

By ALICIA M. QUIJANO

A Guide to BEA Statistics on Foreign Direct Investment in the United States

THE recent surge in foreign direct investment in the United States has caused a great deal of public debate on the magnitude and significance of such investment. Attention is focused on questions such as how much is invested, who is investing from abroad, what industries are most affected, what States receive the most investment, and how are these investments financed. This guide is designed to help those interested in foreign direct investment in the United States understand the data that are collected and published by the Bureau of Economic Analysis (BEA). Its purpose is to explain the types of information collected and clarify the differences in the data sets.

Direct investment implies that a person in one country has a lasting interest in and a degree of influence over the management of a business enterprise in another country. The criteria used to distinguish direct investment from other types of investment are rather arbitrary. In most countries, some percentage of ownership of a foreign company is used. The criterion used in the United States is set forth in the International Investment and Trade in Services Survey Act, which authorizes the collection of the direct investment data by BEA. Under the act, ownership or control of 10 percent or more of an enterprise's voting securities is considered evidence of a lasting interest in or a degree of influence over management sufficient to constitute direct investment. Thus, foreign direct investment in the United States is defined as the ownership or control, directly or indirectly, by one foreign person of 10 percent or more of the voting securities of an incorporated U.S. business

Further Information About Direct Investment

A list of other articles, publications, and diskettes on direct investment is available from BEA. Requests should be sent to International Investment Division, Bureau of Economic Analysis, U.S. Department of Commerce, BE-50, Washington, D.C. 20230.

enterprise or the equivalent interest in an unincorporated U.S. business enterprise. Any foreign investment that is not direct investment by this definition is considered portfolio investment. Data on portfolio investment are collected by the Treasury Department and are included, together with BEA's data on direct investment, in the U.S. international transactions accounts and in the U.S. international investment position of the United States, both of which appear in the SURVEY OF CURRENT BUSINESS.

BEA's data provide comprehensive and reliable information needed to monitor, assess the impact of, and guide U.S. policy on foreign direct investment in the United States. They give a detailed picture of the levels, growth, origin, and State and industrial distribution of foreign direct investment and of the financial and operating characteristics of the U.S. affiliates. The data are collected under the International Investment and Trade in Services Survey Act by means of mandatory surveys of the U.S. affiliates of foreign companies; they are published in regular articles in the SURVEY and in supplementary publications.¹

General Description of Data

BEA collects three broad sets of data: (1) Balance of payments and the direct investment position data, (2) financial and operating data of U.S. affiliates, and (3) establishment and acquisition data. Each of these data sets focuses on a distinct aspect of foreign direct investment in the United States. The *balance of payments and direct investment position data* track the transactions and positions of both new and existing U.S. affiliates with their foreign parents; the *financial and operating data* provide a picture of the overall activities of the U.S. affiliates; and the *acquisition and establishment data* track new direct investments, regardless of whether the invested funds were raised here or abroad.

Balance of payments and direct investment position data

This set of data covers the U.S. affiliate's transactions and positions with its foreign parent or other members of its foreign parent group. (See box on page 30.) The major items included in the U.S. balance of payments are direct investment capital flows, direct investment income, royalties and license fees, and other services transactions with affiliated foreigners. The foreign direct investment position in the United States is a component of the U.S. international investment position. Balance of payments data are collected in two BEA quarterly surveys and are published in quarterly articles on U.S. international transactions in the March, June, September, and December issues of the SURVEY OF CURRENT BUSINESS. The position data are published in the U.S. international investment position article in the June SURVEY. More detailed tables on capital and income flows and on the position appear in the August SURVEY.

NOTE.—Much of the material in this article was drawn from methodologies and technical notes by Betty L. Barker, R. David Belli, and Ned G. Howenstine, which appear in other sources.

1. See table 5 on page 34. The data are also available on diskette or magnetic tape, and BEA can prepare additional tabulations at cost, within the limits of available resources.

Direct investment capital flows consist of equity and intercompany debt flows between U.S. affiliates and their foreign parent groups and the foreign parents' share of the reinvested earnings of their U.S. affiliates. They represent the financing supplied to an affiliate by its foreign parent group. As discussed in the box, capital flows can take place between the U.S. affiliate and the foreign parent, the ultimate beneficial owner (UBO), or other members of the foreign parent group.

The *direct investment position* equals the yearend book value of the foreign parent groups' equity (including retained earnings) in, and net outstanding loans to, their U.S. affiliates. In other words, it is the *cumulative* value of net capital inflows from foreign direct investors. The position at the end of the current year is equal to the position at the end of the *previous* year plus net capital inflows and valuation adjustments in the current year.²

2. Valuation adjustments primarily reflect differences between transaction values, which are used to record direct investment capital inflows, and book val-

For example, the foreign direct investment position in the United States was \$271.8 billion at yearend 1987. In 1988, net capital inflows were \$58.4 billion and net valuation adjustments were a negative \$1.4 billion. Adding the latter two figures to the 1987 position gives the yearend 1988 position of \$328.9 billion (table 1).

The direct investment position estimates are carried at book value and are not adjusted to current value. Thus, they largely reflect prices at the time of investment rather than prices of the current period. For a brief discussion of book value, see the section on characteristics of the data.

Direct investment income consists of (1) the foreign parents' shares of the U.S. affiliates' earnings (net of U.S. withholding taxes on distributed earnings) and (2) interest on intercompany

uses on U.S. affiliates' books, which are used to record the position and hence changes in the position. For example, these adjustments include differences between the sales value and the book value of affiliates that are sold by foreign parents and differences between the purchase value and the book value of affiliates that are acquired by foreign parents.

