U.S. International Services

Cross-Border Trade in 2006 and Sales Through Affiliates in 2005

By Jennifer Koncz and Anne Flatness

IN this presentation of U.S. international sales and purchases of services, the Bureau of Economic Analysis (BEA) takes a broad perspective by including both services that cross borders and are thus included in the international transactions accounts as exports and imports and services delivered by multinationals' affiliates through the channel of direct investment. This approach accounts for the importance of proximity to customers in the delivery of services, which leads many companies to serve foreign markets, partly or wholly, through their affiliates. In 2005 (the latest year for which data on sales through affiliates are available), as in previous years, the majority of both U.S. international sales and purchases of services was through affiliates (table A and chart 1[1]).

In 2006, U.S. cross-border exports of private services totaled $404.3 billion, and U.S. cross-border imports of private services totaled $307.8 billion. The resulting surplus on cross-border trade in private services was $96.6 billion, up 12 percent from $86.2 billion in 2005. In contrast to the persistent deficit on goods trade, which reached $838.3 billion in 2006, the United States has historically run surpluses on trade in services. In 2005, U.S. sales of services to foreign markets through foreign affiliates of U.S. companies totaled $528.5 billion, and U.S. purchases of services from U.S. affiliates of foreign companies totaled $389.0 billion. The difference between U.S. sales and U.S. purchases through affiliates in 2005 was $139.5 billion, up from $101.1 billion in 2004.

In 2006, cross-border exports of services increased 10 percent, the same as in 2005; cross-border imports grew 9 percent in 2006, also the same as in 2005 (table B). Both cross-border exports and imports increased in all major service categories in 2006 (table C). The largest increase in cross-border exports, in both dollar and percentage terms, was in "other private services," which accounted for almost two-thirds of the dollar increase. Increased exports in "business, professional, and technical services" and in financial services

1. The data on sales through affiliates cover all sales of services by nonbank majority-owned affiliates, irrespective of the percentage of ownership. These data are limited to nonbank affiliates because annual data on sales of services by bank affiliates currently are not reported to BEA.

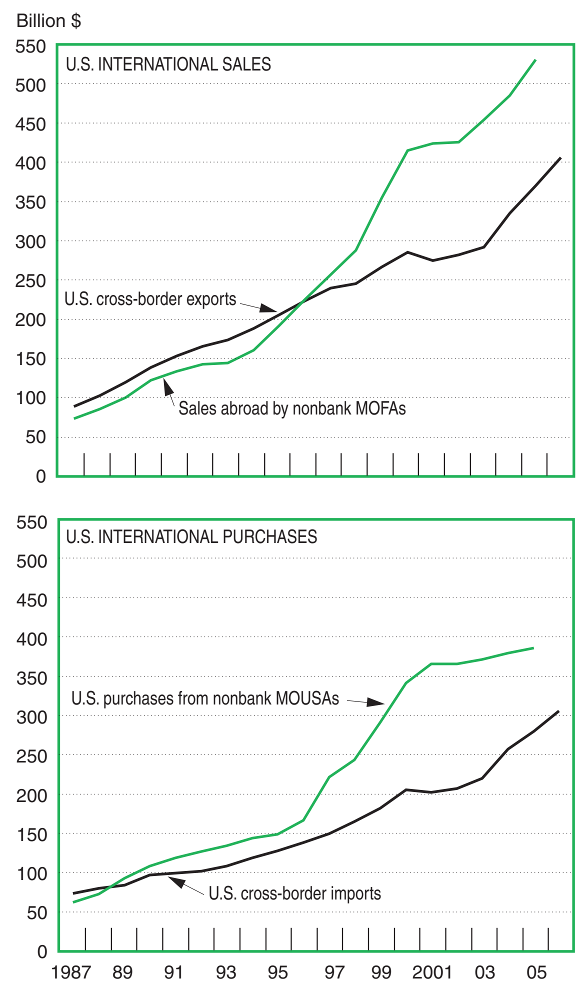
Table A. Sales of Services to Foreign and U.S. Markets

[Billions of dollars]

	U.S. sales to foreign markets		Foreign sales to the U.S. market	
	Across border	Through foreign affiliates	Across border	Through U.S. affiliates
2004	333	483	259	382
2005	368	528	282	389
2006	404	n.a.	308	n.a.

n.a. Not available

Chart 1. U.S. International Sales and Purchases of Private Services, 1987–2006[1]



MOFAs Majority-owned foreign affiliates
MOUSAs Majority-owned U.S. affiliates

1. The data for sales and purchases through majority-owned affiliates are shown through 2005, the latest year for which these data are available.

U.S. Bureau of Economic Analysis

contributed the most to the increase in "other private services" exports. The next largest increase was in "other transportation," which includes services provided by ocean, air, land, pipeline, and inland waterway carriers to transport goods to and from the United States and between foreign ports. The largest increase in cross-border imports, in both dollar and percentage terms, was in "other private services," mainly reflecting increases in "business, professional, and technical services" and in insurance.

Table B. Sales of Services to Foreign and U.S. Markets Through Cross-Border Trade and Through Affiliates

	Through cross-border trade [1]		Through nonbank majority-owned affiliates [2]	
	U.S. exports (receipts)	U.S. imports (payments)	Sales to foreign persons by foreign affiliates of U.S. companies [3]	Sales to U.S. persons by U.S. affiliates of foreign companies
	Billions of dollars			
1986	77.5	64.7	60.5	n.a.
1987	87.0	73.9	72.3	62.6
1988	101.0	81.0	83.8	73.2
1989	117.9	85.3	99.2	94.2
1990	137.2	98.2	121.3	109.2
1991	152.4	99.9	131.6	119.5
1992	164.0	103.5	140.6	128.0
1993	171.6	109.4	142.6	134.7
1994	186.7	120.3	159.1	145.4
1995	203.7	128.7	190.1	149.7
1996	222.1	138.8	223.2	168.4
1997	238.5	151.5	255.3	(4) 223.1
1998	244.4	165.6	286.1	245.5
1999	265.1	183.0	(5) 353.2	293.5
2000	284.0	207.4	413.5	344.4
2001	272.8	204.1	421.7	367.6
2002	279.6	209.0	423.5	367.6
2003	290.2	221.9	452.5	374.1
2004	333.0	259.2	483.0	382.0
2005	367.8	281.6	528.5	389.0
2006	404.3	307.8	n.a.	n.a.
	Percent change from prior year			
1987	12.2	14.2	19.5	....
1988	16.0	9.5	15.9	17.0
1989	16.8	5.3	18.4	28.7
1990	16.4	15.1	22.2	15.9
1991	11.1	1.8	8.5	9.5
1992	7.6	3.5	6.8	7.1
1993	4.6	5.8	1.5	5.3
1994	8.8	9.9	11.6	8.0
1995	9.1	7.0	19.4	2.9
1996	9.0	7.8	17.4	12.5
1997	7.4	9.1	14.4	(4)
1998	2.5	9.4	12.0	10.1
1999	8.5	10.5	(5)	19.6
2000	7.1	13.3	17.1	17.3
2001	–3.9	–1.6	2.0	6.7
2002	2.5	2.4	0.4	(*)
2003	3.8	6.2	6.8	1.8
2004	14.7	16.8	(6) 6.7	2.1
2005	10.5	8.7	9.4	1.9
2006	9.9	9.3	n.a.	n.a.

n.a. Not available.
* A non-zero value between –0.05 and 0.05 percent.
1. The estimates for 2003–2005 are revised from those published in last year's article in this series. See Christopher L. Bach, "Annual Revison of the U.S. International Accounts, 1997–2006," SURVEY OF CURRENT BUSINESS 87 (July 2007): 37–53.
2. The estimates for 2004 are revised from those published in last year's article. The estimates for 2005 are preliminary.
3. The figures shown in this column for 1986-88 have been adjusted, for the purposes of this article, to be consistent with those for 1989 forward, which reflect definitional and methodological improvements made in the 1989 Benchmark Survey of U.S. Direct Investment Abroad. The primary improvement was that investment income of affiliates in finance and insurance was excluded from sales of services. The adjustment was made by assuming that investment income of finance and insurance affiliates in 1986–88 accounted for the same share of sales of services plus investment income as in 1989.
4. Beginning in 1997, sales by U.S. affiliates were classified as goods or services based on industry codes derived from the North American Industry Classification System; the estimates for prior years were based on codes derived from the 1987 Standard Industrial Classification System. This change resulted in a redefinition of sales of services by affiliates, which resulted in a net shift of sales from goods to services. See the box "Changes in the Definition and Classification of Sales of Services by U.S. Affiliates" in the October 1999 SURVEY, page 61.
5. Beginning in 1999, sales by foreign affiliates were classified as goods or services based on industry codes derived from the North American Industry Classification System; the estimates for prior years were based on codes derived from the 1987 Standard Industrial Classification System. This change resulted in a redefinition of sales of services by affiliates, which resulted in a net shift of sales from goods to services. See the box "Changes in the Definition and Classification of Sales of Services by Foreign Affiliates" in the November 2001 SURVEY, page 58.
6. In 2004, BEA began to require that the nonbank units of U.S. banks (including bank and financial holding companies), which were required to file separately in the past, be consolidated on the reports of the banks that owned them. Because the data on sales of services abroad cover only sales by affiliates of nonbank U.S. parents, the change in reporting requirements caused the affiliates of the affected parents to drop out of the data. As a result, the measured change in sales between 2003 and 2004, as computed from the table above, was reduced by about 2 percent. After allowing for the effects of the change, the increase in 2004 would have been about 9 percent. (A parallel change was introduced in the series on sales by U.S. affiliates of foreign companies in 2002, but it did not result in a material discontinuity in the estimates.)

