported into the United States or sold in foreign markets to the detriment of U.S. exports.

According to AFL-CIO estimates, adverse trade movements caused by foreign investments resulted in an approximate net loss of 900,000 employment opportunities from 1966 to 1971. Evidence cited by the AFL-CIO includes cases where jobs have been exported and where the number of production workers has declined in some firms and industries. For example:

--About 600 machinist jobs in New York State were exported from the United States when a typewriter plant which once had 6,000 employees closed in 1972. In 1973, some of the machinery was sent to Brazil, where the parent company had an investment. Typewriters made in Japan under parent company license specifications have since been imported. The 600 machinists joined an estimated 30,000 other typewriter employees whose jobs had been exported in the 5 years before 1972.

--The sale of the Thor-Delta rocket and launching system to the Japanese by a large military contractor resulted in the loss of jobs for skilled aerospace workers in California. Involved in the entire project were an estimated 1,200 to 2,000 jobs that potentially could be lost.

U.S. business enterprises with foreign investments, not surprisingly, do not accept the general criticisms about the

effects of their international activities. They contend that, in most cases, foreign manufacturing investments are made when a foreign market can no longer be feasibly served from a U.S.-based facility. The decision to invest abroad--and replace exports with local production--may be precipitated by (1) tariff increases, (2) pressures and incentives to invest locally by host countries, (3) inflation or currency devaluations, (4) reassessment of the foreign investment climate, or (5) competition in or growth of a foreign market.

The defensive nature of foreign investment is often stressed. For example, it is argued that if American firms had not invested in foreign facilities, the markets would soon be captured by foreign competitors who could then capture American firms' export markets and, possibly, some of their U.S. markets. In either event, American labor would be displaced.

Foreign investors claim that the investment actually helps U.S. employment by stimulating exports. In some cases, they say that U.S. jobs have actually been saved as a result of investment abroad. Investment abroad has contributed to the growth of foreign markets, it is argued, thereby allowing further absorption of and stimulation for U.S. exports. This has proved beneficial to the U.S. economy by providing new and expanded markets for American-produced goods.

Studies of the effects of foreign direct investment on domestic employment have usually been constructed by aggregating the various positive and negative effects attributed to the investment. The principal negative factor, often termed the "export displacement" or "export substitution" effect, is calculated by estimating that portion of the foreign subsidiary's employment that could have been retained in the United States had the foreign market been served by exports from domestic production facilities. An "export stimulus" effect representing the domestic employment necessary to meet a foreign subsidiary's demand for U.S. exports of intermediate products (shipment of semi-processed goods for final assembly or of the capital goods necessary to perform manufacturing) works to offset some of the displacement effect.

These employment effects can be broken down more specifically. Robert G. Hawkins, professor of economics

at New York University, classified the direct effects of foreign investment on U.S. employment as follows.1/

1. The U.S. employment which would have occurred if the production of foreign affiliates could have been carried out in the United States. This, in turn, can be subclassified into employment associated with foreign affiliate

   (a) production sold in foreign markets which otherwise could have been served by exports from the United States and

   (b) output imported back into the United States and which could have been produced here.

2. U.S. employment created in the production of U.S. exports which could not have occurred had foreign subsidiaries not been created. This also can be subclassified into employment

   (a) associated with capital goods exports when the foreign operation is established and

   (b) created due to the marketing, service, and complementary product advantages which U.S. export sales receive as a result of the "local presence" of the foreign affiliate.

3. Non-production employment created in the U.S. parent firm of a managerial, clerical, or service nature which arises solely because a part of the firms' operations are carried out abroad. This might be extended to cover U.S. management and other personnel who reside in the foreign countries, as they are "American" jobs even though performed abroad.

4. Employment created in the United States outside the enterprise itself but involving services for the business directly associated

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1/"Job Displacement and the Multinational Firm: A Methodological Review," Robert G. Hawkins. Occasional Paper No. 3. Center for Multinational Studies. Washington, D.C., June 1972, p. 2.

with the foreign nature of its operations--including legal and public relations services, management, engineering and financial consulting, and other supporting activities.

Professor Hawkins refers to item 1 as the "production displacement effect," a more inclusive classification than "export displacement" which includes employment changes associated with imports from foreign affiliates. Item 2 is the "export stimulus" effect. Hawkins refers to items 3 and 4 as the "home office" and "supporting firm" effects, respectively.

In a May 1975 study funded by the Departments of Labor, State, and the Treasury, Professors Robert H. Frank and Richard T. Freeman of Cornell University estimated overseas investment's displacement of employment opportunities and job losses at 1,062,577 for the 8 years from 1966 to 1973. These losses were distributed across 15 broad industries, as shown in the following table.

Table 6

U.S. Jobs and Employment Opportunities Lost from 1966 through 1973 through Multinational Investment Abroad

Industry	Cumulative job loss 1966-73
All manufacturing:	733,283
Food products	57,425
Paper and allied products	62,244
Chemicals and allied products	120,763
Rubber and miscellaneous plastic products	44,208
Primary and fabricated metals	58,064
Non-electrical machinery	194,721
Electrical machinery	113,619
Transportation equipment	48,782
Other manufacturing	33,457
Agriculture, forestry and fisheries	33,189
Mining and smelting (note a)	894
Petroleum (note a)	5,374
Transportation, communications and public utilities (note a)	29,282
Retail and wholesale trade (note a)	58,469
Other miscellaneous service industries	195,339
Federal, State and local government	6,748
Total - all industries	1,062,577

a/Excluded from any direct employment losses.

Frank and Freeman developed estimates for domestic-to-foreign production cost ratios and market power (competitiveness of firms in an industry) and combined these to estimate what they termed a home-foreign substitution ratio for each of 15 broad industries. That ratio measures the percent of foreign employment that could have been retained in the United States had the foreign investment not been made. These ratios ranged from a low of 18.2 percent for the transportation equipment industry to a high of 61.5 percent for the petroleum industry. A ratio of 100 percent would have indicated that employment in U.S.-owned foreign subsidiaries displaces domestic employment on a one-for-one basis. Frank and Freeman noted, however, that some of these home-foreign substitution ratios may be unrealistic. For example, in the petroleum sector it is unlikely that domestic capacity could be expanded by added investment in the short run.

These ratios were then used with production estimates based on yearly foreign investment in each industry from 1966 to 1973, estimates for jobs created had the investors produced new exports at home, number of jobs in supporting industries that produce intermediate inputs, and an offsetting estimate for existing U.S. employment in support of foreign production to arrive at the net job displacement estimate of over 1 million found in table 6.

Frank and Freeman, emphasizing that their study should be regarded as primarily illustrative, stated that:

> "our calculations of the net job displacement effects present only part of the picture of the impact of DFI [direct foreign investment] on unemployment in the industries of our study. Policymakers concerned with the effects of overseas investments on domestic labor markets must consider not only the extent of the initial dislocations, i.e., our net job displacement figures, but also the speed with which these dislocations tend to equilibrate over time. Displacements which occur in an industry in which job seekers are quickly relocated will generate less policy concern, for example, than those occurring in industries in which job seekers secure placement only with great difficulty and delay."

They further explained that data deficiencies and a number of "strong" assumptions in key areas prohibited placing great confidence in the study's results as they stood at that time.

To limit the scope of their study, they were forced to make certain assumptions and to ignore a number of important issues. For example, little attention was paid to the behavior of foreign competiton, institutional aspects of foreign investment, or the financial structure of foreign investors.

A study by the U.S. Tariff Commission used three assumptions to develop estimates of the employment effects foreign investors' export behavior would have on U.S. employment. The report stated that:

> "It has proved impossible to determine what rate of substitution would take place. Even the newly available data on U.S. MNC [multinational corporations] activities do not provide a means of tackling this problem. The situation will vary from country to country and depend on a combination of factors that are both unmeasurable from a data standpoint and require assumptions about policy variables that would vitiate any creditable data that could be assembled."

The Commission first assumed that markets now served by foreign production could have been served at identical prices by U.S.-produced goods and that, in the absence of a U.S.-owned foreign production facility, no similar facility would have been built by competitors. The Commission then calculated a net impact of 1.3 million jobs lost over time for all foreign investment as of 1970.

Its second calculation assumed that only half the foreign affiliates' sales could be met by U.S. production and competition from other producers would provide the remaining goods. The Commission estimated a 400,000 net job loss for all foreign investment as of 1970 under this assumption.

The third set of estimates was based on the assumption that, in the absence of a foreign production option, U.S. exporters could have maintained their shares of world manufacturing trade during a "benchmark" period; 1960 and 1961 were chosen as the benchmark period because they preceded the recent growth of foreign investment activity.

From the number of jobs associated with these particular export assumptions, the Commission then deducted estimates of U.S. employment accounted for by overseas activities by U.S. companies. These assumptions and calculations showed a net employment gain for the United States due to foreign investment as of 1970 of almost 500,000 jobs.

A group of researchers under the direction of Professor Robert Stobaugh, Harvard Business School, used the case study approach 1/ to analyzing foreign investment's domestic employment impacts. Working under a contract with the Department of Commerce, the group studied the foreign investment decisions of a U.S. firm in each of nine major industries made from 1961 to 1970. Stobaugh found that each of these foreign investments had favorable effects on both the U.S. balance of payments and employment. He estimated that it took an average of 5.3 years for the balance-of-payments inflows caused by the investment to offset the balance-of-payments outflows and 3 years for the employment effects to offset each other.