Table 1.—Foreign Direct Investment in the United States: Position, Capital, Income, and Other Flows, 1987–88

(Millions of dollars)		
	1987	1988
Position.....	271,788	328,850
Capital inflow (outflow).....	46,894	58,435
Equity capital.....	30,621	40,362
Reinvested earnings.....	1,481	6,560
Intercompany debt.....	14,792	11,513
Valuation adjustments.....	4,480	-1,373
Income.....	9,500	16,748
Earnings.....	5,874	11,830
Interest.....	3,626	4,918
Royalties and license fees.....	843	968
Other service charges.....	-616	-694

debt of the U.S. affiliates with their foreign parent groups. Earnings is defined as the foreign parent's share in the net income of the U.S. affiliate, after provision for U.S. income taxes. Interest is defined as interest paid by the U.S. affiliate to the foreign parent group, net of interest received by the U.S. affiliate from the foreign parent group and net of U.S. and foreign withholding taxes.

Relationships and Transactions of U.S. Affiliates with Their Foreign Parent Groups

In many cases, a U.S. affiliate is only one unit in a global network of corporate affiliations. Thus, a U.S. affiliate may have a foreign parent who, in turn, is owned by a direct investor of a third country or who has affiliates in other countries.

An affiliate's *foreign parent* is the first person outside the United States in the U.S. affiliate's ownership chain that has a direct investment interest in the affiliate. Its *ultimate beneficial owner* (UBO) is that person, proceeding up the U.S. affiliate's ownership chain beginning with and including the foreign parent, that is not owned more than 50 percent by another person.

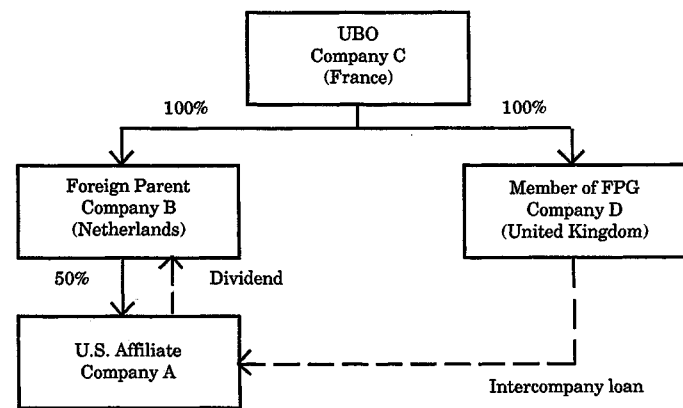
The *foreign parent group* (FPG) consists of (1) the foreign parent, (2) any foreign person, proceeding up the foreign parent's ownership chain, that owns more than 50 percent of the person below it, up to and including the UBO, and, (3) any foreign person, proceeding down the ownership chain(s) of each of these members, that is owned more than 50 percent by the person above it. In the U.S. balance of payments, transactions of U.S. affiliates with all members of the FPG, not only transactions with foreign parents, are shown as transactions with "affiliated" foreigners.

The diagram below illustrates relationships and transactions that could occur between a U.S. affiliate and members of the FPG. Company A is a U.S. chemical company owned 50 percent by Company B, a Netherlands finance affiliate, which is owned 100 percent by Company C, a French manufacturing company. No single investor has more than 50-percent ownership of Company C. Like Company B, Company D, a British company, is owned 100 percent by Company C. Therefore, Company A's foreign parent is Company B; Company A's UBO is Company C. Company A's FPG consists of Companies B, C, and D. Company D is in the FPG because, even though it does not have an ownership interest in the U.S. affiliate, it is owned more than 50 percent by Company C, the UBO.

If Company A receives a loan from Company D, the transaction would be treated as a direct investment transaction in the balance of payments accounts, because Company D is part of the FPG. The flow would be recorded as an intercompany debt inflow from the United Kingdom; repayments by the affiliate would be recorded as outflows to the United Kingdom.

If Company A pays dividends to Company B, the transaction would be recorded as a direct investment income payment between the United States and the Netherlands in the U.S. balance of payments because the dividends are paid directly to the foreign parent (not the UBO). If the Netherlands company (Company B) then passes on the dividend to the French UBO (Company C), this transaction would not be a U.S.-to-foreign transaction; it is a foreign-to-foreign transaction and as such is not recorded in the U.S. balance of payments. (It would, however, be recorded in the balance of payments accounts of France and the Netherlands.)

The direct investment positions of both Company B and Company D are equal to the book value of their cumulative debt or equity transactions with Company A over time and are calculated at yearend. For Company B, the position is equal to its equity (including reinvested earnings) in Company A plus any net outstanding loans by it to Company A. Company D has an investment position with Company A equal to the remaining balance of the loan. The position of Company C in Company A is zero because it has no direct equity interest in Company A and has made no loans to Company A.



February 1990

SURVEY OF CURRENT BUSINESS

Royalties and license fees are payments by U.S. affiliates to, less receipts by U.S. affiliates from, their foreign parents and other members of the foreign parent groups of fees for the use or purchase of intangible property or rights, such as patents, trademarks, copyrights, franchises, manufacturing rights, and other intangible assets or proprietary rights. Payments and receipts are net of U.S. and foreign withholding taxes.

Other services transactions consist of payments by U.S. affiliates to, less receipts by U.S. affiliates from, their foreign parents and other members of the foreign parent groups of service charges, charges for the use of tangible property, and film and television tape rentals. Service charges consist of fees for services—such as management, professional, or technical services—rendered between U.S. affiliates and their foreign parent groups.

