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8 Changing Patterns of International Investment in and by the United States

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1. Robert E. Lipsey

8.1 Introduction

After World War II, the United States became the major supplier of capital in world markets, and for many years that role appeared to be a permanent one. The United States' recent swing to being the world's largest borrower is a reminder that in this respect our history has been cyclical since the late nineteenth century, alternating between periods of capital exporting and capital importing. These swings were mainly based on economic circumstances, but at times wars and threats of wars, revolutions, and other types of government instability made investment flow uphill, against the pull of purely economic forces.

A more constant feature than the direction of the capital flow has been the association of U.S. capital exports with the export of technology and management. Americans were the innovators in exporting the package of management, technology, and capital, sometimes even without the capital, that is known as foreign direct investment: the ownership of production facilities in one country by firms based in another country.

The development of this type of multinational enterprise and the changes that have taken place within it reflect the evolution of the competitiveness and comparative advantage of American firms and their responses to changes in political and economic circumstances. The innovation represented by these U.S. enterprises has been increasingly copied by firms based in other countries, with the result that

many foreign firms have entered the U.S. market, and multinational activity has become a feature of firms even from developing countries.

Against the relatively steady growth of direct investment, first out of the United States and then into it, there have been large swings in other forms of investment. Most foreign investment in the United States has been portfolio rather than direct investment; that is, it has not included foreign control of U.S. enterprises. The United States too has engaged in brief, but very large, spurts in portfolio investing in foreign countries. These are important, despite their infrequency, because they have been so large, at times outrunning the steadier trends in direct investment.

8.2 Historical Background

8.2.1 Foreign Investment in the United States before World War I

The recent metamorphosis of the United States into a large international borrower has been unsettling. It has been an unfamiliar role for many decades, but it is not a totally new one. It is a return to the pattern of the United States' first century of existence. Most of the time, from George Washington's inauguration until an abrupt turn to capital exporting at the end of the nineteenth century, the United States had been a net borrower in foreign financial markets (see table 8.1).

The cumulation of borrowing year after year until the end of the nineteenth century meant that the United States was a net debtor throughout these years; it was still a net debtor at the beginning of World War I, despite fifteen or twenty years in which the United States was a net foreign lender most of the time (see table 8.2).

Table 8.1 Net Inflow of Capital to the United States (millions of dollars, current prices)

Years	Inflow
1790–99	21
1800–1809	11
1810–19	97
1820–29	–6
1830–39	209
1840–49	–80
1850–59	196
1860–69	768
1870–79	402
1880–89	1,146
1890–99	97
1900–1909	–600
1910–14	341

Source: U.S. Bureau of the Census 1975, Series U 18–U 23.

Table 8.2 **Net Liabilities (–) of the United States, 1789–1914 (millions of dollars, current prices)**

	From Cumulation of Net Capital Flows	From Compilation of Assets and Liabilities	
		Net	Gross
1789	–60		
1800	–83		
1815	–80		
1820	–88 ^a		
1830	–75		
1840	–261		
1850	–217 ^b		
1860	–377		
1870	–1,252		
1880	–1,584		
1890	–2,894		
1900	–2,501		
1897	–3,305	–2,710	–3,395
1908		–3,875	–6,400
1914		–3,686	–7,200

Sources: Cumulation of net capital flows from U.S. Bureau of the Census 1975, Series U 40. Compilation of assets and liabilities from Lewis 1938, 445.

^aAfter defaults of \$50 million in 1816–19.

^bAfter defaults of \$12 million in 1841 and 1842.

An indication of the size of the debt relative to the U.S. economy is that the net indebtedness was about 3 percent of U.S. national wealth or tangible assets (land, structures, equipment, and inventories) in 1900; the indebtedness of 1914 was a little over 2 percent of national wealth in 1912. U.S. gross indebtedness in 1914, including foreign holdings of direct investment, was about 2.5 percent of total tangible and financial assets in the United States in 1912 (U.S. Bureau of the Census 1975, Series F 377 and F 378).

There are several ways to view the role of these flows of financial capital in American development. One is as a source of financing for aggregate capital formation, permitting faster accumulation of capital than would have taken place if only domestic financing had been available. On this basis, it is hard to suppose that imports of capital had a great influence on the rate of development, at least during most of the nineteenth century. The capital inflows never reached more than 1.5 percent of total output in any decade from the 1830s through the first ten years of the twentieth century and were probably never more than 6 percent or possibly 7 percent of gross capital formation (see table 8.3).

Table 8.3 Net Inflow of Capital in 1860 Prices

	As Percent of Gross National Product	As Percent of Gross Domestic Capital Formation
1834–43	0.6	6.2
1839–48	−0.3	−2.8
1844–53	0.4	3.1
1849–58	0.5	3.4
1854–63	0.5	n.a.
1859–68	0.9	n.a.
1864–73	1.5	n.a.
1869–78	1.1	4.9
1874–83	−0.1	−0.5
1879–88	0.8	3.5
1884–93	1.5	5.6
1889–98	0.5	1.8
1894–1903	−0.8	−3.1
1899–1908	−0.5	−1.8

Source: Edelstein 1982, 234, table 10.1, cols. 1 and 3.

In general, U.S. borrowing from foreign countries rose when U.S. capital formation surged; borrowing tapered off as U.S. saving, rising more gradually and steadily, caught up with capital formation. Thus, investment from abroad accommodated the large spurts in the demand for capital that characterized the rapidly growing economy.

There may have been other roles for borrowing from abroad. One might have been to supply funds for particularly risky forms of capital formation at a lower interest rate than would have been required by domestic lenders. Another might have been to supply funds when, in the face of heavy demands by rapidly growing sectors, U.S. domestic lenders' needs for diversification of risks made them reluctant to offer sufficient financing to these sectors. Another interpretation is that U.S. railway and government securities, relatively safe and requiring less local knowledge than investment in smaller-scale enterprises in agriculture, mining, and manufacturing, tended to be sold overseas, while domestic suppliers of capital invested in the riskier, but more profitable, sectors (Edelstein 1982, 237–38).

The bulk of foreign investment in the United States was portfolio investment rather than direct investment (table 8.4). That is, it consisted of purchases of bonds or, to a small extent, equities that did not involve control over the enterprise receiving the capital. Just before World War I, about 80 percent of the stock of long-term foreign investment in the United States was portfolio investment; the same had been true for the flow over a long period (Edelstein 1982, 36 and 37). Governments and railways were the chief borrowers, and most of the financing was

Table 8.4 Composition of U.S. Liabilities, 1869–1914 (millions of dollars, current prices)

	1869	1897	1908	1914
Direct investment {				1,310
Securities }	1,390	3,145	6,000	5,440
Short-term credits	150	250	400	450
Total	1,540	3,395	6,400	7,200

Source: Lewis 1938, 442 and 445.

in the form of bonds rather than equities. Most of the foreign investment, whether for governments or private companies, went to large, lumpy, social overhead capital projects, such as canals, railways, electrical utilities, and telephone and telegraph systems (Edelstein 1982, 39–41). Manufacturing enterprises were probably almost all too small to seek foreign financing or even, in most cases, public financing from domestic sources.

There were instances of manufacturing enterprises set up by foreign craftsmen or entrepreneurs with special knowledge or skill. However, in an era in which transportation and communication were slow by modern standards, these often involved the migration of the owners and eventual conversion of their enterprises into domestic entities. Thus, these enterprises involved mainly a flow of human capital to the United States.

We do not deal with the flow of human capital here, but it may have been more important to U.S. development than the flows of financial capital. In terms of numbers, immigration into the United States in each decade from the 1830s through the beginning of World War I ranged from about 5 percent to 10 percent of the number already in the country (U.S. Bureau of the Census 1975, Series A 6 and C 89). Furthermore, most of the immigrants (a 50 percent larger proportion than in the population as a whole) were between fifteen and forty-four years of age (U.S. Bureau of the Census 1975, Series C 119, C 122-27, C 138, and C 141). They came to the United States with most of their rearing costs already incurred and with a large part of their working lives still ahead of them.

8.2.2 The Beginnings of U.S. Direct Investment Abroad

The United States has been unique among the major investing countries in that the principal form of its investment has been, from the earliest times recorded, direct rather than portfolio investment (table 8.5). That is, it has typically involved control of foreign operations rather than simply the lending of capital to foreign-controlled firms or

Table 8.5 Stock of U.S. Investment Abroad, by Type (millions of dollars, current prices)

	Direct	Portfolio ^a
1897	634.5	50.0
1908	1,638.5	886.3
1914	2,652.3	861.5

Source: Lewis 1938, 605.

^aNet of repatriations and repudiations.

to governments. The earliest estimates, for 1897, show over 90 percent of U.S. investment to have been of this type.

The earliest examples of U.S. direct investment took place while the United States was still, on net balance, an importer of capital. They illustrate the key role of the export of technology, or other firm-specific assets, as contrasted to the pure export of capital, as is the case with portfolio investment.

U.S. direct investment abroad, in the sense of production abroad by subsidiaries or branches of U.S. companies, began soon after the Civil War and involved companies “with national sales plans and unique products” (Wilkins 1970, 35). Wilkins describes Singer, the manufacturer of sewing machines, as “the first American international business” (p. 37), with salaried sales representatives abroad in the early 1860s and its first foreign factory by the late 1860s (p. 42). Other early American production abroad during the period when the United States was still a capital importer was done by Hoe (printing presses), Babcock and Wilcox (boilers), International Bell Telephone and Western Electric, Edison Electric, Thomson-Houston Electric, a component of General Electric when it was formed later, Westinghouse Air Brake, Kodak, McCormick, Worthington Pump, Chicago Pneumatic Tool, Otis Elevator, National Cash Register, and Libbey-Owens (Southard 1931; Wilkins 1970, chap. 3). These companies were typically early technological leaders in their fields. Another indication of the importance of technology rather than capital is the number of instances in which the parent’s investment consisted entirely or largely of patent rights, as in the case of Ford in Canada, Libbey-Owens Glass in various European countries, and Westinghouse Electric in the United Kingdom (Lewis 1938, 300–301).

8.2.3 The Transformation of the U.S. International Balance Sheet, 1914–19

The beginning of World War I found the United States still a substantial international net debtor, but the events of the next few years transformed the country’s international balance sheet. As a result of

wartime lending by the United States, and especially the liquidation of foreign claims against the United States in the form of holdings of U.S. securities, this country ended the period as a net creditor in international markets (table 8.6). The United States became a net creditor even on private account, aside from the intergovernment debt of almost \$10 billion that was to bedevil international negotiations on reparations and other topics through the interwar years.

8.2.4 The United States as an International Investor, 1919–29

The period of the 1920s, and particularly the late 1920s, was exceptional in the history of U.S. investing abroad in two respects. One was that the growth of portfolio investment was far greater than that of direct investment, to the extent that the stock of portfolio investment exceeded that of direct investment for the first and only time at the end of that period (table 8.7). The other was that, in the late 1920s, direct investment in foreign public utilities, which represented only 4 percent of the stock of direct investment in 1924, accounted for over a third of the increase during the next five years (table 8.8).

Almost the whole history of U.S. direct investment in foreign public utilities is concentrated in the few years between 1924 and 1929. The increase in the stock of public utility investment in these years was almost 80 percent of the 1929 total as compared with less than 30 percent for all industries combined (table 8.9). The direct investment in foreign public utilities was very concentrated, both geographically and by company. The most detailed geographical breakdown, available only for 1940, probably reflects the distribution in 1929 (table 8.10). Over 60 percent of the public utility investment was in Latin America,

Table 8.6 The International Balance Sheet of the United States (millions of dollars, current prices)

	July 1, 1914	Dec. 31, 1919
Assets (private account)		
Securities	862	2,576
Direct investments	2,652	3,880
Short-term credits	—	500
Total	3,514	6,956
Liabilities		
Securities	5,400	1,623
Direct investments	1,310	900
Sequestered property and securities	—	662
Short-term credits	450	800
Total	7,200	3,985
Net privately held	−3,686	2,971
Net government	—	9,591
Private and government	−3,686	12,562

Source: Lewis 1938, 447.

**Table 8.7 Value of Stock of Private Foreign Assets of the United States
(millions of dollars, current prices)**

Type of Investment	1919	1924	1929	1924 minus 1919	1929 minus 1924
Direct	3,880	5,389	7,553	1,509	2,164
Portfolio, incl. short term	3,076	<u>5,365</u>	<u>9,456</u>	<u>2,289</u>	<u>4,091</u>
Total	6,957	10,754	17,010	3,797	6,256

Source: Lewis 1938, 450 and 605.

**Table 8.8 Percentage Distribution by Industry of the Value and the Growth
in Value of the Stock of U.S. Direct Investment**

	1924	1929	1929 minus 1924
Primary production ^a	45.6	40.6	28.2
Manufacturing	23.2	24.1	26.3
Public utilities	4.2	13.6	37.0
Distribution, incl. petroleum ^b	13.1	11.5	7.2
Other	<u>13.9</u>	<u>10.3</u>	<u>1.3</u>
Total	100.0	100.0	100.0

Source: Lewis 1938, 450 and 605.

^aAgriculture, mining, and petroleum production.

^bSales and purchasing, including petroleum distribution.

**Table 8.9 Growth in Value of the Stock of U.S. Direct Investment, 1924–29,
as Percentage of the 1929 Stock, by Industry**

	1929 minus 1924 as Percent of 1929
Primary production, excl. petroleum distribution	19.9
Manufacturing	31.2
Public utilities	78.2
Distribution incl. petroleum distribution	18.1
Other	<u>3.5</u>
Total	28.7

Source: Lewis 1938, 450 and 605.

Table 8.10 Percentage Distribution (%) of U.S. Direct Investment in Public Utilities

	1940
Canada and Newfoundland	26.9
Latin America	63.6
Other	<u>9.5</u>
Total	100.0

Source: Sammons and Abelson 1942, 21.

mainly South America, far above that area's share in total direct investment.

Portfolio investment, as well as direct investment, was concentrated in South America during the 1920s (table 8.11). More than a third of the growth in direct investment between 1924 and 1929 was in South America, the location of less than a fifth of such investment in 1924, and over a quarter of the growth in portfolio investment was directed there in these years, although the initial share was only 10 percent. Another way of describing the temporal concentration of investment in South America is that almost half of the stock of direct investment and almost two-thirds of the stock of portfolio investment in South America in 1929 were accounted for by the growth between 1924 and 1929 (table 8.12).

Table 8.11 Percentage Distribution by Geographical Area of the Value and the Growth in Value of U.S. Direct Investment

	1924	1929	1929 minus 1924
Direct investment			
Europe	17.5	18.0	19.4
Canada and Newfoundland	20.5	22.3	26.7
Cuba and other West Indies	18.9	13.8	1.5
Mexico and Central America	16.7	12.9	3.8
South America	18.0	23.2	35.7
Africa, Asia, and Oceania	<u>8.4</u>	<u>9.8</u>	<u>13.1</u>
Total excl. banking	100.0	100.0	100.0
Portfolio investment			
Europe	37.9	41.7	46.9
Canada and Newfoundland	34.0	25.6	13.9
Cuba and other West Indies	2.4	1.6	.6
Mexico and Central America	6.2	3.9	.6
South America	10.2	16.5	25.5
Africa, Asia, and Oceania	<u>9.4</u>	<u>10.7</u>	<u>12.5</u>
Total excl. international	100.0	100.0	100.0

Source: Lewis 1938, 606.

Table 8.12 Growth in Value of the Stock of U.S. Direct and Portfolio Investment, 1924–29, as Percentage of the 1929 Stock, by Area

	Percentage of 1929 Stock
Direct investment	
Europe	31.3
Canada and Newfoundland	34.8
Cuba and other West Indies	3.1
Mexico and Central America	8.5
South America	44.9
Africa, Asia, and Oceania	<u>39.0</u>
Total excl. banking	29.1
Portfolio investment	
Europe	46.9
Canada and Newfoundland	22.5
Cuba and other West Indies	15.8
Mexico and Central America	6.6
South America	64.1
Africa, Asia, and Oceania	<u>48.8</u>
Total excl. international	41.7

Source: Lewis 1938, 606.

The changes in value, especially for portfolio investment, reflect some price changes as well as new investment. However, these data do not reflect the price changes on individual issues but only changes in exchange rates. In any case, very little of the investment was in common stock (about 5 percent), and almost all the loans were dollar loans (about 95 percent), so neither possible source of price change, stock prices or exchange rates, could have been of much importance. Thus, the changes in portfolio investment must represent a tremendous flurry of new financing during this period.

The reasons for this concentrated burst of portfolio investment were probably different from those behind the direct investment in utilities. The two U.S. companies that were the ultimate parents of most of the utility affiliates were major manufacturers of the capital goods purchased by the utilities. Neither one was a domestic company in the industries in which these affiliates operated. The ownership of foreign utilities was, in effect, a way of exploiting the parents' advantages in technology and marketing in the telephone and electric power equipment manufacturing industries. The concentration of these investments in Latin America and their decline were at least partly the result of government monopolization and regulation, earlier in Europe and later in Latin America and Asia as well.

The burst of portfolio investment in the late 1920s was fueled by some of the same speculative spirit that propelled the U.S. stock

market in those years. The concentration in South American investment represented, according to one very thorough study (Mintz 1951) and many contemporary accounts, a large decline in the quality of credit extended, as the boom of the late 1920s progressed. The fall in quality is summarized by the fact that of the loans extended in the first half of the 1920s, only 18 percent went into default later, while the share of defaults was 50 percent for loans extended in 1925–29 (Mintz 1951, 6).

8.2.5 Defaults and Liquidations, 1929–35

After the large build-up of portfolio assets and liabilities in the last few years of the 1920s, the depression of the 1930s led to a wave of liquidations of security holdings and of defaults on foreign bonds among U.S. investments abroad as well. In addition, asset and liability values decreased as a result of declines in prices, but much of this decline is concealed by the use of book values for bonds. We do have a rough estimate of U.S. international assets with defaulted bonds valued at market, but we do not have a similar estimate for market values of other securities or direct investment.

Even without any allowance for default or price depreciation on bonds, we observe a decline of more than a quarter in securities assets, a reduction of short-term assets by almost half, and a decline of about 20 percent in securities liabilities (table 8.13). The market value of U.S. security holdings, taking account of depreciation on defaulted bonds but not on other securities, declined almost 50 percent.

Table 8.13 The International Balance Sheet of the United States, 1929 and 1935 (millions of dollars, current prices)

	1935		
	1929	All Bonds at Par	Defaulted Bonds at Market
U.S. private investments abroad			
Direct investment	7,553	7,219	7,219
Securities	7,839	5,622	4,222
Short-term credits	1,617	853	853
Total private	17,009	13,694	12,294
U.S. liabilities			
Direct investment	1,400	1,580	
Securities	4,304	3,529	
Sequestered properties	150	—	
Short-term credits	3,077	1,220	
Total private liabilities	8,931	6,329	

Source: Lewis 1938, 454.

By 1935, the primacy of direct investment among U.S. assets had reappeared. Some of the direct investment values may be inflated by the use of book values. Still, mismeasurement of capital stock is not responsible for the main story, as can be seen from the capital flow data (table 8.14). The United States continued to invest in controlled companies abroad, at least for the first couple of years, and the decline in value of these investments must therefore have stemmed largely from exchange rate changes, and from declines before sale in the value of assets sold during the period.

The data for long-term portfolio and short-term investment reveal a repatriation to the United States of about \$2 billion. The rest of the \$3 billion decline in the U.S. portfolio assets may reflect some losses from declines in the value of foreign currencies relative to the U.S. dollar. On the other side, the decline in foreign portfolio and short-term assets in the United States of almost \$3 billion was less than half accounted for by capital flows during the period.