In preparing a 1972 summary of this study for the Department of Commerce, Stobaugh extended his analysis to estimate the employment and balance-of-payments effects of all foreign investment as of 1970. He estimated that foreign direct investment in manufacturing had created "perhaps 600,000" U.S. jobs and had a positive effect on the U.S. balance of payments of $3 billion or more. Stobaugh developed these results by estimating an average export substitution ratio of 2.3 percent for U.S.-owned manufacturing output abroad in 1970. That is, only 2.3 percent of U.S. production abroad substitutes for domestic production in his analysis. Stobaugh noted that a ratio of 2.3 percent was quite low and that export displacement would have to be 17 times greater, or 39.1 percent, before negative employment effects would develop. He suggested future research to determine to what degree U.S.-owned foreign production displaces domestic exports.

1/Stobaugh, Robert B., and others, "Nine Investments Abroad and Their Impact at Home: Case Studies on Multinational Enterprises and the U.S. Economy." Division of Research, Graduate School of Business Administration, Harvard University. Boston, 1976. Commerce released an earlier version of this study in March 1972 as a part of vol. I of "The Multinational Corporation, Studies on U.S. Foreign Investment."

The investments, Stobaugh noted, were a normal evolution of each firm's business operations. The firms took small, low-risk steps in making their investments abroad, and in most cases were forced into the investment decision by external pressures. Principal reasons for investing abroad and the number of firms investing for these reasons are shown below.

Reason for investment	Number of firms
Losing market share locally	1
Maintenance of market position in a given product line in a growing market	3
Maintenance of market in another country (i.e.--a country the investment was not made in)	3
Maintenance of position in a world-wide oligopoly	1
Obtain business in a new market	a/ 2

a/One firm sought to maintain position in a given product line and to get new business, primarily by reaping dividends.

Stobaugh finds that U.S. firms must invest abroad to serve foreign markets or face losing those markets. Also he found that U.S. firms abroad were competing primarily with local subsidiaries of non-U.S. foreign investors.

A number of other studies have attempted to relate foreign investment to domestic employment. For example, in "The Effects of U.S. Corporate Investment Abroad, 1960-72," Business International Corporation reported on 133 corporations, noting that their exports increased almost twice as fast as those of all U.S. manufacturers between 1960-72 and their net employment rose by about 30 percent compared with about 14 percent of all U.S. manufacturers. The most intensive foreign investing companies increased their employment in the United States at a rate of about 40 percent compared with about 11 percent for less intensive foreign investing companies.

A National Association of Manufacturers report, "U.S. Stake in World Trade and Investment," noted that between

1965-70 U.S. employment trends of intensive foreign investing industries had been upward and generally unaffected by overseas investments.

A U.S. Chamber of Commerce sample survey of 158 companies found a similar employment pattern for foreign investors. For example, between 1960-70, U.S. foreign investors' domestic employment had grown about 31 percent and total U.S. employment had grown only about 12 percent.

None of these studies, however, make analyses of export displacement (substitution) similar to those of Frank and Freeman or the Tariff Commission.

In the study by Robert Hawkins, however, assumptions concerning three relationships are critical for analyzing the effects of export displacement and export stimulation on domestic employment.

1. The relationship between domestic employment and domestic production in the absence of foreign investment.

2. The proportion of foreign production that could have been produced in the United States.

3. The proportion of exports to affiliates which actually depended upon existence of those affiliates.

By combining assumptions on each of these effects within what he considered "reasonable ranges," Hawkins derived estimates ranging from a net creation of 240,000 jobs to a loss of 660,000 jobs as a result of investment abroad. He concluded that the most probable net employment effect was that losses equaled gains within a range of plus or minus 25,000 jobs.

As can be seen, there is a broad range of estimates of the effects of foreign investment on employment. Which estimate, if any, is "right" depends almost totally upon which set of assumptions one chooses. Having such studies available, however, benefits policymakers at least by indicating some of the unknowns of the subject. For example, Frank and Freeman noted the inadequacy of their data base and suggested that better data was needed to further evaluate the employment impact of foreign investment; Stobaugh

suggested that further study be done on the relationships between U.S. production and exports versus foreign production.

LABOR MARKET ADJUSTMENTS

Although foreign investment may generate a net expansion of domestic employment opportunities, a structural mismatch between the jobs eliminated and the jobs created may result. For example, the jobs eliminated may be heavily concentrated in production activities and the jobs created may be managerial, clerical, or technical. If the foreign investment provides an export stimulus, some production jobs might also be created, but overall the skill mix of these groups may not conform and adjustments will be required in the labor market. Moreover the new job opportunities may require a geographic relocation that may be undesirable.

U.S. corporations claim that their investment abroad has helped to create higher skilled and better paying jobs in the United States. Organized labor, on the other hand, has argued that there needs to be varying kinds of job opportunities for the different skill levels of the U.S. worker and that the United States needs a diversified industrial economy.

There is substantial evidence that there has been a loss of specific employment in particular industries which have shifted their production from the United States. Examples of such job loss have been brought to public attention in cases chronicled by the AFL-CIO.

To the extent that companies invest abroad and cause the United States to concentrate its resources in areas where it can do relatively better, real output and income tend to rise. But, how much does it cost to achieve this income? Quantitative estimates of the costs and benefits of these labor market adjustments are absent to date.

The Hawkins study notes that certain workers were displaced by foreign direct investment but does not show any of the costs and benefits resulting from the adjustment process. Hawkins did calculate, however, that for the $6.5 billion increase in foreign production in 1968, between 20,000 and 121,000 U.S. workers would lose their current jobs and have to be retrained and reallocated in the labor market. He added that this would constitute an adjustment burden only if domestic demand failed to expand sufficiently

to absorb additional workers being released by the increased foreign output. Hawkins believes that reallocation of workers should be facilitated by improved adjustment assistance and advanced planning.

In view of the total expansion in the U.S. work force in 1968, Hawkins' estimate does not appear to place a large adjustment burden on the American economy. For example, total nonagricultural employment increased by slightly over 2 million from 1967 to 1968 and by about 2.4 million from 1968 to 1969. Employment gains were registered in the manufacturing, contract construction, transportation, public utility, and several other industrial sectors. But this still fails to tell us what happened to the U.S workers who lost their jobs in 1968 as a result of foreign investment. If the displaced jobs are located in a geographic area with a relatively abundant labor supply and few job opportunities, the economic effects of the lost jobs will be considerably different than if they were in an area with a stronger local economy.

Professors Frank and Freeman simulated the labor market adjustment dynamics for 8 of the 15 manufacturing industries they studied, choosing 1970 as the year on which to base their calculations and made certain data adjustments as appropriate. The overall 4.9 percent unemployment rate that year approximated the "full employment" level characteristic of contemporary macroeconomic policy discussions. They noted that inferences drawn from their calculations would generally pertain only to labor markets exhibiting approximately the same degree of tightness as the 1970 labor market.

Their simulation showed that in each of the eight industries most of the workers displaced found new jobs within 7 weeks of the onset of their unemployment. In this exercise, Frank and Freeman assumed that industry labor markets were essentially independent of one another. In practice, however, there might be substantial inter-industry migration on the part of job seekers, eliminating much of the limited heterogeneity of labor adjustments. Frank and Freeman emphasized that while certain labor market adjustment costs resulted from foreign direct investment, their findings should not be interpreted as necessitating restrictive foreign investment policies. They noted that, although policy efforts should be made to expedite job placement and to provide income maintenance for displaced workers, prolonged periods of joblessness were not one of the major welfare costs associated with the transfer of production overseas.

A 1974 study, by Elizabeth Webbink, "The Labor Market Effects of the Change in U.S. International Competitiveness" (mimeographed, New York University, School of Business Administration, 1974), found that U.S. jobs displaced by export losses tended to be concentrated in the lower skill levels while export gains were concentrated in the professional, scientific, and skilled levels. This implies that jobs which might have been displaced by foreign investment are, on the average, less skill-intensive than jobs created through export expansion.

Commenting on their case studies, Robert Stobaugh and his associates stated, that

> "perhaps the most important finding in our nine cases is that the employment created in the United States as a result of U.S. foreign direct investment is of a higher skill level than exists on the average in U.S. manufacturing industries."

Stobaugh assumed that the U.S. jobs involved in the adjustment process came from the manufacturing sector, and he compared the skill levels of the jobs created to the average skill levels of jobs in the U.S. manufacturing sector.

Again, however, this still fails to tell us what happened to the workers who lost their jobs as a result of the investment made abroad. Jobs lost and jobs created cannot be easily balanced and must be looked at in terms of the transferability of individuals with particular skills. The social and economic impact of unemployment-related foreign investment hits some groups more than others.

Some labor economists have used the concepts of primary and secondary labor markets to explain this differential impact. The primary labor market consists of the more established workers, who tend to have some opportunities for career development, higher skills, better pay, and the most effective union organizations. Workers that are less skilled and less well protected by unions make up the secondary labor market, and for them employment is more unstable and career development is slight.