Table C. Cross-Border Services

[Percent change from the preceding year]

	Exports		Imports	
	2005	2006	2005	2006
Private services	10	10	9	9
Travel	10	5	5	4
Passenger fares	11	6	6	5
Other transportation	12	12	14	5
Royalties and license fees	9	5	6	7
Other private services	11	14	9	17

U.S. sales of services abroad through foreign affiliates of U.S. companies increased 9 percent in 2005 after increasing 7 percent in 2004.[2] This marked the third straight year of strong sales growth, following a historical low of less than 1-percent growth in 2002. Sales of services abroad by foreign affiliates grew strongly across all geographic areas and several industry sectors. The largest increases were for affiliates in "finance (except depository institutions) and insurance" and in "professional, scientific, and technical services." For affiliates in some countries, depreciation of the dollar against local currencies, particularly the Canadian dollar and the euro, boosted sales in dollar terms. However, increases in sales by affiliates were to a large extent driven by industry-specific factors. For example, the increase in "finance (except depository institutions) and insurance" reflected a pickup in activity in financial markets, higher commissions for commodities trading due to increased prices, and increased demand for insurance products in the Asia and Pacific region.

U.S. purchases of services from the U.S. affiliates of foreign multinational companies grew 2 percent for the third consecutive year after having slowed to almost no increase in 2002. The pattern of slow growth in recent years contrasts with the period 1998–2000, which was characterized by very rapid growth. During that period, net additions to the affiliate universe resulting from a boom in international merger and acquisition activity boosted sales of services. In contrast, in recent years the pace of new investment by foreign companies has been slower.

In 2005, increases in U.S. purchases of services were largest in administration, support, and waste management and in transportation and warehousing. Shifts in

2. After accounting for the effects of a change in reporting requirements for the nonbank units of U.S. banks, the increase in 2004 would have been about 9 percent. For more information on this change, see footnote 6 in table B in this article and the box "The 2004 Benchmark Survey of U.S. Direct Investment Abroad and the Treatment of Nonbank Units of Banks" in Jennifer Koncz, Michael Mann, and Erin Nephew, "U.S. International Services: Cross-Border Trade in 2005 and Sales Through Affiliates in 2004," SURVEY OF CURRENT BUSINESS 86 (October 2006): 19.

some affiliates' activities to focus on services rather than on manufacturing, contributed to the increase.[3] Overall growth in sales was dampened by decreases in information. In this sector, corporate restructurings resulted in some previously majority-owned affiliates becoming minority-owned and therefore exiting the sales-through-affiliates data set, which covers only majority-owned U.S. affiliates.

It is difficult to compare precisely international services delivered through cross-border transactions with those delivered through affiliates because of differences in coverage, measurement, and classification. For example, data on cross-border sales and purchases of services are collected and published by type of service, whereas data on sales through affiliates are published by primary industry of the affiliate.[4] Despite these differences, the large gap between sales through cross-border transactions and through affiliates suggests that the latter is the larger channel for both U.S. sales and U.S. purchases of private services in international markets (charts 2 and 3).

The remainder of this article consists of four main sections. The first section presents preliminary estimates of cross-border exports and imports of private services for 2006 and revised estimates for 2003–2005. The second section presents preliminary estimates of sales through affiliates for 2005 and revised estimates for 2004. The third section discusses revisions to the estimates, and the fourth section highlights improvements to the estimates of international services.

U.S. Cross-Border Trade in 2006

U.S. exports of private services (receipts) increased 10 percent to $404.3 billion in 2006 after increasing 10 percent in 2005. U.S. imports of private services (payments) increased 9 percent to $307.8 billion after increasing 9 percent. The services surplus increased 12 percent in 2006, down from a 17-percent increase in 2005. The services surplus increased for the third straight year.

Growth in both exports and imports of services remained strong in 2006. Increases in real gross domestic product (GDP) growth of major U.S. trading partners contributed to the continued growth in exports. In the United Kingdom, real GDP growth rose to 2.8 percent from 1.8 percent; in the euro area, it rose to 3.0 percent from 1.8 percent, and in Japan, it rose to 2.2 percent from 1.9 percent. Real GDP growth in Canada fell slightly, to 2.8 percent from 3.1 percent. GDP growth in the United States also slowed slightly in 2006, falling to 2.9 percent from 3.1 percent. Despite this slowdown, U.S. demand for services imports remained strong.

U.S. cross-border trade in services was also affected by changes in the foreign-currency value of the dollar. In 2006, the dollar depreciated 6 percent against the Canadian dollar, less than 1 percent against the euro, and 1 percent against the British pound.[5] The dollar appreciated 6 percent against the Japanese yen and less than 1 percent against the Mexican peso. The depreciation of the U.S. dollar against the Canadian dollar and the euro continued a trend in recent years.

Much of the growth in both exports and imports of private services in 2006 was accounted for by increases in "other private services," especially in "business, professional, and technical services." Financial services also contributed significantly to the growth in receipts, while insurance services contributed significantly to the growth in payments. Growth in both receipts and payments for travel and passenger fares slowed in 2006; growth in receipts slowed more than growth in payments. Growth in receipts for "other transportation" matched the growth recorded in 2005, but growth in payments slowed.

Trade with Europe and Asia and Pacific accounted for two-thirds of total U.S. cross-border exports and imports of private services in 2006 (chart 4). The United Kingdom, Japan, Canada, Germany, and Mexico continued to be the largest services trading partners of the United States (table D). Services trade with China and India continued to grow rapidly in comparison with services trade with most other countries. U.S. services exports to China and India increased over 20 percent in 2006.

Trade within multinational companies (affiliated trade) accounted for 26 percent of U.S. exports of private services in 2006 and for 23 percent of U.S. imports of private services. Affiliated exports of private services

3. Because BEA data on sales through affiliates are classified by primary industry of activity, the shift in composition of affiliates' activities led some affiliates to be classified out of manufacturing and into other sectors in 2005. The reclassification of an affiliate increases sales of services in the industry to which it is classified and decreases sales of services in the industry from which it was classified, but in and of itself it does not affect the overall year-to-year change in sales of services abroad. However, for affiliates that were reclassified into the administration, support, and waste management sector and the transportation and warehousing sector, sales of services rose in 2005. Thus, overall sales of services increased, not just sales of services in the sectors to which affiliates were classified, as a result of growth in the activities of these affiliates.

4. One source of difference in coverage has been the inclusion of services provided by banks in the cross-border data but not in the data on sales of services through affiliates, which is limited to sales by nonbank affiliates and, in the case of U.S. multinationals' foreign affiliates, nonbank affiliates with nonbank parents. BEA is working to address this data gap. In its most recent benchmark surveys for U.S. direct investment abroad and foreign direct investment in the United States, BEA collected data needed to estimate sales of services through bank affiliates, and it has proposed to introduce coverage of banks in its annual survey of U.S. direct investment abroad, beginning with data for 2007. An example of a difference in measurement has been the estimation of insurance services, which is also being addressed by BEA with the collection of new data items on insurance beginning with the most recent benchmark surveys and continuing in the follow-on annual surveys. For more information, see the box "Supplemental Measures of Insurance, Trade Services, and Financial Services Sold through Affiliates."

5. Annual exchange rates are period averages.

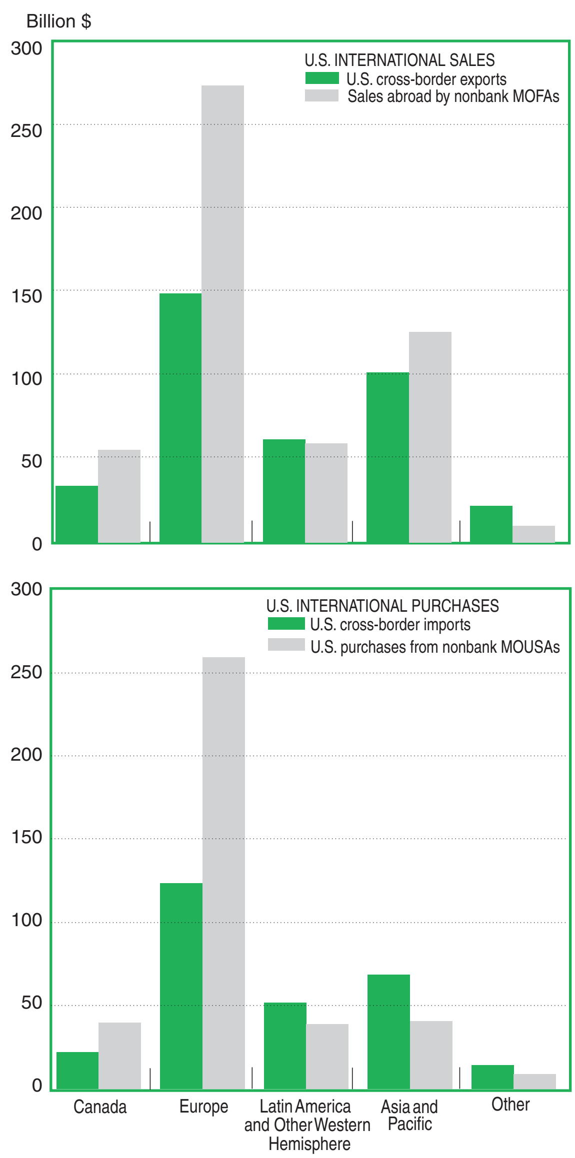
increased 9 percent in 2006 after increasing 10 percent in 2005. Affiliated imports of private services increased 15 percent after a 16-percent increase. Additional information on affiliated trade in services is available in table E.

Travel

Receipts. U.S. travel receipts increased 5 percent to $85.7 billion in 2006 after increasing 10 percent in 2005. Although growth in travel receipts slowed, 2006 marked the third straight year of growth following 3 years of declines. Most of the slowdown in 2006 was attributable to slower growth in travel receipts from overseas (countries other than Canada and Mexico). Growth in receipts from visitors from overseas fell to 3 percent in 2006 from 9 percent in 2005, as the number visitors declined slightly, following 2 years of growth. The number of visitors from Japan declined 5 percent in 2006, following an increase of 4 percent in 2005, leading to a drop in receipts from Japan. Receipts from the rest of Asia and the Pacific, however, increased, driven by a 7-percent increase in the number of visitors. The number of visitors from Europe declined 2 percent in 2006, following a 7-percent increase in 2005, leading to slowed growth in receipts from Europe.