The United States ran a surplus on goods and services during this period of more than \$3 billion. The deficits of the U.S. partner countries were financed not by private capital flows but by an absorption of gold by the United States of about \$3 billion in the last two years of the period.

8.2.6 The United States as a Destination of Flight Capital, 1935–40

Despite the low level of economic activity in the United States in the second half of the 1930s, foreign private investment in the United States more than doubled. The fastest growth was in short-term investment, which more than quadrupled, but every category of foreign investment grew.

In contrast, both U.S. direct and U.S. portfolio investment abroad declined, especially the latter. The \$7 billion increase in foreign in-

Table 8.14 Capital Flows, 1930–35 (millions of dollars, current prices)

	Capital (– = outflow) Flow
U.S. private investment	
Direct investment	–483
Other long term	751
Short term	<u>1,237</u>
Total private	1,505
Government	<u>106</u>
Total U.S.	1,611
Foreign investment in U.S.	
Long term	566
Short term	<u>–1,906</u>
Total	–1,340

Source: U.S. Bureau of the Census 1975, Series U 18–U 23.

vestment in the United States, combined with a cumulative U.S. surplus on goods and services of almost \$5 billion, was financed largely by a \$12 billion flow of reserve assets into the U.S. government's account (table 8.15).

An indication of the size of this capital flow is that over the five years it was almost 20 percent of gross capital formation and greater than net capital formation. In effect, the capital inflow was financing all net capital formation in the United States during this period. With this large inflow of capital, the United States, after twenty or so years as a net creditor on private account, slipped back into the position of a net debtor, aside from U.S. government holdings of official reserve assets.

8.2.7 Effects of World War II and the Reconstruction Period on the U.S. International Capital Position

In contrast to World War I, when foreigners liquidated well over half their long-term investments in the United States, foreign holdings of private U.S. assets were unchanged between the beginning and end of World War II (table 8.16). Foreign holdings of U.S. government securities grew substantially, while the U.S. private sector raised its foreign assets by about 20 percent. The United States remained a net debtor outside of its official reserve assets.

After 1945, the United States resumed its acquisition of private foreign assets, mainly direct investments, and by 1950 the United States was once again a net creditor even outside its official reserve assets. A \$35 billion cumulative surplus in net exports of goods and services in the late 1940s was financed partly by the growth of U.S. assets and

Table 8.15 The International Balance Sheet of the United States, 1935 and 1940 (billions of dollars, current prices)

	1935	1940
U.S. private investment abroad		
Direct	7.8	7.3
Other private long term	<u>4.8</u>	<u>4.0</u>
Total private long term	12.6	11.3
Private short term	<u>.9</u>	<u>.9</u>
Total private	13.5	12.2
Foreign investment in the U.S.		
Direct	1.6	2.9
Other private long term	<u>3.5</u>	<u>5.2</u>
Total private long term	5.1	8.1
Private short term	<u>1.2</u>	<u>5.1</u>
Total private	6.3	13.2
U.S. government	<u>—</u>	<u>.3</u>
Total	6.4	13.5

Source: U.S. Bureau of the Census 1975, Series U 26-U 39.

Table 8.16 International Balance Sheet of the United States before and after World War II (billions of dollars, current prices)

	1940	1945	1950
U.S. investment abroad			
Direct	7.3	8.4	11.8
Other private long term	<u>4.0</u>	<u>5.3</u>	<u>5.7</u>
Total private long term	11.3	13.7	17.5
Private short term	<u>.9</u>	<u>1.0</u>	<u>1.5</u>
Total private	12.2	14.7	19.0
Foreign investment in the U.S.			
Direct	2.9	2.5	3.4
Other private long term	<u>5.2</u>	<u>5.5</u>	<u>4.6</u>
Total private long term	8.1	8.0	8.0
Private short term	<u>5.1</u>	<u>5.3</u>	<u>6.6</u>
Total private	13.2	13.3	14.6
U.S. government	<u>.3</u>	<u>3.7</u>	<u>3.1</u>
Total	13.5	17.0	17.6
U.S. government	22.1	22.2	35.4

Source: U.S. Bureau of the Census 1975, Series U 26-U 39.

by transfers, but a large fraction—more than a third—was financed by an accumulation of official reserve in the hands of the United States.

8.3 The Internationalization of U.S. Companies

8.3.1 The Growth of U.S. Direct Investment Abroad after World War II

After 1950, the growth of U.S. direct investment abroad, slowed by the Great Depression and World War II, resumed its rise. One measure of the spread of U.S. firms, the number of new affiliates established, rose rapidly to a peak until the late 1960s, and then slowed down (table 8.17).

These data are confined to a fixed group of corporations that had become multinational by the time the sample was selected, and the decline in the rate of establishment may have represented only the exhaustion of profitable locations for new affiliates by this particular group of parents. Furthermore, the data take no account of the size of the newly established affiliates or of their growth after establishment.

Another measure of foreign direct investment is the value of such investment, measured as the book value of parent investment in affiliates as reported on the books of affiliates. Since these values are affected by inflation and by the growth of the economy in general, we compare the value of direct investment in foreign countries with the total assets of U.S. corporations (table 8.18). These ratios suggest that

Table 8.17 New Foreign Affiliates Established per Year by 180 Parent Firms

Number of Affiliates	
1946–52 ^a	55
1951–55	84
1956–60	192
1961–65	322
1966–67	390
1968–69	508
1970–71	431
1972–73	378
1974–75	236

Source: Hood and Young 1979, 22.

^aFor 187 parent firms.

the peak importance of foreign investment relative to all U.S. corporate assets was in the early or mid-1970s, although the year-to-year fluctuations make it difficult to identify a precise peak.

Foreign investment was always less important in finance than in other industries, and the ratio for all industries is greatly affected by the inclusion of financial corporations. Overseas investment was a much

Table 8.18 Value of U.S. Direct Investment Abroad as Percentage of Assets of U.S. Corporations

	All Corporations	Nonfinancial Corporations
1950	2.08	4.21
1957	2.76	5.59
1966	3.06	6.72
1967	3.05	n.a.
1968	3.03	n.a.
1969	3.11	n.a.
1970	3.19	n.a.
1971	3.13	n.a.
1972	3.02	n.a.
1973	3.08	n.a.
1974	3.06	n.a.
1975	3.11	n.a.
1976	3.10	n.a.
1977	2.97	5.82
1982	2.45	5.07
1983	2.24	4.83
1984	2.10	4.67
1985	2.07	4.74

Sources: Value of U.S. direct investment abroad from appendix, table 8.A.1, and U.S. Department of Commerce 1982; assets of U.S. corporations from Federal Reserve Board 1979 and 1986, and Musgrave 1986a and 1986b.

higher proportion of the assets of nonfinancial corporations than of those of financial corporations or all corporations, but the time pattern appears to have been similar: a peak at some point between 1966 and 1977 (comparable data for intervening years are not available) and then a decline to the levels of the 1950s.

The amount of investment relative to assets is only one of several possible measures of the international activities of U.S. firms. It is the one that can be carried back the furthest, but it has several drawbacks. At best it measures the financial stake in overseas affiliates, but it does not reflect the level of activity carried on there. U.S. firms could be increasing the share of production they carry on abroad or the share of their employment abroad while reducing their investment in foreign affiliates and still retaining control of them. More serious problems of measurement arise from the fact that the investment in foreign affiliates is measured in book values rather than current values and that these are subject to the vagaries of currency translation. The tangible assets of all U.S. firms, in the denominator of the ratio, are estimated current values. The high inflation rates of the late 1970s and early 1980s must have raised the totals for U.S. firms' assets relative to the values on the books of affiliates, and the rise in the value of the dollar from 1982 to 1985 must have had a similar effect. We must therefore be somewhat skeptical about this evidence for a decline in the importance of overseas activities.

A measure free of problems of valuation is provided by data on employment, although this measure is also subject to question (table 8.19). Relative to private nonagricultural employment in the United States (U.S. Department of Commerce, 1985a), employment in majority-owned affiliates (the only figures available for 1966) rose between 1966

Table 8.19 Employment in Foreign Affiliates as Percentage of U.S. Private Sector Nonagricultural Employment

	All Affiliates		Majority-Owned Affiliates	
	Total	Nonbank	Total	Nonbank
1966			7.3	7.2
1977	10.9	10.7	8.2 ^a	8.0
1982	9.2	9.0	7.0 ^a	6.8
1983		8.6		6.5
1984		8.1		6.2

Sources: U.S. private nonagricultural employment from U.S. Department of Commerce 1985a; employment in affiliates from Brereton 1986 and U.S. Department of Commerce 1975, 1981, and 1985f.

^aIncluding minority-owned bank affiliates.

and 1977 (U.S. Department of Commerce 1975 and 1981). Between that date and 1982, all measures of employment declined relative to U.S. employment, and nonbank affiliate employment continued to decline relatively through 1984 (U.S. Department of Commerce 1985f; Brereton 1986).

The main question about this measure is whether employment is a good measure for comparing domestic and overseas labor input. For one thing, there was a shift toward female and part-time employment in the United States that may not have been matched overseas. Aside from the measurement problem, it is hard to know whether the relative drop in affiliate employment from 1977 to 1982 reflects mainly the effect of the 1982 recession or is part of a declining trend.

One indication in the opposite direction, discussed later, is that exports from overseas affiliates have, within manufacturing, increased relative to exports from the United States by the affiliates' parents and

Table 8.20 Distribution, by Type of Industry, of U.S. Direct Investment Abroad

	1985	1982	1977	1966	1957
TOTAL	100.0	100.0	100.0	100.0	100.0
Primary production ^a	17.8	18.4	14.4	27.2	33.9
Manufacturing, incl. petroleum refining	44.0	43.4	49.6	44.7	35.7
GOODS PRODUCTION, INCL.					
CONSTRUCTION	62.3	62.4	64.6	72.6	70.0
Public utilities and transportation, incl. petroleum transportation	1.6	1.9	3.4 ^b	6.8	13.2
GOODS, PUBLIC UTILITIES, & TRANSPORTATION INCL.	63.9	64.3	68.1	79.4	83.2
CONSTRUCTION					
Trade, incl. petroleum	15.6	17.1	16.4 ^c	12.4	11.4
Finance	15.6	13.8	11.3	4.8	3.8
Other services, incl. oil field services	4.9	4.8	4.3	3.4 ^d	1.6
TRADE, FINANCE & OTHER SERVICES	36.1	35.7	31.9 ^c	20.6 ^d	16.8

Source: Appendix, table 8.A.1.

Note: Table excludes holding companies and finance affiliates in the Netherlands Antilles.

^aIncluding petroleum extraction and integrated extraction and refining but not separate refining, transportation, or distribution of petroleum or oil field services.

^bIncluding gasoline service stations.

^cExcludes gasoline service stations.

^dIncludes all other industries and inactive.

by the United States as a whole. This measure also has defects. It has the advantage that all measures are in current values, but it also reflects the changing degree of export orientation of affiliates, parents, and U.S. firms in general.

The main changes in the composition of U.S. investment abroad are described in table 8.20. The major shifts over the thirty years have been the declines in importance of investment in the production of goods, especially primary products, and in public utilities and transportation, and the rise in importance of investment in trade and services. The fall in investment in primary production took place before 1977, prior to the oil crises. Investment in public utilities and transportation, accounting for 13 percent of investment in 1957, had been reduced to under 2 percent by 1982. Within the trade and services group, finance was responsible for the great increase in importance of the sector. There was some growth in the importance of trade, but other services, especially outside of oil field services, remained of small importance throughout, although they probably did grow.

8.3.2 The Competitiveness and Comparative Advantage of U.S. Multinational Firms

It is customary to discuss the competitiveness of countries and of industries in them in terms of their shares in world markets or of particular markets. A country's competitiveness depends in the short run on the effects of its monetary and fiscal policies on prices and exchange rates and over longer periods on the rate and direction of its advances in productivity.

To some extent, companies that become multinational in their operations loosen their dependence on these home-country determinants of competitiveness. If home-country production becomes more expensive relative to foreign production because of rapid inflation at home or because the exchange value of the home country's currency has risen, or because labor has risen in price or decreased in efficiency, the multinational firm has some opportunity to shift its production to locations in other countries.

The competitiveness of the multinational firm depends on the firm's characteristics rather than on those of its home country. It may rest on the possession of patents or other technological assets based on the firm's R&D. It may rest on the ability to manage or control certain types of production or distribution operations. It may originate in access to raw materials on favorable terms or in access to home-country markets. All these factors have in common that they can be exploited wherever the firm operates. That is, they are mobile geographically within the firm but relatively immobile between firms (Lipsey and Kravis 1985).

We can imagine a number of possible indicators of the competitiveness of a firm or a group of firms. One would be its shares in world production or world consumption of some set of products. Another would be the share in world trade or in world exports of products or groups of products. Still others would be shares in value-added, employment, or capital. All the indicators have drawbacks. The use of employment or capital shares relies on a single factor of production when others may be equally important or may behave differently. Value-added may be affected by the shifting of profits to minimize taxes or for other reasons. Production or consumption is difficult to use because world and area aggregates are difficult to assemble. They may also be subject to manipulation by host-country governments controlling access to their home markets.

Shares in export trade, used here as a competitiveness measure, have drawbacks also—for one, they slight firms and industries making products that, because of weight or bulk, or for other reasons, tend to be supplied from within the countries where they are consumed. Despite the drawbacks, export shares have a number of advantages as measures of competitiveness. One is that there are reasonably comprehensive world and regional aggregates against which to measure a firm's share. The main advantage of using exports rather than production for this purpose is that exports are more footloose. A country has more power to determine which producers supply its home market than which supply export markets. Shares in export markets may, therefore, represent the underlying economic advantages of firms and countries to a greater degree than do shares in production.

That is not to say that export markets are unaffected by government interventions or other noneconomic factors. The imposition of export requirements on U.S. affiliates by some governments as the price for acquisition of a local firm in the host country or even for continued operation in the country has been a source of much friction between the United States and these countries. However, these export-promoting policies are circumscribed by the ability of companies to leave markets where the costs imposed on them are too high. They are also limited by the watchfulness of other countries over their own home and export markets.

The competitiveness of U.S. multinationals, measured by their export shares, can be described and compared to that of the United States as a country by the figures in table 8.21. The shares of the United States and its multinationals were about equal in 1966, but the multinationals kept their share remarkably constant while that of the United States declined, particularly in the earlier years. The parent firms of the U.S. multinationals did not escape the forces that led to the fall in the U.S. export share, but the fall in the parents' share was a little smaller than that of the United States.

Table 8.21 Share of World Exports of Manufactures (percentage)

	U.S. Multinationals	U.S.	U.S. Parent Firms
1966	17.7	17.5	11.0
1977	17.6	13.3	9.2
1982	17.7	14.3	9.5
1983	17.7	13.9	9.1

Source: Lipsey and Kravis 1986.

The multinationals were more successful than nonmultinational U.S. firms in world markets for manufactured goods. What kept the multinationals' share in world exports up was the success of their exports from their foreign affiliates, a record that can be traced back twenty-five years (table 8.22). In the first twenty years, the shares of U.S. multinationals' affiliates in both developed countries and LDCs grew rapidly, but after that, only the shares of the LDC affiliates grew, while affiliates in the developed countries more or less held their shares steady.

This growth in exports from foreign affiliates implies that larger and larger portions of world market shares outside the United States held by U.S. multinationals and by all U.S. firms were being supplied from production outside the United States, as can be seen from table 8.23. By 1983, almost half of all manufactured exports by U.S. multinationals and over 40 percent of manufactured exports by all U.S. firms were supplied by foreign affiliates of the multinationals.

We can identify the comparative advantage of U.S. multinationals by the industry distribution of their exports relative to that of the United States as a country or of the world. Another way of putting this measure is saying that we take the multinationals' share of exports in each industry relative to their share in all industries combined. This measure

Table 8.22 Share in World Exports of Manufactures of U.S. Majority-Owned Foreign Affiliates (percentage)

	In All Countries	In Developed Countries	In LDCs
1957	4.5	4.1	0.5
1966	6.8 (6.6) ^a	6.3 (6.2) ^a	0.5
1977	8.4	7.6	0.8
1982	8.3	7.3	1.0
1983	8.6	7.6	1.1

Source: Lipsey and Kravis 1986, appendix, table U-1a.

^aComparable to 1957.

Table 8.23 Share of U.S. Majority-Owned Affiliates in Exports of Manufactures (percentage)

	Share by U.S. Multinationals	Share by All U.S. Firms
1957	n.a.	17.6
1966	38.1	27.8 (28.9) ^a
1977	47.7	40.0
1982	46.7	38.7
1983	48.7	40.2

Source: Lipsey and Kravis 1986.

^aComparable to 1957.

is sometimes referred to as “revealed comparative advantage” and has the drawbacks of such measures. For example, it is not based on the presumed determinants of comparative advantage and incorporates the effects of trade barriers, subsidies, and many other factors that can affect trade flows.

If we take these distributions for 1966, the first year for which we have the data, we find that the United States as a country enjoyed comparative advantages relative to the world as a whole in chemicals, machinery, and transport equipment, and comparative disadvantages in food products, metals, and miscellaneous manufacturing industries.

The comparative advantages of U.S. multinationals were in the same industries, but to a larger degree, and the same was true for the comparative disadvantages of the multinationals. Thus, if we compare U.S. multinationals with the United States as a country, the multinationals had comparative advantages over other U.S. firms in chemicals, machinery, and especially transport equipment, and disadvantages relative to the United States in foods, metals, and miscellaneous manufacturing industries (see table 8.24). In other words, where the United States was strong, U.S. multinationals, taken as a group, were stronger. And where the United States was weak, U.S. multinationals as a group were

Table 8.24 Industry Share in Manufactured Exports Relative to Share in World Exports, 1966

	U.S.	U.S. Multinationals
Foods	66.7	44.1
Chemicals	123.8	128.6
Metals	76.6	47.1
Machinery	138.3	142.2
Transport equipment	142.4	202.0
Other manufacturing	68.8	61.4

Source: Lipsey and Kravis 1986, appendix, table U-9.

weaker. That is not to say that there were no individual U.S. multinationals with comparative advantages in foods or metals that permitted them to operate in many countries. The data show that such firms were less common in these industries than in chemicals or machinery.

Sixteen years later, the main outlines of the story were similar (table 8.25). There was a slight weakening of the U.S. position in chemicals and transport equipment, as well as in the already weak metals area, and a stronger comparative advantage in machinery. Within machinery, the U.S. comparative advantage in nonelectrical machinery increased and that in electrical machinery declined.

U.S. multinationals increased their comparative advantage in chemicals relative to the world and to the United States as a country, but their previously very large comparative advantage relative to the world in transport equipment was substantially reduced. Their comparative disadvantages in foods and metals were also reduced, but remained large. In 1982, U.S. multinationals still showed a large comparative advantage relative to the world in chemicals, nonelectrical and electrical machinery, and transport equipment, but there was one exception to the rule that their comparative advantages were an accentuated version of U.S. comparative advantage. That exception was in non-electrical machinery, in which the comparative advantage of the United States as a country exceeded that of the U.S. multinationals.

