# Chapter 3 Services in the Balance of Payments

# FEDERAL GOVERNMENT FIGURES FOR THE U.S. BALANCE OF PAYMENTS IN SERVICES

According to official Bureau of Economic Analysis (BEA) figures, the U.S. current account deficit came to \$31.9 billion in 1983 and \$95.9 billion in 1984. Preliminary results for 1985 put the deficit at an estimated \$102.9 bill ion,'

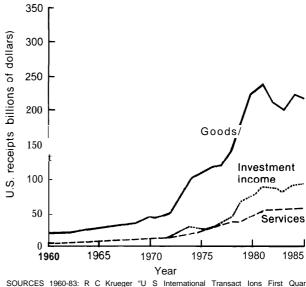
The current account can be divided into two components: 1) trade in goods; and 2) other, nongoods transactions, or invisibles. The invisible portion of the current account is sometimes referred to as the "services" account, a usage that differs from the terminology adopted by OTA and one that is misleading, The reason is as follows, The invisible account includes two different types of receipts: 1) factor income (primarily returns to capital-e,g., dividends, interest income-but also returns to labor, such as the foreign wages of U.S. residents abroad); and 2] non factor income (receipts and payments for value-added services), In this report, OTA refers to the group of all nongoods transactions in the current account as the invisible account, reserving the term services for invisible transactions in which firms or people add value (by providing a service), Thus services are a subset of invisible transactions:

invisible \_ factor income nonfactor income receipts(mostly investment income)+(value-added service)

with a parallel definition for invisible payments.

Figures 1 and 2 present the official U.S, current account figures for receipts and payments, respectively, divided between goods and the two primary invisible categories, services and investment income. Figure 3 presents the U.S. current account balance (surplus or deficit)

Figure I.— BEA (Bureau of Economic Analysis) Estimates of U.S. Current Account Receipts



SOURCES 1960-83: R C Krueger "U S International Transact Ions First Quar ter 1985, " Survey of Current Business, June 1985, pp 34-71 1984.85: C L Bach "U S International Transactions Fourth Quarter and Year 1985, ' Survey of Current Business March 1986 pp 2454

for each of these items. The deficit on goods reached \$114.1 billion in 1984, and an estimated \$124.3 billion in 1985, As figure 3 shows, the United States last ran a surplus in the goods account in 1975.

Figure 3 also presents the balance on investment income, the single largest component of invisible transactions. As the figure shows, the United States has consistently realized a substantial surplus on income from foreign direct investment (FDI), although the magnitude of the surplus has declined in recent years from a peak of \$34,1 billion in 1981 to \$19.1 billion in 1984; preliminary figures for 1985 put the investment income surplus at \$24.7 billion.

The final major component in the current account consists of receipts and payments—or ex-

<sup>&</sup>lt;sup>1</sup> These figures, and all the rest of the BEA data used in this report, exclude transfers of goods and services under U, S, m i] i-tar}' grant programs. They also exclude net unilateral transfers, such as Federal Government grants and pensions. including net unilateral transfers would increase the U.S. current account deficit by \$8.7 billion in 1983.\$ 11.4 hill ion in 1984 and \$14,8 hill ion (preliminary) in 1985.

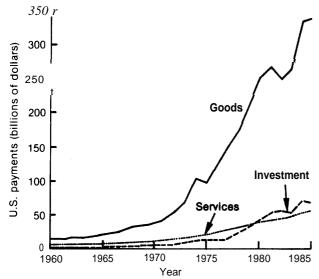
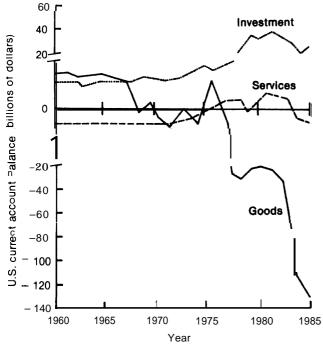


Figure 2.— BEA (Bureau of Economic Analysis) Estimates of U.S. Current Account Payments

SOURCES: 1960.83: R.C. Krueger, "U.S. International Transactions, First Quarter 1985," Survey of Current Business, June 1985, pp. 34-71 1984.85: C L. Bach, "U S. International Transactions, Fourth Quarter and Year 1985," Survey of Current Business, March 1988, pp. 24-54

Figure 3.—BEA (Bureau of Economic Analysis) Estimates of U.S. Current Account Balance



SOURCES: 1960-83: R.C Krueger, "U.S International Transactions, First Quarter 1985, " Survey of Current Business, June 1985, pp. 34-71 1984-85: C L Bach, "U.S. International Transactions, Fourth Quarter and Year 1985, " Survey of Current Business, March 1988, pp 24-54

ports and imports—for value-added services. As figure 3 indicates, official estimates for the service account show a consistent deficit position from 1960 to 1974, followed by a fairly rapid shift to a surplus of over \$7 billion in 1981 and 1982. BEA's totals show a declining surplus since then, shifting to the deficit side in 1985—an excess of imports over exports of \$1.2 billion, according to the preliminary figures the first deficit since 1974. (OTA's estimates, presented in ch. 4, result in larger surpluses.)