Economists believe that a major source of the U.S. economy's difficulty to achieve full employment and price stability since World War II has been an imbalance in the composition of the demand for labor. As the economy expands, labor shortages occur in certain groups before other groups come close to attaining full employment. Skilled workers in the primary labor market, for example, often have lower unemployment rates and higher wage rate advances during an economic expansion than do secondary labor market

workers who may be experiencing higher rates of unemployment and wage stagnation.

To circumvent these types of labor shortages, companies can switch to domestic production processes that use more unskilled labor or relocate production processes abroad. Using more unskilled labor will alleviate the domestic labor market bottleneck problem but may not be feasible if technical substitution possibilities are limited. And if production is transferred abroad that is relatively intensive in the use of skilled labor, foreign investment might tend to improve the composition of domestic labor demands as skilled domestic workers are "freed up" in the labor market. However, if the production that is transferred abroad is intensive in the use of unskilled, or secondary labor market workers, the botcleneck problem may worsen.

It is evident today that these secondary labor market workers are disproportionally hard hit by unemployment. The study by Webbink, for example, noted that U.S. jobs displaced by export losses tended to be concentrated in the lower skill levels. The role foreign investment has played in this process, however, is unknown.

In the past 30 years, shifts in employment have been primarily away from the manufacturing sector and toward the services sector of the U.S. economy. Table 7 shows total nonagricultural employment by sector and percent of total employment for each sector for 1947 and 1976.

Table 7

Nonagricultural Employment by Sector

	1947		1976	
	Employment	Percent of total	Employment	Percent of total
	(000 omitted)		(000 omitted)	
Manufacturing	15,545	35.4	18,954	23.9
Mining	955	2.1	783	.9
Contract construction	1,982	4.5	3,370	4.2
Transportation and public utilities	4,166	9.4	4,507	5.6
Wholesale and retail trade	8,955	20.4	17,490	22.1
Finance, insurance, and real estate	1,754	3.9	4,316	5.4
Services	5,050	11.5	14,607	18.4
Government	5,474	12.4	15,088	19.0
Total	43,881	100	79,115	100

Although manufacturing employment in the United States grew about 22 percent from 1947 to 1976, the percent of manufacturing employment to total employment declined from about 35 percent in 1947 to about 24 percent in 1976. Employment in the services sector grew about 190 percent during this timeframe and from about 12 percent of total nonagricultural employment in 1947 to about 18 percent in 1976.

Changes in the structure of the domestic work force, however, probably only reflect changes in the structure of the world economy and are part of a wider problem of international industrial integration. Workers displaced as a result of U.S. investment abroad may have lost their jobs in the long run due to increased foreign competition that ultimately would capture a foreign market. A choice may exist as to whether to lose these jobs immediately or over time, but either way an effective remedy must be formulated to ease the adjustment burden of the displaced workers. Remedies should be fashioned in ways that recognize both the problems and benefits of foreign investment. Both Stobaugh and Hawkins have suggested improved and expanded adjustment assistance for workers displaced due to foreign investment.

Jack Behrman, professor of international business at the University of North Carolina, has suggested that the United States develop an industrial policy to cope with the increasing internationalization of production.

Industrial policies are concerned with promoting industrial growth and efficiency and involve the selection of industries to be developed within a particular country or region, the necessary infrastructure, and the specific location of that industry. While market mechanisms are, and should remain, the basic factor in the development of industry, market forces do not seem to have been adequate to bring about the balanced industrial growth and structural adaptation necessary to attain general economic objectives. The objectives of industrial policy may be prompted by fostering conditions favorable to free competition as well as by stimulating improved labor adaptability and mobility, technology, management performance, and industrial structure. The methods used to implement industrial policy may include regulatory action, financial incentives to locate in certain areas, technical economic assistance and information, and guidance and advisory activities.

Most analysts agree that foreign direct investment has caused some labor market displacements. Certain policy responses, such as improved adjustment assistance or development of a U.S. industrial policy, have been suggested to

cope with these problems. Policies restricting all foreign investment, however, have not generally been suggested as alternatives to present policies.

INCOME DISTRIBUTION

The effects of foreign investment on income distribution must be viewed as an extension to arguments surrounding the job creation and labor market adjustment issues. Opponents of foreign investment have argued that production abroad by U.S.-owned foreign affiliates may displace similar goods that otherwise would have been exported directly from the United States, with the resultant loss of U.S. income. Proponents have stressed that it expands directly and indirectly the economic base and income of the host country, thereby creating greater demand for products from other countries, including the United States. Since increased incomes generally mean increased efficiencies in the country where they develop, some degree of adjustment in trade patterns is called for.

While the benefits from foreign investment to the foreign investor may be more direct and take the form of reduced operating costs, increased incomes, or higher rates of return, U.S. labor derives its benefits, to the extent they exist, through (1) increased U.S. exports and (2) higher skilled and better paying jobs.

The issue of the distribution between capital and labor of the economic returns of foreign investment until recently has been largely ignored in public debate. However, in an August 1975 report prepared for the Senate Subcommittee on Multinational Corporations, Professor Peggy Musgrave stated that, to determine the domestic effects of foreign investment and what factors should be considered in arriving at policy conclusions, it is helpful to look at foreign investment's effects on U.S. income and how that income is distributed.

If foreign investment displaces domestic investment, Musgrave argues, domestic income may be reduced. Even if displacement does not occur, domestically generated income may be reduced because labor will be less productive and output smaller. On the other hand, investment abroad at higher rates of return will generate additional income and the net effect on total income received in the United States will depend upon the balance between these two elements.

In estimating the longer run effects of foreign investment on real income and its distribution in the United

States, Musgrave assumed that the $80 billion of total U.S. direct investment abroad as of 1968 could have been invested domestically. Making alternative assumptions about how much domestic investment was displaced and using what she considered reasonable values for the various parameters of her model, Musgrave estimated the effects on income distribution for foreign direct investment as of 1968 as follows.

--Income originating in the United States would have been about $5 to $10 billion higher in 1968, or an increase of less than 1 percent of the actual level.

--Labor income after tax also would have increased by about $5 to $10 billion, a 2- to 4-percent increase above the actual level of income accruing to labor.

--Capital income after tax would have decreased by about $8 billion, a 17-percent decline from the actual level of capital income in 1968.

Overall income changes, according to the study, would be small with or without foreign investment. However, the distribution of the shares of that income are significantly affected, as seen above, and labor receives less income. Musgrave argues that the additional domestic investment that could have taken place would have increased worker productivity and that this would have been reflected in the form of higher wages.

Musgrave also noted that her findings were tentative due to a lack of necessary data and the complexity of the problem.

One crucial assumption to the Musgrave analysis is that foreign investment substitutes for domestic investment. This assumption, however, may only be valid to the extent that foreign investment is financed from U.S. sources. Distribution of the economic returns of foreign investment may differ, depending upon whether domestic or foreign capital is used. If foreign capital is used to finance an overseas investment, the argument that domestic investment is displaced is weakened because the same amount of domestic capital would still be available. In fact, U.S. firms have financed a substantial part of their direct investment by borrowing abroad, which represents a use of foreign rather than domestic savings.

Additionally, according to several recent surveys of corporate executives both domestic and foreign investment

decisions are evaluated for their return on investment and if favorable returns are not projected, investments are not made. In this case, reduction of foreign investment might not increase domestic investment.

If direct investment enables a firm to use its resources more efficiently, national income should rise even though the redistribution effects of foreign investment are uncertain. Robert Stobaugh, for example, believes that income distribution is aided by foreign investment because of the higher skilled and generally better paying jobs the investment helps create domestically. Whatever the process for income redistribution, Stobaugh argues that total income should first be maximized and then redistributed, perhaps by government policy, in the desired pattern.

CHAPTER 4

NATIONAL SECURITY

The literature dealing with U.S. direct investment abroad is heavily concentrated on economic as opposed to political or military aspects, probably because the individuals and groups spearheading the discussion are more concerned with economic issues. Also, it may be that the subject of U.S. direct investment abroad within the general context of U.S. national security has warranted little attention in the past. Whatever the reasons for the scarcity of information, the subject of U.S. direct investment abroad and national security is likely to receive greater attention in the future.

SOURCES OF INFLUENCE AND CONFLICT

Economically and militarily strong allies enhance U.S. national security. This was recognized at the end of World War II when the United States provided assistance to war-torn Western Europe to prevent its takeover by the Soviet Union. It also is recognized today as the United States provides special programs and concessions for friendly developing countries.

To some extent, U.S. private business enterprises have, over the years, been encouraged to take an active role through direct investment in this assistance process. The Investment Guaranty Program, under the European Recovery Program, was instituted in 1948 to encourage the use of private American funds for European reconstruction and economic development. The Overseas Private Investment Corporation's insurance and loan guarantee programs are current examples of incentives for U.S. companies to invest in friendly developing countries.

U.S. companies have been encouraged to take an active role in this development process because U.S. policymakers have, for the most part, considered them valuable sources of capital, technology, and know-how. Secretary of State Henry Kissinger, before the Seventh Special Session of the U.N. General Assembly on September 1, 1975, said that:

> "Transnational enterprises have been powerful instruments of modernization both in the industrial nations -- where they conduct most of their operations -- and in the developing countries, where there is often no substitute for their ability to marshal capital, management, skills, technology and initiative."