For 1977 and 1982 it is possible to examine the comparative advantage of U.S. multinationals for a much finer breakdown of industry groups into thirty or more industries. The industries in which U.S. multinationals exhibited the largest comparative advantage relative to the world were, in order: (1) tobacco products, (2) office and computing machinery, (3) electronic components, (4) soaps, cleansers, and so forth, (5) drugs, and (6) construction machinery (see the appendix, table 8.A.3). Of the six, four were also among the industries of greatest comparative

Table 8.25**Industry Share in Exports by the United States and by U.S. Multinationals Relative to Share in World Exports, 1982**

	U.S.	U.S. Multinationals
Foods	67.3	45.8
Chemicals	112.9	143.1
Metals	64.0	44.6
Machinery	142.3	131.9
Nonelectrical	163.8	127.7
Electrical	110.8	138.0
Transport equipment	116.8	158.8
Other manufacturing	73.0	58.3

Source: Lipsey and Kravis 1986, appendix, table U-9.

advantage for the United States as a country, exceptions being the two chemical groups. These industries are characterized by high expenditures on R&D (office and computing machinery, drugs, and electronic components) and on advertising (tobacco products, drugs, soaps, cleansers, etc.).

The 1977–82 period was one in which the shift by multinationals from the United States to their overseas affiliates as their export base, which was strong in the previous decade, was interrupted and even reversed to a small extent. As might be expected, there was wide variation among industries in this respect. Most of the industries in which U.S. multinationals' exports rose rapidly saw a continuation of the shift to overseas production for export. That category included drugs, industrial chemicals, other chemicals, other transport equipment, plastic products, and instruments. Two major exceptions were office and computing machinery and electronic components. There was not a major shift back to the United States (in percentage terms) in these two industries, but there was clearly no move away from U.S. operations.

By comparing the distributions of exports of U.S. multinationals for 1977 and 1982 with those of the United States for the same year, we can get some notion of the distinctive comparative advantages of these firms, as compared with the United States as a geographical entity (appendix, table 8.A.5). Among the major groups, the multinationals showed comparative advantages in chemicals, electrical machinery, and transport equipment, but not in foods, metals, nonelectrical machinery, and "other manufacturing."

The ratios for more detailed industries are suggestive. Within foods, the multinationals held a large advantage over other U.S. firms in beverages, probably an advertising-intensive industry. In chemicals, the largest advantage was in soaps, cleaners, and the like, also an advertising-intensive field, followed by drugs and, by a small margin, industrial chemicals, the former extremely R&D-intensive, the latter a little above average. In nonelectrical machinery, the largest advantage of multinationals over other U.S. firms was in office and computing machinery, by far the most R&D-intensive group. In the electrical machinery group, the multinationals' advantages were large relative to the United States in electronic components and, in 1982, also in communications equipment, both R&D-intensive industries, but not in "other electrical machinery," the most R&D-intensive. However, in electrical machinery, the lines are quite blurry among the detailed industries. Many parents seem to cross these detailed industry lines.

There are a number of indications here that both R&D intensity and advertising intensity are major factors in the comparative advantage of U.S. multinationals, and both have been associated with U.S. firms'

shares in foreign markets (for example, in Caves 1974). R&D intensity is a variable that has been associated in many studies with the comparative advantage of the United States as a country (for example, Baldwin 1979; Stern and Maskus 1981). Our data confirm that association. If we relate the share of an industry in U.S. exports relative to its share in world exports (US/W) to the R&D intensity of industries, as measured by the ratio of R&D expenditures to sales (RD/S), we find we can explain a substantial part (40 percent) of the interindustry differences in U.S. export shares in 1977 with that factor alone (t-statistics in parentheses).

$$(1) \quad US/W = .089 + .022 RD/S; \quad \bar{R}^2 = .40.$$

(5.96) (4.40)

However, the same R&D intensities are even more strongly related to the comparative advantage of U.S. multinationals in the same year, measured in the same way (share of industry in multinationals' exports relative to its share in world exports, or $USMNC/W$).

$$(2) \quad USMNC/W = 0.98 + .052 RD/S; \quad \bar{R}^2 = .49.$$

(3.39) (5.26)

The foreign investment survey does not include data on advertising intensity, the other characteristic associated with U.S. multinationals' comparative advantage, but R&D intensity at least is one attribute explaining the comparative advantages of the United States and of U.S. multinationals, especially that of the multinationals.

8.3.3 Changing Characteristics of U.S.-Owned Foreign Operations

U.S. affiliates in foreign countries exist mainly to serve local markets. About two-thirds of their sales have been in their host countries in the last few years. Exporting is most important for affiliates in primary production—agriculture, mining, and the extraction of petroleum—in all of which a majority of sales were outside the host country (table 8.26). The reason for the export orientation of affiliates in these industries is that they were drawn to their locations not by the prospect of breaking into or enlarging their shares of the host country's market but by the presence of relatively cheap resources.

At the other end of the scale, affiliates in some noncommodity industries—public utilities, retail trade, and business and personal services—concentrated heavily in their host-country markets.

Over the last quarter century, the trend has been for affiliates to become more export oriented. The share of exports in total sales more than doubled for manufacturing affiliates. That is a substantial shift in orientation, but not as large as the rise in the share of exports in GNP or in output of goods in the United States and in other countries.

Table 8.26 Affiliate Exports as Percentage of Sales, Majority-Owned Affiliates, by Industry

	1957	1966	1977	1982	1983	1984
All industries	27.4	24.9	38.2	34.5	35.2	36.5
Agriculture, forestry, and fishing	63.0	n.a.	58.2	72.6	73.5	74.6
Mining	84.0	75.2	77.5	82.4	79.5	80.7
Petroleum	34.3	29.9	49.5	35.4	37.0	36.4
Extraction	n.a.	n.a.	54.1	61.4	61.0	61.0
Other, incl. oil field services	n.a.	n.a.	48.8	30.1	31.7	29.6
Manufacturing	15.9	18.6	30.8	33.9	35.1	37.5
Construction	n.a.	n.a.	13.5	9.5	10.6	11.1
Public utilities and transport	24.4	11.1	1.7	9.2	6.3	8.3
Trade	n.a.	29.1	34.6	36.9	34.6	35.2
Wholesale	n.a.	n.a.	41.1	41.7	39.8	40.3
Retail	n.a.	n.a.	2.0	2.2	2.1	1.5
Finance (excl. banking), insurance, real estate	n.a.	n.a.	12.0	37.8	41.2	46.2
Services	n.a.	14.8	22.0	19.8	20.3	20.3

Source: Appendix, table 8.A.7.

The export orientation of affiliates varies by location as well as by industry (table 8.27). Affiliates in all industries combined were more export oriented in developing than in developed countries, partly because those in natural resource industries were large exporters and partly because of the high ratios for the Asia and Pacific countries. In manufacturing, the affiliates in Asia and Pacific countries exported over 40 percent of their sales. Affiliates in Japan and in Oceania were very

Table 8.27 Exports as Percentage of Sales, Majority-Owned Affiliates, by Location, 1982

	All Industries	Mfg. Industries
All countries	34.5	33.9
Developed	31.2	36.6
Canada	23.3	34.5
Europe	37.3	41.2
Japan	8.7	11.0 ^a
Australia, New Zealand, S. Africa	10.9	12.7 ^a
Developing	45.8	22.0
Latin America	40.4	11.9
Middle East	25.0	31.9
Asia and Pacific	58.7	41.1 ^b

Source: U.S. Department of Commerce 1985f, tables III.D3, III.E1, and III.E3.

^aSuppressed observations estimated by the author.

^bIncluding sub-Saharan Africa.

inward-looking, perhaps because these countries had comparatively protected markets.

For the most part, overseas affiliates have relied little on the United States as a market, with slightly more than 10 percent of their sales in the two most recent years for which we have data and a similar proportion for twenty-five years earlier (table 8.28). The unusually low share in 1966 and the exceptionally high U.S. share in 1977 both reflected mainly the fluctuations of the petroleum industry.

Affiliates in primary production—agriculture, mining, and petroleum extraction—have, in general, been the most dependent on the U.S. market, although the finance (except banking), insurance, and real estate group entered that category in 1982. In the other broad industry groups—manufacturing, construction, public utilities and transportation, wholesale and retail trade, and services—sales to the United States have ranged from less than one percent of affiliate sales to a little over 10 percent.

If there has been any trend in some of the groups, it seems to be toward an increasing dependence on the U.S. market. The largest jump was in the finance group, as mentioned above, but there have been persistent increases in manufacturing (more than a doubling of the share of sales to the United States) and, over the last few years, a substantial one in wholesale trade. The rise of almost 50 percent in the dependence of manufacturing affiliates on the U.S. market suggests the influence

Table 8.28 Exports to the United States as Percentage of Sales, Majority-Owned Affiliates, by Industry

	1957	1966	1977	1982	1983	1984
All industries	9.9 ^a	6.4	18.5	10.5	10.9	12.4
Agriculture, forestry, fishing	38.2	n.a.	30.1	40.7	39.7	39.1
Mining	44.2	37.9	28.1	28.5	30.9	32.3
Petroleum	9.9	5.4	35.7	13.7	12.4	13.5
Extraction	n.a.	n.a.	36.0	40.1	35.7	31.4
Other, incl. oil field services	n.a.	n.a.	35.7	8.3	7.3	8.5
Manufacturing	6.0	5.6	9.1	9.7	11.6	14.0
Construction	n.a.	n.a.	.7	.3	.3	.4
Public utilities and transportation	n.a.	7.4	.6	6.4	3.2	4.2
Trade	n.a.	3.6	2.9	4.3	5.0	5.3
Wholesale	n.a.	n.a.	3.4	4.8	5.7	6.1
Retail	n.a.	n.a.	.2	.2	.5	.2
Finance, insurance, and real estate (excl. banking)	n.a.	n.a.	5.9	23.0	25.3	25.5
Services	n.a.	n.a.	4.2	5.4	5.3	6.0

Source: Appendix, table 8.A.7.

^aExcluding trade and finance.

of the increasing exchange value of the dollar in those years. It remains to be seen whether the reversal in exchange rates will undo this shift in orientation.

A widely discussed trend in the character of direct investment by the United States and by other countries has been the move toward shared ownership, and particularly toward minority ownership, with majority shares in the hands of citizens of the host country. The less developed countries, particularly in Latin America, have promoted this trend. Restrictions on majority ownership were written into the Andean Pact and into Mexican law.

Despite the pressure from host-country governments, U.S. parent companies have been more reluctant to share ownership in affiliates than companies from other countries. Of the multinationals' affiliates surveyed in the Harvard program that were established before 1951, 58 percent of the U.S.-owned affiliates, 39 percent of European affiliates, and 27 percent of affiliates of firms in other countries were wholly owned. All these proportions had decreased by the late 1960s to 46 percent, 19 percent, and 6 percent, but the preference of U.S. firms for 100 percent ownership remains clear (OECD 1981, 50).

There has been some move by U.S. multinationals toward sharing ownership. The proportion of total affiliate sales made by majority-owned affiliates fell from 88 percent in 1966 to 77 percent in 1982. The decline took place in the first ten years of that period, however, and there was actually a small rise between 1977 and 1982.

There are large differences among industries in the shares of majority-owned affiliates, and the reduced share in the aggregate could represent shifts among, as well as within, industries. It is clear, however (see appendix, table 8.A.8) that in all the major industry groups, the proportion of sales by affiliates less than majority owned grew between 1966 and 1982 in both developed countries and LDCs. The rise of these affiliates was important in mining, retail trade, and public utilities and transportation, and in LDCs they accounted for half or more of affiliate sales in these industries by 1982. Thus, if the growth of these firms has been a response to host countries' efforts to gain substantial shares in the equity of foreign-owned affiliates, the efforts have met with some success.

Given that technological or proprietary information is the basis for the competitive advantage of multinational firms, one might expect that the more important these factors were in an industry, the greater would be the reluctance of parent companies to share these advantages and the stronger the insistence on control or, preferably, total ownership of affiliates. It is indeed the case that among manufacturing industries, those that rank high with respect to spending on R&D are also among those with the highest shares of majority ownership (table 8.29). The

Table 8.29 Sales of Majority-Owned Affiliates as Percentage of Affiliate Sales

	1977		1982	
	Developed Countries	LDCs	Developed Countries	LDCs
All manufacturing	80.5	71.0	76.5	71.1
Drugs	93.8	86.0	96.2	93.8
Office and computer machines	94.7	97.5	94.0	99.5
Electronic comp. and access.	80.5	95.3	78.9	96.0

Source: Appendix, table 8.A.8.

only exception was electronic components and accessories in developed countries, largely in Japan (a country in which less than 20 percent of manufacturing affiliate sales are from majority-owned affiliates). In fact, in these industries, the share of majority-owned affiliates actually increased between 1977 and 1982, despite the decline in the majority-owned share in manufacturing as a whole.

It is clear, then, that the policy of forcing shared ownership has not been very successful for the LDCs in R&D-intensive industries. The cost of enforcing the policy may have been too great: a reduction in foreign investment in these industries and in the consequent transfer of technology.

8.4 The United States as a Recipient of Foreign Direct Investment

8.4.1 The Recent Growth of Foreign Direct Investment in the United States

During the 1960s, as U.S. direct investment in foreign countries was reaching its peak rate of growth, hardly any of the world's flow of new direct investment was coming to the United States (table 8.30). From 1961 through 1967, less than 3 percent of the flow to developed countries came to the United States, and in 1967 the United States was the location of less than 10 percent of the world stock of direct investment (Hood and Young 1979, 18; U.S. Bureau of the Census 1975, Series U-35). The U.S. share of inflows of direct investment to developed countries rose to over 10 percent in 1968–73, and since then has been over 20 percent in every year through 1983. It has stayed over one-third since 1978 and reached as high as two-thirds in 1981. The U.S. share of inflows to all countries has been over a quarter since the late 1970s and reached a peak close to 50 percent in 1981. The United States has absorbed more than all developing countries together since 1978 and usually more than all the European countries combined.

With this large inflow of direct investment, the stock of foreign direct investment in the United States has been growing very rapidly. One

Table 8.30 Direct Investment Inflows to the United States as Percentage of Inflows to the World and Developed Countries

	World	Developed Countries
1961–67		2.6
1968–73		11.4
1970	15.0	18.5
1971	3.4	4.6
1972	7.4	9.3
1973	17.5	23.2
1974	25.8	26.6
1975	13.4	22.1
1976	30.9	38.6
1977	14.6	23.6
1978	26.4	35.2
1979	30.0	40.5
1980	35.6	46.0
1981	47.5	66.0
1982	36.9	55.0
1983	29.0	39.0

Sources: United Nations 1983, annex table II.2, and 1985, table II.1; OECD 1981.

indication of the growth is the comparison with assets of all U.S. corporations (table 8.31). After staying around one-half of one percent from 1950 through 1966, the ratio tripled in the next twenty years, and more than doubled in the eight years from 1977 to 1985.

Another way of describing the growth of foreign direct investment in the United States is by comparing it with U.S. investment abroad (table 8.32). The greatest leap in foreign investment in the United States relative to U.S. investment abroad took place in the five years from 1977 to 1982, when foreign direct investment grew from less than a quarter of U.S. direct investment abroad to 60 percent of it, and the ratio has continued to increase rapidly since 1982.

Table 8.31 Stock (Book Value) of Foreign Direct Investment in the United States as Percentage of Assets of All U.S. Corporations

1950	.6
1960	.6
1966	.5
1974	.7
1977	.7
1980	1.2
1982	1.5
1985	1.6

Sources: Appendix, table 8.A.9; Federal Reserve Board 1979 and 1986; and Musgrave 1986a and 1986b.

Table 8.32 Stock (Book Value) of Foreign Direct Investment in the United States as Percentage of U.S. Direct Investment Abroad.

	1950	28.8
	1966	17.5
	1977	23.7
	1982	60.0
	1983	66.1
	1984	77.3
	1985	78.6

Sources: Appendix, tables 8.A.1 and 8.A.9.

Since these are book values, they are subject to the familiar doubts about their meaning and comparability. The U.S. direct investments abroad are much older, on average, than the foreign direct investments in the United States and were made in periods of much lower asset prices. It is therefore likely that the use of book values understates the value of U.S. investments relative to market values much more than it does the foreign investments. Thus, the extent and growth of foreign investment in the United States relative to U.S. investment abroad is probably considerably exaggerated in these figures.

Another fact that points to such a bias is the difference in income. Despite the relatively small ostensible difference in the value of the stocks, income on U.S. direct investment abroad was more than four times as large as income on foreign direct investment in the United States in 1985 (U.S. Department of Commerce 1986a and 1986b).

For the most recent decade or so, data on employment provide a measure of foreign firms' participation in the U.S. economy that is free of the effects of exchange rate changes and conversion methods. This measure too demonstrates the rapid growth of foreign-owned operations, but also indicates that their role in the U.S. economy as a whole remains small (table 8.33).

A point to keep in mind in comparing inward and outward direct investment is that U.S. firms became multinational earlier than did

Table 8.33 Employment in Nonbank U.S. Affiliates of Foreign Companies as Percentage of U.S. Private Sector Nonagricultural Employment

	1974	1.6
	1977	1.8
	1980	2.7
	1982	3.3
	1984	3.4

Sources: Appendix, table 8.A.10; U.S. Department of Commerce 1985a, 46–48.

most foreign firms and probably reached something like an equilibrium stock of foreign assets by the end of the 1960s. After that, there was not a large net movement of U.S. firms into multinational status. Foreign firms, in contrast, have, for the most part, become multinational fairly recently and are adding to their overseas operations rapidly because they have not reached the goals they have set. One indication of the relative maturity in this sense of U.S. direct investment is that all (and more) of its growth came from reinvested earnings in 1984 and 1985, while most of the growth of other countries' direct investment in the United States is from flows of new equity and debt (table 8.34). U.S. parents were bringing some of their foreign assets back to the United States by reducing equity and intercompany debt, while foreign companies were increasing their holdings of U.S. assets far beyond their accumulation of reinvested earnings.

8.4.2 Characteristics of Foreign-Owned Affiliates in the United States

The fact that the share of foreign-owned firms in U.S. employment was still only about 3.5 percent in 1985 might appear to deflate the anxieties that have been aroused by the inflow of direct investment. However, the explanation for that concern lies in the concentration of the investment; half of the employment in foreign-owned firms is in manufacturing, which accounted for only about 15 percent of total nonagricultural employment in the United States in 1984 (appendix, table 8.A.10).

Aside from mining, the ratios for which are affected seriously by incomparabilities between numerator and denominator, the greatest foreign share in U.S. employment—7 percent—is in manufacturing. That share almost tripled in ten years (table 8.35).

Employment in foreign-owned manufacturing operations more than doubled, while total U.S. employment in manufacturing stayed about constant or even declined a little. Employment in foreign service af-

Table 8.34 Shares in Changes in the Value of Direct Investment, 1984 and 1985 (percentage)

	U.S. in Foreign Countries	Foreign Countries In U.S.
Equity and intercompany debt	−28.2	85.4
Reinvested earnings	117.0	8.7
Valuation adjustment	<u>11.2</u>	<u>5.8</u>
Total	100.0	100.0

Sources: U.S. Department of Commerce 1986a and 1986b.

Table 8.35 Employment in U.S. Affiliates of Foreign Corporations as Percentage of Total U.S. Private Sector Employment, by Broad Industry Groups

	1974	1977	1980	1982	1984
Mining ^a	16.8	13.0	12.4	14.5	16.1
Manufacturing	2.7	3.5	5.4	6.6	7.1
Construction	.2	.3	1.0	1.3	1.0
GOODS PRODUCTION	2.8	3.3	5.0	6.2	6.4
Transportation and public utilities	1.0	.5	.7	1.1	1.2
GOODS, TRANSP., & PUB. UTIL.	2.5	2.9	4.3	5.3	5.5
Wholesale trade	2.8	3.2	4.1	5.3	5.3
Retail trade	1.0	1.0	2.0	2.6	2.7
Finance, insurance and real estate ^b	1.1 ^c	1.1	2.1	2.3	2.2
Services	.3	.2	.5	.6	.9
TRADE & SERVICES	1.0	1.0	1.6	2.1	2.2

Sources: Appendix, table 8.A.10; U.S. Department of Commerce 1985a, 46-48.