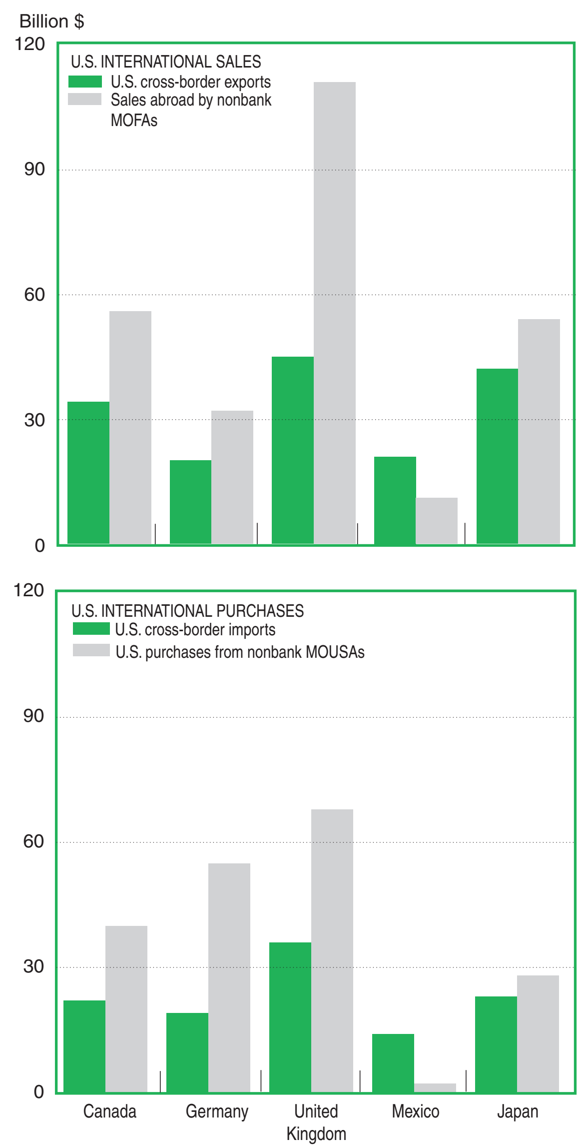
Travel receipts from Canada grew 14 percent to $10.3 billion in 2006, matching the 2005 growth rate. The number of travelers from Canada grew 6 percent

Chart 2. U.S. International Sales and Purchases of Services by Major Area in 2005



MOFAs Majority-owned foreign affiliates
MOUSAs Majority-owned U.S. affiliates
U.S. Bureau of Economic Analysis

Chart 3. U.S. International Sales and Purchases of Services by Major Country in 2005



MOFAs Majority-owned foreign affiliates
MOUSAs Majority-owned U.S. affiliates
U.S. Bureau of Economic Analysis

in 2006, a slightly faster rate than in 2005. Average spending by Canadian visitors also increased, although at a slightly slower rate than in 2005. The appreciation of the Canadian dollar against the U.S. dollar likely contributed to the continued strong growth in travel receipts from Canada.

Travel receipts from Mexico increased 5 percent in 2006 after increasing 8 percent in 2005. Receipts from travel to the interior of the United States accounted for all of the growth in receipts from Mexico. Receipts from visitors to the U.S. interior increased 15 percent, up from 12 percent in 2005, reflecting increases in both the number of visitors and their average expenditures. In contrast, travel receipts from border visitors showed no growth in 2006, as an increase in average expenditures was offset by a decrease in the number of visits.

Payments. U.S. travel payments increased 4 percent to $72.0 billion in 2006, after increasing 5 percent in 2005. Like travel receipts, travel payments increased for the third straight year after declining for 3 years. Growth in travel payments to overseas countries (other than Canada and Mexico) slowed to 5 percent in 2006 from 6 percent in 2005. Growth in the number of U.S. visitors overseas slowed slightly in 2006, partly reflecting higher airfares and the depreciation of the dollar. The slowdown in the number of visitors more than offset a slight increase in average expenditures, partly reflecting increased costs facing those who chose to travel. The slowdown was particularly pronounced in payments to Europe, especially the United Kingdom, and Asia and Pacific.

Travel payments to Canada increased 2 percent in 2006 after decreasing 2 percent in 2005. The number of travelers to Canada decreased 9 percent, continuing a trend of decreasing U.S. travel to Canada that began in 2000. In 2006, a 6-percent depreciation of the U.S. dollar against the Canadian dollar and high gasoline prices were factors contributing to the decrease. However, the drop in the number of travelers was more than offset by an increase in average expenditures. The increase in U.S. travelers' average expenditures may be partly the result of the above-mentioned developments

Types of Cross-Border Services: Coverage and Definitions—Continues

The estimates of cross border transactions cover both affiliated and unaffiliated transactions between U.S. residents and foreign residents. Affiliated transactions consist of intrafirm trade within multinational companies—specifically, the trade between U.S. parent companies and their foreign affiliates and the trade between U.S. affiliates and their foreign parent groups. Unaffiliated transactions are with foreigners that neither own, nor are owned by, the U.S. party to the transaction.

Cross border trade in private services is classified in the same five broad categories that are used in the U.S. international transactions accounts—travel, passenger fares, "other transportation," royalties and license fees, and "other private services."

Travel. These accounts cover purchases of goods and services by U.S. persons traveling abroad and by foreign travelers in the United States for business or personal reasons. These goods and services include food, lodging, recreation, gifts, entertainment, local transportation in the country of travel, and other items incidental to a foreign visit. U.S. travel transactions with both Canada and Mexico include border transactions, such as day trips for shopping and sightseeing.

A "traveler" is a person who stays less than a year in a country and is not a resident of that country. Diplomats and military and civilian government personnel are excluded regardless of their length of stay; their expenditures are included in other international transactions accounts. Students' educational expenditures and living expenses and medical patients' expenditures for medical care are included in "other private services."

Passenger fares. These accounts cover the fares received by U.S. air carriers from foreign residents for travel between the United States and foreign countries and between foreign points, the fares received by U.S. vessel operators for travel on cruise vessels, and the fares paid by U.S. residents to foreign air carriers for travel between the United States and foreign countries and to foreign vessel operators for travel on cruise vessels.

"Other transportation." These accounts cover U.S. international transactions arising from the transportation of goods by ocean, air, land (truck and rail), pipeline, and inland waterway carriers to and from the United States and between foreign points. The accounts cover freight charges for transporting exports and imports of goods and expenses that transportation companies incur in U.S. and foreign ports. Freight charges cover the receipts of U.S. carriers for transporting U.S. exports of goods and for transporting goods between foreign points and the payments to foreign carriers for transporting U.S. imports of goods. (Freight insurance on goods exports and imports is included in insurance in the "other private services" accounts.)

Port services consist of the value of the goods and services purchased by foreign carriers in U.S. ports and by U.S. carriers in foreign ports.

Royalties and license fees. These accounts cover transactions with nonresidents that involve patented and unpatented techniques, processes, formulas, and other intangible assets and proprietary rights used in the production of goods; transactions involving trademarks, copyrights, franchises, broadcast rights, and other intangible rights; and the rights to distribute, use, and reproduce general use computer software.

in prices and exchange rates.

Growth in travel payments to Mexico slowed to 1 percent in 2006 from 6 percent in 2005. Most of the slowdown reflected reduced travel to the Mexican border area; the number of U.S. visitors to this area decreased 6 percent, following a 3-percent increase in 2005. However, average expenditures rose, so the decline in payments for border travel was smaller—only 3 percent. The number of travelers to the Mexican interior also decreased—falling less than 1 percent—but again average expenditures rose and payments for travel to the interior of Mexico rose 3 percent. Hurricane damage to resort areas and State Department warnings to U.S. citizens regarding travel to Mexico appear to have contributed to the slowdown in the number of travelers and, thus, travel payments.

Passenger fares

Receipts. U.S. receipts for passenger fares increased 6 percent to $22.2 billion in 2006 after increasing 11 percent in 2005. Most of the slowdown was attributable to slower growth in the number of overseas visitors; however, the effects on receipts were tempered by an increase in airline ticket prices, as carriers passed some of the increased costs of jet fuel on to passengers.

U.S.-flag carriers decreased domestic capacity in 2006 and increased international capacity. Despite increased international capacity, continued demand for air travel by foreign visitors to the United States enabled U.S. carriers to pass a percentage of the fuel price increases on to passengers in the form of increased ticket prices. Foreign demand for travel from Latin America was especially strong, contributing to the 14-percent increase in passenger fares from Latin America and Other Western Hemisphere in 2006. Passenger fares from Japan, however, fell sharply, decreasing 12 percent in 2006.

Payments. U.S. payments for passenger fares

Types of Cross-Border Services: Coverage and Definitions

"Other private services." These accounts consist of education; financial services; insurance; telecommunications; "business, professional, and technical services"; and "other services."

Education consists of expenditures for tuition and living expenses by foreign students enrolled in U.S. colleges and universities and by U.S. students for study abroad. This category excludes fees for distance-learning technologies and for educational and training services provided on a contract or fee basis; these transactions are included in training services in "other business, professional, and technical services" in table 1.

Financial services include funds management and advisory services, credit card services, fees and commissions on transactions in securities, fees on credit related activities, and other financial services.

Insurance services consist of the portion of premiums remaining after provision for expected or "normal" losses, an imputed premium supplement that represents the investment income of insurance companies on funds that are treated as belonging to policyholders, and auxiliary insurance services.[1] Primary insurance mainly consists of life insurance and property and casualty insurance, and each type may be reinsured.[2]

Telecommunications consists of receipts and payments between U.S. and foreign communications companies for the transmission of messages between the United States and other countries; channel leasing; telex, telegram, and other jointly provided basic services; value-added services, such as electronic mail, video conferencing, and online access services (including Internet backbone services, router services, and broadband access services); and telecommunications support services.