As an outgrowth of their economic contributions, U.S. investments have also been cited as important contributors to political stability and American influence. This was probably truer in the past when U.S. companies dominated some countries' economies and could exert more economic and political influence. Some analysts have interpreted this influence as unauthorized interference by multinationals in host country economies and politics. To some extent, this may have led to the adoption of codes of conduct for international business enterprises. Host countries have taken steps to control foreign investors operating in their economies and have become considerably more skeptical of the economic benefits derived from the investments.

As host countries exert their sovereign rights over the operations of U.S. investment within their borders, some analysts believe the United States may have to protect its rights, which could lead to economic and/or political confrontations. The potential areas of conflict are discussed in the following sections.

Extraterritorial application of U.S. laws

To protect its interests, the United States has chosen to extend its jurisdiction over domestic business investments abroad. In those instances where U.S. laws implement national policies that are not consistent with host-country national policies, the possibility of conflict has arisen, as the following examples show.

--The United States is conducting antitrust investigations that extend to activities of U.S. firms operating in Canada 1/ and concern possible potash and uranium cartels. Canada has labeled the investigations as unwarranted interferences in its affairs and has refused to cooperate with the U.S. Justice Department. Indications are that host-country production and pricing policies may have been the primary contributors to the alleged price-fixing for which the U.S. subsidiaries are being investigated.

1/The justification cited for the extraterritorial application of U.S. antitrust laws concerns the 'effects" doctrine of jurisdiction. Judge Learned Hand, in the landmark 1945 "Alcoa Case," decided "that any state may impose liabilities, even upon persons not within its allegiance, for conduct outside its borders that has consequences within its borders that the state reprehends."

--The United States is a participant in the U.N. sanctions against Rhodesia 1/ which include a total embargo of trade except for humanitarian, medical, and educational cases. The sanctions provide special problems for U.S. subsidiaries in South Africa, whose policies require sales to all willing and able buyers. U.S. efforts to force these subsidiaries to abide by the sanctions would most likely be resisted by South Africa, possibly to the detriment of the U.S. companies.

Protection of U.S. private property abroad

The United States traditionally has recognized the rights of sovereign states to nationalize or expropriate foreign-owned property, provided such takeovers do not violate specific host-country international commitments and conform to standards of international law which require that the takeovers be for a public purpose, be nondiscriminatory, and be accompanied by just compensation.

To protect U.S. investment abroad, the Congress, since the end of World War II, has enacted numerous laws to impose sanctions against countries which take over properties in which U.S. citizens hold 50 percent or more interest but do not take reasonable steps to compensate the former owners. Probably the best known of these are the Hickenlooper and the Gonzalez Amendments.

The Hickenlooper Amendment, section 620(e)(1) of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2370(e)), requires the President to suspend assistance to the government of any country which has (1) nationalized, expropriated, or seized ownership or control of property owned by any U.S. citizen or by any corporation, partnership, or association at least 50 percent beneficially owned by U.S. citizens, (2) repudiated or nullified existing contracts or agreements with any citizen or business at least 50 percent beneficially owned by U.S. citizens, or (3) imposed or enforced discriminatory taxes or other exactions or restrictive maintenance or operational conditions or taken other actions which are in effect nationalizations, expropriations, or seizures and which does not, within a reasonable period, take appropriate steps to make prompt, adequate, and effective compensation.

1/Under authority of the U.N. Participation Act of 1945 (22 U.S.C. 287c), the President has issued several executive orders giving various U.S. executive agencies responsibility for enforcing the sanctions.

The Hickenlooper Amendment has been formally invoked only once since its enactment in 1962, against Ceylon (now Sri Lanka) in February 1963. Bilateral aid was suspended until July 1965, when it was determined that Ceylon had fulfilled its obligation to compensate nationalized U.S. oil companies.

The United States may also withhold its support of loans being considered by the three multilateral development banks of which it is a member. On March 10, 1972, Public Laws 92-245 (for the Asian Development Bank), 92-246 (for the Inter-American Development Bank), and 92-247 (for the International Bank for Reconstruction and Development (World Bank) and the International Development Association) were approved. The pertinent sections (Gonzalez Amendment) of each of the three acts directs the President to instruct the U.S. executive director of each institution to vote against any loan or other use of funds for any country which has:

> "(1) nationalized or expropriated or seized ownership or control of property owned by any United States citizen or by any corporation, partnership, or association not less than 50 percentum of which is beneficially owned by United States citizens;
>
> "(2) taken steps to repudiate or nullify existing contracts or agreements with any United States citizen or any corporation, partnership, or association not less than 50 percentum of which is beneficially owned by United States citizens; or
>
> "(3) imposed or enforced discriminatory taxes or other exactions, or restrictive maintenance or operational conditions, or has taken other actions, which have the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property so owned; "unless the President determines that (A) an arrangement for prompt, adequate, and effective compensation has been made, (B) the parties have submitted the dispute to arbitration under the rules of the Convention for the Settlement of Investment Disputes, or (C) good faith negotiations are in progress aimed at providing prompt, adequate, and effective compensation under the applicable principles of international law."

Since the enactment of the Gonzalez Amendment, U.S. representatives to the financial institutions have four times abstained from voting and twice voted against loans to expropriating countries.

U.S. expropriation policy is not widely accepted among developing countries. Some countries, particularly in Latin America where a large percent of expropriations have taken place since the early 1960s, reject the U.S. positions on international law and international arbitration. They contend that investment disputes come under the jurisdiction of local law, and arbitration is viewed as an infringement of host-country sovereignty.

Sanctions may also provoke adverse reactions to U.S. and host-country relations. According to the President's First Annual Report on U.S. Actions Affecting the Development of Low-Income Countries, transmitted to the Congress in May 1975:

> "Even when there is an assistance program, sanctions or threatened sanctions may provoke a reaction which impairs chances of settlement. The existence of mandatory sanctions limits the flexibility to deal with investment disputes in ways which take into account the full range of U.S. interests involved."

National interest

Host countries are placing increasing demands and controls on foreign investments, to shift the balance of benefits to themselves. Examples include:

--Colombia, a member of the Andean Common Market and subscriber to its Foreign Investment Code, is highly selective in the types of investments it will allow. Investors must be able to demonstrate positive effects from the investment, preferably in the form of export earnings, employment, technology, population dispersion, and local investor participation.

--Canada, the largest single recipient of U.S. direct investment, has established the Foreign Investment Review Agency to monitor incoming investments. Proposals for investment are judged in terms of their estimated contributions to Canada, characterized by:

1. Increased employment.

2. New investment.

3. Increased resource planning or use of Canadian parts and services.

4. Additional exports.

5. Canadian participation (as shareholders, directors, or managers).

6. Improved productivity and industrial efficiency.

7. Enhanced technological development.

8. Improved product variety and innovation.

9. Beneficial impact on competition.

10. Compatibility with industrial and economic policies.

--Mexico, a recipient of substantial U.S. direct investment, limits through its investment law the percent of foreign ownership in Mexican enterprises. The maximum allowable percent (usually not more than 49 percent) of the capital can be modified if the investment benefits the country, as measured by:

1. Its positive effects on the balance of payments and, especially, on the increase of Mexican exports.

2. Its effect on employment, taking into account job opportunities created and wages paid.

3. The incorporation of domestic inputs and components in the manufacture of its products.

4. The extent to which it finances its operations with resources from abroad.

5. Its supply of technology and contribution to technological research and development in the country.

6. The extent in general to which it complies with and contributes to the achievement of national development policy objectives.

What are the implications for the United States? According to a February 1975 article 1/ in "Foreign Affairs," the United States--as the home country for approximately 50 percent of the total foreign investment throughout the world--may frequently find itself on the losing end of the

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1/Written by C. Fred Bergsten, then a senior fellow at the Brookings Institution and now Assistant Secretary of the Treasury for International Affairs.

benefits allocation. As a result, it may be forced to take a more active role in foreign investment negotiations between host countries and direct investors. As the United States tries to represent its interests,

> "the likelihood of international conflict will rise sharply. For at stake is nothing less than the international division of production and the fruits thereof. * * * Unless host countries cease their efforts to tilt the benefits of investment in their own direction, which is unlikely (and undesirable unless accompanied by other steps to help them achieve their legitimate objectives), the clash of these particular national interests could become a central problem of world economics and politics.

RAW MATERIALS SUPPLIES

The oil embargo of 1973 emphasized the United States' vulnerability to sudden shifts in raw materials supplies. Although it is recognized that no other commodity has as great an impact as oil on the domestic economy, other materials shortages, either natural or imposed, could drastically affect economic sectors.

--Bauxite is the only economical source of aluminum (under current technology and prices). Aluminum's high strength-to-weight ratio makes it important for economic and military purposes. U.S. bauxite reserves represent only a fraction of domestic requirements.