^aIncluding petroleum.

^bBanking included in denominator but not in numerator.

^cIncluding banking would be 1.8 percent.

filiates rose at an even faster rate than in goods production. However, in these industries U.S. total employment was also rising, by about 50 percent over ten years. As a result, although the foreign share increased, it did not grow as rapidly as in manufacturing.

At the end of the period, among trade, finance, and services, it was only in wholesale trade, probably closely tied to the distribution of imported goods, that the share of employment in foreign-owned firms reached 5 percent. In other groups the foreign share was under 3 percent. However, the ratios for finance, insurance, and real estate are understated because the data for foreign-owned firms omit banks. It seems clear, however, that foreign penetration of the service sectors was relatively small.

Within manufacturing, also, there were wide differences among industries in the degree of foreign penetration. In 1984, almost 40 percent of manufacturing employment in the chemical industry was in foreign-owned firms, while the proportions in other industries were all under 10 percent (table 8.36).

The foreign share increased substantially in every group, at least doubling within each industry. However, the ranking of the industries hardly changed at all. The greatest degree of foreign penetration was in chemicals at the beginning and end of the period, followed by food manufacturing industries, and there was a relatively small foreign employment share in nonelectrical machinery in both periods. Thus the comparative advantages of foreign firms relative to U.S. firms seemed to remain in the same industries.

Table 8.36 Employment in U.S. Affiliates of Foreign Corporations as Percentage of Employment in All U.S. Firms, by Industry within Manufacturing

	1974	1984
All manufacturing	2.7	7.1
Food and kindred products	4.4	9.0
Chemicals	10.8	38.7
Metals	3.0	7.1
Machinery, excl. electrical	1.9	5.8
Electrical machinery and equipment	2.8	8.2
Transportation equipment	1.7	3.2
Other manufactures	3.6	

Sources: Appendix, table 8.A.10; U.S. Department of Commerce 1985a, 46–48.

The industry distribution of employment in foreign firms in 1984 was much more concentrated in manufacturing and petroleum, and in goods-producing industries as a group, than was U.S. employment in general, as can be seen in table 8.37. The shares in trade and finance did not diverge as much from those of the United States as a whole, especially if one takes account of the omission of banks from the total of foreign holdings. However, the share of employment in foreign-owned companies that was in service industries was less than a third of that for U.S. firms.

The differences in the distributions reflect two influences. Foreign firms may have had a comparative advantage in goods production and U.S. firms in service production. However, the results may also reflect differences in the difficulty of carrying across national boundaries the comparative advantages of firms. Whatever gives firms a comparative advantage or competitiveness in manufacturing industries, whether ownership of patents or knowledge of production techniques or management abilities, may be easier to move across national boundaries than the characteristics that distinguish firms in trade and service industries. That might be because of inherent characteristics of the two groups of industries or because there are many more regulatory and similar obstacles placed in the path of service industry producers than in the path of goods-producing companies. Since entry into the U.S. market is relatively unrestricted and the share of foreign firms in services is small, the suspicion that there are inherent obstacles to service industry direct investment is reinforced.

The main trends in the industry distribution of foreign firms' employment appear to move it toward the U.S. pattern. That is, the share of mining and petroleum was declining, as was that of manufacturing, after 1977. The main increase in importance within foreign-owned companies was in the service industries.

Table 8.37 Distribution by Industry of Employment in Foreign-Owned Firms in the United States

	Employment in Foreign-Owned Firms					Empl. in All Private Sector U.S. Firms
	1974	1977	1980	1982	1984	
	100.0	100.0	100.0	100.0	100.0	
All nonagricultural	100.0	100.0	100.0	100.0	100.0	100.0
Mining	2.2	1.3	1.2	1.7	1.2	1.2
Petroleum	9.0	7.4	5.0	5.0	4.6	
Manufacturing	52.5	56.7	54.6	51.0	50.9	24.7
Construction	.8	1.1	2.1	2.1	1.6	5.5
GOODS PRODUCTION	64.4	66.5	63.0	59.8	58.3	31.5
Transportation and public utilities	4.3	1.9	1.8	2.3	2.3	6.6
GOODS, TRANSP., & PUBL UTIL.	68.7	68.4	64.8	62.1	60.6	38.1
Wholesale trade	11.6	12.6	10.7	11.5	10.8	7.1
Retail trade	11.5	11.7	15.0	16.3	16.8	21.1
Finance, Insurance, and real estate	4.5 ^a	4.2	5.3	5.0	4.7	7.2 ^b
Services	3.9	3.1	4.2	5.0	7.1	26.5
TRADE & SERVICES	31.6	31.7	35.2	37.9	39.4	61.9 ^b

Sources: Appendix, table 8.A.10; U.S. Department of Commerce 1985a, 46-48.

Note: Foreign-owned firms means U.S. nonbank affiliates of foreign corporations.

^aIncluding banking, 6.6 percent.

^bIncluding banking.

8.4.3 Sources of Foreign Direct Investment in the United States

As foreign direct investment has flowed into the United States in the last few years there have been periodic alarms about increasing control of U.S. industry by companies from the Middle East or Japan. Despite the publicized incidents of investments from these countries, the great bulk—two-thirds of the total—of foreign direct investment in the United States continues to be controlled by European firms. Over 40 percent of the foreign investment is concentrated in two countries, the Netherlands and the United Kingdom (table 8.38).

The identification of firms by nationality is often uncertain. These ratios may well underestimate the ultimate Japanese and middle eastern stake that is partly held through firms incorporated in Europe. Data on U.S. direct investment abroad include investments by U.S. firms controlled by foreigners, and data on foreign direct investment in the United States include investment by foreign firms controlled by U.S. parents. In the latter case, however, the surveys include a classification by ultimate beneficial ownership.

The shares of the different countries and areas vary from industry to industry. Investment in the petroleum industry, for example, is over-

Table 8.38 Share in Foreign Direct Investment Position in the United States, 1985

	Percentage
Canada	9
Europe	66
France	3
Germany	8
Netherlands	20
U.K.	24
Switzerland	6
Japan	10
Latin America	9
Neth. Antilles	6
Middle East	3
Kuwait	2

Source: Appendix, table 8.A.11.

whelmingly from Europe, over 80 percent of the total from the Netherlands and the United Kingdom (appendix, table 8.A.11). Investment in manufacturing, the area that receives most public attention, is also largely from Europe—about three-quarters—but several countries participate: 9 percent from France, 10 percent from Germany, and 12 percent from Switzerland, aside from the usual high proportion, over 40 percent, from the Netherlands and the United Kingdom. Japan accounts for less than 5 percent of this investment.

Japan's investment is concentrated in wholesale trade. That investment is more than half of Japan's total investment position in the United States and is more than 40 percent of total foreign direct investment in the industry. Japan also plays a larger role in investment in U.S. banking—almost a fifth—than in the other industries.

Investment from Latin America, largely from the Netherlands Antilles, is more concentrated in the U.S. real estate industry than that from any other source. More than a quarter of Latin America direct investment and that from the Netherlands Antilles is in real estate, and over a quarter of total foreign direct investment in real estate is from Latin America, most from the Netherlands Antilles.

The sources of the most recent growth in the foreign investment position in the United States do not suggest revolutionary changes in the pattern (table 8.39). Europe accounted for two-thirds of the additions over the last five years, as it did for the stock. The major change was that Japan was the source of 14 percent of the additions, as compared to only 6 percent of the 1980 stock, and the Netherlands and the United Kingdom less than 50 percent of additions as compared with a share in the 1980 stock of almost 60 percent. Within manufacturing,

Table 8.39 Share in Changes in Foreign Direct Investment Position in the United States, 1980–85

	Percentage
Canada	4
Europe	66
France	3
Germany	7
Netherlands	17
U.K.	30
Switzerland	6
Japan	14
Latin America	7
Middle East	4

Source: Appendix, table 8.A.11.

increases in investment from France were small relative to the initial stock and those from Switzerland and Japan were relatively large, the latter from a very small base of only 3 percent of total foreign investment in manufacturing.

8.5 Portfolio Investment and Aggregate Investment Flows and Stocks

The capital account of the United States has gone through wide swings, representing what appears to be an underlying evolution of the United States from steady capital exporter in the 1960s to the world's major capital importer in the mid-1980s. The major element of the U.S. capital outflow in the first decade was the steadily growing direct investment flow to foreign countries, averaging about \$4.5 billion per year (table 8.40). That trend of direct investment was not interrupted in the next few years, but it was outweighed in 1971 and 1972 by the monetary troubles of the United States, reflected in the additions to foreign official holdings in the United States of over \$18.5 billion a year

Table 8.40 Net U.S. Capital Outflow (−) or Inflow (+) Annual Averages (billions of dollars, current prices)

	U.S. Capital Outflow/Inflow
1960–70	−2.8
1971–72	+8.7
1973–82	−13.3
1983–85	+69.8

Source: Appendix, table 8.A.12.

and, until the devaluation of the dollar, by the running down of foreign deposits in U.S. banks.

The next ten years were turbulent, including the two oil price shocks and two U.S. recessions that were severe by post-World War II standards. U.S. direct investment abroad continued to grow and accounted for capital export averaging about \$12.5 billion a year, but it was reduced severely by the 1982 recession and did not recover to earlier levels until 1985. However, a new element entered the picture in this decade: foreign lending by U.S. banks at the rate of over \$37 billion a year, dwarfing the direct investment that had been dominant in the 1960s. As U.S. banks lent abroad, they also absorbed deposits from abroad that were far larger than in earlier years, averaging over \$20 billion a year. While the two series were not perfectly synchronized, the bank lending and bank borrowing did move more or less in step, as U.S. banks acted as intermediaries between the countries accumulating assets and those absorbing them. The inflow of capital to the United States also included large additions to foreign holdings of U.S. Treasury securities and, beginning in the late 1970s, large direct investment flows to the United States.

The next few years were to see a spectacular reversal of the U.S. position. U.S. bank lending, which had averaged over \$37 billion a year in the 1973–82 decade and over \$80 billion a year in 1980–82, dropped to under a billion dollars in 1985. At the same time, U.S. bank borrowing from abroad, which had averaged a little over \$20 billion a year during 1973–82 and almost \$40 billion in 1980–82, continued to average over \$40 billion in 1983–85. Thus, the United States was absorbing foreign capital through U.S. banks, through foreign purchases of Treasury securities, and through foreign purchases of other U.S. securities (table 8.41). Most of the foreign purchases of U.S. securities other than Treasury securities in the last couple of years have been of bonds rather than stocks, although stocks predominated earlier (tables 8.42 and 8.43). The main sources of these funds were Western European countries, especially the United Kingdom.

The sources of other U.S. borrowing, including purchases of U.S. Treasury securities and additions to U.S. bank liabilities other than foreign official assets, were more widely dispersed (table 8.44). In this case, too, the industrial countries have been the main sources of funds, but among them, Japan, included in the other industrial countries, played a larger role than in purchases of corporate bonds. The Caribbean centers are intermediaries, the origins of whose funds are not reported. The rest of the U.S. borrowing, about a fifth, came mainly from the developing countries of Latin America and Asia.

Changes in foreign official assets in the United States were relatively small on net balance in 1983–85, but there were significant shifts among countries (table 8.45).

Table 8.41 Additions to Foreign Holdings of U.S. Assets, Annual Averages (billions of dollars, current prices)

	1973–82	1983–85
U.S. Treasury securities	+ 2.6	+ 17.4
Other U.S. securities	+ 3.3	+ 24.1

Source: Appendix, table 8.A.12.

Table 8.42 Additions to Foreign Holdings of U.S. Corporate Stocks and Bonds Other than Treasury Securities (millions of dollars, current prices)

	1981–83	1984–85
Stocks	15,017	3,949
Bonds	7,182	59,670

Source: Appendix, table 8.A.13.

Table 8.43 Foreign Purchases of U.S. Bonds Other than Treasury Securities, 1983–85 Annual Average, by Country (billions of dollars, current prices)

	Purchases
Total	20.6
Germany	1.4
Switzerland	1.7
U.K.	13.8
Japan	2.5

Source: Appendix, table 8.A.13.

Table 8.44 Purchases of U.S. Treasury Securities and Additions to Foreign Liabilities of U.S. Banks, 1983–85 Annual Averages, by Country (billions of dollars, current prices)

	Purchases and Additions
Total	59.0
Industrial countries	32.8
Western Europe	17.9
Canada	2.7
Other	12.3
Caribbean banking centers	13.3
Other countries	12.8
Of which OPEC	1.7
By area, incl. OPEC	
Latin America	5.6
Asia	4.5
Other	2.7

Source: Appendix, table 8.A.14.

Table 8.45 Changes in Foreign Official Assets in the United States, Annual Averages (billions of dollars, current prices)

	1974–78	1979–82	1983–85
Total	21.1	2.5	2.5
Industrial countries	13.0	-9.6	4.0
OPEC members	6.5	9.8	-6.4
Other countries	1.5	2.4	4.9

Source: Appendix, table 8.A.14.

Since the collapse of oil prices, OPEC countries have been drawing down reserves in the United States while the industrial countries and the developing countries have been increasing them. In contrast, in the four years before, OPEC countries had been increasing their official reserve holdings in the United States by almost \$10 billion a year and the industrial countries had been reducing theirs just about as fast. In the years after the first oil shock, all three groups of countries were adding to the official reserves held in the United States.

The collapse of U.S. bank lending during the last three years includes very different behavior toward industrial and developing countries (table 8.46). Lending to developed countries changed little, but with respect to the developing countries of Latin America and Asia the United States turned from net lending to net repayment of debt.

Over longer periods, the concentration of the growth of debt in a very few years becomes evident: almost two-thirds of the total since the first oil shock was extended during 1981 and 1982, and that pattern was repeated in almost all the borrowing countries (table 8.47). Then the next period, 1983–85, saw reductions of 80–85 percent in the rate at which U.S. banks were extending credit, and that pattern too was repeated in each of the individual countries.

Table 8.46 Changes in Claims on Foreigners Reported by U.S. Banks, by Area (billions of dollars, current prices)

	1983	1984	1985
Total	-29.9	-11.1	-.7
Industrial countries	-8.8	-8.4	-7.3
Caribbean banking centers	-6.7	-.7	-.2
Other areas	-14.4	-2.0	+6.8
Latin America	-9.3	-1.1	+4.7
Asia	-4.6	-.8	+1.7

Source: Appendix, table 8.A.15.

Note: (-) = increase in U.S. assets.

Table 8.47 Changes in Claims on Foreigners Reported by U.S. Banks, by Areas, Annual Averages (billions of dollars, current prices)

	1976–80	1981–82	1983–85
Total	−27.9	−97.6	−13.9
Industrial countries	−10.8	−41.3	−8.2
Western Europe	n.a.	−33.6	−4.9
U.K.	−4.2	−21.6	−3.3
Other	n.a.	−12.0	−1.6
Canada	n.a.	−3.8	−1.0
Japan	n.a.	−2.8	−1.7
Caribbean banking centers	−6.8	−23.5	−2.5
Other Areas	−10.4	−32.8	−3.2
OPEC	−1.5	−4.0	−.6
Latin America	−6.2	−24.6 ^a	−1.9 ^a
Asia	−2.3	−7.4 ^a	−1.2 ^a
Other	−.4	−.9	−.1

Source: Appendix, table 8.A.15.

Note: (−) = increase in U.S. Assets.

^aIncluding OPEC.

8.6 Conclusion

The United States has gone through several cycles in the state of its foreign investment account. It was a borrower and international debtor before World War I, first a lender and then a refuge for foreign capital between the wars, the world's major lender and creditor after World War II, and, in the last few years, a borrower again and, according to the official accounts, even a net debtor. Most foreign investment in the United States has always been portfolio investment, although direct investment has been growing rapidly in recent years, while most U.S. investment abroad has typically been direct investment. The major episodes of foreign portfolio investment by the United States have not been happy ones. One was the intergovernment lending during World War I, eventually written off. A second was the burst of lending to Latin America in the late 1920s, a good part of which ended in default. And the third was the large international lending of the period after the first oil crisis, much of which is of questionable standing now.

The long period of U.S. borrowing before 1900 does not seem to have brought enough foreign capital into the United States for the transfer of resources involved to have made a great difference in the long-run growth of the country. The role of foreign capital appears to have been that of accommodating capital needs for sharp bursts in U.S. growth or in the growth of particular sectors, especially capital-intensive ones, until domestic saving caught up with capital formation. If the

irregularity of capital requirements was an intrinsic feature of rapid growth, the inflow of foreign capital was more important than its size would indicate.

U.S. direct investment abroad began while the United States was still an overall borrower and debtor, as the technological leaders among U.S. manufacturing firms pioneered in the technique of exploiting their firm advantages by producing in other countries. The major expansion in U.S. direct investment took place in the 1950s and 1960s, as U.S. firms took advantage of the great advances in communication and transportation to spread their production activities around the world. The peak in the stock of foreign assets relative to domestic assets was probably reached during the early 1970s, although the share of their exports that multinational U.S. manufacturing firms produced abroad continued to increase after that.

The bulk of U.S. direct investment abroad has always been in goods production. However, there was a brief period in the 1920s in which almost all of U.S. investment in public utilities was concentrated, presumably a reflection of the U.S. lead in telephone systems and electric power production and distribution. Within the production of goods there has been a shift away from primary production, between a third and a half of the total in the 1950s, to manufacturing, which reached its peak share in the late 1960s or early 1970s. Since then there has been growth in the trade and services sector, the share of which roughly doubled between the mid-1950s and the mid-1980s and reached almost a third of total direct investment. Most of this growth is in wholesale trade and finance, with other services, even including oil field services, still less than 5 percent of U.S. direct investment abroad in 1985.

Using foreign production to retain their competitiveness in world markets, U.S. multinational manufacturing firms have been able to retain a constant share of world exports of manufactures over the last fifteen or twenty years, while the share of the United States as a country has fallen sharply. What sustained the share of U.S. multinationals was the growth in their exports from locations outside the United States to the point that almost half of their exports now originate from their foreign production.

The comparative advantage of both the United States and its multinational firms is concentrated in chemicals, machinery, and transport equipment, to judge by export performance. The multinationals' share is large relative to that of the United States in chemicals, electrical machinery, and transport equipment, but the share of the United States as a country is greater in nonelectrical machinery. Among more narrowly defined industries, the multinationals' comparative advantage is strongest in industries with heavy investments in advertising and R&D. R&D intensity, a major explanation of the comparative advantage of

the United States as a country, explains the comparative advantage of U.S. multinationals to an even greater degree.

Over the last quarter century, U.S. affiliates in foreign countries have changed their operations in several respects. One is that they have become more dependent on the U.S. market. However, they still sell mainly in their host-country markets, and what they do export goes mainly to countries other than the United States. Exports to the U.S. market are only 14 percent of their total sales.

There has been an increase in the proportion of affiliates in which parents own less than a majority share, although that trend has at least slowed. Affiliates in the most technologically advanced industries continue to be majority owned in most cases, presumably because sharing of ownership would erode the very advantages that make direct investment profitable.