Financial and operating data

The primary focus of the financial and operating data is on the overall operations of the U.S. affiliate, not just on the affiliate's transactions or positions with the foreign parent group. The data cover, among other things, U.S. affiliates' balance sheets and income statements, employment and employee compensation, merchandise trade, sources of external financing, and selected data by State (table 2). They cover only nonbank U.S. affiliates. (Selected data for bank affiliates are available from the Federal Reserve System.) The estimates are based on sample data from BEA's Annual Survey of Foreign Direct Investment in the United States or on universe data from BEA's Benchmark Survey of Foreign Direct Investment in the United States. (The benchmark survey, or census, is BEA's most comprehensive survey and is normally conducted every 5 years.) An annual article in the SURVEY OF CURRENT BUSINESS gives a brief description and analysis of the data. Separate publications provide more detailed data. Data are available annually for 1977 forward.

The information collected on the overall operations of U.S. affiliates may be used to analyze the impact of foreign direct investment on the U.S. economy. For example, the information can answer questions such as: How

Table 2.—Selected Data of Nonbank U.S. Affiliates, 1986–87

	1986	1987	Change		
			Amount	Percent	
	Thousands of employees				
Employment.....	2,937.9	3,159.7	221.8		8
	Millions of dollars				
Total assets.....	838,039	926,042	88,003		11
Gross property, plant, and equipment.....	320,215	346,212	25,997		8
Manufacturing ¹	n.a.	124,803	n.a.	n.a.	n.a.
Commercial property ²	n.a.	90,886	n.a.	n.a.	n.a.
Other.....	n.a.	130,523	n.a.	n.a.	n.a.
Sales.....	672,004	731,392	59,388		9
Goods.....	n.a.	621,848	n.a.	n.a.	n.a.
Services.....	n.a.	90,764	n.a.	n.a.	n.a.
Investment income.....	n.a.	18,780	n.a.	n.a.	n.a.
Net income.....	2,458	9,859	7,401		301
U.S. merchandise exports shipped by affiliates.....	49,560	47,929	-1,631		-3
U.S. merchandise imports shipped to affiliates.....	125,732	140,617	14,885		12

n.a. Not available.

1. Consists of the gross book value of property, plant, and equipment used for manufacturing, including petroleum refining.

2. Consists of the gross book value of all commercial buildings and associated land owned by the affiliate that is used or operated by the affiliate or leased or rented to others. Commercial buildings include apartment buildings, office buildings, hotels, motels, and buildings used for wholesale, retail, and services trades (such as shopping centers, recreational facilities, department stores, bank buildings, restaurants, public garages, and automobile service stations).

many people do foreign-owned companies employ? How much do affiliates spend on plant expansions? What are their assets or sales? To answer these questions, data on the activity of the affiliate as a whole are needed, regardless of the foreign ownership share or the source of financing. Therefore, the data are not adjusted for percentage of foreign ownership. For example, if a French company has a 49-percent interest in a U.S. affiliate, all of the affiliate's employment is included in the data because all of the employees are affected by the foreign parent's influence or control over the management of the enterprise. (As discussed earlier, a 10-percent-or-more ownership interest is considered evidence that a foreign parent has sufficient influence or control over the management of the enterprise to constitute direct investment.)

In some cases, however, data users may want to focus their analysis on U.S. affiliates in which the foreign parent has a majority ownership share. In response to this need, BEA is developing separate estimates of financial and operating data for majority-owned U.S. affiliates—those owned more than 50 percent by foreigners. These estimates are expected to be available by mid-1990.

Acquisition and establishment data

In the late 1970's, after an unprecedented surge in foreign direct investment, BEA developed and implemented a survey of new investments that requires a report from every U.S. business that is newly acquired or established by a foreign direct investor. Since 1979, this survey has provided BEA with the information on new investments needed to continually update its universe of foreign direct investment. The survey also provides users with more timely information on new investments than was available previously. The results of the survey are summarized in an annual SURVEY article, and supplementary tables containing additional detail are available from BEA.

The data from the survey cover (1) existing U.S. business enterprises in which foreign direct investors acquired, directly or through their U.S. affiliates, at least a 10-percent ownership interest and (2) new U.S. business enterprises established by foreign direct investors. The data do not cover the acquisition of additional equity in an existing U.S. affiliate by the foreign parent, the acquisition of an existing U.S. affiliate from a different foreign investor, or plant expansions by an existing U.S. affiliate. These transactions are not considered new investments because they do not result in U.S. affiliates being added to the direct investment universe; rather, they are considered either a transfer or an expansion of an ongoing investment by foreign direct investors.

The survey provides data on investment outlays, that is, on how much foreign direct investors spend in a given year to acquire or establish new U.S. affiliates. Outlays are the total dollar cost of the equity interests acquired or established. The survey also includes data on the number and type of investments and investors and on selected operating items—total assets, sales, net income, employment, and acres of U.S. land owned—for the new U.S. affiliate.

Outlays are presented by type of investor, that is, the foreign parent or an existing U.S. affiliate of the foreign parent (table 3). In the first case, the foreign parent acquires a direct ownership interest in the U.S. affiliate; in the second case, the foreign parent acquires an indirect ownership interest through its existing U.S. affiliate.