Figures 4 and 5 present greater detail on invisible transactions in the official current account statistics. As figure 4 indicates, the largest contributors to U.S. invisible receipts in 1985 were not service exports but rather nonservice invisible transactions generating investment income, The category "other private receipts, consisting primarily of U.S. portfolio investment abroad and bank income on foreign assets, made up the largest component of invisible receipts in 1985 at \$49,9 billion. Income resulting from U.S. FDI contributed \$35.3 billion to invisible receipts, while U.S. Government receipts on assets abroad added \$5.3 billion (including interest on loans to developing countries). Combined, these three nonservice invisible categories accounted for nearly twothirds of all invisible receipts in the official balance of payments.

According to BEA's figures, service transactions as a whole contributed \$46.0 billion to invisible receipts in 1985, Transportation services were the single largest component at \$14.3 billion, followed by exports of travel services (i.e., travel expenditures in the United States by visitors from overseas) at \$11.7 billion, Fees and royalties added \$8.5 billion, while the category "receipts for other private services, " including business services, generated \$7.6 billion,

As figure 5 shows, the pattern for invisibles was similar on the import (payments) side. Combined, the three nonservice invisible categories totaled \$65.8 billion, or 58 percent of all invisible payments. Services came to \$47.2 billion,

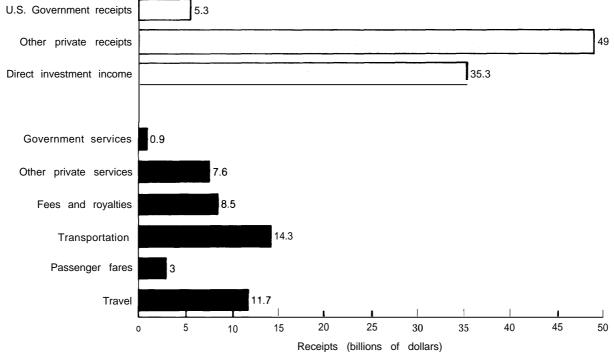


Figure 4.— BEA (Bureau of Economic Analysis) Estimates of U.S. Invisible Receipts, 1985 (preliminary)

SOURCE C L Bach, "U S International Transactions, Fourth Quarter and Year 1985, " Survey of Current Business, March 1986, pp 24.54

with travel (\$17. o billion) and transportation (\$16.3 billion) the largest components.

The official figures show that trade in services and other international invisible transactions have a substantial impact on the U.S. balance of payments. However, OTA's analysis indicates that estimates of U.S. invisibles transactions, and particularly exports and imports of services, are subject to much greater errors than estimates for trade in goods, Thus the BEA figures summarized above are not a very accurate reflection of the actual level of U.S. trade in invisibles, particularly services. As discussed in the next section, most of the errors in the current account reflect *underesti*mates of service transactions, with both exports and imports likely to be underreported. Chapter 4 presents OTA's estimates of the impact of services on the balance of payments, constructed by supplementing Federal Government data with information from other sources.

# FEDERAL GOVERNMENT PROCEDURES FOR MEASURING SERVICES AND INVESTMENT IN THE BALANCE OF PAYMENTS

BEA, part of the Department of Commerce, collects most U.S. data on invisibles trade, and is responsible for all the reporting on invisibles that appears in the U.S. balance of payments, The Bureau collects this data primarily by surveying participants in international services transactions (exports and imports of services) and by surveys of international direct investment activities of both U.S. firms and the American affiliates of foreign firms,

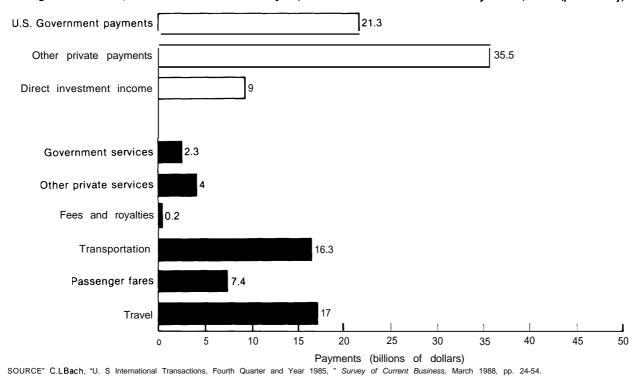


Figure 5.—BEA (Bureau of Economic Analysis) Estimates of U.S. Invisible Payments, 1985 (preliminary)

Quarterly articles in the *Survey of Current Business*, published by BEA, summarize U.S. international transactions, presenting data on receipts and payments for private invisibles transactions in six major service categories (travel, passenger fares, transportation, affiliated and unaffiliated fees and royalties, and other private services) and three investment income categories (direct investment, other private payments and receipts, and U.S. Government payments and receipts). The tabulations also include a category for miscellaneous government service transactions.