While the flow of direct investment from the United States has slowed, there has recently been a large inflow of foreign direct investment into the United States, roughly tripling the share of foreign-owned companies in the United States since 1950, doubling it in the last decade, and reaching to about three-quarters of the value of U.S. investment abroad if those book value figures are taken literally. They probably exaggerate the size of inward direct investment relative to outward investment because so much of the inward investment has occurred in recent years.

While foreign-owned firms accounted for only about 3.5 percent of total U.S. employment after all the recent growth in foreign investment, the shares in manufacturing and wholesale trade were considerably higher. Within manufacturing there was also considerable variation, with foreign firms accounting for almost 40 percent of chemical industry employment, but in all the other industries for less than 10 percent. The foreign shares in service industries, aside from wholesale trade, increased, but remained below 3 percent. To some extent, these figures reflect U.S. comparative advantage in service industry production, but the fact that U.S. companies' direct investment in foreign service industries is not itself very large suggests that it may be difficult to carry firm advantages in these industries across national borders.

The sources of these foreign investment flows into the United States continue to be mainly European countries, particularly the United Kingdom and the Netherlands. However, there has been some increase in the flow from Japan, mainly into wholesale trade. Most of that is probably connected with exporting from and importing to Japan rather than with wholesale trading among U.S. companies.

Aside from the increased flow of direct investment into the United States in recent years, there have been major shifts in the U.S. international capital position, stemming largely from changes in portfolio

investment. The United States became a very large capital importer in 1983–85 as U.S. banks reduced their net lending to insignificant amounts overall and foreign countries added greatly to their holdings not only of direct investment but also of U.S. Treasury securities, other U.S. securities, and deposits in U.S. banks. Most of the flows have been from Europe, as in the case of direct investment, but Japan has also become an important investor, particularly in U.S. Treasury securities.

The growth of U.S. bank claims on foreigners was concentrated in a very short period after the second rise in oil prices, with most being accumulated in 1981 and 1982. That concentration is unpleasantly reminiscent of the concentration of portfolio investment in the late 1920s, but there has already been a substantial reduction in those claims in 1985 alone.

Appendix

Tables 8.A.1–8.A.15 are on pages 518–42.

Table 8.A.1

U.S. Direct Investment Abroad, by Industry of Affiliate (millions of dollars, current prices)

	1985	1984	1983	1982	1977	1966	1957	1950	1943	1936	1929
Agriculture	679	739	528	504	528	322	680	589	503	482	880
Mining	4,797	5,230	5,514	5,210	5,998	3,983	2,361	1,129	973	1,032	1,185
Petroleum, total	58,347	59,089	57,574	57,817	28,030	13,893	9,055	3,390	1,393	1,074	1,117
Extract. & integ. ref. & ext.	35,967	36,501	33,003	32,693	12,987	9,136	5,518	n.a.	n.a.	n.a.	n.a.
Petrol. ref. & petrol. & coal prod.	6,508	6,091	7,085	7,028	5,259	1,366	1,009	n.a.	n.a.	n.a.	n.a.
Tankers, pipelines, storage	1,338	1,465	1,740	1,648	2,490 ^a	1,104	1,198	n.a.	n.a.	n.a.	n.a.
Distribution & marketing	8,377	8,895	9,692	11,057		1,804	1,212	n.a.	n.a.	n.a.	n.a.
Wholesale	n.a.	n.a.	n.a.	10,835	5,380	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oil & gas field service	6,157	6,137	6,053	5,392	1,914	482	117	n.a.	n.a.	n.a.	n.a.
PRIMARY, incl. all petrol.	63,823	65,058	63,616	63,531	34,556	18,198	12,096	5,108	2,869	2,588	3,182
PRIMARY, excl. petrol. ref., dist. & serv.	41,443	42,470	39,045	38,407	19,513	13,442	8,560	n.a.	n.a.	n.a.	n.a.
Manufacturing	95,586	85,253	82,907	83,452	62,019	20,740	8,009	3,831	2,276	1,710	1,813
Mfg., incl. petrol. ref.	102,094	91,344	89,992	90,480	67,278	22,106	9,018	n.a.	n.a.	n.a.	n.a.
Construction								— ^d	— ^d	— ^d	— ^d
TOTAL GOODS, incl. all petrol.	160,568	151,325	147,460	148,044	97,480	39,300	20,223	8,939	5,145	4,298	4,995

Goods, excl.											
petrol. transp.,											
trade & serv.	144,696	134,828	129,975	129,947	87,696	35,910	17,696	n.a.	n.a.	n.a.	n.a.
Public utilities &											
transp., excl.											
petrol.	2,333	2,322	2,427	2,273	2,186	2,260	2,145	1,425	1,390	1,640	1,610
Public utilities &											
transp., incl.											
petrol. transp.	3,671	3,757	4,167	3,921	4,676 ^a	3,364	3,343	n.a.	n.a.	n.a.	n.a.
Goods & PUBL.											
UTIL., incl.											
all petrol.	162,901	153,647	149,887	150,317	99,666	41,560	22,368	10,364	6,535	5,938	6,605
Goods & PUBL.											
UTIL., excl.											
petrol. trade, &											
service	148,367	138,585	134,142	133,868	92,372	39,274	21,039	n.a.	n.a.	n.a.	n.a.
Trade, excl. petrol.	27,863	25,650	25,184	24,485	16,836	4,331	1,668	762	654	391	368
Wholesale, excl.											
petrol.	23,822	21,790	21,278	20,788	14,011	3,427	1,156	542			
Wholesale, incl.											
petrol.	31,921	30,408	30,712	31,623	19,391	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Retail, excl.											
petrol.	4,041	3,860	3,906	3,697	2,825	905	513	221			
Retail, incl.											
petrol.	4,319	4,137	4,164	3,919	n.a.	n.a.	n.a.	n.a.			
Trade, incl. petrol.	36,240	34,545	34,876	35,542	22,216 ^b	6,135	2,880	n.a.	n.a.	n.a.	n.a.
Finance & other											
serv., excl.											
petrol.											
Banking	14,728	13,246	12,387	10,317	4,370	280	131	— ^g			
Finance (exc.											
bank), ins., & RE	21,914	15,828	15,075	18,018	21,248	4,423	934	463 ^h			

Table 8.A.1 (continued)

	1985	1984	1983	1982	1977	1966	1957	1950	1943	1936	1929
Of which Neth Antilles	– 21,994	– 25,040	– 23,300	– 20,089	– 1,215	—	—	—	674	362	555
Of which holding comp.	22,398	20,584	19,666	19,597	11,477	2,311	111	56			
Insur., RE, & other finance	21,510	20,284	18,709	18,510	10,986	2,112	823	407 ^h			
Insur. & RE						769	400	237			
Other Services, excl. petrol.	5,260	4,625	4,670	4,615	3,870	1,199 ^c	293	199			
TRADE & SERV., excl. petrol.	69,765	59,349	57,316	57,435	46,324	10,233	3,026	1,424	1,328	753	923
TRADE & SERV., excl. petrol., Neth., Antilles, & Holding cos.	69,361	63,805	60,950	57,927	36,062	7,922	2,915	1,368	n.a.	n.a.	n.a.
TRADE & SERV., incl. petrol., excl. Neth. Ant. & hold. cos.	83,895	78,837	76,695	74,376	43,336 ^b	10,208	4,244	n.a.	n.a.	n.a.	n.a.
Total	232,667	212,994	207,203	207,752	145,990	51,792 ^e	25,394 ^f	11,788	7,862	6,691	7,528
Total, excluding Neth. Antilles	254,661	238,034	230,503	227,841	147,205						
TOTAL, Excl. Neth. Antilles and holding companies	232,263	217,450	210,837	208,244	135,728	49,481	25,283	11,732			

Sources: 1982-85: U.S. Department of Commerce 1986a, table 37; 1977: U.S. Dept. of Commerce 1981; 1966: U.S. Dept. of Commerce 1975, table A-15; 1929-57: U.S. Dept. of Commerce 1960, tables 5 and 6, pp. 93, 94.

^aIncludes gasoline service stations.

^bExcludes gasoline service stations.

^cHotels, advertising & other business services, motion pictures, and all other, including inactive.

^dIncluded with other services.

^eFigure comparable to 1957 is 54,799.

^fFigure comparable to 1950 is 26,278.

^gIncluded with other finance.

^hIncludes banking.

Table 8.A.2 Distribution of Exports of Manufactures by the United States and the World, by Detailed Industry, 1966, 1977, and 1982

	1966		1977		1982	
	World	U.S.	World	U.S.	World	U.S.
All manufacturing industries	100.00	100.00	100.00	100.00	100.00	100.00
Foods and kindred products	13.03	8.69	11.09	7.58	9.92	6.68
Grain-mill. & bakery prod.	1.27	2.23	.87	1.42	.91	1.41
Beverages	1.13	.08	.86	.13	.88	.12
Other food products	10.63	6.38	9.36	6.03	8.13	5.14
Chemicals & allied products	10.30	12.75	10.73	12.04	11.82	13.35
Drugs	1.16	1.18	1.12	1.14	1.24	1.47
Soaps, cleansers, etc.	.41	.41	.43	.35	.50	.40
Agricultural chemicals	.95	1.16	.74	1.06	.81	1.49
Industrial chemicals	6.44	8.33	7.17	7.95	7.88	8.34
Other chemicals	1.35	1.67	1.27	1.53	1.38	1.65
Metals	15.53	11.90	13.08	7.50	12.41	7.94
Primary iron and steel	5.82	2.08	5.57	1.49	5.27	1.08
Primary nonferrous	6.12	3.01	3.76	1.72	3.29	1.96
Fabricated metal prod.	3.58	6.81	3.75	4.29	3.84	4.90
Nonelectrical machinery	13.96	20.85	13.81	20.93	14.17	23.21
Farm and garden mach.	1.43	2.75	1.10	2.01	.89	1.49
Construction mach.	2.09	4.34	2.44	4.81	2.56	5.52
Office and comp. mach.	1.43	2.44	1.63	3.93	2.44	6.09
Other nonelect. mach.	9.01	11.32	8.63	10.17	8.28	10.11
Electrical machinery	6.82	7.88	8.90	9.94	9.70	10.75
Household appliances	1.02	.80	1.01	.71	.94	.56
Communications equip.	2.18	2.05	3.14	2.51	3.29	2.42
Electronic components	.58	1.09	1.09	2.14	1.64	3.08
Other electrical mach.	3.04	3.94	3.66	4.58	3.82	4.70
Transport equipment	13.78	19.62	17.14	23.68	16.93	19.78
Motor vehicles & equip.	9.16	12.70	12.06	15.75	11.81	10.63
Other transport equip.	4.62	6.93	5.07	7.92	5.13	9.15
Other manufacturing	26.58	18.30	25.25	18.34	25.06	18.30
Tobacco products	.28	.57	.28	.67	.34	.81
Textiles & clothing	8.54	3.17	7.26	2.70	7.00	2.33
Paper & pulp	3.53	2.58	2.39	2.19	2.37	2.10
Paper products	.37	.37	.41	.50	.46	.60
Printing & publishing	.84	1.17	.71	.72	.71	.86
Rubber products	.84	.78	.97	.64	.95	.63
Plastic products	.35	.36	.57	.48	.58	.41
Lumber & wood furn.	3.02	1.74	3.04	2.48	2.67	2.14
Glass products	.62	.63	.56	.54	.57	.50
Nonmetallic minerals	1.12	.65	1.23	.47	1.24	.48
Instruments	2.98	4.34	3.30	4.77	3.77	5.66
Other manufacturing	4.09	1.94	4.53	2.18	4.40	1.77

Source: U.N. Tapes.

**Table 8.A.3 Industry Distribution of Exports of Manufactures by U.S.
Multinationals, by Detailed Industry, 1977 and 1982**

	1977	1982	1982/1977
All manufacturing industries	100.00	100.00	1.00
Foods and kindred products	4.71	4.54	.96
Grain-mill. & bakery prod.	1.37	1.12	.82
Beverages	.495	.505	1.02
Other food products	2.84	2.92	1.03
Chemicals & allied products	13.99	16.92	1.21
Drugs	2.39	2.89	1.21
Soaps, cleansers, etc.	1.09	1.26	1.16
Agricultural chemicals	.698	.794	1.14
Industrial chemicals	8.63	10.34	1.20
Other chemicals	1.18	1.63	1.38
Metals	5.86	5.54	.95
Primary iron and steel	1.37	1.03	.75
Primary nonferrous	1.88	1.96	1.04
Fabricated metal prod.	2.61	2.55	.98
Nonelectrical Machinery	18.23	18.10	.99
Farm and garden mach.	^a	1.27	^a
Construction mach.	5.32	4.69	.88
Office and comp. mach.	5.91	7.92	1.34
Other nonelect. mach.	7.00 ^b	4.22	.78 ^b
Electrical machinery	11.14	13.39	1.20
Household appliances	1.04	.552	.53
Communications equip.	2.98	3.75	1.26
Electronic components	3.33	4.67	1.40
Other electrical mach.	3.78	4.42	1.17
Transport equipment	30.65	26.89	.88
Motor vehicles & equip.	24.22	19.52	.81
Other transport equip.	6.43	7.37	1.15
Other manufacturing	15.43	14.61	.95
Tobacco products	^c	1.58	^c
Textiles & clothing	1.37	1.05	.77
Pulp & paper	^d	2.09	.79
Paper products		2.65	
Printing & publishing	.418	.406	.97
Rubber products	1.59	1.09	.69
Plastic products	.305	.527	1.73
Lumber & wood furn.	1.39	.95	.68
Glass products	.582	.530	.91
Nonmetallic minerals	.837	.637	.76
Instruments	4.03	5.09	1.26
Other manufacturing	2.25 ^d	.65	.99 ^d

Sources: U.S. Department of Commerce 1981, tables III.H2 and II.T1, and 1985f, tables III.E2 and II.P1.

Note: *Multinationals* refers to manufacturing industry parents and majority-owned affiliates in manufacturing industries.

^aIncluded in other nonelectrical machinery.

^bIncludes farm and garden machinery.

^cIncluded in other manufacturing.

^dIncludes tobacco products.

Table 8.A.4 **Industry Share in Exports of Manufactures, United States and U.S. Multinationals Relative to the World, by Detailed Industry, 1966, 1977, and 1982**

	Industry Share of Exports					
	U.S. Relative to the World			U.S. Multinationals Relative to the World		
	1966	1977	1982	1977	1982	
Foods and kindred products	.67	.68	.67	.42	.46	
Grain-mill. & bakery prod.	1.76	1.63	1.55	1.57	1.23	
Beverages	.07	.16	.14	.58	.58	
Other food products	.60	.64	.63	.30	.36	
Chemicals & allied products	1.24	1.12	1.13	1.30	1.44	
Drugs	1.02	1.02	1.19	2.13	2.33	
Soaps, cleansers, etc.	1.00	.81	.80	2.53	2.52	
Agricultural chemicals	1.22	1.43	1.84	.94	.98	
Industrial chemicals	1.29	1.11	1.06	1.20	1.31	
Other chemicals	1.24	1.20	1.20	.93	1.19	
Metals	.77	.57	.64	.45	.45	
Primary iron and steel	.36	.27	.20	.25	.20	
Primary nonferrous	.49	.46	.60	.50	.60	
Fabricated metal prod.	1.90	1.14	1.28	.70	.66	
Nonelectrical machinery	1.49	1.52	1.64	1.32	1.28	
Farm and garden mach.	1.92	1.83	1.67	a	1.43	
Construction mach.	2.08	1.97	2.16	2.18	1.83	
Office and comp. mach.	1.71	2.41	2.50	3.63	3.25	
Other nonelect. mach.	1.26	1.18	1.22	.72 ^b	.51	
Electrical Machinery	1.16	1.12	1.11	1.25	1.38	
Household appliances	.78	.70	.60	1.03	.59	
Communications equip.	.94	.80	.74	.95	1.14	
Electronic components	1.88	1.96	1.88	3.06	2.85	
Other electrical mach.	1.30	1.25	1.23	1.03	1.16	
Transport equipment	1.42	1.38	1.17	1.79	1.59	
Motor vehicles & equip.	1.39	1.31	.90	2.01	1.66	
Other transport equip.	1.50	1.56	1.78	1.27	1.43	
Other Manufacturing	.69	.73	.73	.61	.58	
Tobacco products	2.04	2.39	2.38	c	4.65	
Textiles & clothing	.37	.37	.33	.19	.15	
Pulp & paper	.73	.92	.89	{ .95	.74	
Paper products	1.00	1.22	1.30		.59	.58
Printing & publishing	1.39	1.01	1.21		1.64	1.15
Rubber products	.93	.66	.66		.54	.91
Plastic products	1.03	.84	.71			
Lumber & wood furn.	.58	.82	.80			
Glass products	1.02	.96	.88			
Nonmetallic minerals	.58	.38	.39			
Instruments	1.46	1.45	1.50			
Other manufacturing	.47	.48	.40			

Sources: Tables 8.A.2 and 8.A.3.

^aIncluded in other nonelectrical machinery.

^bIncludes farm and garden machinery.

^cIncluded in other manufacturing.

^dIncludes tobacco products.

Table 8.A.5 **Industry Shares in Exports by U.S. Multinationals Relative to Shares in U.S. Exports of Manufactures, by Detailed Industry, 1977 and 1982**

	1977	1982
Foods and kindred products	.62	.68
Grain-mill. & bakery prod.	.96	.79
Beverages	3.81	4.22
Other food products	.47	.57
Chemicals & allied products	1.16	1.27
Drugs	2.10	1.97
Soaps, cleansers, etc.	3.11	3.15
Agricultural chemicals	.66	.53
Industrial chemicals	1.09	1.24
Other chemicals	.77	.99
Metals	.78	.70
Primary iron and steel	.92	.95
Primary nonferrous	1.09	1.00
Fabricated metal prod.	.61	.52
Nonelectrical machinery	.87	.78
Farm and garden mach.	^a	.85
Construction mach.	1.11	.85
Office and comp. mach.	1.50	1.30
Other nonelect. mach.	.57 ^b	.42
Electrical machinery	1.12	1.25
Household appliances	1.46	.99
Communications equip.	1.19	1.55
Electronic components	1.56	1.52
Other electrical mach.	.83	.94
Transport equipment	1.30	1.36
Motor vehicles & equip.	1.54	1.84
Other transport equip.	.81	.81
Other manufacturing	.84	.80
Tobacco products	^c	1.95
Textiles & clothing	.51	.45
Pulp & paper	} .99	.77
Paper products	.58	.47
Printing & publishing	2.48	1.73
Rubber products	.64	1.29
Plastic products	.56	.45
Lumber & wood furn.	1.08	1.06
Glass products	1.78	1.33
Nonmetallic minerals	.84	.90
Instruments	.79 ^d	.37
Other manufacturing		

Sources: Tables 8.A.2 and 8.A.3.

Note: *Multinationals* refers to manufacturing industry parents and affiliates in manufacturing industries.

^aIncluded in other nonelectrical machinery.

^bIncludes farm and garden machinery; comparable 1982 ratio was .47.

^cIncluded in other manufacturing.

^dIncludes tobacco products; comparable 1982 ratio was .86.