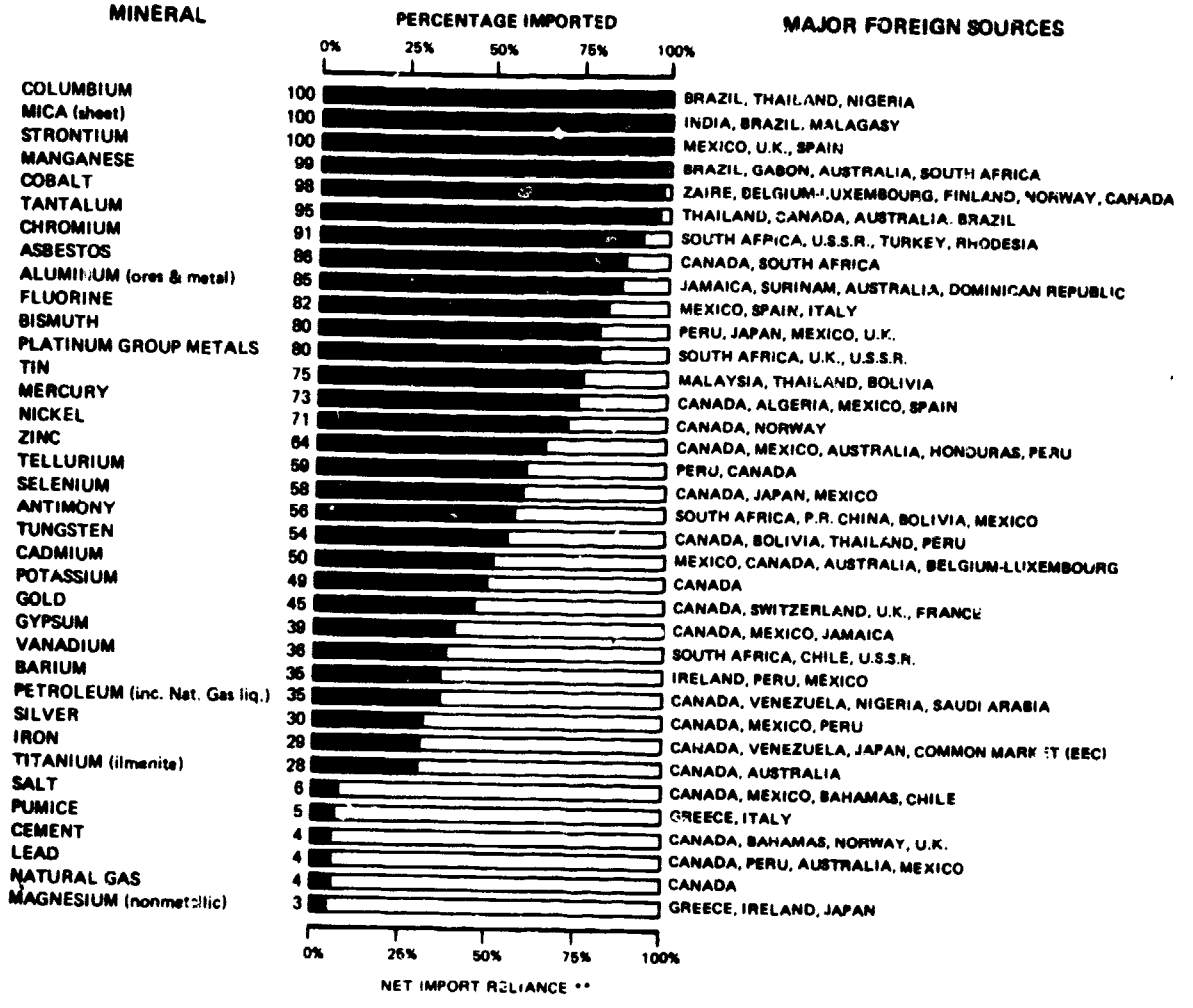
--Chromium is used in the United States primarily in making stainless steel and there is no known substitute for this mineral. The mineral is mined in the form of chromite ore. No chromite is mined in the United States.

--Manganese is required in steelmaking as a deoxidizing, desulfurizing, and alloying agent for which there is no known substitute. The United States depends almost entirely on imports for its manganese requirements. Domestic resources are very low grade and are not economically competitive with imports.

Table 8 shows the materials that the United States is most dependent upon and their primary sources.

Table 8

IMPORTS SUPPLIED SIGNIFICANT PERCENTAGE OF MINERALS AND METALS CONSUMPTION* IN 1975



* APPARENT CONSUMPTION = U.S. PRIMARY + SECONDARY PRODUCTION + NET IMPORT RELIANCE

** NET IMPORT RELIANCE = IMPORTS – EXPORTS ± GOV'T STOCKPILE AND INDUSTRY STOCK CHANGES

BUREAU OF MINES, U.S. DEPARTMENT OF THE INTERIOR (import-export data from Bureau of the Census)

The possibility of producer countries imposing embargoes for raw materials other than oil is highly unlikely because developing countries could not afford to lose raw material revenues and developed countries, such as Australia and Canada, would be unlikely to resort to political embargoes. Moreover, there are more substitutes for most minerals than there are for oil, and other producers do not have the same political bonds holding them together as the Middle East oil producers had during the Arab-Israeli war.

Although embargoes are unlikely, disruptions in foreign supplies are possible for several reasons, including:

--Supplier country desires to increase or stabilize prices; Saudi Arabia has cut back production to prevent price reductions during periods of lower petroleum demands. Also, members of the International Council of Copper Exporting Countries have tried production cutbacks to support declining copper prices; although unsuccessful, the attempt proves that supplier countries will resort to reductions in order to affect prices of commodities.

--Political or military actions that affect materials producing areas; the possibility of armed conflict in Southern Rhodesia threatens disruption of mineral shipments from the southern African countries, including South Africa, and political disturbances in Chile during the Allende period severely restricted the flow of Chilean copper to world markets.

--Materials conservation programs by producing countries; to conserve oil and gas supplies for domestic use, Canada is restricting future exports of these commodities to the United States.

Such disruptions could have important strategic consequences for the United States if they are enduring and affect most of the supply sources for one or several commodities within approximately the same time frame. U.S. stockpiles of strategic and critical raw materials could meet our Nation's economic and military needs for only a limited time. Moreover, disruptions could take on added significance in the future as competition for basic commodities increases.

Competition for raw materials

Western Europe is dependent on foreign supplies of most of the raw materials vital to the maintenance of its highly

industrialized society. And although there are some opportunities for expansion of raw materials capabilities within Western Europe, the fact is that its dependence is a permanent condition.

Japan's needs for imported raw materials are more crucial, because, in addition to non-energy minerals, Japan must also import some 88 percent of its primary energy supplies. Table 9 compares U.S. dependence on selected raw materials with that of the European Community and Japan.

Table 9

Selected Imported Industrial Raw Materials in 1975

Raw material	United States (note a)	European Community	Japan
	(percent)		
Aluminum (ore and metal)	84	75	100
Chromium	91	98	98
Cobalt	98	98	98
Copper	(b)	98	90
Iron (ore and metal)	29	55	99
Lead	11	85	73
Manganese	98	99	88
Natural rubber	100	100	100
Nickel	72	100	100
Phosphates	(b)	100	100
Tin	84	93	97
Tungsten	55	100	100
Zinc	61	70	53

a/Percentages may differ slightly from table 8 due to differences in methodology.

b/Net exporter.

Source: President's International Economic Report, Jan. 1977.

The differing degrees of dependence among the countries of Western Europe, the United States, and Japan have resulted in varying philosophies toward raw materials supplies and the role of foreign direct investment.

The United States has generally supported U.S. investment abroad in raw materials through various programs and policies but has largely relied on the free market forces for its foreign raw materials supplies. Japan has sought constantly to improve the reliability of its raw materials imports.

Some European countries have adopted policies which appear to parallel those of Japan. Germany and France, for example, have established government-financed companies for the purpose of acquiring foreign oil-producing properties. The Germans also will provide grants of up to 50 percent of the cost of prospecting and exploration work and government guarantees for making investments abroad.

As stated in "Raw Materials & Foreign Policy," written by the International Economic Studies Institute in 1976:

> "With government support, Japanese private industry has mounted an aggressive search for stable supplies of minerals from overseas, as well as for more direct access to producing properties. Throughout the 1960's, the government offered tax benefits, direct government subsidies, and preferential access to foreign exchange in order to gain assured foreign raw material supplies. Japanese firms sought to conclude long-term purchase contracts, providing loan capital if necessary to develop production capabilities rather than direct investments. With a strong balance of payments by the end of the decade, Japan accorded a new priority to overseas investment in raw materials production, particularly in the cases of petroleum and natural gas. * * * In mid-1972, a third of Japan's overseas investments was in mining and petroleum.
>
> * * * * *
>
> "European and Japanese entrepreneurs have groped for arrangements other than total ownership. They have used joint ventures with partners from one or more other industrialized countries, partnerships with public and private investors in the host country, and bilateral trade agreements and long-term purchase contracts associated with loans to be repaid by exporting the mineral to be developed. Public funds, tax credits, and government guarantees have been used to reduce the risks of private financing of enterprises designed to

develop and preempt foreign production of minerals. A number of developed countries, with Germany in the lead, have negotiated investment protection agreements with developing countries."