"Business, professional, and technical services" cover a variety of services, such as legal services, accounting services, and advertising services (see the list in table 1).

"Other services" receipts consist mainly of expenditures (except employee compensation) by foreign governments in the United States for services such as maintaining their embassies and consulates; noncompensation-related expenditures by international organizations, such as the United Nations and the International Monetary Fund, that are headquartered in the United States; expenditures of foreign residents employed temporarily in the United States; and receipts from foreigners for the display, reproduction, or distribution of motion pictures and television programs. "Other services" payments consist primarily of payments by U.S. distributors to foreign residents for the rights to display, reproduce, or distribute foreign motion pictures and television programs.

1. The portion of total premiums required to cover "normal losses" is estimated by BEA on the basis of the relationship between actual losses and premiums averaged over several years. Auxiliary insurance services include agents' commissions, actuarial services, insurance brokering and agency services, claims adjustment services, and salvage administration services. For a detailed description of the imputed premium supplement, see Christopher L. Bach, "Annual Revision of the U.S. International Accounts, 1989–2003," SURVEY 84 (July 2004): 60–62. For a description of other components of insurance services, see Christopher L. Bach, "Annual Revision of the U.S. International Accounts, 1992–2002," SURVEY 83 (July 2003): 35–37 and Christopher L. Bach, "Annual Revision of the U.S. International Accounts, 1995-2005," SURVEY 84 (July 2006): 42.

2. Reinsurance is the ceding of a portion of a premium to another insurer who then assumes a corresponding portion of the risk. It provides coverage for events with such a high degree of risk or liability that a single insurer is unwilling or unable to underwrite insurance against their occurrence.

increased 5 percent to $27.5 billion in 2006 after a 6-percent increase in 2005. Payments for overseas air travel, which increased 6 percent in 2006, accounted for the majority of the increase. The majority of this increase was due to higher airfares; the number of U.S. residents traveling on foreign carriers was almost unchanged in 2006. Passenger fare payments to Asia and Pacific increased strongly in 2006, up 12 percent from 2005. Payments to Italy also increased strongly, possibly because of travel for the 2006 Winter Olympics.

Other transportation

Receipts. U.S. receipts for "other transportation services" increased 12 percent to $46.3 billion in 2006 after increasing 12 percent in 2005. The increase reflects increases in both freight receipts and port services receipts, largely as the result of increases in U.S. goods exports and imports and higher fuel prices. Growth in the volume of U.S. goods exports increased to 11 percent in 2006 from 7 percent in 2005.

Freight receipts increased 5 percent to $17.3 billion in 2006 as increased receipts for air and "other" freight more than offset decreased receipts for ocean freight. Most of the increase in air freight receipts reflected a 10-percent increase in the volume of exports transported on U.S. carriers. Ocean freight receipts decreased slightly as decreased revenue from transporting goods between foreign countries more than offset an increase in revenues from transporting U.S. exports. Ocean freight rates fell in 2006, continuing a decline that began in 2005. In 2004, ocean freight rates had increased sharply, partly because of China's rapid export-led economic expansion. Increased rates encouraged ship building, which added many new ships to the world's fleet and contributed to rate declines in 2005 and 2006.

Port services receipts increased 17 percent to $29.0 billion in 2006, following a 16-percent increase in 2005. The increase in ocean port receipts reflected increases in bunker fuel revenues and in imports and exports transported by foreign-operated vessels. The increase in air port services receipts reflected higher jet fuel prices and increases in goods imports and exports.

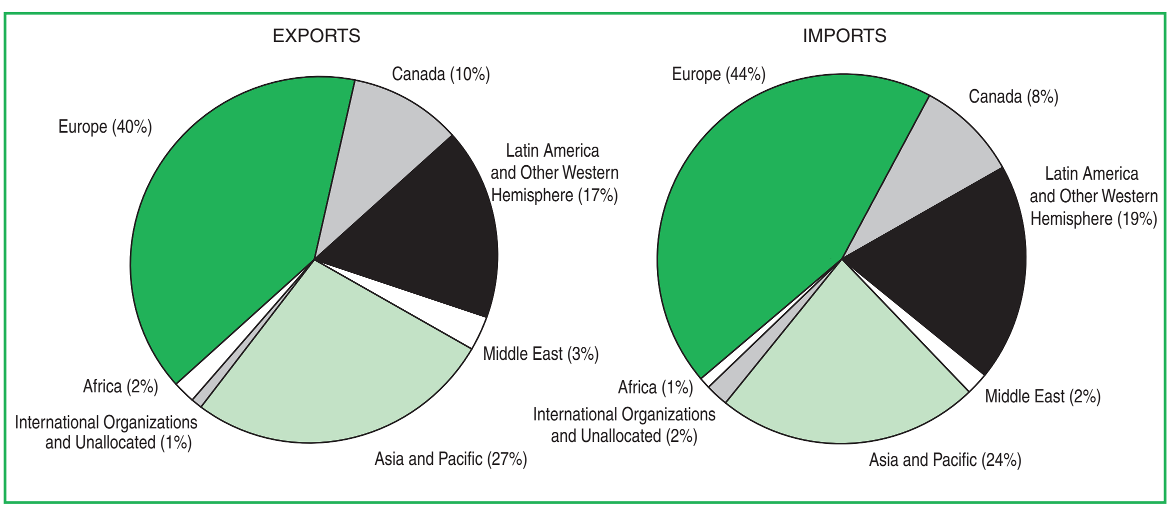
"Other transportation" receipts from all major areas rose in 2006. Receipts from Europe and Asia and Pacific—especially China, Hong Kong, India, and Malaysia—increased strongly in 2006, mainly reflecting higher trade volumes.

Payments. U.S. payments for "other transportation services" increased 5 percent to $65.3 billion in 2006 after increasing 14 percent in 2005. Growth in both freight and port payments slowed, reflecting slower growth of U.S. goods imports; growth in the volume of U.S. goods imports slowed to 6 percent in 2006 from 7 percent in 2005.

Freight payments increased 4 percent to $45.7 billion following a 12-percent increase in 2005. The slowdown was mostly the result of smaller increases in ocean freight payments. Port services payments increased 9 percent, to $19.6 billion, following a 21-percent increase in 2005. Payments for air port services accounted for most of the increase. The increase in air port services was attributable to increases in jet fuel prices, which continued to rise in 2006, although at a slower rate than in 2005. Payments for ocean port services were virtually unchanged.

"Other transportation" payments to all major areas increased, mainly reflecting increased goods imports. Growth in payments to Brazil, Hong Kong, the Philippines, and India was particularly strong.

Chart 4. U.S. Cross-Border Services Transactions: Share by Area in 2006



U.S. Bureau of Economic Analysis

Royalties and license fees

Receipts. U.S. receipts of royalties and license fees increased 5 percent to $62.4 billion in 2006 after increasing 9 percent in 2005. Affiliated receipts accounted for 71 percent of receipts for royalties and license fees in 2006, a slight decrease from recent years.[6] Affiliated transactions account for a large portion of royalty and license fees partly because firms with marketable intellectual property usually prefer to exercise some degree of control over the distribution and use of this property, which is easier within affiliated relationships.[7]

U.S. parents' receipts of royalties and license fees from their foreign affiliates decreased 1 percent to $39.3 billion in 2006, but they still accounted for nearly 90 percent of total affiliated receipts. The remaining 10 percent was accounted for by receipts by U.S. affiliates from their foreign parents, which increased 25 percent to $5.1 billion. In most cases, in multinational firms, the parent companies rather than the affiliates are the holders of intellectual property. The largest contributors to the increase in U.S. affiliates' receipts were affiliates in manufacturing, particularly chemicals manufacturing, and "professional, scientific and technical services."

U.S. companies' receipts from unaffiliated foreign companies increased 15 percent to $17.9 billion in 2006 following a 14-percent increase in 2005. Receipts from the sales of rights to distribute and use general-use computer software and for the use of industrial processes, including patents and trade secrets that are used in connection with the production of goods, accounted for most of the increase. Additional receipts from computer software licensing agreements flowed through affiliated channels, but the value of these receipts cannot be separately identified (see the box "Delivery of Computer Services to Foreign Markets").

Payments. U.S. payments of royalties and license fees increased 7 percent to $26.4 billion in 2006 after increasing 6 percent in 2005. Increases in U.S. affiliates' payments to their foreign parents and in unaffiliated payments more than accounted for the increase. Affiliated payments, mainly those by U.S. affiliates to their foreign parents, continued to account for nearly 80 percent of U.S. payments of royalties and license fees in 2006. U.S. affiliates' payments to their foreign parents increased 8 percent to $18.7 billion. The largest increases in payments were by affiliates in manufacturing, especially those in chemical manufacturing and

6. Beginning with estimates for 2006, BEA changed the reporting requirements for withholding taxes in the estimates of affiliated royalties and license fees. This change reflects a change in reporting on BEA's quarterly surveys of affiliated firms: Before 2006, the firms reported royalty and license fee transactions to BEA net of withholding taxes; since 2006, they have reported gross of withholding taxes. Before 2006, BEA published country-level estimates net of taxes but included an estimate of withholding taxes for all countries combined under "International Organizations and Unallocated." Therefore, BEA's published global totals for affiliated royalties and license fees before 2006 were gross of taxes. Beginning in 2006, the country estimates are also gross of taxes. The current treatment conforms to the international balance of payments accounting guideline specifying that transactions should be recorded gross of taxes.

7. Lee Bransetter, Raymond Fisman, and C. Fritz Foley, "Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm-Level Data" (National Bureau of Economic Research working paper no. 11516, July 2005); <papers.nber.org/papers/w11516.pdf>.