Table 8.A.6

**R&D Expenditures by Manufacturing Parents and Relation to
Parent Sales, 1977 (millions of dollars)**

	R&D Expend.	Sales	R&D Expend. as % of Sales
Total Manufacturing	17,039	739,460	2.30
Foods and kindred products	395	83,422	.47
Grain-mill. & bakery prod.	94	14,497	.65
Beverages	29	9,679	.30
Other food products	273	59,245	.46
Chemicals & allied products	2,892	96,474	3.00
Drugs	950	16,423	5.78
Soaps, cleansers, etc.	277	14,790	1.87
Agricultural chemicals	^a	3,303	^a
Industrial chemicals	1,481	53,985	2.74
Other chemicals	184 ^b	7,974	.74 ^b
Metals	751	94,563	.79
Primary iron and steel	314	46,902	.67
Primary nonferrous	183	19,250	.95
Fabricated metal prod.	255	28,411	.90
Nonelectrical machinery	3,395	80,174	4.23
Farm and garden mach.	203	6,559	3.09
Construction mach.	356	18,211	1.95
Office and comp. mach.	2,191	23,950	9.15
Other nonelect. mach.	645	31,455	2.05
Electrical machinery	2,284	62,631	3.65
Household appliances	102	8,436	1.21
Communications equip.	446	16,723	2.67
Electronic components	238	6,247	3.81
Other electrical mach.	1,498	31,225	4.80
Transport equipment	5,046	165,681	3.05
Motor vehicles & equip.	3,242	115,877	2.80
Other transport equip.	1,804	49,804	3.62
Other manufacturing	2,275	156,516	1.45
Tobacco products	52	10,845	.48
Textiles & clothing	74	25,342	.29
Pulp & paper	315	22,570	1.40
Paper products	14	13,734	.10
Printing & publishing	312	16,401	1.90
Rubber products	30	3,251	.92
Plastic products	84	18,218	.46
Lumber & wood furn.	94	6,053	1.55
Glass products	115	10,409	1.10
Nonmetallic minerals	1,058	19,087	5.54
Instruments	127	10,607	1.20

Source: U.S. Department of Commerce 1981.

^aIncluded in "other chemicals."

^bIncludes "agricultural chemicals."

Table 8.A.7 Sales and Exports by U.S. Majority-Owned Affiliates (millions of dollars)

	Total Sales					
	1957	1966	1977	1982	1983	1984
All Industries	38,154 ^a	97,783	507,019	730,235	705,811	716,410
Agriculture, forestry, fishing	856	b	1,195	1,286	1,353	1,490
Mining	2,032	3,321	5,086	4,336	3,220	3,260
Petroleum	14,501	27,457	198,624	266,304	245,340	235,267
Extraction	n.a.	n.a.	24,753	45,143	44,462	51,174
Other	n.a.	n.a.	173,871	221,161	200,878	184,093
Manufacturing	18,331	47,375	194,200	271,099	270,363	284,581
Construction	b	b	7,871	12,208	10,544	7,094
Public utilities and trans.	1,216	1,366	3,629	4,233	4,460	4,276
Trade	n.a.	14,066	77,362	129,333	128,584	134,545
Wholesale	n.a.	n.a.	64,463	113,622	110,929	116,796
Retail	n.a.	n.a.	12,899	15,711	17,655	17,749
Finance, ins., & real estate (excl. banking)	n.a.	n.a. ^e	10,002	23,526	23,690	28,517
Services	1,217 ^c	4,181 ^d	9,051	17,911	18,256	17,380
Total Exports						
	1957	1966	1977	1982	1983	1984
All Industries	10,459 ^a	24,393	193,712	252,274	248,763	261,328
Agriculture, forestry, fishing	539	b	695	934	994	1,111
Mining	1,707	2,496	3,940	3,572	2,560	2,632
Petroleum	4,980	8,206	98,254	94,205	90,882	85,748
Extraction	n.a.	n.a.	13,392	27,736	27,125	31,211
Other	n.a.	n.a.	84,862	66,469	63,757	54,537
Manufacturing	2,912	8,817	59,773	91,832	94,973	106,587
Construction	b	b	1,060	1,155	1,118	787
Public utilities and transp.	297	151	60	388	281	356
Trade	n.a.	4,100	26,737	47,754	44,482	47,395
Wholesale	n.a.	n.a.	26,483	47,410	44,118	47,125
Retail	n.a.	n.a.	254	344	364	270
Finance, ins., & real estate (excl. banking)	n.a.	n.a. ^e	1,198	8,897	9,771	13,181
Services	n.a.	623	1,994	3,539	3,700	3,529

Table 8.A.7 (continued)

	Exports to the U.S.					
	1957	1966	1977	1982	1983	1984
All Industries	3,770 ^a	6,300	93,573	76,780	76,814	88,956
Agriculture, forestry, fishing	327	^b	360	524	537	583
Mining	898	1,260	1,429	1,234	995	1,052
Petroleum	1,441	1,491	70,916	36,567	30,514	31,780
Extraction	n.a.	n.a.	8,909	18,113	15,854	16,048
Other	n.a.	n.a.	62,007	18,454	14,660	15,732
Manufacturing	1,093	2,679	17,601	26,244	31,258	39,858
Construction	^b	^b	56	33	30	29
Public utilities and transp.	n.a.	101	20	273	144	179
Trade	n.a.	504	2,225	5,538	6,387	7,157
Wholesale	n.a.	n.a.	2,195	5,501	6,297	7,122
Retail	n.a.	n.a.	30	37	90	35
Finance, ins., & real estate (excl. banking)	n.a.	n.a.	591	5,401	5,984	7,277
Services	n.a.	n.a.	377	966	966	1,040

Sources: U.S. Department of Commerce 1960, tables 22 and 23; 1975, table L-1; 1981, table III.H2; 1985f, table III.E2; 1986d, table 35; 1986c, table 35.

^aExcluding trade and finance.

^bIncluded with services.

^cIncluding construction.

^dIncluding agriculture, forestry, fishing, and construction.

^eThe division of sales between local sales and exports was not reported by companies in "finance, insurance, and real estate."

Table 8.A.8 **Sales of Majority-Owned Affiliates as Percentage of Sales of All Affiliates**

	1966		1977		1982	
	Developed Countries	LDCs	Developed Countries	LDCs	Developed Countries	LDCs
All Industries	88.0	88.7	75.4	84.2	77.3	80.3
Agriculture	a	a	58.8	87.5	68.2	86.2
Mining	92.7	74.8	54.6	48.3	61.9	42.6
Petroleum	90.2	100.0	72.8	93.4	78.2	86.4
Manufacturing	88.8	80.2	80.5	71.0	76.5	71.1
Chemicals	91.1	83.3			82.1	68.2
Drugs	n.a.	n.a.	93.8	86.0	96.2	93.8
Soaps, cleansers, etc.	n.a.	n.a.	96.6	88.6	99.3	88.8
Machinery	90.2	87.2	86.3	77.8	86.1	79.1
Office & computing mach.	n.a.	n.a.	94.7	97.5	94.0	99.5
Radio, TV, & commun. eq.	n.a.	n.a.	94.1	77.6	83.3	71.1
Electronic comp. & access.	n.a.	n.a.	80.5	95.3	78.9	96.0
Instruments & related prod.	n.a.	n.a.	89.2	76.8	88.5	78.7
Transportation, comm., & public util.	88.5	68.3 ^c	19.5	29.4	6.3	50.3
Construction	a	a	80.8	75.3	96.5	82.7
Wholesale trade	94.8	91.8	75.6	79.5	93.4	87.3
Retail trade			71.6	60.5	58.9	46.4
Finance, insur., & real estate	95.4 ^b	91.5 ^c	75.6 ^d	53.9 ^d	76.3 ^d	92.6 ^d
Services	a	a	73.1	76.0	90.3	81.0
Other industries	94.4	93.3 ^c				

Sources: U.S. Department of Commerce 1975, tables J-3, J-4, J-18 and L-3; 1981, tables II.F6 and III.F6; and 1985f, tables II.D4 and III.D4.

^aIncluded with "other industries."

^bBased on income in place of sales. The sales figures for majority-owned affiliates in the source appear to be incorrect.

^cSuppressed observations estimated by the author.

^dExcluding banks.

Table 8.A.9 Foreign Direct Investment in the United States, by Industry of Affiliate (millions of dollars)

	1985	1984	1983	1982	1981	1980	1977	1974	1966	1960	1950
Total	182,951	164,583	137,061	124,677	108,714	83,046	34,595	26,512	9,054	6,910	3,391
Agriculture, forestry, & fishing	1,110	1,150	1,148	1,049	948	773	n.a.	31 ^c			
Mining	4,070	3,920	1,928	1,876	2,152	1,320	n.a.	427			
Petroleum, total	28,123	25,400	18,209	17,660	15,246	12,200	6,573	6,354	1,740	1,238	405
Extraction & integ. ref. & ext.	24,256	21,913	15,385	14,199	12,452	10,229	n.a.	6,174			
Petrol. refin. & petrol. & coal prod.	29	28	31	44	48	39	n.a.				
Tankers, pipelines & storage ^a	520	538	587	457	393	368	n.a.	180			
Distribution & marketing ^b	2,398	1,930	1,202	1,909	1,365	962	n.a.				
Oil & gas field service	919	990	1,005	1,051	988	601	n.a.	6,812			
PRIMARY, incl. all petrol.	33,303	30,470	21,285	20,585	18,346	14,293	n.a.				
PRIMARY, excl. petrol., transp., dist., & service	29,466	27,012	18,491	17,168	15,600	12,362	n.a.	6,632			
Manufacturing	60,798	51,802	47,665	44,065	40,533	33,011	14,030	8,242	3,789	2,611	1,138
Chemicals	19,502	16,631	15,766	14,377	13,701	10,439	n.a.	2,672			
Machinery	9,447	9,682	8,608	8,595	8,297	6,995	n.a.	1,093			
Transp. equip.	2,134	1,880	1,656	1,507	994	955	n.a.	4,477			
Other	29,715	23,609	21,635	19,586	17,541	14,622	n.a.				
Construction	4,024	4,337	3,676	3,692	3,152	522	n.a.	36 ^c			
TOTAL GOODS, incl. all petrol.	98,125	86,609	72,626	68,342	62,031	47,826	n.a.	15,090			
Goods, excl. petrol., transp., dist., & service	94,288	83,151	69,832	64,925	59,285	45,895	n.a.	14,910			
Public util. & transp., excl. petrol.	1,885	1,633	1,572	1,379	1,103	774	n.a.	347			
Public util. & transp., incl. petrol.	2,405	2,171	2,159	1,836	1,496	1,142	n.a.	n.a.			
Goods & pub. util., incl. all petrol.	100,010	88,242	74,198	69,721	63,134	48,600	n.a.	15,437			
Goods & pub. util., excl. petrol. trade & service	96,693	85,322	71,991	66,761	60,781	47,037	n.a.	15,257			

Trade, excl. petrol.	34,212	31,219	26,513	23,604	20,537	15,210	n.a.	4,578	
Wholesale, excl. petrol.	27,514	24,455	21,031	18,397	16,012	11,560	7,237	4,153	739
Wholesale, incl. petrol.	29,912	26,385	22,233	20,306	17,377	12,522	n.a.		
Retail	6,698	6,764	5,482	5,207	4,525	3,650	n.a.	425	
Trade, incl. petrol.	36,610	33,149	27,715	25,513	21,902	16,172	n.a.		
Finance & other serv., excl. petrol.									
Banking	11,503	10,326	8,697	7,846	6,553	4,617		510	
Finance (exc. bank), insur., &									
real estate	34,334	32,316	25,570	21,607	17,159	13,530	5,398	5,686	2,072
Holding companies	3,783	3,687	2,213	1,772	1,044	857		3,807	1,810
Other finance	30,551	28,629	23,357	19,835	16,115	12,673		1,879	1,065
Other services, excl. petrol.	2,893	2,479	2,082	1,899	1,330	1,089		302	
Other industries							1,357 ^d		714 ^d 1,251 ^e 784 ^e
TRADE & SERV., excl. petrol.	82,942	76,340	62,862	54,956	45,579	34,446		11,076	
TRADE & SERV., excl. petrol. & hold cos.	79,159	72,653	60,649	53,184	44,535	33,589		7,269	
TRADE & SERV., incl. petrol. excl. hold. cos.	81,557	74,583	61,851	55,093	45,900	34,551		n.a.	

Sources: 1981-85: U.S. Department of Commerce 1986a, table 23; 1980: U.S. Department of Commerce 1985b, table 34; 1974: U.S. Department of Commerce 1976, table A-4. These data have been revised in the source listed for 1977 and earlier years, but we used this source for its superior detail. 1950, 1960, 1966, 1977: U.S. Department of Commerce 1984b, tables 1 and 17.

^aIncludes gasoline service stations.

^bWholesale only.

^cInvestment in unincorporated affiliates in agriculture and construction is combined in the source. We assumed that half was in agriculture and half was in construction.

^dIncluding agriculture, mining, construction, public utilities and transportation, retail trade, and other services.

^eSame coverage as note d, plus wholesale trade.

Table 8.A.10 Employment of Nonbank U.S. Affiliates of Foreign Corporations, by Industry of Affiliate (thousands)

	1984	1983	1982	1981	1980	1979	1978	1977	1974
All Industries	2,715	2,547	2,448	2,417	2,034	1,753	1,430	1,219	1,057
Agriculture, forestry, & fishing	9	11	11	11	10	10	10	9	8
Mining	32	29	41	40	25	18	16	16	23
Petroleum	125	121	122	128	102	86	98	90	94
PRIMARY PRODUCTION	166	161	174	179	137	114	124	115	125
Manufacturing	1,378	1,321	1,242	1,300	1,105	1,006	804	686	551
Food & kindred prod.	145	139	126	128	120	111	84	72	75
Chemicals	406	398	390	414	284	261	224	198	115
Primary & fabric. metals	164	146	103	111	113	107	84	85	88
Machinery, excl. elect.	128	125	132	138	117	112	86	65	43
Elect. mach. & equip.	181	168	153	164	173	149	110	95	56
Transport. equip.	61	65	71	73	65	50	21	3	
Other manuf.	294	281	266	273	233	217	195	167	174
Construction	42	45	52	58	43	28	23	13	8
GOODS PRODUCTION	1,586	1,527	1,468	1,537	1,285	1,148	951	814	684
Public utilities & transportation	63	56	57	43	36	27	25	23	45
GOODS, PUBLIC UTIL. & TRANSP.	1,649	1,583	1,525	1,580	1,321	1,175	976	837	729
Wholesale trade	293	269	280	254	217	196	172	153	122
Retail trade	454	420	398	344	304	236	172	142	121
Finance, exc. bank. & insur.	38	37	25	18	25	13	11	10	9 ^a
Insurance	62	68	71	68	62	45	38	33	33
Real estate	27	27	26	29	20	22	11	8	5
Services	192	143	123	124	85	66	51	37	41
TRADE AND SERVICES	1,066	964	923	837	713	578	455	383	331

Sources: Shea 1986; Howenstine 1985; U.S. Department of Commerce 1984a, table F-1; U.S. Department of Commerce 1985c, table F-1; U.S. Department of Commerce 1976, table L-1.

^aBanking: 26 thousand.

Table 8.A.11 Foreign Direct Investment Position in the United States by Industry and Country (billions of dollars, current prices)

	1985	1984	1983	1982	1981	1980
All Industries	183.0	164.6	137.1	124.7	108.7	83.0
Canada	16.7	15.3	11.4	11.7	12.1	12.2
Europe	120.9	108.2	92.9	83.2	72.4	54.7
Germany	14.4	12.3	10.8	9.8	9.5	7.6
Netherlands	36.1	33.7	29.2	26.2	26.8	19.1
U.K.	43.8	38.4	32.2	28.4	18.6	14.1
Switzerland	11.0	8.1	7.5	6.4	5.5	5.1
Japan	19.1	16.0	11.3	9.7	7.7	4.7
Latin America	17.0	16.2	15.0	14.2	11.7	9.7
Neth. Antilles	10.6	10.9	9.9	9.2	8.2	6.7
Middle East	5.0	5.3	4.4	4.4	3.6	.9
Petroleum	28.1	25.4	18.2	17.7	15.2	12.2
Europe	25.4	23.1	16.3	15.1	12.9	n.a.
Netherlands & U.K.	23.6	21.0	14.6	13.5	11.4	n.a.
Manufacturing	60.8	51.8	47.7	44.1	40.5	33.0
Canada	5.1	4.1	3.3	3.5	3.4	n.a.
Europe	46.5	39.1	36.9	33.0	30.9	n.a.
France	5.5	5.4	5.5	5.0	4.9	n.a.
Germany	6.2	4.4	4.5	4.2	4.2	n.a.
Netherlands	13.0	12.5	11.2	9.9	9.0	n.a.
U.K.	11.9	9.7	9.2	8.5	7.6	n.a.
Switzerland	7.4	4.8	4.2	3.6	3.3	n.a.
Japan	2.6	2.5	1.6	1.6	1.3	n.a.
Latin America	5.6	5.5	5.2	5.4	4.5	n.a.
Neth. Antilles	3.7	4.1	3.8	3.7	4.0	n.a.
Wholesale trade	27.5	24.5	21.0	18.4	16.0	11.6
Europe	12.5	11.7	10.1	9.0	8.0	n.a.
Japan	11.6	9.7	7.8	6.1	5.0	n.a.
Retail trade	6.7	6.8	5.5	5.2	4.5	3.6
Europe	5.1	5.2	4.4	4.3	3.8	n.a.
Banking	11.5	10.3	8.7	7.8	6.6	4.6
Europe	6.0	5.7	5.6	4.9	4.0	n.a.
Finance, excl. bank.	4.7	5.6	2.3	2.2	1.1	1.3
Europe	2.4	3.5	1.2	1.4	.6	n.a.
Insurance	11.1	8.9	8.7	7.9	7.1	6.1
Europe	8.9	6.7	7.2	6.3	5.5	n.a.
Netherlands & U.K.	5.7	3.9	4.2	3.9	3.5	n.a.
Real estate	18.6	17.8	14.6	11.5	9.0	6.1
Europe	8.8	8.3	6.8	5.1	3.7	n.a.
Latin America	4.8	4.7	4.1	3.3	2.6	n.a.
Neth. Antilles	3.9	3.7	3.2	2.6	1.9	n.a.
Other	9.9	9.5	8.5	8.0	6.5	3.2

Sources: U.S. Department of Commerce 1986a and earlier articles in the same series.