In addition, BEA publishes periodic articles in the *Survey* covering specific components of the invisibles account—e.g., an annual review on travel and passenger fares. These provide data in considerably more detail than the quarterly summaries. The Bureau also publishes occasional articles summarizing definitions, changes in measurement techniques, and other points of methodology, In November of 1981, BEA published data on invisibles transactions over time at the maximum level of available detail.2 Updates through 1984 of most of the tables presented in that article are available from the Bureau. Table 2 summarizes the categories used under current methods of data collection and estimation, Geographic detail is also available by region and by selected individual countries for several of the categories listed.

While BEA's summary figures provide useful indicators of the order of magnitude and distribution of international service transactions, the official data on invisibles trade contain a variety of omissions and misclassifications, many of which have been previously identified by BEA. These deficiencies stem primarily from the origins of the invisibles ac-

<sup>&#</sup>x27;A, J, DiLullo, "Service Transactions in the U.S. International Accounts, 1970-1980, " *Survey of Current Business*, November 1981, pp. 29-46.

Travel
•Overseas travel • Canada and Mexico
Passenger fares
<i>Transportation</i> • Ocean freight • Air freight • Other freight • Ocean port services • A i r port services • Other port services • Other transportation
Fees and royalties • Affiliated royalties and license fees (by industry group) • Other affiliated fees and royalties • Unaffiliated fees and royalties (by industry group)
Private miscellaneous receipts and payments Contractors' fees (net receipts only) Reinsurance Communications Foreign governments/international organizations Canadian affiliate trade u n ions Temporary resident wages and expenditures Film rentals Commissions (receipts only) Other private miscellaneous services
Investment Income Direct investment income (by industry group) Other private receipts and payments U.S, Government receipts and payments
U.S. Government transactions •Defense agencies •Other U.S. Government agencies
SOURCE Service Transactions in the US International Accounts, 1977.198. (Washington, DC U S Department of Commerce, Bureau of Econom

Table 2.—Categories for Invisible Transactions in the U.S. Current Account

count, which was at first intended simply as a home for residual transactions in the balance of payments—i.e., for entries other than imports and exports of goods; the data collection and reporting system was not designed to provide detailed information by sector and type of transaction, An additional and inherent difficulty is that, unlike tangible goods, Customs receipts cannot be used to measure the volume of invisible trade; surveys of firms and individuals participating in international invisible transactions must be undertaken.

IC Analysis, no date)

Sources of errors and omissions in the official data include:

• Lack of Detail,—The government collects and presents data on merchandise trade

for roughly 10,000 categories of goods. By comparison, the invisibles account can be disaggregated into about 40 categories at most, and data are typically published at higher levels of aggregation. This lack of detail results in part from the historical lack of interest in invisibles relative to goods. It also reflects the intrinsic problems of measuring many types of service and investment transactions.

- Incomplete Coverage .—The service account in the balance of payments omits many service transactions that take place in nonservice industries (for example, financing provided by a manufacturing firm, or software sold by a computer hardware firm). Also, some of the survey forms for gathering data on service transactions are voluntary, which generally means poor response rates and incomplete coverage. Finally, comprehensive surveys are impractical or impossible for some types of transactions e.g., foreign holdings of private portfolio investment by Americans, or the U.S. portfolio holdings of foreigners.
- Valuation .-- For some kinds of service transactions, assigning values or prices poses vexing problems, Many services are sold bundled with goods—that is, a single price is charged for a bundle of goods and services. In such cases, the value of the service export or import generally appears in the merchandise portion of the trade accounts. Common examples include maintenance or training provided along with the sale of equipment. (Similar problems, of course, exist within the goods account; no figures exist for steel or tires that enter the United States as part of automobile shipments from Japan.) Furthermore, many services e.g., research and development-are provided by U.S. parent firms to their overseas affiliates (or by foreign parents to U.S. affiliates). In such cases, the value assigned to the service may be more a function of bookkeeping or tax considerations than the cost to the company of providing the service or the value added that it represents; this is also true of licensing fees charged to affiliates.



Photo credit National Aeronautics and Space Administration

Satellite receiving antenna for instructional television in India.