Table 3.—Investment Outlays by Country of Each Ultimate Beneficial Owner, 1987–88

	[Millions of dollars]									
	1987 ^a					1988 ^a				
	Total	By type of investment		By type of investor		Total	By type of investment		By type of investor	
Acquisitions		Estab-lishments	Foreign direct investors	U.S. affiliates	Acquisitions		Estab-lishments	Foreign direct investors	U.S. affiliates	
All countries	40,310	33,933	6,377	11,773	28,536	65,019	60,003	5,016	16,400	48,619
Canada	1,276	1,169	107	409	867	10,405	10,291	114	752	9,653
Europe	25,517	24,003	1,514	6,634	18,884	34,157	32,641	1,516	6,958	27,199
Of which:										
France	2,044	1,949	96	946	1,098	3,753	3,276	477	201	3,553
Germany, Federal Republic of	4,664	4,318	347	319	4,345	1,375	1,242	133	430	944
Netherlands	391	204	188	122	269	1,937	1,837	100	218	1,719
Switzerland	2,085	1,926	160	1,302	784	2,017	1,593	424	530	1,487
United Kingdom	15,142	14,648	494	3,300	11,842	21,520	21,371	149	4,779	16,741
Latin America and Other Western Hemisphere	1,483	1,030	454	526	957	106	83	23	86	20
Africa	(^c)	(^c)	(^c)	(^c)	(^c)	28	23	5	6	22
Middle East	925	465	460	527	398	1,004	933	71	112	892
Asia and Pacific	10,928	7,112	3,816	3,522	7,406	19,278	16,004	3,274	8,467	10,811
Of which:										
Australia	2,691	2,609	82	663	2,028	4,211	4,014	197	255	3,956
Japan	7,006	3,340	3,666	2,103	4,903	14,166	11,524	2,642	7,599	6,567
United States	(^c)	(^c)	(^c)	(^c)	(^c)	41	29	12	19	22
Addenda:										
European Communities (12)	22,895	21,631	1,264	5,112	17,783	31,175	30,157	1,018	6,274	24,901
OPEC	1,077	592	485	554	523	1,322	1,250	72	433	889

^a Revised.^b Preliminary.^c Suppressed to avoid disclosure of data of individual companies.* Less than \$500,000 (^d).

The Sets of Data Compared

Acquisition and establishment data compared with balance of payments data

The acquisition and establishment data and the balance of payments data provide different measures of the annual growth in foreign direct investment in the United States.

The acquisition and establishment data cover the actual outlays to establish or acquire new U.S. affiliates, regardless of how or by whom the investment was financed. Thus, the outlays may be made by either the foreign parent or an existing U.S. affiliate, and the source of financing may be other than the foreign parent group, such as local borrowing by existing U.S. affiliates. In contrast, the balance of payments data cover only transactions between foreign parent groups and U.S. affiliates. If, for example, a U.S. affiliate of a German chemical manufacturer acquired a U.S. chemical company by borrowing funds in the United States, the borrowed funds would be included in investment outlays but not in capital inflows in the balance of payments because the acquisition did not involve funds from the foreign parent.

Another difference is that direct investment capital flows finance any of the various operations of existing as well as new U.S. affiliates, whereas investment outlays finance only acquisitions and establishments of new U.S. affiliates. For example, if a German chemical manufacturer supplied its U.S. affiliate with funds to expand a plant, the funds would be included in the balance of payments data as a capital inflow, but would not be included in the acquisition and establishment data as an investment outlay because no new affiliate was created.

Direct investment capital flows related to acquisitions or establishments occur if the foreign parent purchases the equity directly or if the foreign parent or another member of the foreign parent group supplies funds to a U.S. affiliate in order to acquire or establish another U.S. business. Even in these cases, the capital flows may not equal total outlays, because the capital flows may have financed only a portion of the total. In any event, this type of inflow cannot be separated from other capital flows between the foreign parent group and its U.S. affiliates.

The acquisition and establishment data do not cover the acquisition of an existing affiliate by one foreign per-

son from another because no new affiliate was created. For example, if a German chemical manufacturer acquired a U.S. chemical company that was already foreign owned, and thus already a U.S. affiliate, the purchase would not be covered in the acquisition and establishment data. This transaction would be included in the balance of payments data only if the new foreign parent group provided funds to another U.S. affiliate to finance the acquisition indirectly.³

Finally, the two sets of data are presented differently. The balance of payments data are presented by country of foreign parent and by industry of affiliate. The acquisition and establishment data are presented by country of UBO and by industry of the U.S. business enterprise acquired or established. (See subsections on country and industry classification on pp. 34–35.)

Financial and operating data compared with balance of payments data

These two sets of data provide different measures of the size of foreign direct investment in the United States. The measures differ mainly because the financial and operating data cover the overall activities of the U.S. affiliate and are not adjusted for percentage of foreign ownership. In contrast, the balance of payments data focus exclusively on the foreign parent group's investment in the affiliate.

The balance of payments data and the financial and operating data are closely related but the terminology used for certain items in the two sets of data can be a source of misunderstanding to users. For example, data users often confuse the direct investment position—a balance-of-payments-related item—with the total assets of the affiliate—a financial and operating item. Total assets of the affiliate cover all assets of the affiliate carried in its balance sheet, regardless of how the assets are financed. The position is the portion of the affiliate's assets that is financed by the foreign parent or other members of the foreign parent group in the form of debt or equity.

3. This transaction would not be included in the balance of payments data if the foreign parent purchased capital stock in the U.S. affiliate from another foreign person, because that would be a foreign-to-foreign transaction. However, if the foreigners are in different countries, offsetting valuation adjustments would be made by BEA to the direct investment position to reduce the position of the seller's country and to increase the position of the purchaser's country.