Table 8.A.12 U.S. International Capital Transactions, 1960–85 (millions of dollars, current prices)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
U.S. AND FOREIGN													
ASSETS, NET	−1,805	−2,833	−2,263	−4,053	−5,917	−4,974	−3,660	−2,378	−1,049	+1,117	−2,978	+10,495	+6,964
U.S. ASSETS ABROAD,													
NET (increase/ capital outflow (−))	−4,099	−5,538	−4,174	−7,270	−9,560	−5,716	−7,321	−9,757	−10,977	−11,585	−9,337	−12,475	−14,497
U.S. official													
reserve assets, net	2,145	607	1,535	378	171	1,225	570	53	−870	−1,179	2,481	2,349	−4
U.S. government													
assets, other than official reserve													
assets, net	−1,100	−910	−1,085	−1,662	−1,680	−1,605	−1,543	−2,423	−2,274	−2,200	−1,589	−1,884	−1,568
U.S. private assets,													
net	−5,144	−5,235	−4,623	−5,986	−8,050	−5,336	−6,347	−7,386	−7,833	−8,206	−10,229	−12,940	−12,925
Direct investment	−2,940	−2,653	−2,851	−3,483	−3,760	−5,011	−5,418	−4,805	−5,295	−5,960	−7,590	−7,618	−7,747
Foreign securities	−663	−762	−969	−1,105	−677	−759	−720	−1,308	−1,569	−1,549	−1,076	−1,113	−618
U.S. claims on													
unaffiliated foreigners													
reported by													
nonbanking													
concerns	−394	−558	−354	157	−1,108	341	−442	−779	−1,203	−126	−596	−1,229	−1,054
U.S. claims													
reported by U.S.													
banks, not													
included													
elsewhere	−1,148	−1,261	−450	−1,556	−2,505	93	233	−495	233	−570	−967	−2,980	−3,506

FOREIGN Assets in the UNITED STATES, NET (increase/ capital inflow (+))													
	2,294	2,705	1,911	3,217	3,643	742	3,661	7,379	9,928	12,702	6,359	22,970	21,461
Foreign official assets in the U.S., net	1,473	765	1,270	1,986	1,660	134	−672	3,451	−774	−1,301	6,908	26,879	10,475
U.S. government securities	655	233	1,409	816	432	−141	−1,527	2,261	−769	−2,343	9,439	26,570	8,470
U.S. Treasury securities	655	233	1,410	803	434	−134	−1,548	2,222	−798	−2,269	9,411	26,578	8,213
Other	—	—	−1	12	−2	−7	21	39	29	−74	28	−8	257
Other U.S. government liabilities	215	25	152	429	298	65	113	83	−15	251	−456	−510	182
U.S. liabilities reported by U.S. banks, not included elsewhere	603	508	−291	742	930	210	742	1,106	10	792	−2,075	819	1,638
Other foreign official assets	—	—	—	—	—	—	—	—	—	—	—	—	185
Other foreign assets in the United States, net	821	1,939	641	1,231	1,983	607	4,333	3,928	10,703	14,002	−550	−3,909	10,986
Direct investment	315	311	346	231	322	415	425	698	807	1,263	1,464	367	949
U.S. Treasury securities	−364	151	−66	−149	−146	−131	−356	−135	136	−68	81	−24	−39
U.S. Securities other than U.S. Treasury securities	282	324	134	287	−85	−358	906	1,016	4,414	3,130	2,189	2,289	4,507

Table 8.A.12 (continued)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	-90	226	-110	-37	75	178	476	584	1,475	792	2,014	369	815
U.S. liabilities reported by U.S. banks, not included elsewhere	678	928	336	898	1,818	503	2,882	1,765	3,871	8,886	-6,298	-6,911	4,754
Allocations of special drawing rights	—	—	—	—	—	—	—	—	—	—	867	717	710
Statistical discrepancy	-1,019	-989	-1,124	-360	-907	-457	629	-205	438	-1,516	-219	-9,779	-1,879
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
U.S. AND FOREIGN ASSETS, NET	-4,486	-504	-24,033	-14,751	+16,534	+2,906	-25,579	-28,006	-27,709	-27,195	+35,474	+79,128	+94,670
U.S. ASSETS ABROAD, NET (increase/ capital outflow (-))	-22,874	-34,745	-39,703	-51,269	-34,785	-61,130	-64,331	-86,118	-111,031	-121,273	-50,022	-23,639	-32,436
U.S. official reserve assets, net	158	-1,467	-849	-2,558	-375	732	-1,133	-8,155	-5,175	-4,965	-1,196	-3,131	-3,858
U.S. government assets, other than official reserve assets, net	-2,644	366	-3,474	-4,214	-3,693	-4,660	-3,746	-5,162	-5,097	-6,131	-5,005	-5,523	-2,824

U.S. private assets,													
net	–20,388	–33,643	–35,380	–44,498	–30,717	–57,202	–59,453	–72,802	–100,758	–110,177	–43,821	–14,986	–25,754
Direct investment	–11,353	–9,052	–14,244	–11,949	–11,890	–16,056	–25,222	–19,222	–9,624	2,369	–373	–3,858	–18,752
Foreign securities	–671	–1,854	–6,247	–8,885	–5,460	–3,626	–4,726	–3,568	–5,778	–8,102	–7,007	–5,082	–7,977
U.S. claims on													
unaffiliated foreigners													
reported by													
nonbanking													
concerns	–2,383	–3,221	–1,357	–2,296	–1,940	–3,853	–3,291	–3,174	–1,181	6,626	–6,513	5,081	1,665
U.S. claims													
reported by U.S.													
banks, not													
included													
elsewhere	–5,980	–19,516	–13,532	–21,368	–11,427	–33,667	–26,213	–46,838	–84,175	–111,070	–29,928	–11,127	–691
FOREIGN ASSETS IN													
THE UNITED STATES,													
NET (increase/ capital inflow (+))	18,388	34,241	15,670	36,518	51,319	64,036	38,752	58,112	83,322	94,078	85,496	102,767	127,106
Foreign official assets													
in the U.S., net	6,026	10,546	7,027	17,693	36,816	33,678	–13,665	15,497	4,960	3,593	5,968	3,037	–1,324
U.S. government													
securities	641	4,172	5,563	9,892	32,538	24,221	–21,972	11,895	6,322	5,085	6,496	4,703	–841
U.S. Treasury													
securities	59	3,270	4,658	9,319	30,230	23,555	–22,435	9,708	5,019	5,779	6,972	4,690	–546
Other	582	902	905	573	2,308	p – 666	463	2,187	1,303	–694	–476	13	–295
Other U.S.													
government													
liabilities	936	301	1,517	4,627	1,400	2,476	–40	615	–338	605	725	436	438
U.S. liabilities													
reported by U.S.													
banks, not													
included													
elsewhere	4,126	5,818	–2,158	969	773	5,551	7,213	–159	–3,670	–1,747	545	555	522

Table 8.A.12 (continued)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Other foreign official assets	323	254	2,104	2,205	2,105	1,430	1,135	3,145	2,646	-350	-1,798	-2,657	-1,488
Other foreign assets in the U.S., net	12,362	23,696	8,643	18,826	14,503	30,358	52,416	42,615	78,362	90,486	79,527	99,730	128,430
Direct investment	2,800	4,760	2,603	4,347	3,728	7,897	11,877	16,918	25,195	13,792	11,946	25,359	17,856
U.S. Treasury securities	-216	697	2,590	2,783	534	2,178	4,960	2,645	2,946	7,052	8,721	23,059	20,500
U.S. securities other than U.S. Treasury securities	4,041	378	2,503	1,284	2,437	2,254	1,351	5,457	7,176	6,392	8,636	12,759	50,859
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	1,035	1,844	319	-578	1,086	1,889	1,621	6,852	917	-2,383	-118	4,704	-1,172
U.S. liabilities reported by U.S. banks, not included elsewhere	4,702	16,017	628	10,990	6,719	16,141	32,607	10,743	42,128	65,633	50,342	33,849	40,387
Allocations of special drawing rights	—	—	—	—	—	—	1,139	1,152	1,093	—	—	—	—
Statistical discrepancy	-2,654	-1,458	5,917	10,544	-2,023	12,521	25,431	24,982	20,276	36,325	11,130	27,338	23,006

Source: Krueger 1986, table 1.

Table 8.A.13 Foreign Purchases of U.S. Corporate Stocks and Corporate and Other Bonds, excluding Treasury Securities and Transactions of Foreign Official Agencies (millions of dollars, current prices)

	1985	1984	1983	1982	1981
Stocks, net foreign purchases	4,855	-906	6,395	3,566	5,056
Western Europe	2,079	-3,061	3,947	2,518	3,655
Germany	730	-48	1,046	334	-22
Switzerland	-75	-1,542	1,325	-579	288
U.K.	1,686	-676	1,771	3,096	2,216
Other	-262	-794	-195	-333	1,173
Canada	355	1,691	1,151	223	1,046
Japan	298	-148	274	-	118
Other	2,123	612	1,023	826	237
Corporate & other bonds, net foreign purchases	46,004	13,666	2,241	2,826	2,115
Western Europe	39,424	11,192	1,204	2,678	1,713
Germany	2,001	1,727	345	2,011	848
Switzerland	3,987	639	583	158	108
U.K.	32,488	8,436	406	189	661
Other	948	390	-130	320	96
Canada	188	-62	123	24	-12
Japan	5,420	1,455	682	29	175
Other countries	1,086	787	223	123	198
Intl. financial inst.	-114	294	9	-28	41

Sources: 1983-85: Krueger 1986, table 6; others from earlier articles in the same series

Notes: (+) = net foreign purchases; (-) = net foreign sales

Table 8.A.14 Foreign Purchases of U.S. Treasury Securities and Additions to Liabilities Reported by U.S. Banks (millions of dollars, current prices)

incl.										
elsewhere	60,887	56,908	59,063	72,974	45,074	13,388	37,567	18,456	7,253	13,773
Industrial countries	35,988	36,255	26,299	38,585	13,209	6,062	18,150	10,931	1,183	6,312
Western										
Eur.	10,964	23,343	19,296	33,975	11,029					
Canada	777	3,392	3,989	2,027	–23					
Other	24,247	9,520	3,014	2,583	2,193					
Caribbean banking centers	11,287	6,972	21,770	18,894	24,817	2,980	14,006	3,911	3,128	1,618
Other areas	13,612	13,681	10,994	15,495	7,048					
Of which members of										
OPEC ^a	2,464	2,023	573	4,736	90	861	1,808	1,070	989	1,161
By area ^b						4,311	3,565	2,473	2,674	1,968
Latin										
America	5,361	6,350	4,989	11,533	4,681					
Asia	5,538	3,651	4,358	2,915	1,009					
Africa	1,079	243	–57	–36	–45					
Other	1,634	3,437	1,704	1,083	1,403					
Intl. fin. inst.			776	1,472	–826	38	71	–721	2,714	

Sources: 1983–85: Krueger 1985 and 1986, tables B and 9; others from earlier articles in the same series.

Notes: (+) = credits, increase in foreign assets; (–) = debits, decrease in foreign assets.

^aPrevious to 1981, oil-exporting countries.

^bOPEC members included in area totals from 1981 through 1985; oil-exporting countries excluded from area totals before 1981.

Table 8.A.15 Changes in Claims on Foreigners Reported by U.S. Banks, by Area (millions of dollars, current prices)

	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976
Total	-691	-11,127	-29,928	-111,070	-84,175	-46,838	-26,213	-33,631	-11,427	-21,368
Industrial countries	-7,291	-8,384	-8,846	-49,183	-33,464	-14,255	-13,906	-18,107	-3,125	-4,507
Western Europe	-6,445	-6,411	-1,868	-43,053	-24,092					
U.K.	-4,450	-7,994	2,527	-26,076	-17,094	-2,812	-10,009	-4,610	-1,942	-1,799
Other	-1,995	1,583	-4,395	-16,977	-6,998					
Canada	1,319	-349	-3,905	-3,241	-4,352					
Japan	-2,659	-663	-1,752	-1,591	-4,019					
Other	494	-961	-1,321	-1,298	-1,001					
Caribbean banking centers	200	-717	-6,696	-25,462	-21,475	-16,845	2,335	-1,930	-5,825	-11,518
Other Areas	6,800	-2,026	-14,386	-36,425	-29,236	-15,738	-14,642	-13,594	-2,477	-5,343
Of which OPEC members ^a	1,321	124	-3,105	-5,698	-2,302	-1,684	241	-3,472	-906	-1,712
By area ^b						-14,054	-14,883	-10,122	-1,571	-3,631
Latin America	4,702	-1,122	-9,269	-26,344	-22,763	-8,870	-11,436	-7,045	-609	-3,095
Asia	1,713	-761	-4,567	-9,499	-5,341	-4,407	-2,795	-2,879	-928	-366
Africa	385	280	-570	-867	-511	-303	-99	-109	-111	59
Other	—	-423	20	285	-621	-474	-553	-89	77	-229

Notes: (+) = credits, decrease in U.S. assets; (-) = debits, increase in U.S. assets.

^aPrevious to 1981, oil-exporting countries.

^bOPEC members included in area totals from 1981 through 1985; oil-exporting countries excluded from area totals before 1981.

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2. *Mario Schimberni*

Investing to and from the United States

I have been asked to explain why European businessmen are interested in entering, operating, and investing in the U.S. market. The explanation is complex and associated with all the components of a global strategy. Briefly, for a European company a presence in the United States is an important step toward competing successfully with American firms in the world market.

We live in a low- or no-growth economy, where markets are more competitive, partly due to the presence of new competitors, sometimes from new geographical areas or from industries outside the ranks of traditional rivals. Being present in the United States may enable us to acquire useful competitive factors and be successful in this context.

The 1980s have been characterized by increasing interrelations among the various economies. If we measure the degree of openness of an economy by the incidence of imports and exports on GNP, we observe that it rose from 8 percent to 30 percent in the OECD countries between 1970 and 1985.

This indicator is not sufficient, however, to fully describe the internationalization process in economies and business strategies, which today is characterized by qualitative elements difficult to measure in monetary terms. Traditionally, it was the industrial and commercial aspects of economic activity that were affected by the process of foreign openness, through the flows of imports and exports and direct investments. Now the elements upstream from the market competition phase also take part in the internationalization process. For this reason it is more correct to speak of “globalization.”

In a global market, business can find market outlets perhaps with differentiated classes of users for its products, but also it can find (1) new financial opportunities in terms of markets, instruments, and cur-

rencies of denomination; and (2) new occasions for innovation, through forms of collaboration and interaction with other companies and with advanced research centers. This change in the objectives of internationalization is also reflected in the greater diversification of available instruments. In contrast to the past, companies are going beyond the alternative between exports and direct investments and utilizing a "continual" range of instruments that lend themselves to flexible use and rapid termination.

Joint ventures, nonequity collaboration agreements between companies, minority shareholdings in firms that are strategic from the standpoint of innovation and research, acquisitions, mergers: these are the instruments and opportunities available to global companies today. European businessmen have a growing interest in the American economy precisely because of the complex, diversified nature of the *motivations* and *methods* of the internationalization process.

In addition to its continental "commercial" dimension, the American market is strategic because it offers a series of industrial, technological, scientific, distributional, financial, and managerial resources. The *existence* and *accessibility* of these resources have attracted European economic operators even during strong dollar periods, demonstrating that their interest is strategic and long range, not speculative or linked to short-term profits.

We may attempt to "quantify" interest in the American economy by analyzing collaboration agreements, which have been a highly important flexible instrument at the service of corporate "global requirements."

Out of a broad sample of 1,883 agreements concluded during the 1982–85 period, almost 50 percent included an American partner. In the electronic and pharmaceutical industries, the percentages were even higher: 55 percent and 68 percent, respectively.

I describe, based on the experience of the Montedison Group, the significant reasons for this interest. We begin with the scientific-technological reason.

Of the 1,883 agreements signed during the 1982–85 period, 41 percent were sought for reasons of R&D or technology transfer. The important role of the United States in this field of know-how diffusion is shown by the fact that out of 204 agreements in which there was a unilateral transfer of technology, 132 had the United States as a source, with Europe and Japan as the principal recipients. The American balance is strongly positive, Japan's slightly positive, Europe's negative.

At the basis of these tendencies is the existence of a "system effect" that increases the efficiency with which each company, large or small, American or not, participates in the innovation process. At the foundation there is a high level of scientific research, particularly that con-

ducted in university laboratories, but European universities (and especially Italian) are far away from these standards.

The results of scientific and technological research are "transferred" from the university world to industry: the United States offers great possibilities and capacity for applying scientific progress. This is particularly important in a phase like the present when innovation has a high concentration of scientific knowledge, and the competitive position of a company depends to a great extent on the quantity and quality of scientific knowledge incorporated into its productive processes.

The facility and rapidity with which ideas, information, and research results circulate, and the mobility of scientists from the university to industry, enable most production organizations, even those of small dimensions, to be involved in the innovation process at a high level. In other words, even small and midsize companies enter the innovation system and enrich it. This permits the association between high-quality research and the entrepreneurial flexibility and creativity of small business.

The "system effect" lies precisely in the *pervasiveness* of scientific and technological progress, also boosted by (1) efficient mechanisms for financing innovation (like venture capital); and (2) the existence, in some cases, of physical facilities that institutionalize this intermingling of the relationships and communication channels which multiply innovation (the case of science parks).

A "system effect" of this type is lacking in Italy and, I would say, in all of Europe. As a consequence, this limits innovation in the fabric of small and midsize firms characteristic of our economy. This limited capacity to generate product innovations has negative effects on competitiveness throughout the system. In Montedison we have sought to overcome these structural deficiencies in two ways. On the one hand, we have consolidated our presence and our network of contacts here in the United States. For example, we have concluded two research agreements, the first with the creation of Keramont (joint venture with MER) in the field of advanced ceramics, the second with the acquisition of Plant Cell Research Institute of Palo Alto in the field of biotechnology. On the other hand, we are working on two projects: the first creates together with other European firms a scientific research center on the American model of MIT; the second founds a liaison agency to organize joint ventures between small Italian firms and U.S. high-tech companies.

A second reason for European interest in the United States is of a financial nature. The American capital market has some important characteristics that in Europe are present only to a limited degree (or totally nonexistent).

1. *Magnitude.* The New York Stock Exchange has a ratio of capitalization to GNP of 50 percent, while the Milan Stock Exchange has

a ratio of 18 percent. This great magnitude also concerns the secondary market, where it is possible to make large unit transactions without upsetting the market. An important consequence of these characteristics is stability. The European capital market is still segmented by the various national regulations, and we cannot speak of integrated European financial structures.

2. *The number and type of intermediaries.* The U.S. market is endowed with a diversified system of financial intermediation: the activity of collecting deposits and granting loans is accompanied by forms and channels of intermediation sufficient to finance investments through risk capital and debt capital. In Italy, for example, the government regulations constituting investment banks were approved only a month ago.

3. *Broad presence of institutional investors.* In the United States there is a type of institutional investor, the complementary pension funds, that because of its method of collecting savings is able to invest significant amounts on the stock market. This circumstance, absent in the Italian system, gives the American market great stability and offers business a large source of risk capital to finance its investments. An important consequence is that it reduces the entire structure of long-term interest rates.

The need to overcome the structural limitations of the Italian capital market has induced the Montedison group; on the one hand, to strengthen the presence of foreign investors in its ownership. Almost one-third of shares outstanding are owned by foreign operators, including U.S. investors. On the other, the group has listed the shares of some group companies on foreign stock exchanges. Erbamont, a subholding in the health care field, and Ausimont, a subholding in specialty chemicals, are quoted on the New York Stock Exchange. In addition, the shares of the holding company (Montedison S.p.A.) will be listed on some European exchanges (Frankfurt, London, Paris, Zurich) within a few months. This global financial strategy is also one way for diversifying our sources of financing and making our financial structure consistent with our production and commercial structures.

A third reason for the interest of European businessmen in the U.S. market comes from its *dimension* and *homogeneity*. The European market as a whole is quite large, but it is segmented and not homogeneous due to national barriers of a regulatory and institutional nature.

The chemical market in Europe, for example, in terms of apparent dimensions (the subtotal of internal production plus imports less imports), is 22 percent larger than that of the United States and over twice that of Japan. What is lacking is homogeneity in the market. The physiological need to consider Europe as a single domestic market is contrasted by national economic and monetary policies which are often

divergent—a fact that has a negative impact on the exchange agreement linking European currencies—and by the differences and complexities of national legislation. Let us not forget that completion of the EEC internal market is scheduled only for 1992.

Based in part on these considerations of dimension and homogeneity, the Montedison group has taken several initiatives, such as the creation of a 50-50 joint venture with Hercules in the polypropylene field, in which Montedison provided the technology and Hercules its strong penetration capacity in a broad market area. Today Himont, as this joint venture is called, controls 22 percent of the world polypropylene market.

The U.S. market, besides being large and homogeneous, has a high quality of demand. For a company like Montedison, which is increasing the proportion of its high-value-added and high-tech products, it is important to be able to count on an advanced level of consumers. For this reason, our production of Fomblin, a high-performance lubricant employed in electronics and aerospace, is sold predominantly in the United States.