European and Japanese aggressiveness in securing raw materials, sometimes at the expense of U.S. oil and mineral extractive companies, has raised concerns that the present U.S. policy of relying on free market forces for raw materials may be unrealistic in view of increasing demands and possible shortages. Some corporate executives have suggested that the United States should provide greater incentives for its foreign investors abroad as insurance against future disruptions in supplies. Others point to the oil embargo of 1973 and the inability of U.S. oil companies to exercise control over their investments in the Middle East as proof that investments are no insurance against disruptions. 1/

Most would agree that U.S. investment in foreign raw materials sources has helped to reduce the risk of shortages by increasing and diversifying the supply. Moreover, by providing capital, technology, and know-how, it has helped other countries to develop their raw materials deposits to a greater extent than would have been possible using domestic resources. Hence, such investment has been important as an instrument of supply and development. 2/

As long as investors' rewards exceed risks, investments will continue to be made. The risk element, either real or perceived, is very important to a raw materials investor because of the substantial capital involved in such ventures and the length of time needed to develop a project to the profit-making stage. Over approximately the last two decades, the risk factor has played an important part in the allocation of U.S. private direct investment abroad. Overall, the trend has been away from the strategic areas of utilities and raw materials to less critical areas, such as manufacturing and services. Moreover, the trend in mining and smelting and

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1/Some see the oil companies' ability to shift supplies "to share the shortage" during the embargo against the United States as evidence of the value of direct investment.

2/U.S. national security is enhanced if the United States through its direct investment abroad is assured of an adequate supply of raw materials at a reasonable cost. And a further enhancement is achieved if U.S. allies (developed and developing countries) also benefit from the investments as supplier or consumer countries.

petroleum has been away from developing to more developed countries as shown in table 20.

Table 20

U.S. Direct

Investment Abroad in the Raw Materials Sectors

	Mining and smelting				Petroleum			
	Developed countries		Developing countries		Developed countries		Developing countries	
Year	(millions)	(percent)	(millions)	(percent)	(millions)	(percent)	(millions)	(percent)
1955	$1,004	45	$1,205	55	$2,174	37	$3,675	63
1965	2,035	54	1,750	46	6,909	45	8,389	55
1976	4,749	67	2,309	33	a/23,662	a/80	a/2,882	a/10

a/Approximately $3,169 million or 10 percent of total petroleum investments are classified as "international and unallocated" by Commerce.

Source: U.S. Department of Commerce.

Expropriations and nationalizations have contributed greatly to the decline in raw materials investment in developing countries. 1/ But other factors, such as host-government control over investment and economic and political instability, have tended to decrease investor interest in future investments. This trend, if sustained several more years, could negatively affect the worldwide availability of raw materials at a time when increases in demand are projected. Also, it could concentrate control over some raw materials supplies within a select group of developed countries.

Ocean resources

Petroleum and natural gas

To some extent, offshore petroleum drilling has been technically feasible for some 100 years, but has received little attention except for a few coastal areas due to its high cost in relation to onshore drilling. As a result of the substantial oil price increases from 1972, developments affecting foreign supply sources, and advances in technology, deep offshore drilling has attracted considerably more interest.

In 1973, offshore production accounted for some 17 percent of total U.S. and 18 percent of total world

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1/Between January 1961 and January 1975, there were some 128 takeovers of private foreign investments in the petroleum, mining, and processing industries by host-country governments.

production. 1/ Experts predict that this could increase considerably in the years ahead as the North Sea, Prudhoe Bay, and other deposits are exploited.

Which offshore petroleum resources will be exploited and when is a matter of conjecture at this time. Since the United States subscribes to the free enterprise system, the further development of U.S. offshore petroleum resources will likely be heavily influenced by what private enterprises perceive as the costs and benefits of such ventures.

Corporate decisions on whether to develop U.S. offshore petroleum resources will be influenced by:

--Costs: depth and climatic conditions are important contributors to the cost of any petroleum drilling operation, but probably more so for offshore ventures. On the basis of these and other cost determinants, U.S. offshore resources will be competing with onshore and offshore resources of other nations.

--Benefits: the development of offshore deposits is projected as having little effect on the market price of oil since it is estimated that such deposits will be developed gradually and OPEC members will continue to dominate the petroleum market and to dictate petroleum prices. This could prevent higher, offshore drilling costs from being recovered, and host-country financial incentives may be key determinants in whether offshore resources are exploited.

--Controls: fully integrated oil companies possess the capital and technology needed to develop offshore resources, and it has been to their economic advantage to control all phases of production and distribution. The United States has traditionally allowed them to exercise this control, whereas other countries have increasingly tried to dilute their control. A change in U.S. policy could negatively affect the development of U.S. offshore petroleum resources.

Thus, it can be seen that U.S. investors' decisions on where to invest their limited capital resources will continue to have a major impact on U.S. dependency on oil, and U.S. policy could play an important part in those decisions. Ultimately, however, the determinant has to be profit.

1/National Petroleum Council, Ocean Petroleum Resources, Mar. 1975.

Minerals

The seabed surface contains large deposits of nodules composed of nickel, copper, cobalt, and manganese. These ferromanganese nodules are concentrated at great depths in international waters. The technologic and economic feasibility of commercially extracting and processing the nodules is still unproven, but estimates are that by 1985 16.5 million short tons (dry weight) of nodules could be mined annually. However, this depends critically on the returns anticipated, i.e., the incentives to further develop and use the technology required, and on the resolution of jurisdictional problems of who owns and who should mine the resources.

Because of the jurisdictional issues and the other issues surrounding the increased use of the oceans by all nations, the United Nations has convened several Law of the Sea Conferences, but none of these has reached agreement on mining the deep seabed.

Developing nations, for the most part, hold that the resources of the deep seabed are the "common heritage of mankind" and benefits from exploiting these resources should accrue to the international community as a whole, with special priority to developing and landlocked countries. They have been in favor of a U.N. authority with power to mine on its own, strictly regulate the operations of others, and guarantee that a sizable portion of the revenue from seabed mining accrues to developing countries.

The United States and other industrialized countries have agreed in principle with the "common heritage of mankind" concept and the need for a U.N. authority which insures access for their nationals under conditions which permit profitable operations and provide security of investment.

Seabed mining, should it develop as projected, is estimated to have limited economic impact on the United States. But it could further diversify U.S. supply sources, thus decreasing dependence on foreign sources for three of the four minerals involved (the United States is presently a net exporter of copper). However, a decision by U.S. companies to mine the seabed without an international agreement could lead to confrontation between the United States and countries which now rely on the export of these minerals for foreign exchange.

TRANSFER OF STRATEGIC TECHNOLOGY

Technological innovation is recognized as a major contributor to economic vitality and military superiority. Other countries have contributed heavily to the pool of scientific knowledge, but to a large extent, it is the United States which has capitalized on this knowledge and developed it for practical applications. According to the Organization for Economic Cooperation and Development, 38 of the 50 most important inventions of the 20th century were developed or brought to fruition in the United States. As a result, the United States has been recognized as foremost in technological superiority and has also been at the forefront in transferring technology internationally. U.S. private enterprises, as holders of much commercial and military technology have played an important role in this transfer process.

Coproduction programs and licensing arrangements

Coproduction refers to the program by which the United States and an eligible country join together in producing a U.S. military system or item in a foreign country. The combined effort may be government-to-government, industry-to-industry, or a mix of government and private resources. The arrangements enable an eligible foreign government, international organization, or designated commercial producer to acquire substantial know-how to manufacture or to assemble, repair, maintain, and operate in whole or in part a specific weapon, communication, or support system for an individual military item.

Major objectives of coproduction projects, as defined by Department of Defense directives, are to (1) enable eligible countries to improve military readiness through expanding their technical and military support capability and (2) promote U.S. allies' standardization of military materiel and equipment, which in turn would generate the establishment of uniform procedures and logistics support and expand multinational operational capabilities.

From 1960 through July 1975, 33 coproduction agreements valued at $9.8 billion were signed. Agreements valued at $2.1 billion were being considered. Also, as of the end of 1975, 387 industry-to-industry licensing arrangements were in effect. The agreements and arrangements involved the production of such diversified defense items as armored personnel carriers, howitzers, tanks, rifles, machineguns, ammunition, helicopters, antitank rockets, aircraft, and vessels.

Probably the most publicized coproduction arrangement to date is that for the F-16 aircraft, which involves the United States, Belgium, Denmark, Norway, and the Netherlands. The program includes the design, development, production, and deployment of F-16 air combat fighters in the United States and Europe.

Our December 2, 1975, report to the House Committee on International Relations, "Coproduction Programs And Licensing Arrangements In Foreign Countries," listed the principal advantages and disadvantages of coproduction and licensing arrangements, as follows.

Advantages

--Create incountry compatibility with U.S. standardized equipment, thereby creating allied compatibility for supporting deployed U.S. Forces.

--Promote standardization of materiel or equipment to integrate and strengthen international military operations.

--Encourage multinational acceptance of strategic and tactical concepts through use of common materiel equipment.

--Establish or broaden base for common and interchangeable logistics.

--Improve procurement, production, contract administration, and mutual support capability of friendly nations.

--Permit entry into foreign markets at minimum investment cost and into markets that, due to import restrictions, might otherwise be closed to direct sales.

--Avoid expense of having to adjust homebased production and personnel to sometimes unstable demands.

--Obtain additional revenue from company-owned patents, trademarks, and accumulated know-how.

--Gain some tactical or strategic advantage in marketing U.S. manufacturers' products overseas.

--Develop market outlets for raw materials or components made by the domestic company.

Disadvantages

--Create the potential for foreign competition.

--Unit cost may be higher to foreign country.

--Loss of technology by the United States.

--U.S. labor employment loss if straight sales of U.S. manufacture would have been an alternative.