Table 4.—External Financial Position of Nonbank U.S. Affiliates, Transactor by Account, 1987

[Millions of dollars]

	External sources of funds					Receivables and financial investments		
	Total	Current liabilities and long-term debt			Owners' equity excluding retained earnings	Total	Current and noncurrent receivables	Noncurrent financial investments
		Total	To banks	To nonbanks				
All transactors.....	783,759	608,830	130,085	478,745	174,929	272,717	226,663	46,054
Foreign parent group.....	234,689	92,520	3,204	89,315	142,169	24,604	22,997	1,607
Other foreign persons.....	25,569	24,573	14,155	10,418	996	8,325	5,825	2,500
U.S. persons.....	523,501	491,737	112,725	379,012	31,764	239,788	197,840	41,948

One way to see the relationship between the direct investment position and total assets of the U.S. affiliate is by examining the composition of external financing of affiliates. Table 4 presents information on the external sources of funds, including funds from the foreign parent group, used by affiliates to finance assets in 1987. Affiliate liabilities and owners' equity are broken down by transactor—that is, by the foreign parent group, unaffiliated foreign persons, or U.S. persons. The values for liabilities and owners' equity of the foreign parent group are roughly equal to the direct investment position.⁴

Two important observations can be made from this table. First, although financing from foreign parent groups is an important source of funds, financing from U.S. sources is even more important. Second, foreign parents account for more than 80 percent of all owners' equity in nonbank U.S. affiliates. Thus, although only a 10-percent ownership interest in an affiliate qualifies as direct investment, most foreign parents wholly own, or have a majority interest in, their U.S. affiliates.

Another financial and operating data item that is sometimes confused with the position is the gross book value of property, plant, and equipment of affiliates. This item is taken from affiliates' balance sheets and is a measure of their total fixed assets, regardless of how these assets are financed. The direct investment position, as stated earlier, is the cumulative value of financing provided by the foreign parent group, regardless of how the funds are used. Thus, the position

reflects sources of funds, whereas the gross book value of property, plant, and equipment reflects uses of funds.

BEA data on the gross book value of property, plant, and equipment are collected by State. Thus, they provide a measure of the extent of the operations of affiliates in a given State. However, information on the amount of foreign parent financing of affiliate operations in a State, or on how much foreign direct investors spend on property, plant, and equipment in the State, is not collected by BEA.

The financial and operating data are generally presented by country of UBO and the balance of payments data are, as noted earlier, presented by country of foreign parent. The country of foreign parent is often the same as the country of UBO. Exceptions arise when, for certain foreign tax, regulatory, or other purposes, foreign direct investors find it advantageous to hold or finance their direct investments in the United States through third countries. For example, many Canadian UBO's hold their U.S. affiliates through affiliates in the Netherlands for tax reasons. In addition, a significant portion of U.S. affiliate financing, including equity capital, comes from affiliates in Caribbean offshore financial centers.

Characteristics of the Data

Data Collection

All foreign direct investments in U.S. business enterprises, including all ownership of real estate other than for personal use, are subject to mandatory reporting to BEA under the International Investment and Trade in Services Survey Act (P.L. 94-472, 90 Stat. 2059, 22 U.S.C. 3101-3108, as amended). The data are collected by means of a series of surveys. Table

5 describes the types of information, the data collection procedures, and the publications where the results can be found.

Confidentiality

Information collected by BEA is protected against unauthorized public disclosure by the International Investment and Trade in Services Survey Act. The act states that the information collected cannot be published or released in such a manner that the person or company that furnished the information can be specifically identified. The act further specifies that the information collected must be used only for statistical and analytical purposes. Use of an individual company's data for tax, investigative, or regulatory purposes is prohibited.

Confidentiality is crucial for maintaining the integrity of the direct investment data collection system. Confidentiality assures companies that their competitors will not gain an unfair advantage by having access to their data and that the data are gathered for statistical, not regulatory, purposes. If confidentiality were not guaranteed, companies would be less willing to provide accurate information, and the quality of the resulting statistics would suffer.

To ensure confidentiality, data are tested before publication to determine if they should be suppressed (that is, not shown). To avoid disclosing the data of an individual company, a "(D)" is placed in the data cell. The suppression of data in a cell limits analysis by users. However, BEA can do analyses based on individual company data, and it can use individual company data to do special analyses for outside researchers at cost, as long as the results do not disclose proprietary information. The act also permits other Federal agencies to have access to the individual company data if they are designated to perform analytical or statistical functions under the act.

Valuation of the direct investment position

As noted previously, the direct investment position estimates are carried at book value. Thus, they largely reflect prices at the time of investment rather than prices of the current period. As a result, the foreign direct investment position may be understated in relation to current value.

4. The figure for equity and debt investment by the foreign parent group (\$234.7 billion) in table 4 does not match the position figure (\$271.8 billion), primarily because the former, unlike the latter, does not cover bank affiliates and, for nonbank affiliates, does not include retained earnings or affiliates' receivables due from the foreign parent group. Also, the external financing data are on a fiscal year basis, whereas the position data are on a calendar year basis.

Book value is used mainly because historical cost is the accepted basis for company accounting records both in the United States and many other countries. Thus, with few exceptions, book values are the only ones readily available to companies required to report in BEA surveys. For those companies that do have current value estimates, the estimates differ from company to company. For example, estimates may represent an "exit" or sale value, which can be based on an independent appraisal of an affiliate or on offers by potential buyers; or an appraisal oriented towards tax or regulatory reporting; or some measure of specific interest to the company itself or to

its shareholders. BEA is investigating the feasibility of using indirect methods to estimate the current value of the foreign direct investment position.

Country classification

The foreign parent and UBO of a U.S. affiliate are each classified by country. For affiliates with more than one foreign parent or UBO, each foreign parent and UBO is classified separately.

The financial and operating data and the acquisition and establishment data are published primarily by country of UBO because the country of the person that ultimately controls, and

that therefore derives the benefits from owning or controlling, the U.S. affiliate is considered the most important in analyzing these data sets. When a given affiliate has two or more UBO's, the data are shown in the country of the UBO having the largest percentage of ownership in the U.S. affiliate.