Classification.—Somewhat analogous to the bundling problem, factor income and nonfactor income are in some cases mingled in the same account. When this occurs, service transactions cannot be separated from investment income. In addition, transactions involving many of the service industries appear in several different accounts, making analysis of the total international transactions of the industry difficult. The invisibles account classifies some payments and receipts by type of activity (regardless of the industry classification of the firm) and some by primary industry of firm (regardless of activity). For example, international banking transactions appear in three accounts: direct investment income, other private receipts and payments, and fees and royalties. As another example, the software exports of a computer hardware manufacturer might appear in the goods account (bundled with hardware exports) or in the invisible account as a service, a fee, or a royalty; many software exports escape the balance of payments accounts entirely.

Given these difficulties, along with the upsurge of interest in services, BEA has sought to improve data collection by broadening cov-

erage, increasing the level of detail, and developing more accurate methods for estimating trade and investment flows. Table 3 summarizes the deficiencies in the database for the major BEA categories of invisible transactions, noting those likely to have the greatest impacts on BEA's balance of payments figures, The table also indicates where BEA is taking steps to improve the quality of data. The remainder of this chapter expands on the summary in table 3, taking the invisible account by category and including a discussion of BEA methodology, weaknesses in the database, and steps planned or already taken for improving the data collection and estimation process, Federal Government service and investment transactions have been excluded from the discussion below: not only are they relatively small, but the data should be more reliable than for private transactions.<sup>3</sup>

### Travel

This account measures expenditures (excluding passenger fares) of U.S. residents traveling abroad (travel imports) and of foreign residents traveling in the United States (travel exports). BEA collects data through survey forms distributed by the Customs Service at selected U.S. ports of entry and exit,

In theory, the survey population represents all travelers; in practice, sampling has suffered from very low response rates (the actual response rate cannot be calculated because BEA does not know precisely the number of surveys distributed). A second methodological problem arises because the entry/exit ports surveyed have not been chosen at random, but in part for the convenience of the Customs Service.

In addition to the entry/exit surveys, the U.S. Travel and Tourism Administration (USTTA), part of the Commerce Department, administers its own in-flight surveys. While not used in the official balance of payments, these surveys pro-

<sup>&</sup>lt;sup>3</sup>Much of the rest of this chapter draws on discussions with BEA staff members, as well as a BEA staff paper summarizing the data collection process—O.G.Whichard, "U.S. International Trade and Investment in Services: Data Needs and Availability, " Department of Commerce, Bureau of Economic Analysis Staff Paper 41, Washington, DC, September 1984.

Type of problem	Travel	Passenger fares	Transport	Affiliated fees and royalties	Unaffiliated fees and royalties	Miscellaneous private services	Other direct private transactions	investment data
Voluntary survey/low response rate	Voluntary "mail-i n" response <sup>⊪ь</sup>		Low response for U.S freighters *			Low response on technical services <sup>a</sup>		
Surveys old or out of date		1975 survey for ocean passengers					Portfolio Income estimated from 1942 benchmark	
Other methodological problems	. Nonrandom survey distribution <sup>b</sup>					Survey BE-47 voluntary <sup>b</sup>		No annual outbound data before 1982
Inherent problems in assigning value to transaction	s		Trucking cannot be measured	Values reflect bookkeeping considerations	Exchanges not assigned values			Inherent problem In affiliated transactions
Highly aggregate data presentation				Estimated on net basis⁵	LImIted detail by Industry or country	Poor data quality prevents dlsaggregatlon	Poor data quality prevents disaggregation	
Gaps In coverage			Land freight (trucking)		Exchanges	Many services not covered'	Individual portfolios, bank fees <sup>°</sup>	Minority affIllates, service purchases
Commingling of distinct items	.Land travelers' passenger fares included	Port services included in transport account				Several distinct services combined	Lumping of bank services with investment earnings	

## Table 3.—Summary of Deficiencies in BEA Database on Invisible Transactions

<sup>a</sup>May have significant balance-of-payments ramifications. <sup>D</sup>BEA taking steps to improve data.

SOURCE Office of Technology Assessment

vide independent estimates for the overseas expenditures of Americans traveling abroad and of visitors to the United States. Only airline passengers get these survey forms, Results from USTTA surveys have indicated a higher level of per-traveler expenditures than do the Customs/BEA surveys (thus a higher level of trade in travel services).

BEA and USTTA have begun to plan coordinated travel surveys intended to eliminate duplication and produce more accurate estimates. BEA has agreed in principle to use USTTA data for estimating travel expenditures by foreign visitors, with the decision on which source to use for information on U.S. expenditures abroad pending as of mid-1986. Neither survey provides data for estimating travel expenditures broken down by purpose of trip (business, pleasure, education, health, etc.); there is no standard way of apportioning costs on multipurpose trips, which represent a large fraction of international travel.