Coproduction and licensing arrangements contain clauses which restrict third-country transfer of U.S. defense items. Similar restrictions are imposed on third-country transfers of defense information acquired through coproduction and licensing arrangements. However, technology transfers are much more difficult to monitor than the transfers of items.

This fact was brought out in our June 1, 1976, report to the Congress, "Foreign Military Sales--A Growing Concern," which states that:

> "According to Defense officials, to estimate the potential impact of an export of technology is much more difficult than to assess the importance of exporting a finished product. Where a piece of hardware is concerned, the U.S. Government usually has a fair chance of determining that it went to its intended destination. Should diversion be detected, the value can be reduced by shutting off follow-on spares and refusing to ship similar equipment. The damage to U.S. security tends to be limited if only because machines and equipment have a finite utility and a finite useful life. This is not so with technology. The United States cannot be assured of the uses to which its end products will be put; the United States cannot recall them, nor are they necessarily wasting assets."

The urgency of concerns about technology transfer was reflected in recent legislation, the International Security Assistance Act of 1977 (Public Law 95-92), August 4, 1977, which directs the President, through his designee(s) to "conduct a comprehensive study of the policies and practices of the United States Government with respect to the national security and military implications of international transfers of technology in order to determine whether such policies and practices should be changed." Among other things, the study shall examine the:

1. Nature of technology transfer.

2. Effect of the transfers on U.S. technological superiority.

3. Rationale for transfers from the United States.

4. Benefits and risks of such transfers.

5. Trends in technology transfers by the United States and other countries.

6. Need for controls on transfers.

7. Effectiveness of existing organizational arrangements in the executive branch in regulating transfers.

8. Adequacy of existing legislation and regulations with respect to transfers from the United States.

9. Possibility for international agreements with respect to transfers.

A report of findings and conclusions from the study as well as appropriate recommendations for legislative and administrative actions is required to be submitted to the Congress no later than one year from the enactment of this act.

The economic consequences of military technology transfers through coproduction and licensing arrangements are likely to increase in the near future as the United States tries to reduce its sales of military items to other countries. Indications are that some of our allies are eager to sell military arms to other countries to fill the void left by decreasing U.S. military sales. Hence, it may be that U.S.-developed military technology will be incorporated in arms sold to third countries without U.S. approval and without the United States reaping the financial benefits.

This could have important economic consequences for the United States, as foreign military sales contribute largely to the U.S. balance of trade and payments. In 1975, sales amounted to almost $10 billion and cumulative undelivered sale orders totaled about $24 billion.

Technology transfers to the Soviet Union and Eastern European countries

The United States and the Soviet Union are rivals in terms of military power and world influence. Over the last

several years, this rivalry has changed from one of "cold war" confrontation to one of peaceful coexistence, sometimes referred to as "detente," and trade between the United States and the Soviet Union and its Eastern European satellites has increased, as shown in table 21.

Table 21

U.S. trade with Communist countries

	U.S. exports		U.S. imports	
	Eastern Europe	Soviet Union	Eastern Europe	Soviet Union
	(millions)			
1970	$ 234.9	$ 118.7	$153.5	$ 72.3
1971	222.2	162.0	165.8	57.2
1972	276.9	542.2	225.0	95.[illegible]
1973	606.5	1,194.7	306.1	220.1
1974	823.4	609.2	539.4	350.4
1975	951.0	1,836.0	472.9	255.3
1976	1,197.5	2,353.9	648.7	220.2

Source: President's International Economic Report, Jan. 1977.

A considerable amount of the increase in U S. exports can be attributed to agricultural commodities, but technology-oriented goods, including industrial machinery, are also on the increase. And the trend of importing industrial technology is likely to continue as the Soviet bloc countries seek to improve their industrial production, rate of growth, and future export capabilities. Moreover, the importation of Western technology is thought to be more productive than domestic investment outlays.

For the most part, the equipment and technology transfers have been accomplished outside of the direct investment mode--foreign equity in the traditional sense of ownership is usually not included as part of the agreement. Nevertheless, the involvement by some U.S. firms has been substantial, as shown in the following examples.

--Two U.S. companies have contracts with a Polish state corporation for the sale of equipment and technology used in the manufacture of color TV tubes. As a result, Poland will have an independent manufacturing capability for color tubes, which will enable it to become an exporter to other East European countries,

developing nations, and, potentially, to Western Europe. 1/

--In 1973, a U.S. tire manufacturer contracted with a Romanian ministry to design, equip, supervise construction of, and put onstream a plant to manufacture one million steel-belted radial truck and passenger tires a year. 2/

--In 1975, a U.S. firm contracted with a socialist country to provide manufacturing equipment and technical know-how for an automotive parts manufacturing plant. The contract calls for intensive training of the client's engineers and technicians in the United States. The technology and equipment, including metallurgical, mechanical, electroplating, and casting lines, will be the most sophisticated available and promises to produce an internationally competitive product. 1/

The implications of commercial technology transfers to Soviet bloc countries are numerous and subject to considerable differences of opinion. The following are but a few of the thoughts which have been expressed on the subject.

--Greater economic ccoperation between the United States and Eastern European countries (excluding the Soviet Union) could decrease these countries' dependency upon and political ties with the Soviet Union.

--Economic cooperation and interdependence could reduce the possibility of military confrontation between the United States and the Soviet Union.

--A higher standard of living achieved through the use of imported commercial technologies could result in a reallocation of resources from military to civilian sectors within the Soviet Union.

--A decreased U.S. technological advantage vis-a-vis the Soviet Union could erode U.S. prestige abroad, especially in developing countries.

1/"International Transfers of Industrial Technology By U.S. Firms and Their Implications for The U.S. Economy", by Jack Baranson, Dec. 1976.

2/Technology Transfer to East Europe, by Eric W. Hayden, 1976.

--The Soviet Union's ability to purchase foreign commercial technologies at less than it would cost to develop them domestically could alleviate its need to shift resources from military to commercial sectors.

CHAPTER 5

OBSERVATIONS

The following observations are drawn from the printed materials we reviewed and the discussions held during our study. In most cases, they do not relate specifically to investment issues or relate to issues not clearly delineated in the literature, but they are, nonetheless, important to the study of U.S. direct investment abroad.

There is a high degree of interrelation among the investment issues discussed in this paper; although we, as well as others, have chosen to isolate the issues for discussion purposes, they should be considered together for policy formulation purposes. The literature on multinational corporations and their direct investments abroad abounds with discussions of selected issues and their impacts on one or several domestic resource(s) (labor, trade, capital, technology, etc.), but few, if any, discuss the issues and their impacts on the domestic economy in their entirety. The study of the issues has been both aided and hampered by these parochial studies and the many and varied quantitative techniques used to measure the impact of the investment data. Analysts' varied techniques and assumptions have helped to identify different facets of issues, but they have also helped to diffuse the focus of policymakers' attention, leading to confusion over the issues. Hence, the formulation of acceptable quantitative techniques or models by which to measure the full effects of investment abroad appears to deserve priority attention so that priority issues can be identified and addressed by policymakers.

The identification and interpretation of investment trends is important to the study of investment abroad because as investments change in character, their effects on the U.S. economy may also change. Direct investment abroad traditionally has meant ownership of at least 10 percent of voting stock or equivalent interest and has signified an element of control over the investment. Portfolio investment, on the other hand, traditionally has meant lack of controlling interest, such as ownership of less than 10 percent of voting stock or equivalent interest. Important to these traditional concepts is a perceived trend toward new types of investments in which equity participation does not necessarily equate to control of operations. For example, a U.S. investor may have considerable equity participation in a foreign enterprise, but majority ownership and control may be in someone else's hands. Conversely, a U.S. investor may supply critical technology, management

know-how, or products, and may exercise considerable control over the foreign enterprise through agreements rather than equity participation. The implications of such a trend, if accurate, are that equity could no longer be the sole determinant of control and that such criteria as technology and management control would have to be incorporated in revised definitions of investment.

Over the last few years, U.S. companies have been less attracted to investing abroad due to (1) U.S. dollar devaluations, (2) elimination of some U.S. tax incentives, (3) increased host-government involvement in foreign business operations, (4) rising inflation and increased price controls abroad, (5) host-country currency devaluations which sometimes result in substantial losses, (6) host-country import restrictions and duties on equipment and parts to force more local production, (7) increased host-country labor rates and worker participation in management and decisionmaking, and (8) political uncertainties due to socialist party gains in the host governments. Moreover, U.S. companies and foreign investors from other nations are increasingly recognizing the advantages of investing in the United States. As a result, U.S. companies, faced with declining profitability and control, appear to be critically evaluating present and future investment abroad and will probably exercise a great degree of selectivity in making those investments.

The substantial increase in the price of oil over the last few years could have conflicting effects on the U.S. investor. For example, the U.S. investor has been severely criticized in some circles for contributing to the United States increasing dependence on foreign oil supplies and trade deficits by investing in foreign, rather than domestic, production facilities and raw materials deposits. As a result, the investor has had to weigh the perceived advantages of investing abroad against the possibility and consequences of U.S. Government intervention in the free market system should the trends continue. Adding to this dilemma are (1) the possibility of reducing transportation and production expenses (through cheaper raw materials and energy sources) of products which must compete on the basis of price, (2) a high concentration of liquid capital in a few oil-producing countries eager to buy technology and management expertise, (3) a growing financial crisis in oil-importing developing countries which could soften their position on foreign investment, and (4) high petroleum prices which make previously considered economically unfeasible foreign offshore and onshore oil deposits economically feasible. The exact implications for the U.S. economy and national security of these conflicting forces on the U.S. investor are impossible to assess at this time, but are nonetheless worthy of investment analysts' attention.