Table D. Cross-Border Services Exports and Imports by Type and Country, 2006

[Millions of dollars]

	Total private services	Travel	Passenger fares	Other transportation	Royalties and license fees	Other private services
	Exports					
All countries	**404,327**	**85,694**	**22,187**	**46,297**	**62,378**	**187,771**
10 largest countries [1]	**231,911**	**51,141**	**13,804**	**24,552**	**39,288**	**103,126**
United Kingdom	47,887	10,775	2,539	3,459	5,553	25,561
Japan	41,253	11,245	3,347	4,209	9,103	13,349
Canada	39,307	10,334	3,095	3,189	5,078	17,611
Mexico	22,443	7,146	2,119	1,403	1,567	10,208
Germany	20,635	3,165	1,041	3,348	3,585	9,496
France	14,935	2,289	569	1,618	2,719	7,740
Switzerland	13,153	771	231	713	6,171	5,267
Korea, Republic of	11,454	2,753	45	2,775	2,105	3,776
China	10,900	1,642	431	2,417	1,443	4,967
Netherlands	9,944	1,021	387	1,421	1,964	5,151
Other countries	**172,416**	**34,553**	**8,383**	**21,745**	**23,090**	**84,645**
	Imports					
All countries	**307,770**	**72,029**	**27,503**	**65,282**	**26,432**	**116,524**
10 largest countries [1]	**179,884**	**35,688**	**13,685**	**31,609**	**21,863**	**77,039**
United Kingdom	36,817	5,697	4,772	4,364	1,777	20,207
Japan	23,883	2,970	1,283	6,772	7,247	5,611
Canada	23,542	7,319	373	4,725	860	10,265
Germany	20,875	2,559	2,596	5,006	2,547	8,167
Bermuda	15,084	284	0	1,327	142	13,331
France	15,077	3,124	1,864	2,080	2,819	5,190
Mexico	14,757	10,003	901	981	215	2,657
Switzerland	13,725	550	467	907	3,998	7,803
Netherlands	8,876	1,027	826	2,151	2,205	2,667
China	7,248	2,155	603	3,296	53	1,141
Other countries	**127,886**	**36,341**	**13,818**	**33,673**	**4,569**	**39,485**

1. Ranked by dollar value of total exports or imports.

“other” manufacturing. Payments of royalties and license fees by U.S. parents to their foreign affiliates decreased 26 percent to $2.3 billion after a 17-percent increase in 2005.

Unaffiliated payments of royalties and license fees increased 28 percent in 2006 to $5.5 billion. Unaffiliated payments tend to spike in years when there are major international sporting events because U.S.

Table E. Intrafirm Trade in Services, by Type, 1997–2006

[Billions of dollars]

	Total private services	Transportation [1]	Royalties and license fees [2]	Other private services: Total [3]	Other private services: Financial services	Business, professional, and technical services: Total	Computer and information services	Management and consulting services	Research and development and testing services	Operational leasing	Other business, professional and technical services [4]	Film and television tape rentals
Total receipts:												
1997	51.8	0.4	24.5	26.9	2.2	22.3	1.6	(5)	(6)	1.5	19.2	2.4
1998	54.6	0.4	26.3	27.9	2.7	22.7	1.3	(5)	(6)	1.7	19.7	2.5
1999	62.0	0.5	29.3	32.3	4.0	25.8	1.2	(5)	(6)	2.2	22.4	2.4
2000	66.0	0.5	30.5	35.0	3.8	28.9	1.2	(5)	(6)	2.1	25.7	2.2
2001	66.8	0.6	29.2	37.0	4.1	30.7	1.3	2.2	5.7	2.2	19.4	2.2
2002	74.0	0.7	32.8	40.5	4.2	33.5	1.7	2.9	7.0	2.4	19.4	2.8
2003	79.2	0.7	35.5	43.0	5.2	35.1	2.2	2.8	8.2	2.6	19.3	2.7
2004	86.7	0.9	40.8	44.9	4.9	37.2	2.1	3.1	7.4	3.0	21.6	2.8
2005	95.1	1.1	43.9	50.1	4.9	42.1	2.3	4.3	8.9	3.3	23.3	3.1
2006	103.3	1.2	44.5	57.6	5.7	48.8	2.5	4.9	11.3	3.8	26.3	3.1
By U.S. parents from their foreign affiliates:												
1997	40.8	0.4	23.1	17.3	1.4	13.5	1.4	(5)	(6)	1.2	10.9	2.4
1998	42.9	0.4	24.4	18.1	1.8	13.9	1.3	(5)	(6)	1.4	11.2	2.5
1999	50.3	0.5	27.6	22.2	2.5	17.3	1.1	(5)	(6)	1.9	14.3	2.4
2000	51.9	0.5	28.3	23.1	2.8	18.1	1.1	(5)	(6)	1.8	15.2	2.2
2001	52.1	0.6	27.2	24.3	3.2	18.9	1.2	1.3	2.2	1.8	12.4	2.2
2002	55.0	0.7	29.7	24.6	3.1	18.7	1.4	1.4	1.9	2.0	12.0	2.8
2003	59.3	0.7	32.3	26.3	3.5	20.2	1.7	1.6	2.0	2.2	12.7	2.7
2004	65.4	0.9	37.2	27.3	3.6	20.9	1.7	1.6	1.8	2.6	13.2	2.8
2005	70.7	1.1	39.8	29.9	3.8	23.0	1.9	1.6	2.0	2.9	14.5	3.1
2006	73.1	1.2	39.3	32.6	4.2	25.2	1.9	1.8	2.4	3.3	15.8	3.1
By U.S. affiliates from their foreign parents: [7]												
1997	11.0	(*)	1.4	9.6	0.9	8.8	0.2	(5)	(6)	0.3	8.3	(*)
1998	11.7	(*)	2.0	9.7	0.9	8.8	0.1	(5)	(6)	0.3	8.4	(*)
1999	11.7	(*)	1.7	10.0	1.5	8.5	0.1	(5)	(6)	0.4	8.1	(*)
2000	14.1	(*)	2.2	11.9	1.0	10.8	0.1	(5)	(6)	0.3	10.5	(*)
2001	14.7	(*)	2.0	12.7	0.9	11.8	0.1	0.9	3.5	0.3	7.0	(*)
2002	19.0	(*)	3.1	15.9	1.1	14.7	0.3	1.5	5.1	0.5	7.4	(*)
2003	19.9	(*)	3.2	16.7	1.7	14.9	0.5	1.2	6.2	0.4	6.7	(*)
2004	21.3	(*)	3.7	17.6	1.2	16.4	0.4	1.5	5.6	0.4	8.5	(*)
2005	24.4	(*)	4.1	20.3	1.1	19.2	0.3	2.6	6.9	0.5	8.8	(*)
2006	30.2	(*)	5.1	25.1	1.5	23.5	0.6	3.0	8.9	0.5	10.5	(*)
Total payments:												
1997	24.2	0.4	6.7	17.1	2.8	14.3	0.8	(5)	(6)	0.9	12.6	(*)
1998	27.7	0.4	8.5	18.7	4.2	14.5	0.9	(5)	(6)	0.9	12.6	(*)
1999	35.9	0.4	10.4	25.1	6.0	19.0	3.0	(5)	(6)	1.1	15.0	0.1
2000	40.1	0.4	12.5	27.2	7.2	20.0	2.6	(5)	(6)	1.0	16.3	(*)
2001	41.4	0.5	13.2	27.7	6.7	21.0	2.9	1.8	1.7	1.0	13.6	(*)
2002	45.3	0.7	15.1	29.4	5.5	24.0	2.8	3.4	2.0	0.9	14.9	(*)
2003	47.9	1.2	15.2	31.5	5.8	25.6	3.5	2.8	3.1	0.7	15.6	(*)
2004	53.2	1.5	17.9	33.9	6.2	27.7	4.6	3.2	3.1	1.0	15.8	(*)
2005	61.9	1.7	20.4	39.8	5.9	33.9	6.3	4.2	4.5	1.2	17.7	(*)
2006	71.2	2.0	21.0	48.2	5.8	42.4	8.0	5.9	6.4	1.3	20.8	(*)
By U.S. parents to their foreign affiliates:												
1997	10.8	0.4	1.4	9.0	2.5	6.5	0.5	(5)	(6)	0.1	5.9	(*)
1998	12.6	0.4	1.8	10.4	3.3	7.1	0.6	(5)	(6)	0.1	6.4	(*)
1999	18.2	0.4	2.3	15.5	4.7	10.7	2.7	(5)	(6)	0.1	7.9	0.1
2000	19.2	0.4	2.5	16.3	5.4	10.9	2.4	(5)	(6)	0.1	8.4	(*)
2001	19.6	0.5	2.5	16.6	5.2	11.4	2.6	0.5	0.6	0.1	7.6	(*)
2002	20.6	0.7	2.9	17.0	4.6	12.4	2.5	0.5	0.8	0.1	8.5	(*)
2003	22.7	1.2	2.6	18.8	4.6	14.2	3.0	0.7	1.0	0.1	9.3	(*)
2004	25.5	1.5	2.6	21.4	5.4	16.0	4.1	0.9	1.2	(*)	9.8	(*)
2005	27.7	1.7	3.1	23.0	5.1	17.8	4.3	1.2	1.4	0.1	10.9	(*)
2006	30.3	2.0	2.3	26.0	5.2	20.8	5.2	1.4	1.8	0.1	12.3	(*)
By U.S. affiliates to their foreign parents: [7]												
1997	13.4	(*)	5.4	8.1	0.3	7.7	0.2	(5)	(6)	0.8	6.7	(*)
1998	15.1	(*)	6.8	8.3	0.9	7.4	0.2	(5)	(6)	0.8	6.3	(*)
1999	17.7	(*)	8.1	9.6	1.3	8.4	0.3	(5)	(6)	1.0	7.1	(*)
2000	21.0	(*)	10.1	10.9	1.8	9.1	0.2	(5)	(6)	1.0	7.9	(*)
2001	21.8	(*)	10.7	11.1	1.5	9.6	0.3	1.3	1.1	0.9	6.0	(*)
2002	24.7	(*)	12.2	12.4	0.8	11.6	0.3	2.9	1.3	0.8	6.3	(*)
2003	25.2	(*)	12.5	12.6	1.2	11.4	0.5	2.1	2.1	0.6	6.1	(*)
2004	27.7	(*)	15.3	12.5	0.8	11.7	0.6	2.4	1.9	0.9	5.9	(*)
2005	34.2	(*)	17.3	16.9	0.8	16.1	2.0	3.1	3.1	1.1	6.9	(*)
2006	40.9	(*)	18.7	22.2	0.6	21.5	2.8	4.5	4.6	1.2	8.4	(*)