The direct investment position and balance of payments data are classified by country of foreign parent rather than by country of UBO. Any transactions with other members of the foreign parent group are assigned to the countries of the other members. This classification is consistent with the U.S. balance of payments methodology, which requires that each trans-

Table 5.—BEA's Foreign Direct Investment Surveys

Survey title and number	Types of information	Data collection procedures	SURVEY OF CURRENT BUSINESS article and related publications
Initial Report on a Foreign Person's Direct or Indirect Acquisition, Establishment, or Purchase of the Operating Assets of a U.S. Business Enterprise, Including Real Estate (BE-13) and Report by a U.S. Person Who Assists or Intervenes in the Acquisition of a U.S. Business Enterprise by, or Who enters into a Joint Venture with, a Foreign Person (BE-14).	Investment outlays by foreign direct investors for the direct or indirect acquisition or establishment of a new U.S. affiliate, and selected operating data of the new U.S. affiliate (total assets, sales, acres of land, net income, and employment).	Mandatory report required when a foreign person or an existing U.S. affiliate establishes or acquires a 10-percent or more voting interest in a U.S. business enterprise and when real estate is purchased other than for personal use. An exemption form is required if the newly acquired or established U.S. affiliate costs less than \$1 million and does not own more than 200 acres of land.	"U.S. Business Enterprises Acquired or Established by Foreign Direct Investors" in the May SURVEY OF CURRENT BUSINESS. Supplementary tables available from BEA for 1980 forward.
Transactions of U.S. Affiliate, Except an Unincorporated Bank, with Foreign Parent (BE-605) and Transactions of Banking Branch or Agency with Foreign Parent (BE-606B).	Changes in foreign parents' equity in their U.S. affiliates; intercompany debt transactions between U.S. affiliates and foreign parent groups; foreign parents' share of affiliate net income, distributed earnings, capital gains and losses, reinvested earnings, and interest; royalties and license fees; and other services transactions between U.S. affiliates and their foreign parent groups.	Mandatory quarterly survey of U.S. affiliates, when an affiliate's assets, annual sales, or annual net income exceeds \$20 million.	Quarterly data on capital, income, and other flows appear in the March, June, September and December SURVEY articles on U.S. international transactions. Direct investment position data appear in the June SURVEY article on the U.S. international investment position. Detailed tables on the position and related capital, income, and other flows between parents and affiliates appear in the August SURVEY.
Annual Survey of Foreign Direct Investment in the United States (BE-15).	U.S. affiliates' balance sheets and income statements; external financial position; property, plant, and equipment; employment and employee compensation; U.S. merchandise trade; and research and development expenditures, including selected data items by State.	Mandatory annual survey of U.S. affiliates, when an affiliate's assets, sales, or net income exceeds \$10 million. Beginning in 1988, a long form must be filed by affiliates with assets, sales, or net income over \$20 million, and a short form must be filed by affiliates with assets, sales, or net income are between \$10 million and \$20 million.	"Operations of U.S. Affiliates of Foreign Companies," usually in the May SURVEY. (In 1989, this article was replaced by an article on the 1987 benchmark survey in the July SURVEY (see below); the article will also appear in the July SURVEY in 1990.) More detailed data for 1977-85 appear in separate publications available from BEA by the same title. Revised 1986 data are available from GPO.
Benchmark Survey of Foreign Direct Investment in the United States (BE-12).	Complete financial and operating data for each U.S. affiliate of foreign direct investors, including selected items by State, and data on the investment position and transactions between U.S. affiliates and their foreign parent groups.	Mandatory benchmark survey, or census, taken every 5 years of each U.S. affiliate, when the U.S. affiliate's assets, sales, or net income exceeds \$1 million or when the affiliate owns 200 or more acres of U.S. land. Affiliates below the exemption level must file an exemption claim on which they report the value of their assets, sales, and net income. Affiliates with assets, sales, or net income greater than \$20 million file a long form; those with assets, sales, or net income exceeds \$1 million, but for which no one item exceeds \$20 million, file a short form.	Preliminary data appeared in "U.S. Affiliates of Foreign Companies: 1987 Benchmark Survey Results" in the July 1989 SURVEY. More detailed data appear in a separate publication available from GPO entitled <i>Foreign Direct Investment in the United States: 1987 Benchmark Survey, Preliminary Results</i> . Final results will be available this summer.

action be assigned to the foreign country with which it occurred.

Industry classification

Data can be classified by industry in three ways: Industry of U.S. affiliate, industry of sales, and industry of UBO. The most widely used classification is by industry of U.S. affiliate.

When data are classified by industry of U.S. affiliate, BEA assigns each affiliate the code of the industry that accounts for the largest percentage of the affiliate's sales. The procedure is as follows:

(1) A U.S. affiliate is first classified in the major industry that accounted for the largest percentage of its sales. Major industry groups are (a) agriculture, forestry, and fishing, (b) mining, (c) petroleum, (d) construction, (e) manufacturing, (f) transportation, communication, and public utilities, (g) wholesale trade, (h) retail trade, (i) finance, insurance, and real estate, and (j) services.

(2) Within the major industry group, the U.S. affiliate is classified in the two-digit subindustry in which its sales were largest.

(3) Within this two-digit industry, the U.S. affiliate is classified in the three-digit subindustry in which its sales were largest.

This procedure ensures that the U.S. affiliate is not assigned to a three-digit subindustry that is outside its major industry even if its sales in that subindustry exceed its sales in the largest three-digit subindustry within its major industry.

When classified by industry of affiliate, all data for an affiliate are shown in a single industry, even if the affiliate has activities in several industries. Thus, the distribution of data by industry of affiliate may differ from the distribution that would result if each of the activities of an affiliate were separately classified by industry. For example, U.S. affiliates of many foreign automobile manufacturers are classified in wholesale trade, not in transportation equipment manufacturing, because most of their sales result from the wholesale distribution of imported cars rather than from sales of cars they manufacture in the United States.