### **Passenger Fares**

Exports in this account include receipts by U.S. carriers from foreign residents traveling to or from the United States. When an American carrier transports a foreigner between two foreign points, an export is also registered. Imports consist of payments by U.S. residents to foreign carriers. By convention, and according to the guidelines of the International Monetary Fund (which collates trade data on services from more than 120 countries), receipts of U.S. carriers for foreign travel by U.S. residents are treated as purely domestic transactions; these do not appear in the balance of payments, nor do receipts of foreign carriers from foreign residents traveling to or from the United States,

Passenger fares exists as a category separate from other travel-related receipts and payments because the nationalities of the carrier and the passenger together determine whether a fare transaction affects the balance of payments, For example, when a U.S. citizen flies to Europe on a U.S. airline, the fare payment is a purely domestic transaction. Once in Europe, however, the traveler's expenditures would belong in the travel account as a balance of payments item,

The shortcomings in the passenger fares account are primarily the result of outdated benchmark surveys and problematic classification procedures, Import estimates for ocean passenger fares—i.e., payments by U.S. passengers to foreign carriers—are based on extrapolations of a survey conducted by the Immigration and Naturalization Service which was discontinued in 1975 (this may not be a major source of error; extrapolated 1984 payments came to only a little more than \$300 million). In other cases, data belonging conceptually in the passenger fares account have been classified elsewhere. For example, fare expenditures for land travel between the United States and Mexico or Canada are included in the travel account and cannot be estimated separately or combined with other passenger fares. Similarly, some portion of port services expenditures reported in the transportation account (described below) results from passenger travel.' Geographic detail in the passenger fares account is available for 10 world regions but not by individual country.

### Transportation

BEA measures international transportation transactions through surveys, now mandatory, of U.S. air and ocean carriers' foreign earnings (surveys BE-37 and BE-30, respectively), along with U.S. operations of foreign air and ocean carriers (surveys BE-36 and BE-29). The air carrier surveys include questions on both passenger traffic and freight shipping, The Bureau uses this passenger traffic data in compiling the passenger fares account discussed above, although not as the primary source of information on such fares.

<sup>&</sup>lt;sup>4</sup>Ideally, these payments should appear in the passenger fares account; in practice, this separation is not possible. One problem is that many carriers, particularly air carriers, move both passengers and freight. Many port services costs for these firms are fixed and thus cannot easily be allocated between passenger and freight transportation. Even in those cases where costs could be allocated, BEA does not request a breakdown between freight and passenger expenditures for port services, and few firms probably keep such records.

Response rates on the mandatory surveys of foreign carriers operating in the United States have been good. The surveys of U.S. carriers remained voluntary until 1986, For these voluntary surveys, response rates had been acceptable for air carriers but poor for ocean carriers, particularly tankers (a problem partially offset when BEA gained access to Census Bureau data on ocean freight billings).

Shipping by truck between the U.S. and Canada or Mexico does not appear in the transportation balance of payments. As BEA points out, even if complete data were available, it would be necessary to subdivide expenditures, with travel up to the border of the exporting country belonging in the merchandise trade account (thus appearing as a service bundled with trade in goods), and travel in the importing country belonging in the transportation account.

### **Fees and Royalties**

Fees and royalties are classed in two categories: *affiliated* transactions, which occur between U.S. parent firms and their foreign affiliates, or between foreign firms and their U.S. affiliates; and *unaffiliated* transactions, those between firms without direct ownership or investment ties (or with ties amounting to less than 10 percent of equity, the dividing line adopted by the U.S. Government for distinguishing portfolio investment from FDI).

### Affiliated Fees and Royalties

Direct investment can be of two types: outbound, in which an investment relationship exists between a U.S. parent firm (or individual or group) and a foreign affiliate; and *inbound*, in which a foreign firm or individual invests in a business located in the United States. BEA estimates inbound and outbound transactions on a quarterly basis from sample data reported on mandatory forms BE-577 (Direct Transactions of U.S. Reporter with Foreign Affiliate) and BE-605 (Transactions of U.S. Affiliate with Foreign Parent). These surveys sample gross receipts and payments in three categories: 1) royalties, license fees, and other fees for the use or sale of intangible property; 2) charges for the use of tangible property (including film and TV rentals); and 3) allocated expenses (such as R&D assessments) and reimbursements for management, professional, technical, or other services. The universe from which sampling occurs is determined from periodic inbound and outbound benchmark surveys, which also provide independent data on affiliated fees and royalties (these surveys are discussed in detail in the section, "Direct Investment Data" below).