* Less than $50 million.
1. Equal to “affiliated other transportation” in table 1.
2. Equal to “affiliated royalties and license fees” in table 1.
3. Equal to “affiliated other private services” in table 1.
4. Includes affiliated insurance and affiliated telecommunications transactions; see footnotes 13 and 14 in table 1.
5. Prior to 2001, management and consulting services were included in “other” services. Beginning in 2001, data on management and consulting services were collected as a separate type of service.
6. Prior to 2001, research and development and testing services were included in “other” services. Beginning in 2001, data on research and development and testing services were collected as a separate type of service.
7. In addition to transactions with its foreign parent, a U.S. affiliate’s receipts and payments include transactions with other members of its foreign parent group. The foreign parent group is defined as (1) the foreign parent, (2) any foreign person, proceeding up the foreign parent’s ownership chain, that owns more than 50 percent of the foreign person below it, up to and including the ultimate beneficial owner, 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.

companies pay international sports organizations, or their representatives, for the rights to broadcast and record the event. Such a spike occurred in 2006 when U.S. firms paid to broadcast the Winter Olympics and the soccer World Cup.

Other private services

U.S. receipts for "other private services," which consists of education, financial services, insurance services, telecommunications, and "business, professional, and technical services," increased 14 percent to $187.8 billion in 2006 after increasing 11 percent in 2005. The largest increases were in "business, professional, and technical services" and financial services (table 1 and tables 5–8). Payments for "other private services" increased 17 percent to $116.5 billion after increasing 9 percent. The largest increases were in "business, professional, and technical services" and insurance services (table 1 and tables 5–8).

Education

Receipts. U.S. receipts for education services increased 4 percent to $14.6 billion in 2006 after increasing 3 percent in 2005. The increase in 2006, like those in 2004 and 2005, resulted primarily from a continued increase in tuition. Tuition at both public and private 4-year colleges and universities increased 6 percent in academic year 2006–2007.[8] Despite the growth in tuition, the total number of foreign students enrolled in the United States was virtually unchanged in 2006, following 2 years of decreases. Although the number of foreign undergraduate and graduate students in the United States is nearly equal, most of the increase in receipts in 2006 was attributable to undergraduate students, who rely most heavily on foreign-source funds to finance their studies. More than 80 percent of foreign undergraduates rely primarily on personal and family funds, while foreign graduate students rely equally on U.S.-source funds, primarily from the institutions where they study, and from personal and family funds.

As in previous years, students from India accounted for more foreign students in the United States than any other country, although the number of Indian students fell 5 percent in 2006. The number of students from China, the next largest country of origin, remained stable, while the number from the Republic of Korea, the third largest, grew 11 percent. The total number of students from the Middle East, Northern Africa, and

8. *Trends in College Pricing 2006* (Princeton, NJ: The College Board); <www.collegeboard.com>.

Delivery of Computer Services to Foreign Markets

The delivery of computer-related services and of many other types of services may be further divided within the two major channels of cross-border trade and sales through affiliates. As a result, the total value of these services may be scattered across several categories of cross-border trade and sales by affiliates in the tables. In addition, some computer-related services may be embedded in goods that are exported to foreign markets, or they may be delivered in ways that result in entries in the U.S. international transactions accounts under income rather than under trade in goods and services.

Cross-border receipts from unaffiliated foreigners for "computer and data processing services" and "database and other information services" are shown under "business, professional, and technical services" in table 1.[1] Computer-related services that are delivered to foreign markets through cross-border software-licensing agreements, such as onsite licenses, are shown under "royalties and license fees."[2] Specifically, receipts through agreements with unaffiliated foreign persons are shown in "general-use computer software" in table 4. Receipts through agreements with affiliated foreign persons (intrafirm trade) are included in affiliated royalty and license fee transactions in table 1, but their value cannot currently be separately identified. Intrafirm receipts for computer and information services, which consist of computer and data processing services and of database and other information services, are shown in table 1 and table E.

The wages of U.S. residents who provide computer services to nonresidents are included in "compensation receipts" in the international transactions accounts (ITAs) (table 1, line 17), but their value cannot be separately identified. Compensation covers the earnings of U.S. individuals who are employees of nonresident firms and the earnings of certain independent individuals who provide services to nonresidents; it is classified in the ITAs as "income" rather than as services. If a U.S. resident goes abroad to provide these services, the length of stay must be less than 1 year; otherwise, the individual is considered a foreign resident.

Sales of computer-related services to foreign residents through foreign affiliates generally exceed cross-border exports of these services, reflecting the advantages of a local commercial presence when delivering these services to foreign customers (table 10). The available data on sales through affiliates are classified by the primary industry of the affiliate rather than by type of service, but computer-related services may also be sold through affiliates in several other industries, particularly machinery manufacturing and wholesale trade.

1. For detailed estimates of receipts for these services by country and by area, see table 7.

2. Receipts and payments for general-use software that is packaged and physically shipped to or from the United States are included in trade in goods. The value of software that is preinstalled on computer equipment and peripherals is captured in the value of this hardware and thus is also included in trade in goods.

Asian countries with majority Muslim populations continued to decrease in 2006. Decreases were particularly sharp for Turkey and Pakistan, at 7 percent and 9 percent, respectively. However, the number of students from Middle Eastern countries increased 2 percent in 2006, led by strong growth in the number of students from Saudi Arabia.

Payments. U.S. payments for education increased 11 percent to $4.4 billion in 2006 after increasing 12 percent in 2005. The increase reflected increases in both the number of students from U.S. universities participating in study-abroad programs and the number of students directly enrolled in universities abroad. The United Kingdom, Italy, Spain, and France continued as the top destinations for U.S. students in study-abroad programs. A large majority of U.S. students in these programs study in European countries, but an increasing number are studying in other countries such as China, Argentina, Brazil and India. "Social sciences and humanities" continues to be the dominant field of study for U.S. students abroad, with "business and management" second. Since the 2001–2002 academic year, the number of students from the United States participating in study-abroad programs in the Middle East, North Africa, and Asian countries with majority Muslim populations has continued to grow; however, these students account for just 2 percent of the total number of U.S. students studying abroad.

Financial services

Receipts. U.S. financial services receipts increased 19 percent to $42.8 billion in 2006, following a 10-percent increase in 2005. The sharp increase was due to sizable increases in both unaffiliated and affiliated transactions. Unaffiliated receipts increased 20 percent in 2006; management and advisory services accounted for nearly half of the increase (table F). Unaffiliated management and advisory services surged 24 percent, due to strong merger and acquisition activity and large inflows of fees to both established and newly formed asset management firms. Growth in private placement and underwriting services for foreign securities issued in the United States more than accounted for the gain in fees for securities transactions. "Other financial services" increased because of gains in electronic funds transfer services and securities lending services. Credit card and credit-related services also increased, mostly from continued strong growth in credit card transactions. Affiliated financial services receipts increased 16 percent.

Payments. U.S. financial services payments increased 13 percent to $14.3 billion in 2006, following an 8-percent increase in 2005. Strong growth in unaffiliated transactions was partly offset by a decrease in affiliated transactions. The increase in unaffiliated payments resulted mostly from an increase in "other financial services," which reflected a surge in securities lending services and continued strong growth in electronic funds transfer services. Securities transactions were higher as a result of increased trading in foreign stocks and bonds and a small increase in underwriting services for U.S. securities issued abroad. Management and advisory services increased as an increase in financial advisory services was only partly offset by a decrease in financial management services. Credit card and credit-related services also increased because of continued growth in credit card services and a sharp rebound in credit-related services. Affiliated financial services payments decreased 2 percent.

Insurance services

Receipts. U.S. insurance services receipts grew 19 percent to $9.3 billion in 2006 after increasing 6 percent in 2005. The increased growth was led by a 30-percent increase in receipts for reinsurance services, which resulted from increases in both premium receipts and premium supplements.[9] In 2005, Canada surpassed the United Kingdom as the top market for U.S. exports of insurance services, and Japan surpassed Germany as the third largest market for U.S. insurance exports, positions these countries maintained in 2006.

9. Note that although the measure of insurance services rises and falls along with premiums, only a portion of changes in premiums are assumed to represent charges for insurance services. See the box "Types of Cross-Border Services: Coverage and Definitions" for more information about how BEA estimates insurance services.

Table F. Unaffiliated Financial Services Transactions, 1994–2006

[Millions of dollars]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total receipts	**5,763**	**7,029**	**8,229**	**10,243**	**11,327**	**13,410**	**16,026**	**15,498**	**17,746**	**19,699**	**27,766**	**31,039**	**37,114**
Securities transactions [1]	2,527	3,253	3,917	4,715	4,690	4,833	5,459	5,021	6,203	6,563	8,256	8,633	10,042
Management and advisory [2]	1,479	1,665	1,886	2,553	3,219	4,687	6,610	5,675	6,343	7,352	11,843	12,829	15,880
Credit card and other credit-related	1,093	1,423	1,472	1,839	2,030	1,959	2,206	2,520	2,832	2,541	3,457	4,253	5,141
Other [3]	664	688	954	1,136	1,388	1,931	1,751	2,282	2,368	3,243	4,210	5,324	6,051
Total payments	**1,654**	**2,472**	**2,907**	**3,347**	**3,590**	**3,418**	**4,840**	**4,489**	**4,160**	**3,996**	**5,486**	**6,720**	**8,497**
Securities transactions [1]	956	1,506	1,654	1,943	1,949	1,748	2,402	1,918	1,595	1,277	1,726	1,999	2,462
Management and advisory [2]	327	348	401	406	545	627	718	495	482	621	987	1,349	1,452
Credit card and other credit-related	204	327	372	390	403	407	459	607	674	633	765	691	901
Other [3]	167	291	480	608	693	636	1,261	1,469	1,409	1,465	2,008	2,681	3,682

1. Includes brokerage, underwriting and private placement services.
2. Includes financial management, financial advisory, and custody services.
3. Includes securities lending, electronic funds transfer, and other financial services.