When classified by industry of sales, data in secondary industries are shown in those industries rather than all data being shown in the affiliate's primary

industry. The items that are available by industry of sales are employment and sales. Prior to 1987, these data were only available in benchmark years, but are now available annually.

Classification by industry of UBO is much less detailed than classification by industry of affiliate. Each UBO is assigned to 1 of 17 broad industry categories that is specified by the affiliate.

Comparisons of Foreign Direct Investment Data With All-U.S.-Business Data

This section provides examples of affiliate data and all-U.S.-business data that are reasonably comparable and that provide an indication of the foreign investment share of the U.S. econ-

Table 6.—Selected Comparisons of Nonbank U.S. Affiliates and All Nonbank U.S. Businesses, 1986–87

	1986		1987		U.S. affiliates as a percentage of all U.S. businesses	
	U.S. affiliates	All U.S. businesses	U.S. affiliates	All U.S. businesses	1986	1987
	Thousands of employees					
Employment.....	2,938	84,055	3,160	86,584	3.5	
Billions of dollars						
U.S. merchandise trade:						
U.S. merchandise exports.....	49.6	226.5	47.9	253.9	21.9	18.5
U.S. merchandise imports.....	125.7	365.7	140.6	406.3	34.4	34.6
Research and development expenditures.....	5.8	61.7	6.2	64.9	9.4	9.6
Expenditures for new plant and equipment.....	28.5	379.5	31.6	389.7	7.5	8.1
Gross product.....	148.3	3,626.0	151.9	3,875.9	4.1	3.9
Millions of acres						
Acres of land owned.....	14	2,265.2	14	2,265.2	.6	.6

Table 7.—Total Assets and Sales of U.S. Affiliates and All U.S. Businesses in Manufacturing, 1986–87

	Millions of dollars				U.S. affiliates as a percentage of all U.S. businesses	
	U.S. affiliates		All U.S. businesses		1986	1987
	1986	1987	1986	1987		
Total assets						
Manufacturing.....	243,429	276,764	1,994,119	2,135,266	12.2	13.0
Stone, clay, and glass products.....	11,610	15,016	46,784	48,057	24.8	31.2
Chemicals and allied products.....	70,709	75,552	217,166	244,446	32.6	30.9
Primary metal industries.....	15,231	14,975	73,942	78,678	20.6	19.0
Petroleum and coal products.....	51,003	58,352	334,952	338,384	15.2	17.2
Rubber and plastics products.....	2,406	5,875	41,329	43,956	5.8	13.4
Food and kindred products ¹	21,029	27,689	219,791	235,690	9.6	11.7
Electric and electronic equipment.....	20,156	20,121	173,262	190,363	11.6	10.6
Printing and publishing.....	11,124	10,521	94,154	99,617	11.8	10.6
Instruments and related products.....	4,419	7,652	62,943	78,988	7.0	9.7
Fabricated metal products.....	7,199	7,820	84,491	86,746	8.5	9.0
Paper and allied products.....	5,264	6,027	69,082	85,279	7.6	7.1
Machinery, except electrical.....	10,433	12,171	211,901	213,658	4.9	5.7
Textile products.....	1,188	1,417	26,729	30,817	4.4	4.6
Transportation equipment.....	6,897	7,412	251,406	276,740	2.7	2.7
Other.....	4,761	6,164	86,187	83,847	5.5	7.4
Sales						
Manufacturing.....	222,025	262,343	2,220,931	2,378,212	10.0	11.0
Stone, clay, and glass products.....	11,602	12,075	52,901	54,338	21.9	22.2
Chemicals and allied products.....	60,120	70,238	205,778	225,200	29.2	31.2
Primary metal industries.....	16,283	18,259	85,523	93,627	19.0	19.5
Petroleum and coal products.....	31,408	41,641	226,519	248,324	13.9	16.8
Rubber and plastics products.....	2,885	6,546	60,596	63,293	4.8	10.3
Food and kindred products ¹	21,676	27,751	317,523	340,135	6.8	8.2
Electric and electronic equipment.....	23,579	25,704	193,892	210,870	12.2	12.2
Printing and publishing.....	8,627	9,049	107,552	116,587	8.0	7.8
Instruments and related products.....	4,493	6,802	63,152	74,171	7.1	9.2
Fabricated metal products.....	8,819	8,879	115,694	123,994	7.6	7.2
Paper and allied products.....	5,170	6,350	74,844	95,576	6.9	6.6
Machinery, except electrical.....	10,857	13,087	201,284	206,438	5.4	6.3
Textile products.....	1,588	1,840	46,226	48,284	3.4	3.8
Transportation equipment.....	10,034	8,253	322,438	324,117	3.1	2.5
Other.....	4,884	5,869	147,009	153,258	3.3	3.8

1. Includes tobacco manufacturing.
NOTE.—In this table, unlike most other tables on direct investment published here and elsewhere, petroleum and coal products is included in manufacturing in order to be consistent with the industry classification of the all-U.S.-business data.

omy. Table 6 shows selected U.S. affiliate and all-U.S.-business data for all industries combined, and table 7 compares total assets and sales of U.S. affiliates and all U.S. businesses in manufacturing. Table 8 lists the sources of the all-U.S.-business data. The data in tables 6 and 7 are included here only to illustrate some of the comparisons that can be made. Additional comparisons may also be possible.