The affiliated fee and royalty data have little real meaning because the prices attached to such transactions must be regarded as bookkeeping values. They cannot be assumed to correspond with market values—i. e., with prices that would hold in arms-length transactions. Because there is no practical way of establishing market valuations, balance of payments figures for transactions between parents and affiliates are seldom useful for analytical purposes.

Beyond this, BEA for many years presented its worldwide totals and geographic subtotals for affiliated royalties and fees on a net rather than a gross basis. Thus published values for affiliated receipts actually represented receipts of U.S. firms minus their payments to affiliates; similarly, the value published for payments of affiliated fees represented payments by U.S. affiliates to foreign parents net of receipts from foreign parents. Companies report receipts and payments separately, but the Bureau subtracted receipts from payments before expanding the sample to generate an estimate for the universe of firms. Until recently, receipts by U.S. parent firms were much larger than payments to affiliates, so that there was relatively little difference between the figures for net and gross receipts. This is no longer true; in recent years, affiliated payments have grown relative to receipts.

BEA is now converting its estimating procedures to a gross basis for affiliated fees and royalties. As of June 1984, the Bureau has estimated inbound data on a gross basis. BEA is also preparing new estimates of gross inbound receipts and payments back to 1980. At present, outbound data is available on a gross basis only for benchmark years (most recently, 1982); yearly gross estimates (and quarterly estimates not disaggregated by industry or country) will be available following benchmarking to the recently released 1982 benchmark survey of outbound FDI.

### Unaffiliated Fees and Royalties

A mandatory annual survey on unaffiliated fee and royalty transactions (form BE-93, International Transactions in Royalties, Licensing Fees, Management Fees, etc. with Unaffiliated Foreign Residents) covers receipts and payments by country of transaction. Here the pricing problem of affiliated transactions is not a concern, given the assumption, which should normally be valid, that charges will reflect armslength valuations when equity ties are no more than 10 percent. The primary limitation in BEA's coverage of unaffiliated transactions arises from the exclusion of "reciprocal exchange(s) of intangible assets or rights where no monetary or in kind compensation is paid. This means, for example, that technology exchange agreements between unaffiliated firms will not be reported unless prices are explicitly negotiated as part of the deal (table 2). There is a further shortcoming, particularly troublesome for analysis based on this data series: no distinctions are made between new license payments and those under ongoing multi-year agreements, While this has no effect on the balance of payments, it does make it impossible to identify changes in the volume and value of licensing on a year-by-year basis.

### **Other Private Services**

Major contributors to this category include contractors' fees, reinsurance, communications, and expenditures by foreign governments and international organizations. The account also contains a number of smaller items—wages and expenditures of U.S. residents working abroad and foreign residents working in the United States; film and videotape rentals between unaffiliated parties; consular fees; miscellaneous commissions—while omitting many business services that belong conceptually. The omissions include accounting, advertising, and direct insurance; other intermediate and business services are significantly underreported, Some services have been left out of the surveys because they were originally judged to be of negligible importance, or because they have only recently become significant internationally; in other cases, surveys have been voluntary, with very low response rates,

Several survey forms contribute to the data BEA reports under this category. BE-47, for instance-which collects information on overseas contracts of U.S. firms—is intended to cover a broad range of technical and business services. The survey was voluntary until April 1986, with few firms outside the architecture, engineering, and construction (AEC) industry responding, Since the survey became mandatory, it has been restricted to AEC firms, and to those engaged in a few other technical activities, such as mining services. Moreover, the form covers exports but not imports; the latter will be reflected only if the reporting firm nets out overseas expenditures associated with a contract. Form BE-48, Reinsurance Transactions with Insurance Companies Resident Abroad, illustrates another of the omissions in this category. The form covers premiums and losses on reinsurance only —i.e., insured risks passed along to third parties, There are no surveys of direct international insurance trans-



Photo credit Bechtel Power Corp

Computer-aided drafting for construction project in Papua New Guinea

actions, which go unreported in the balance of payments.

Because major gaps exist in BEA's coverage of the "other services' account, the agency recently proposed a new mandatory benchmark survey of unaffiliated transactions, BE-20, to be followed by yearly sample surveys. BE-20 would replace existing surveys for fees and royalties, franchising fees, reinsurance, and technical services. In addition, the survey would cover a number of service transactions, some representing substantial revenue flows, on which the Federal Government currently collects no data: direct insurance; advertising; computer and data processing services; database and other information services: telecommunication services; performing arts, sports, and other live performances, presentations, and events. As proposed, BE-20 would also include a category of selected miscellaneous services, only a few covered previously: research and development; management services; consulting; public relations; accounting, auditing, and bookkeeping; agricultural services; legal services; education and training; mailing, reproduction and commercial art; health care management; employment services; industrial engineering; maintenance and repair services; installation, startup and training in connection with sales of goods; and construction, engineering, architectural, and mining services (purchases only).