Payments. U.S. insurance services payments increased 18 percent to $33.6 billion in 2006 after decreasing 2 percent in 2005. Payments for reinsurance services more than accounted for the increase, rising 21 percent in 2006. Payments for primary insurance fell 6 percent in 2006; this decrease was likely the result of a decrease in premium rates, which fell for most types of policies in 2006. Before September 11, 2001, primary premium rates had been rising because of consolidation in the insurance industry and the loss of investment gains as a source of supplements to premiums in the wake of the stock market downturn in 2000; after September 11th, premium rates increased sharply, resulting in strong increases in primary insurance payments in 2002 and 2003. Since 2005, premium rates have generally fallen, as have payments for primary insurance.

Telecommunications

Receipts. U.S. receipts for telecommunications services increased 20 percent to $6.3 billion in 2006 after increasing 12 percent in 2005. A number of developments contributed to the surge in receipts. In recent years, increasing competition due to market deregulation, declining fees for terminating calls in the United States, and the emergence of Voice over Internet Protocol (VoIP) have led to reductions in the prices of some international telecommunications services. These price declines, along with increased international business linkages, have lead to increases in call volumes. In addition, consumers are migrating away from the traditional fixed-line telephone services, prompting the traditional telecommunications companies to move into the growing mobile phone and broadband/data transmission markets internationally as well as domestically. There have also been increases in receipts for satellite-based services. Finally, improvements to the telecommunications infrastructure and the increasing availability of mobile phones have increased telecommunications receipts from developing nations. In 2006, receipts from Latin America and Other Western Hemisphere grew 55 percent, and receipts from the Middle East grew 21 percent. In contrast, receipts from Europe and Asia and Pacific grew 12 percent and 8 percent, respectively.

Payments. U.S. payments for telecommunications services remained largely stable for the second consecutive year, rising less than 1 percent to $4.6 billion in 2006. Since 2002, payments for telecommunications services have risen at a much slower rate than receipts. In 2003, receipts for telecommunications services surpassed payments, and in 2006, this gap grew. The stagnation of payments may be related to both the declining cost of terminating calls internationally and the growth of VoIP. As they have in the United States, fees for terminating calls abroad have fallen rapidly in recent years, leading to increased call volumes. In addition, an increasing number of businesses and households are switching from fixed-line telecommunications to VoIP, which allows businesses to combine their voice and data operations and offers households lower call rates. This development is particularly important for calls to developing nations, where termination rates are still high. Calls placed using VoIP in the United States can be terminated abroad on a fixed or mobile handset, typically for a lower fee than a handset-to-handset call, leading to lower telecommunications payments. Telecommunications firms have also moved to sending more calls over IP networks, which are less costly to operate than traditional phone lines and may lead to lower payments.

Data Sources

The estimates in this article are primarily based on data from the surveys that are conducted by the Bureau of Economic Analysis (BEA), but the estimates of some services are based on data from a variety of other sources, including U.S. Customs and Border Protection, surveys conducted by other Federal Government agencies, private sources, and partner countries.

BEA conducts several mandatory surveys of trade in services; some surveys are targeted to specific services industries and, for intrafirm transactions, to specific types of investment. These surveys of services are available on BEA's Web site at <www.bea.gov/international/index.htm#surveys>.

The data on intrafirm trade in services and on sales by majority-owned affiliates are collected in BEA's surveys of U.S. direct investment abroad and of foreign direct investment in the United States. For the methodologies for these surveys, see *Foreign Direct Investment in the United States: 2002 Benchmark Survey, Final Results* and *U.S. Direct Investment Abroad: 1999 Benchmark Survey, Final Results.* For additional information on the methodology used to prepare the estimates of both affiliated and unaffiliated cross-border trade, see *The Balance of Payments of the United States: Concepts, Data Sources, and Estimating Procedures* (1990). These publications and other detailed information on the changes in the methodology since 1990 can be accessed on BEA's Web site at <www.bea.gov/methodologies/index.htm#international_meth>.

For a summary of the changes from 1990–2003, see "Improvements to BEA's Estimates of U.S. International Services, 1990–2003," in Borga and Mann, SURVEY 83 (October 2003): 74–76. Additionally, each subsequent October SURVEY article in this series has featured an appendix describing recent and planned improvements to the estimates. The SURVEY articles for 1994–2006 are available at <www.bea.gov/scb/index.htm>.

Business, professional, and technical services

Receipts. U.S. receipts for "business, professional, and technical (BPT) services" increased 15 percent to $96.2 billion in 2006 after increasing 17 percent in 2005. Both affiliated and unaffiliated transactions contributed to the increase. Affiliated receipts accounted for more than half of the total increase. Receipts by U.S. parent companies from their foreign affiliates grew 10 percent while receipts by U.S. affiliate companies from their foreign parents grew 22 percent (table E).

Receipts for computer and information services increased 3 percent to $10.1 billion in 2006. Affiliated receipts accounted for most of the increase and grew at a faster rate than unaffiliated receipts. Receipts for management and consulting services decelerated, increasing 8 percent to $7.4 billion in 2006 after increasing 29 percent in 2005.

Research, development, and testing services continued to increase sharply, rising 28 percent to $13.0 billion in 2006 after increasing 17 percent in 2005. Most of the increase was attributable to affiliated receipts, which increased 27 percent in 2006 after increasing 20 percent in 2005. Affiliated transactions typically account for the majority of receipts for research, development, and testing services, possibly because the affiliated relationship provides a way for companies to retain control over their intellectual property while gaining the returns from the use of that property worldwide. Receipts for operational leasing services increased 16 percent to $11.1 billion, primarily because of growth in unaffiliated receipts.[10]

Receipts for "other BPT services" increased 15 percent to $54.7 billion in 2006 after increasing 18 percent in 2005. The slowdown was accounted for by unaffiliated receipts, which increased 17 percent after increasing 30 percent. "Architectural, engineering, and other technical services" and legal services led the increase in unaffiliated receipts. Affiliated receipts accelerated, increasing 13 percent after increasing 8 percent. "Other BPT services" include a variety of services that are not recorded in other categories of BPT services and costs that parent firms charge to their affiliates that are not further disaggregated by type of service.[11]

Payments. U.S. payments for BPT services increased 19 percent to $58.2 billion in 2006 after increasing 18 percent in 2005. The acceleration was accounted for by affiliated payments, which increased 25 percent in 2006 after increasing 23 percent in 2005; growth in unaffiliated payments slowed slightly in 2006. Payments by U.S. affiliates to their foreign parents accounted for the majority of the growth in affiliated payments (table E).

Payments for computer and information services increased 23 percent to $11.1 billion in 2006 after increasing 32 percent in 2005. Affiliated payments accounted for most of the increases in both years. Affiliated payments increased 27 percent in 2006 and 37 percent in 2005, reflecting the growing importance of affiliated foreign companies as suppliers of computer services to U.S. firms for use in their production processes or for resale. Unaffiliated payments also increased, but at a slower rate. Canada and India continued to be the top providers of unaffiliated computer and information services to the U.S. market.

Payments for management and consulting services continued to grow strongly in 2006, increasing 23 percent to $7.5 billion, matching the 2005 rate of growth. The increase reflected a rise in affiliated payments, which was partially offset by a decrease in unaffiliated payments. The continued focus on risk management and governance standards contributed to growth in management and consulting services. Payments for research, development, and testing services increased 34 percent to $9.0 billion in 2006, compared with 33-percent growth in 2005. Payments for operational leasing services increased 16 percent to $1.5 billion after increasing 15 percent in 2005.

Payments for "other BPT services" increased 14 percent to $29.1 billion in 2006 after increasing 10 percent in 2005. Affiliated payments accounted for most of the acceleration, rising 17 percent in 2006. Unaffiliated payments also increased, but at a slower rate. "Installation, maintenance and repair of equipment" led the increase in unaffiliated payments.

Film and television tape rentals

Receipts. U.S. receipts for film and television tape rentals increased 9 percent to $11.1 billion in 2006 after decreasing 2 percent in 2005. Film and television tape rentals cover the rights to display, reproduce, and distribute U.S. motion pictures and television programming abroad. Although film and tape rentals do not directly correspond to box office totals, the 14-percent increase in total international box office revenue in 2006 likely contributed to the increase in film and television tape rentals.

Payments. U.S. payments for film and television tape rentals fell 9 percent to $0.8 billion in 2006 after more than doubling in 2005. This decrease largely reflects a decrease in box office revenue for

10. This category covers rentals of transportation equipment (such as ships, aircraft, and railcars) without crews or operators. If crews or operators are provided, the transaction is included under transportation services.

11. As part of "other BPT services," BEA collects and publishes additional details on transactions with unaffiliated foreign persons that cover more than a dozen types of services (see the addenda to table 1). For affiliated trade in BPT services, allocated expenses for research and development services and management services are sometimes identified and separately charged; when they are, the values are recorded in the categories provided for those services. When they cannot be identified, the values are recorded under affiliated "other BPT services."

films produced by foreign motion picture companies. U.S. payments for film and television tape rentals are only a small fraction of U.S. receipts, reflecting the relatively small U.S. audience for foreign films and television programs, compared with the large foreign audience for U.S. films and television programs.