As tables 6 and 7 indicate, the U.S. affiliate share of the total U.S. economy varies according to the measure used. Analyses of several measures and the variations among them can be found in other BEA publications.⁵

It should be noted that, in cases where reasonably comparable U.S. affiliate and all-U.S. data are available, not all measures are available for every industry. For example, for some items, such as assets and sales, comparable U.S. affiliate and all-U.S.-business data are available only for manufacturing. For other items, such as employment, strictly comparable data are available only at the all-industries level.⁶

For a few items, such as the foreign direct investment position, no readily available U.S. counterpart exists. Because the position is the most commonly used measure of direct investment, many users would like to relate it to a comparable figure for all U.S. businesses. However, the position, as explained earlier, is the cumulation of capital flows between U.S. affiliates and members of the foreign parent group, and it is a concept relevant only in a balance of payments context.

Regardless of the measure used, comparisons of the U.S. affiliate and all-U.S.-business data should be made with caution because of definitional and conceptual differences in the data series, such as differences in valuation, industry classification, and coverage.

Valuation.—Comparisons of U.S. affiliate assets and all-U.S.-business data on assets may be affected by the use of book rather than current value. When a company is acquired, whether by foreign or U.S. buyers, its assets are often revalued to reflect the new, gen-

erally higher value implicit in the acquisition price. Because much of the growth in foreign direct investment in recent years has involved acquisitions, the share of affiliates' assets that has been revalued is probably much higher than that for all U.S. businesses. Thus, affiliates' assets may tend to be overstated relative to assets of all U.S. businesses.

Industry classification.—Comparisons of U.S. affiliate and all-U.S.-business data at detailed industry levels are not appropriate when the affiliate data are classified by industry

at the enterprise (company) level and the all-U.S.-business data are classified by industry at the establishment level. For example, when affiliate employment is classified by industry of enterprise but all-U.S.-business employment is classified by industry of establishment, comparisons of the affiliate share of U.S. employment can only be made for broad industry groups, such as petroleum, manufacturing, or wholesale trade.

In benchmark years and in future annual publications, comparisons of employment can be made using data

Table 8.—All-U.S.-Business Data Sources Comparable to Foreign Direct Investment in the United States Data

Item	All-U.S.-business data source	Comments
Employment	Table 6.6B, "National Income and Product Accounts Tables," July SURVEY OF CURRENT BUSINESS.	Employment of government and government enterprises, banks, and private households must be subtracted from all-U.S. data. FDIUS data are classified by industry of enterprise; all-U.S. data are classified by industry of establishment. Thus, comparisons can only be made for major industries.
Employment by industry of sales.	Same as above.....	FDIUS data available for 1980 and 1987 and will be available annually for 1988 forward.
Manufacturing employment by State.	<i>Employment and Earnings</i> , May 1988, Bureau of Labor Statistics, U.S. Department of Labor.	
Total assets.....	<i>Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations</i> , Census Bureau, U.S. Department of Commerce.	Comparison is limited to manufacturing because of differences in coverage.
Sales	Same as for total assets	Same as for total assets.
Expenditures for new plant and equipment.	"Plant and Equipment Expenditures, Third Quarter 1989," Commerce News Release (CB-89-199), December 1989, Census Bureau, U.S. Department of Commerce.	These data have been collected and published by the Census Bureau since August 1988. Data for years prior to 1987 are available in the June issues of the SURVEY OF CURRENT BUSINESS.
Gross product.....	Table 6.1, "National Income and Product Accounts Tables," July SURVEY OF CURRENT BUSINESS.	All-U.S. data are classified by industry of establishment. Government, banking, and private household figures should be subtracted from all-U.S. data for a closer comparison. FDIUS tables are available from BEA.
Merchandise trade.....	<i>Highlights of U.S. Export and Import Trade</i> (publication FT990), Census Bureau, U.S. Department of Commerce.	
Research and development expenditures.	<i>Research and Development in Industry</i> , National Science Foundation.	Although the totals in the two data sets are comparable, industry comparisons are limited because of differences in industry classification. For a given industry, all-U.S. data include R&D performed by companies in that industry and exclude R&D performed for companies in that industry by others; FDIUS data include R&D performed for the companies in that industry by others and exclude R&D performed by the companies in that industry for others.
Acres of land owned.....	Geography Division, Census Bureau, U.S. Department of Commerce.	

FDIUS Foreign direct investment in the United States.

5. For the most recent analysis, see "U.S. Affiliates of Foreign Companies: 1987 Benchmark Survey Results" in the July 1989 SURVEY OF CURRENT BUSINESS.

6. However, reasonable comparisons below that level can be made using all-U.S. employment data disaggregated by industry of establishment and affiliate data disaggregated by industry of sales. See the subsection on industry classification below and the article cited in footnote 5 for further explanation.

classified by industry of sales. Affiliate employment classified by industry of sales should approximate that classified by industry of establishment (plant) because an affiliate that has an establishment in an industry usually also has sales in the industry.

Another difference in industry classification between affiliate data and all-U.S.-business data is the treatment of the petroleum and coal products industry. In the affiliate data, companies in this industry are classified in petroleum, whereas in the all-U.S.-business data, they are classified in manufacturing. However, in this in-

stance, the affiliate data can be easily reclassified to be comparable to the all-U.S.-business data.

Coverage.—The data for U.S. affiliates can be compared with data for all U.S. businesses at fairly detailed industry levels by using all-U.S.-business data classified at the enterprise level. However, differences in coverage between the two data sets may preclude comparisons for some industries. The Census Bureau's *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations*

(*QFR*) contains data on total assets and sales by U.S. manufacturing subindustry. The comparisons made with these all-U.S.-business data are limited to manufacturing because the *QFR* data for mining and trade cover only corporations with assets over \$25 million, whereas the universe estimates for U.S. affiliates cover U.S. business enterprises with assets, sales, or net income over \$1 million. Also, the exclusion of unincorporated businesses from the *QFR* mining and trade data means that a significant portion of the all-U.S.-business activity in these industries is missing.