Late in 1985, the Office of Management and Budget (OMB) rejected the proposed BE-20 survey. OMB called it "unreasonably burdensome" for reasons including a format said to be nonstandard and complicated, instructions that OMB asserted were difficult to interpret, and failure by BEA to pre-test the reporting forms. According to OMB, the Commerce Department had also underestimated the costs to firms of responding. A revised survey may or may not be approved at some later date; in any event, no survey before 1987 at the earliest (i. e., covering 1986 data) would, as of this writing, be possible,

### **Other Private Receipts and Payments**

This account includes three types of items:

- 1. receipts and payments of bank income, including interest on short- and long-term loans, deposits, and other claims (but excluding direct investment income);
- 2. receipts of fees for bank services provided to foreign customers; and
- 3. earnings on foreign portfolio investments (i.e., security holdings amounting to less than 10 percent of a firm's outstanding equity).

BEA constructs estimates for all three, basing interest payment figures, for example, on prevailing interest rates together with estimates of U.S. holdings of foreign assets and foreign holdings of U.S. assets; the overall revenue figure will therefore only be as accurate as the underlying holdings data and BEA's information on prevailing yields.

A major shortcoming of this account is that it commingles nonfactor income (e. g., fees earned by banks) with factor income (e. g., returns to U.S. holders of foreign portfolio investments). This is a fundamental conceptual problem; the value-added services provided by U.S. banks should be viewed quite differently than investment earnings.

In addition to the commingling problem, a number of transactions that belong conceptually in this account are either missing or underreported. Examples include:

- Fees Earned by Banks for Services.-In addition to commingling of bank fee income (as collected by the Federal Reserve Board) with various types of factor income, BEA lacks a basis for estimating some types of bank fee income–e.g., charges for providing guarantees,
- Bank Earnings on Foreign Exchange Dealings.—Here, the gap in coverage appears to be a minor one, While there is little information on the size of unreported bank earnings from these transactions, most foreign exchange transactions by U.S. banks

are either purely domestic in a balance of payments sense (matching U.S. buyers and U.S. sellers) or purely foreign (i.e., between foreign customers and U.S. banks' foreign offices). As such, these transactions are not cross-border and should not appear in the balance of payments.

private Broker Transactions .—Because it is difficult to gage the portfolio transactions of private parties, BEA has little information on the extent to which such transactions—purchase and sale of foreign securities by U.S. holders, and of U.S. securities by foreign holders—may be under- or overestimated. Commissions and fees earned by brokerage firms on such transactions may or may not be balance of payments items, depending on whether broker and client are residents of the same country. Such commissions and fees should appear in the "other private services" category, but in practice they go essentially unreported. In a 1978 benchmark survey of U.S. issuers of debt and equity instruments, the Treasury Department estimated U.S. portfolio investment holdings by foreigners. This benchmark greatly improved the accuracy of the portfolio account on the inbound side (in terms of earnings on investment, not brokerage commissions), but no similar benchmarking has been undertaken for U.S. holdings of foreign portfolio investments. Not only do a very large number of individuals hold such investments. but the U.S. Government also lacks the authority to survey foreign issuers.<sup>5</sup>Private portfolio earnings are currently extrapolated from a 1942 survey.

### **Direct Investment Data**

The Federal Government gathers considerable data on the operating activities and financial status of firms and individuals with direct investments overseas. The FDI category in the current account measures receipts associated with outbound investment (U.S. firms or individuals with direct investments abroad) and payments associated with inbound investment (foreign firms or individuals with investments in the United States). BEA estimates receipts through quarterly sampling of the universe of firms and individuals known to hold such investments, and payments from quarterly samples of the universe of U.S. firms known to be affiliates of foreign investors. In addition, benchmark surveys of the universe of firms and annual sample surveys based on benchmark results provide more detailed financial and operating information. In general, BEA has good balance of payments data on FDI income and payments, certainly in comparison with many of the service categories described above.

BEA surveys direct investment activities in three ways:

- *1. Quarterly surveys* of affiliated transactions which impact the balance of payments (income, capital, and fees and royalties—surveys BE-577 and BE-605),
- 2. Benchmark surveys of direct investment (both outbound and inbound), conducted periodically to identify the universe of FDI relationships for quarterly sampling. These surveys also gather basic financial and operating data from affiliates and parent firms. Outbound benchmark surveys at varying levels of detail were conducted in 1950, 1957, 1966, 1977, and 1982; under current authorization, they will continue at 5-year intervals. The last inbound benchmark survey took place in 1980, BEA will wait until 1987 to conduct the next inbound benchmark, collecting inbound and outbound benchmark data concurrently beginning in that year.
- **3.** Annual sample surveys consisting of less detailed versions of the benchmark surveys. These are now in place for both inbound (since 1977) and outbound (since 1983) direct investment, sampling from the population of firms identified through the benchmarks.