Perhaps having to live with situations of instability, a lack of homogeneity, and greater difficulties than in the U.S. system has developed in European businessmen an aptitude for internationalization, for looking beyond their own borders, for managing situations of uncertainty with flexible instruments and methods. This "adaptable mentality" may be useful in the future low- or no-growth economy. It will be an important asset when the implementation of global strategies leads European companies to rapidly exploit opportunities for investments and growth in economic systems other than America's, such as in Japan, for example. The future of the global European company may include a wider spread of investments among geographic areas.

It is here that we perhaps find an element of relative weakness in the American strategic approach: Compared to the capacity, especially Japanese, to compete on the U.S. market, and the keen activity, especially European, of monitoring U.S. technology, we find that U.S. firms, with the exception of the multinationals, have difficulty going beyond national borders and confronting other realities. With regard to the global economy, the American mentality today appears "domestic oriented."

I would like to recall one fact concerning the chemical industry. Several European firms have increased their sales on the American market at a *faster rate* than their overall sales. On the other hand, most of the American companies have registered a *lower* rate of growth in European sales than in overall sales. Some U.S. chemical companies have greatly reduced their European sales. Keeping in mind that most of the agreements and joint ventures between European and American

chemical companies have taken place on U.S. soil, we could deduce that the enterprises of the Old Continent have been more skillful than their American competitors at grasping opportunities, at increasing technological level, at penetrating strategic markets. These considerations seem confirmed by the superior performance of Europe's chemical companies with respect to their American counterparts.

3. Robert V. Lindsay

Direct Investment into the United States

My observations on direct investment in the United States are those of an individual banker—drawing on market developments rather than depth of research. Given those limitations, I hope I can contribute a few points.

In contemplating a theme for this chapter, I thought one might paraphrase *res ipsa loquitur*, modifying “actions speak for themselves” to “markets speak for themselves.” For the flow of direct investments is based on many specific corporate decisions dictated by specific market opportunities and by a supportive market climate. Broader political and economic forces can encourage or deter, but individual corporate strategies are paramount. I believe that current market opportunities and market conditions are such that direct investments will grow in number, in overall dollar value, and in diversity of origin.

To support that conclusion, I review briefly the earlier pattern of U.S. business expansion abroad; the nature and sources of recent foreign direct investments into this country; the forces at work in the U.S. and international business scenarios that are highly encouraging to foreign direct investors; and the financial market environment which is equally encouraging. I make a few comments specifically related to Japanese direct investment and finally highlight some overall positives and negatives from the U.S. point of view.

When I arrived in London in the early 1970s, U.S. corporate expansion abroad was at a peak. From the first establishment or reestablishment of foreign sales offices and subsidiaries after the Second World War, there developed a broader outreach through acquisitions, green field manufacturing entities, and marketing organizations. This growth was well documented in Robert Lipsey's paper published in this volume.

Our bank and its counterparts devoted significant people and financial resources to the service of our U.S. corporate clients as they

pursued a goal of greater market share in a rebuilding Europe. We worked with them on local financing and on such problems as exchange and other controls in the various European centers. Our clients for the most part identified their offshore expansion as a discrete and separate part of their organizations, and we dealt with a combination of expatriate corporate officers and international specialists in the corporate treasury staffs.

Fifteen years later, the U.S. direct investment totals continue to grow, but from high levels. Mistakes made in the push for overseas market share have in many cases been rectified and overseas operations rationalized. In effect the U.S. overseas investment process has matured.

At the same time, the U.S. multinational has integrated its overseas investments into the structure and strategy of the corporate whole. Outsourcing, interborder component sales, cross-border financings—all are part of an overall strategic thrust. As Lipsey points out, a growing portion of offshore market share for these companies is supplied by their offshore subsidiaries. Their bankers, to compete successfully, must serve the corporate clients on an integrated basis in all markets rather than dealing separately with the parts. And the integrated corporation works to serve its shareholders rather than any specific national interest.

To some extent there may be a parallel though more recent pattern involved in the development of foreign direct investment into the United States. From the 1960s on, a growing number of foreign companies with sufficient capital and management talent to expand beyond their national or regional areas directed their attention to building market share in the United States. This was done primarily by acquisition or joint venture rather than through start-ups. As in the case of their U.S. counterparts, mistakes were made, particularly but not exclusively in the earlier years. *Forbes* noted in an issue last July that of the 101 foreign-owned U.S. companies for which a separate profit and loss statement can be broken out, 23 operations lost \$1.3 billion in the previous fiscal year. However, there have been enough successes of sufficient size so that the Morgan Bank, for example, now has a fully staffed department of banking officers specifically assigned to servicing the U.S. subsidiaries of the bank's offshore corporate clients. That department did not exist a decade ago.

What distinguishes the foreign corporate invasion from the U.S. expansion abroad is that the process has by no means peaked; if anything it is gathering momentum. One also has the impression that most foreign corporate entities have from the outset devoted their most senior time and attention to their U.S. strategic moves, reflecting perhaps the enormous potential of the U.S. market and their own inherently multinational backgrounds. Here again, understandably, corporate self-interest tends to transcend specific national interests.

Who has been coming in from abroad, what have they been buying, and at what cost? The figures show that total foreign direct investments increased 11 percent in 1985, the last year for which there are complete figures, to a total of \$183 billion. Of the \$17.9 billion net additional investment, nearly \$12 billion represented equity capital inflows. The figures from the first nine months of 1986 indicate a dropoff of nearly 50 percent in net additional investment, but these figures were importantly affected by several repayments of capital and debts by U.S. affiliates to their European parents.

As to who is doing the buying, Jeffrey Frankel points out in his paper that 66 percent of foreign direct investments at the end of 1985 were owned by Europeans. The British and Dutch were by far the largest holders within the European totals. Other countries are also important—the United Kingdom, Switzerland, Germany, and Canada together accounted for 74 percent of the increase in investment in 1985—but the United Kingdom itself doubled its net additional investments from \$4.3 billion in 1984 to \$8.7 billion in 1985. The Japanese presence has been much smaller but may grow apace in future years. Total Japanese investment in the United States nearly tripled from 1980 to 1985; *Business Week* reports that MITI expects a 14 percent growth annually until the year 2000. As I mention later, the direct investment percentage of the Japanese total should itself increase.

What is being bought? The list runs the gamut from manufacturing to natural resources to trade and service industries of all kinds. Food, chemicals, and machinery were important in 1985, and several major investments in petroleum and oil services were made. Retail trade, banking, other finance and insurance have all been well represented in recent years. Real estate is significant in its own right, with representation in several categories as direct investments, portfolio investments, and joint venture start-ups. Clearly whatever is not prohibited by statute is fair game, and the fact that an industry is at least temporarily depressed is no bar to the acquisition or joint venture process.

What are the forces at work that give impetus to the flow of direct investment into the United States? Some result from the changing world economic environment and some relate to U.S. domestic market developments within the global environment.

In the first category we begin with currency relationships. One could argue that a falling dollar is discouraging in that existing dollar investments fall in value and the foreign currency value of earnings from existing or new investments will be lower. However, those negatives are more than offset by the lower capital cost of new investments for offshore buyers. America can be bought on the cheap, as the press points out, all the more so when compared to the cost of alternative investments in other developed countries with relatively flat growth

rates. Another point worth making, even though it cannot be supported by hard evidence, is that offshore investors, as we will see, have increasing means of partial exchange rate protection at their disposal; however, they are not as concerned with the risks of currency gains and losses as their American counterparts. Europeans in particular tend to take the longer view, having lived with currency fluctuations over centuries; the effects of currency gains and losses in the income statement are reported as a fact of doing business rather than a management sin. If the underlying market strategy is seen to make sense, a currency risk will not outweigh it, unless political risk is also a factor.

Clearly economic growth in the countries of ultimate ownership have helped build the capital and earning power of acquiring companies. The process of both growth and rationalization in postwar Europe has resulted in the emergence of strong multinational entities and investment pools fully capable of financing and managing sizable U.S. acquisitions. Some companies in smaller domestic markets like Scandinavia *must* go offshore to grow, but all are impressed with the necessity of a U.S. base for diversification, on both economic and political grounds.

Differences in labor practices, particularly between the United States and Europe, are well known and do not need amplification here. However, despite a trend toward a slightly less restrictive labor environment in Europe, most notably in England, the gap is seen to be widening in favor of the United States as a more flexible place to do business.

Another characteristic in the world environment which is unfortunate but must be recognized is the lack of alternatives in the world investment climate. Businesses measure success by growth; successful businesses are not static by their nature. In a different world, Eastern Europe, Africa, Latin America, and the Asian land mass would provide outlets for that growth; as it is, the realistic options have *narrowed* in recent years, making a U.S. investment even more of an imperative.

The U.S. environment is itself supportive of direct investment in several ways. Our wrenching readjustments in the face of world competition have resulted in low valuation of some corporate assets, making those assets more likely targets for offshore acquisition. Corporate restructuring has thrown up divisions or subsidiaries that are unprofitable or outside the strategic thrust of the original owner, but that represent a market fit or point of entry for the foreign buyer. Obviously interstate competition for new investment has gone well beyond southern lures to northern manufacturers; the trade mission from Nashville is as likely to be in Tokyo as in Detroit. Threats of protectionism, either through tariffs or quotas, are a more recent spur to a manufacturing presence in the U.S. domestic market, outweighing the negatives of higher labor costs. In sum the economic trends in the world and in the United States not only support further direct investment; they create

an environment in which *not* to have a presence in the United States can be seen to represent an undue risk.

What about financial market developments that are supportive of investment from the outside? They are may, and in my view they are crucial to the decision process, since they provide at least initial comfort to the decision makers. They make managements and their boards of directors *feel* better.

Let's look at the decision process and how it relates to the market. First, it is fair to say that most decisions are taken against a five-year time frame. Ten-year forecasts can be drawn as part of strategic planning, but only the super confident or super gutsy will pay much attention beyond the fifth year. In the process, strategic options are examined and the broader environmental factors previously mentioned are taken into consideration. If as I concluded earlier those point to a presence in the United States, one or more of several steps will be taken by a potential acquirer. Its existing line organization will be advised to locate appropriate U.S. acquisitions through its own sources of information. Investment and commercial bankers will be apprised of acquisition interests. Consultants may be called upon to abet or confuse the process. A chain of events will be set in motion designed to seek out an opportunity or react quickly when an opportunity arises. The intermediaries not only will arrive in force with screens at the ready; they will also include representatives of home-grown financial institutions as well as those of the United States, the United Kingdom, and other key money centers. Everybody is either in or getting in the M&A game these days, and advice and ideas, some good, some bad, will flow in. Morgan Guaranty as a case in point not only is represented in all the major money centers; it also has 120 research professionals around the world maintaining data bases and analytical papers on every important industry, jurisdiction by jurisdiction. Clearly, such talents are in place to develop business with and stimulate the process of investment by potential acquirers.

Along the line, management will concern itself with financial support of the strategic decision. Here is where those innovations discussed in Richard Levich's paper came into play, but frst let me underscore two points: (1) the world is awash in money; and (2), it is a near certainty that our acquirer's banks and investment banks have branches or home bases in the United States competing strenuously to finance this piece of business. Management will be comforted by multilingual liquidity and multilingual competition. It will also be comforted, as well perhaps as irritated, by transnational documentation—the lawyers have not been slow to follow their clients from and into the United States, and even law firms from as far off as Australia now have American resident offices and partners.

As to the innovations so ably documented by Levich, let me simply highlight two and mention a third that deserves attention. I pointed out that management primarily plans within a five-year horizon. What a comfort therefore that long-dated forward exchange contracts have become a commonplace, going in some cases well beyond five years. As I said earlier, foreign exchange risks may not drive the decision, but partial protection over the medium term puts smiles in the board room. If one adds interest rate swaps, commercial paper bridges, and other means of minimizing the cost of financing the acquisition, the board's comfort will be limited only by its capacity to understand what its financial team is talking about! Finally, the international equity markets are developing an underpinning to the acquisition process. In 1980 Morgan had 270 American depositary receipt (ADR) accounts representing 244 million shares. As of this January we had 450 accounts representing 1.4 billion shares. Out of such statistics flow potential liquidity for the American seller and greatly enhanced flexibility for the buyer. Reuters, for example, set up their ADR facility in 1984 and used its mechanism in 1985 to acquire Rich Inc. by the issuance of new depository shares. One would assume that British Telecom or British Gas will expand via the same process, having incorporated ADRs in their initial privatization.

These are just a few examples to make the point: the markets are developing techniques that support the globalization process to the same extent that the market makers themselves have become globalized, and as long as the United States is a strategic business target, the support systems will push the decision makers in that direction.

As noted earlier, Japanese investments in the United States are expected to grow at a remarkable rate. Within that growth, however, direct investment will increase proportionately, a point most recently made by Michiya Matsukawa of Nikko Securities in the latest paper published by the Group of Thirty, and a point reflecting also the experience of Morgan's M&A group in Tokyo. A deterrent has been Japanese skepticism about acquisitions—joint ventures and green field start-ups have been preferred. However, protectionist concerns and the high cost of doing business in Japan are forcing a reexamination of policy on acquisitions and a drive toward better execution, in which they have been weak heretofore. Among other things, for example, acquisition strategy requires fast decisions as all those last-minute hurdles appear, a real problem for the Japanese, but one they are addressing.

The problem for U.S. manufacturing employment going forward may be that the Japanese are tending to outsource their manufacturing in lower-cost locations elsewhere in Asia and looking to the United States for technology and services, notably finance. And with a year-end 1986 market capitalization of \$34 billion for Nomura Securities alone, as

against \$8 billion for J. P. Morgan, \$3.6 billion for Merrill Lynch, and \$2.7 billion for Chase Manhattan, the prospect of Japanese direct investment concentrated in finance is a bit scary, to say the least! There is also the potential problem of imbalances in U.S. real estate ownership and valuations, as Japanese annual purchases of our real estate have moved to a \$6 billion level in 1986.

Over and above specific questions relating to the Japanese, there is the broader subject of the impact for better or worse of a growing inflow of direct investment in this country. Let me mention a few of the positives and negatives, both for U.S. businesses and for the nation as a whole.

For the American businessman, an important factor in acquisition by a foreign buyer may be the perception of greater continuing job stability for the selling management and staff, since there is less likelihood of duplication of experience and local knowledge. The ability to move ahead without fear of being swallowed by domestic competitors is a corollary plus, an example being the acquisition by Allied Irish Banks of a major interest in the First National Bank of Maryland, leaving the latter intact and with a substantial infusion of capital. There are similarities in the Sumitomo investment in Goldman Sachs. Also, a foreign acquirer can offer its U.S. target a built-in expansion into foreign markets—a quick widening of business horizons. Negatives include the obvious problem of differing business cultures and the flip side of the management picture, that is, the good younger American executive may see promotion to the upper ranks of the parent as unlikely, if not impossible. This is a real problem for the Japanese, but also for more compatible cultures such as Scandinavia, where high personal taxation is a major deterrent to influx of otherwise mobile American managers. There is no one answer to these questions. As a general rule, if the underlying transaction made sense, the positives will outweigh the negatives in the glow of subsequent success.

The nation as a whole should benefit from infusions of capital and business brainpower, capital that by its nature will be more stable than the massive offshore holdings of liquid assets (although parenthetically, when concerns are expressed about foreign investors pulling out of their U.S. holdings, I am more inclined to think, as Martin Feldstein does, of satiation rather than outright withdrawal). A negative, apart from the political concerns of loss of control of our economic destiny—somewhat farfetched at this point—is pointed out in Jeffrey Frankel's paper: earnings on direct investment tend to be greater than interest earned on bonds, and to that extent the underlying current account problem is worsened. Also, as pointed out earlier, multinational self-interests will prevail and may run a political collision course with perceived interests of U.S. voting constituencies.

I conclude by repeating the original theme—the markets speak for themselves, and at the moment they tell us that most signals are go for direct investment, including accumulations of offshore capital, attraction to the United States as a market, and a highly accommodative acquisition environment for corporate decision takers. I see little on the horizon likely to change that market consensus.

Summary of Discussion

Several participants commented on the consequences of direct investment for trade. Thomas Enders recalled that when U.S. multinationals went abroad, exports, through sales to subsidiaries, for example, followed. Later, there may have been a reverse flow, he suggested. Robert Lindsay argued that direct investment is not a substitute for firm or country exports but is rather an effort to hold onto or expand foreign markets. The Swedish investments here, for example, expanded Swedish exports to the United States.

On a different topic, Lionel Olmer expressed some doubt that the EEC internal market would be complete by 1992, and Mario Schimberni conceded that there was some doubt that this target was achievable; he noted that he was doing everything he could to help, but suggested that unification will require great political leadership.

There was some discussion of the reasonableness of the scenario in which foreign investors in the United States lose confidence in their U.S. securities and shift their portfolios quickly overseas, precipitating a crisis. Schimberni accepted the possibility that foreign investors might desire eventually to stop the huge inflow of foreign flows, but he wondered if there were markets anywhere else with the depth and breadth of U.S. markets. Olmer agreed that a sudden collapse was unlikely because the only possibility is the gradual acceptance of the mark and the yen as reserve currencies. Schimberni contended that the macroeconomic climate of low inflation and uncertain growth in Germany and Italy is not conducive to their absorption of capital that had rejected the United States.

Rachel McCulloch opened a discussion on strategies for direct investment by noting that U.S. companies abroad tend to like wholly owned subsidiaries, while foreigners in the United States avail themselves of a range of options. She wondered whether this could be explained by differences between the types of firms. Lindsay considered that the desire of U.S. firms to hold onto their technological advantage and of foreign firms to acquire technology could explain the different behaviors.

Schimberni predicted two basic changes in direct investment. First, the slow rate of overall growth implies that businesses should avoid overcapacity and the resulting competition. Second, the acceleration of the timing of technical change means that a new discovery does not last long and the product cycle is short. The reduction in the number of actors and the bigger critical mass required for the larger amounts of research and development necessary imply that Americans will have to consider partnerships and joint ventures too. In fact some American firms, such as Dupont, already are, which was unheard of five years ago.

Peter Peterson proposed that the trend was toward the global rationalization of the business, not as a U.S. firm with several subsidiaries, for example, but as one global profit center. This makes partial ownership awkward. Robert Ingwersoll agreed that partnership and globalization of production and marketing are not compatible. Charles Parry said that Alcoa has not seen this coordination problem, although he remarked that IBM has had difficulties with cross-border transport of components. He observed a problem for the national interest in the possibly conflicting desires to preserve national technological leads and to optimize the location of manufacturing.

The issue goes beyond ownership integration to management integration, pointed out Bruce Atwater. In the 1950s and 1960s the European subsidiaries of U.S. companies primarily were run by American managers. Now most European subsidiaries are run by national managers, and the issue has moved to internationalizing parent-company management. George Voita suggested that the early stages of direct investment involve the acquisition of technology or markets and hence imply subsidiary arrangements, while the more mature stage, where foreign direct investment in the United States may be in ten or fifteen years, involves a more global structure and management.

Schimberni argued that the joint venture may have some advantages from a cultural point of view. The difference in organizations might reflect a difference in management styles, not a more primitive stage of investment. The flexibility of European firms comes from the necessity to be international in orientation. The management must fit the community. IBM, for example, suffers in Japan because it is wholly owned and has partly American managers. To successfully penetrate Japanese markets will require joint ventures and a long-term point of view. His firm's joint venture with Hercules, a fifty-fifty proposition, would not have been more successful as a wholly owned subsidiary.