APPENDIX I

MEASURES OF INVESTMENT MAGNITUDE

VALUE

Over the years, the concentration of investment dollars shifted from developing to developed economies (primarily in Europe) and from strategic (primarily extractive and public service) to manufacturing sectors.

Changes in Distribution
of U.S. Direct Investment Abroad

	Amount				Percent			
	1929	1950	1970	1976	1929	1950	1970	1976
	(billions)							
Developed areas:								
Canada	$2.0	$ 3.6	$21.0	$ 33.9	26.7	30.5	27.8	24.7
Europe	1.3	1.7	25.3	55.9	17.3	14.4	33.5	40.7
Other (note a)	.3	.4	5.5	11.3	4.0	3.4	7.3	8.2
	3.6	5.7	51.8	101.1	48.0	48.3	68.6	73.6
Developing areas:								
Latin America	3.5	4.9	13.0	23.5	46.7	41.5	17.2	17.1
Other	.4	1.2	6.2	5.5	5.3	10.2	8.2	4.0
	3.9	6.1	19.2	29.0	52.0	51.7	25.4	21.1
Unallocated	-	-	4.5	7.1	-	-	6.0	5.3
Total	$7.5	$11.8	$75.5	$137.2	100.0	100.0	100.0	100.0
Sectors:								
Mining and smelting	$1.2	$ 1.1	$ 5.4	$ 7.1	16.0	9.3	7.2	5.2
Petroleum	1.1	3.4	19.7	29.7	14.7	28.8	26.1	21.6
Manufacturing	1.8	3.8	31.0	61.2	24.0	32.2	41.1	44.6
Other (note b)	3.4	3.5	19.4	39.2	45.3	29.7	25.6	28.6
Total	$7.5	$11.8	$75.5	$137.2	100.0	100.0	100.0	100.0

a/Includes Australia, Japan, New Zealand, and South Africa.

b/Comprises primarily public and private service sectors.

Source: U.S. Department of Commerce

APPENDIX I

SALES

Sales by majority-owned foreign affilitates of U.S. companies totaled an estimated $458.3 billion in 1975--approximately 66 percent ($301.5 billion) to customers in countries where the affiliates were located, 7 percent ($31.6 billion) in exports to the United States, and 27 percent ($125.2 billion) in exports to third countries. Moreover, sales by industrial sectors were distributed, approximately, 1 percent ($4.6 billion) to mining and smelting; 39 percent ($178.7 billion) to petroleum; 42 percent ($192.3 billion) to manufacturing; 11 percent ($52.2 billion) to trade; and 7 percent ($30.6 billion) to others.

From 1966 to 1975, total sales increased by about 370 percent, $97.8 billion to $458.3 billion, with the petroleum industry having the greatest increase--$27.5 billion to $178.7 billion. However, manufacturing sales also increased 306 percent, from $47.4 billion to $192.3 billion.

Affiliates' sales to the United States, although comprising only 7 percent of their total sales, are substantial when compared to host-country exports to the United States. As seen in the following table affiliate sales comprised 25 and 32 percent of total host-country exports to the United States for 1966 and 1975, respectively. Also, affiliate sales comprised a larger percentage of host-country exports to the United States in 1975 than in 1966 for most geographical areas.

U.S. Affiliates' Share of Regional Exports

Geographic area	1966	1975
	(percent)	
Canada	49	58
Europe	10	14
Japan	1	1
Australia, New Zealand, and South Africa	10	8
Latin America	38	41
Other	18	32
All areas	25	32

Source: U.S. Department of Commerce

EARNINGS

Adjusted earnings 1/ for U.S. affiliates abroad totaled an estimated $18.8 billion in 1976. The following table shows the geographical and sectoral breakdown.

Geographic area	Mining and smelting	Petro-leum	Manu-facturing	Trade	Finance	Other
	(millions)					
Canada	$253	$1,002	$1,836	$217	$ 327	$201
Europe	-5	532	3,582	853	653	492
Japan	0	113	214	33	71	-20
Australia, New Zealand, and South Africa	374	234	322	59	6	45
Latin America	198	449	981	219	1,278	176
Middle East	2	1,656	5	19	62	1[illegible]
Other	107	1,086	245	274	225	171

Source: U.S. Department of Commerce

For balance-of-payments purposes, earnings are shown as either remitted to the United States or reinvested abroad. From 1966 to 1976, the trend has been toward reinvesting a larger percent of the earnings.

Distribution of Adjusted Earnings

	Balance-of-payments income	Reinvested earnings
	(percent)	
1966	66	34
1967	69	31
1968	63	37
1969	63	37
1970	61	39
1971	65	35
1972	59	41
1973	52	48
1974	70	30
1975	52	48
1976	59	41

Source: U.S. Department of Commerce

1/U.S. parents' share in the earnings of their foreign affiliates, plus net interest on intercompany accounts, less foreign withholding taxes.

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PLANT AND EQUIPMENT EXPENDITURES

Plant and equipment expenditures by majority-owned foreign affiliates of U.S. companies totaled an estimated $27 billion in 1975.

Geographic area	Mining and smelting	Petroleum	Manufacturing	Trade	Other
	(millions)				
Canada	$620	$1,180	$2,207	$ 363	$903
Europe	5	2,786	6,394	1,263	499
Japan	-	(a)	550	65	(a)
Australia, New Zealand, and South Africa	267	(a)	402	97	(a)
Latin America	225	866	1,477	454	331
Middle East	1	1,651	41	8	159
Other	66	b/2,887	313	58	b/856

a/Suppressed by Commerce to avoid disclosure.

b/Includes suppressed amounts for other geographic areas.

Source: U.S. Department of Commerce

Plant and equipment expenditures abroad as a percent of domestic plant and equipment expenditures has been growing. For example, in 1971 expenditures abroad were 20 percent of those in the United States but in 1975 they had grown to 24 percent. Expenditures abroad, as a percent of domestic expenditures from 1957 to 1975 for selected manufacturing industries, are shown on the following table.

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	1957-61	1962-66	1967-70	1971-75
	(average percent)			
Chemicals	16.0	29.0	38.6	36.9
Transportation equipment	39.7	49.3	44.0	39.9
Machinery	16.4	27.1	37.0	53.4
Metals	9.1	12.9	13.8	18.1
Paper	14.4	20.0	15.5	32.9
Food	10.5	15.9	14.6	18.8
Rubber	42.1	50.0	20.5	23.5
All manufacturing	12.0	18.6	21.2	24.0
All industries	11.7	12.2	15.9	21.5

Sources: 1957-61, 1962-66, and 1967-70, "Direct Investment Abroad And The Multinationals: Effects On The United States Economy," by Peggy B. Musgrave

1971-75 U.S. Department of Commerce

FOREIGN TAXES

A U.S. corporation with investments abroad is allowed, within certain limits, a credit against U.S. taxes for taxes paid to foreign governments. In 1972, the latest year for which information is available, U.S. corporations took advantage of $6.3 billion in foreign tax credits. As can be seen in the following table, credit benefits for 1972 were concentrated within a small group of very large corporations.

Asset size	Number of corporations	Foreign tax credit	
		Amount	Percent of total
	(thousands)	(thousands)	
Under $1 million	1,692.8	$ 14,156	.2
$1 million to $50 million	114.2	132,912	2.1
$50 million to $100 million	2.5	83,229	1.3
$100 million to $250 million	1.8	266,630	4.2
$250 million or more	1.5	5,818,798	92.1
Total	1,812.8	$6,315,725	99.9

Source: Statistics of Income, Corporation Income Tax Returns, 1972, Department of the Treasury, Internal Revenue Service

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Although the amount of foreign tax credits more than doubled from 1965 to 1972, the number of corporations taking advantage of the credits remained fairly constant, within a range of about six to seven thousand.

Year	Foreign tax credits	Number of corporate returns (note a)
	(billions)	
1965	$2.6	6,186
1966	2.9	6,197
1967	3.2	6,143
1968	3.7	7,110
1969	4.0	6,820
1970	4.5	5,745
1971	5.7	6,010
1972	6.3	6,411

a/Excludes small businesses and domestic international sales companies (DISCs).

Source: Internal Revenue Service

EMPLOYMENT

Majority-owned foreign affiliates of U.S. companies employed 3,874,000 people in 1966 according to Commerce's benchmark survey, including 26,000 U.S. nationals. For the same year, total payroll costs were estimated at $14.2 billion.

The geographic and sectoral breakdown for employees is shown below.

Geographic area	Mining and smelting	Petroleum	Manufacturing	Trade	Finance	Others
	(000 omitted)					
Canada	49	37	545	78	27	66
Europe	4	114	1,354	121	15	82
Japan	-	4	40	6	1	3
Australia, New Zealand, and South Africa	21	15	171	18	2	17
Latin America	81	58	413	58	13	132
Middle East	-	32	3	1	1	7
Other	17	63	109	29	5	82

Source: U.S. Department of Commerce

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