For the benchmark and annual FDI surveys, BEA collects data for 40 service industry sec-

 $<sup>5</sup>_{A}$ Treasury Department feasibility study indicated that a full benchmarking survey (covering the universe of investors) would be prohibitively expensive, although a survey of selected banks, brokerage houses, and insurance companies might help improve the accuracy of this account. See Whichard, op. cit., p. 39.

tors (including construction as a service) and 91 goods-producing sectors (including wholesale trade as a goods sector), Twelve new service classifications were added in the 1982 outbound benchmark; in addition, insurance was subdivided into three subcategories (life, accident and health, and other)."

Major shortcomings in the direct investment data include:

• *Coverage* Gaps.—While inbound data are available on a yearly basis beginning with 1977, there were no annual outbound surveys during the period 1978-81; BEA lacked the authority for such surveys prior to 1982.

Lack of information on minority-owned affiliates (from 10 to 50 percent ownership) restricts the usefulness of the outbound surveys. All U.S. firms responding to both annual and benchmark surveys must provide information on service transactions with affiliates. If the affiliate is majority-owned, BEA requires a detailed statement of financial and operating information, including service transactions with unaffiliated U.S. parties, but the Bureau's experience has been that many U.S. parents holding a minority interest in foreign affiliates cannot provide such information. Since the affiliates are foreign companies, BEA has no authority to question them directly, This creates more serious problems for some sectors than others. In 1982, for example, majority-owned firms accounted for nearly all of the \$1.8 billion in sales by U.S. affiliates in management, consulting, and public relations. However, minority-owned affiliates registered more than \$1.0 billion of the \$1.1 billion in sales by air transport affiliates that year. For the inbound surveys, the affiliates are American firms; these companies can be required to answer, and BEA asks the same questions of majorityand minority-owned affiliates.

• Classification. —The benchmark F D I surveys measure sales revenues of affiliates by industry of affiliate (defined as the industry of the affiliate's primary activity) and by industry of sales. For example, 1982 sales by foreign affiliates classified in the business services industry came to \$10.4 billion, including sales in categories other than business services. Total sales of business services by all firms—including those in other industry categories—came to \$16.8 billion. Thus at least \$6.4 billion in business services represents revenues of firms whose primary activity fell into some other industry category (and perhaps more than \$6.4 billion, since some unknown portion of the \$10.4 billion in sales by business service industry firms would have been nonbusiness-service sales).

The outbound and inbound benchmark surveys and the outbound annual survey present sales data classified by industry of affiliate and by industry of sales; the inbound annual survey does not. Beginning with the 1982 outbound benchmark and the 1983 inbound and outbound sample surveys, total sales of goods and services have been reported separately, broken down by industry of affiliate. But while service sales by firms not classified in a service industry category are reported, as are goods sales of service industry firms, the type of service provided is not identified.

An additional classification problem arises for inbound FDI, because the overseas parent may not be in the same industrial sector as the "ultimate beneficial owner" (UBO). An affiliate's foreign parent is defined as the firm one step up the ownership chain, while the UBO is at the top of the chain. Just as the industries of the parent and the UBO may differ, so may the countries in which parent and UBO are incorporated. The foreign parent of a U.S. affiliate, for example, might in turn be controlled by a UBO based in the United States. BEA typically has published some data from the inbound surveys by industry or country of parent, some by industry or country of UBO, and other data disaggregate by both parent and UBO. In the

<sup>&</sup>lt;sup>6</sup>The 12 new c I assifications are: metal m i n i n g services: travel agents; franchising; R&D and commercial testing laboratories; management, consult ing, and public relations; employment services; computer and data processing services; automotive rental and leasing; equipment rental and leasing (excluding automotive and computer): health services; legal services; and educational services.

future, the Bureau plans to emphasize data disaggregated by UBO.

• Purchases of Services .—While BEA gathers data on the purchases by affiliates of services from parent firms, no reporting has been required on affiliates' purchases of services from unaffiliated parties. BEA considered adding such questions to the 1982 outbound benchmark, but decided to gain experience with affiliates' sales of services before surveying purchases.<sup>7</sup> Also, firms have indicated in consultations with BEA that such data would in many cases be difficult to supply using current bookkeeping procedures.

<sup>7</sup>1bid,, p. 42.