Sales Through Affiliates in 2005

In 2005, worldwide sales of services by nonbank U.S. multinationals through their nonbank majority-owned foreign affiliates rose 10 percent to $574.7 billion (table G). Foreign multinationals' sales of services to all customers through their nonbank majority-owned U.S. affiliates were $422.3 billion, up 2 percent from 2004.

Sales of goods and services through affiliates are generally dominated by transactions with parties located in the same country as the affiliate. In 2005, 77 percent of worldwide sales of services and 58 percent of worldwide sales of goods by foreign affiliates of U.S. multinationals were local sales. For U.S. affiliates of foreign multinationals, local sales are even more important as a share of worldwide sales for both goods and services, which reflects the large size of the U.S. market. In 2005, local sales accounted for 92 percent of U.S. affiliates' worldwide sales of services and for 91 percent of their worldwide sales of goods.[12]

Sales of services to the local market and to other foreign markets by U.S. multinationals' foreign affiliates and sales of services to the U.S. market by foreign multinationals' U.S. affiliates both represent the delivery of services through the channel of direct investment. Table 9 presents these international sales of services through affiliates by country of foreign affiliate and by country of the U.S. affiliate's ultimate beneficial owner (UBO).[13] Tables 10.1 and 10.2 present sales by primary industry of the affiliate cross-classified by country of the foreign affiliate for 2004 and 2005. Tables 11.1 and 11.2 present sales by primary industry of the U.S. affiliate cross-classified by country of UBO for 2004 and 2005.

Foreign affiliates' sales to foreign persons

In 2005, sales of services to foreign persons by nonbank majority-owned foreign affiliates of nonbank U.S. companies were $528.5 billion. By area, affiliates in Europe had by far the largest sales of services to foreign persons, accounting for 52 percent of the total, followed by affiliates in Asia and Pacific with 24 percent of the total. Within Europe, affiliates in the United Kingdom had the largest sales by far, accounting for 40 percent of the total for Europe. Affiliates in Germany had the next largest sales (12 percent), followed by those in France (11 percent). Within Asia and Pacific, affiliates in Japan had the largest sales, accounting for 42 percent of the total for the area.

By industry sector, foreign affiliates' sales of services to foreign persons were largest in "finance (except depository institutions) and insurance," accounting for more than a quarter of the total. The next largest sales were by affiliates in "professional, scientific, and technical services," which accounted for 18 percent of the total, followed by those in information. In "finance (except depository institutions) and insurance," sales by insurance carriers accounted for over two-thirds of the total, with particularly large sales by affiliates in Asia and Pacific. In "professional, scientific, and technical services," sales by affiliates in computer systems design and related services were largest. In information, affiliates in "Internet service providers, Web search portals, data processing services, Internet publishing and broadcasting, and other information services" had the largest sales.

Sales of services abroad by nonbank majority-owned affiliates of nonbank U.S. companies increased

Table G. Sales of Services by U.S. MNCs Through Their Nonbank MOFAs and by Foreign MNCs Through Their Nonbank MOUSAs, 2004–2005

[Millions of dollars]

	2004	2005
Sales through MOFAs		
Total	**522,616**	**574,666**
To affiliated persons	83,838	89,797
To unaffiliated persons	438,778	484,869
To U.S. persons	39,594	46,185
To U.S. parents	27,302	31,584
To unaffiliated U.S. persons	12,292	14,602
To foreign persons	483,022	528,481
To other foreign affiliates	56,536	58,214
To unaffiliated foreign persons	426,486	470,267
Local sales	405,058	440,330
To other foreign affiliates	20,086	17,257
To unaffiliated foreigners	384,972	423,072
Sales to other countries	77,964	88,151
To other foreign affiliates	36,450	40,956
To unaffiliated foreigners	41,514	47,195
Sales through MOUSAs		
Total	**415,389**	**422,309**
To U.S. persons	381,960	389,030
To foreign persons	33,428	33,279
To the foreign parent group	15,463	16,749
To foreign affiliates	1,193	1,406
To other foreigners	16,772	15,123

NOTE. Depository institutions are excluded because data are not available.

In this table, sales of services through affiliates are generally defined to be economic outputs that are intangible. Intangible outputs are typically associated with establishments in the following NAICS sectors: utilities; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional, scientific, and technical services; management of companies and enterprises; administrative and support and waste management and remediation services; educational services; health care and social assistance; arts, entertainment, and recreation; accommodation and food services; other services (except public administration); and public administration. Additionally, the output of establishments that provide support activities for agriculture and forestry or mining are typically intangible.

MNCs Multinational companies
MOFAs Majority-owned foreign affiliates
MOUSAs Majority-owned U.S. affiliates

12. For U.S. affiliates of foreign companies, the shares of local and foreign sales of goods have been estimated based on exports of goods shipped because data on these affiliates' sales of goods are not collected by destination. Exports accounted for 9 percent of U.S. affiliates' sales of goods in 2005.

13. The UBO of a U.S. affiliate is that person, proceeding up the affiliate's ownership chain, beginning with and including the foreign parent, that is not owned more than 50 percent by another person. Unlike the foreign parent, the UBO of an affiliate may be located in the United States. The UBO of each U.S. affiliate is identified to ascertain the person that ultimately owns or controls the U.S. affiliate and therefore ultimately derives the benefits from ownership or control.

9 percent in 2005 after increasing 7 percent in 2004. In 2005, growth in foreign affiliates' sales of services increased despite an overall slowing in real economic growth in many major markets served by affiliates, including several Organisation for Economic Cooperation and Development member countries. A variety of factors boosted affiliates' sales of services in 2005, including the depreciation of the dollar against some major currencies, including the Canadian dollar and the euro. In addition, developments specific to several industry sectors significantly boosted affiliates' sales of services. For example, a pickup in financial market activity boosted sales of services by affiliates in finance, particularly "securities, commodity contracts, and other intermediation and related activities," and strong local demand sharply increased affiliates' sales of insurance services in Asia and Pacific. Also contributing to the increase was a continued shift of some affiliates' activities away from manufacturing and toward the provision of services, particularly in computer systems design and related services.[14] Increased global demand for commodities—such as oil, gas, and metals—boosted sales for affiliates involved in natural gas distribution and marketing and in commodities trading. In addition, higher demand for these commodities indirectly boosted sales for affiliates in sectors—such as architectural, engineering, and related services—that provide services to firms producing these commodities. Increased demand for oil and natural gas also boosted sales of services by affiliates in the industry "support activities for oil and gas operations" (which is classified in mining in tables 10.1 and 10.2).

Sales of services abroad increased for U.S. companies' affiliates in all major areas in 2005. Affiliates in Europe and in Asia and Pacific had the largest increases in dollar terms and together accounted for 67 percent of the overall increase. The next largest increase by area was in Canada. Within Europe, sales of services increases were broadly based by country and industry sector, but the largest increases were in the United Kingdom, Germany, and Italy. Together, affiliates in these three countries accounted for 56 percent of the increase in Europe. In the United Kingdom, the largest increases were in "professional, scientific, and technical services" and in "finance (except depository institutions) and insurance." In "professional, scientific and technical services," the increase was largely attributable to affiliates in management, scientific, and technical consulting. In "finance (except depository institutions) and insurance," the increase was attributable to increased sales by affiliates in "securities, commodity contracts, and other intermediation and related activities." In Germany, affiliates in utilities contributed most to the increase. In Italy, affiliates in information, particularly "broadcasting (except Internet)," had the largest increase.

Within Asia and Pacific, the largest increase was in Japan, followed by Hong Kong, which together accounted for 56 percent of the increase in Asia and Pacific. In Japan, the increase was accounted for by affiliates in "finance (except depository institutions) and insurance," which was largely attributable to increased sales for insurance carriers. Sales also increased for affiliates in "securities, commodity, contracts, and other intermediation and related activities." In Hong Kong, the largest increase was for affiliates in "finance (except depository institutions) and insurance," particularly those in "securities, commodity contracts, and other intermediation and related activities." Canada had the largest dollar increase ($9.2 billion) of any country. Among Canadian affiliates, those in utilities had the largest increase.

By industry sector, foreign affiliates in "finance (except depository institutions) and insurance" had the largest dollar increase in sales ($14.6 billion), followed by affiliates in "professional, scientific, and technical services" ($10.5 billion) and in utilities ($4.4 billion). Within the nonbank finance and insurance sector, affiliates both in "finance (except depository institutions)" and in the insurance carriers and related activities industry had strong increases in sales. In "finance (except depository institutions)," affiliates in "securities, commodity contracts, and other intermediation and related activities" accounted for much of the increase, which was concentrated in Europe, especially the United Kingdom, and in Asia and Pacific, especially Japan. The increase reflected stepped up activity in 2005 in securities markets, particularly higher trading volumes and increased merger and acquisition and underwriting activity, and in commodities markets, where higher prices for precious metals boosted fees and commissions earned by affiliates. In the insurance industry, sales increased for both nonlife and life insurance affiliates. For nonlife insurance affiliates, the largest increase was for affiliates in Asia and Pacific, especially those in Japan, in response to stronger demand. Sales by nonlife insurance affiliates rose strongly in Latin America and Other Western Hemisphere, particularly those in Bermuda, reflecting

14. The shift in composition of affiliates' activities led some affiliates to be classified out of the computer and peripheral equipment manufacturing and the "professional and commercial equipment and supplies wholesaling" industries and into the computer systems design and related services industry in 2005. In previous years, these affiliates' sales of services were included in the manufacturing and wholesale trade sectors. As mentioned earlier, the overall year-to-year change in sales of services abroad may be unaffected by an industry reclassification because of offsetting changes in the industries from which and to which an affiliate is classified. However, sales of services for affiliates that were reclassified into the computer systems design and related services industry rose in 2005, so that overall sales of services increased, not just sales of services in that industry. Additionally, other affiliates that had been reclassified into this industry in recent years continued to expand their services operations.

increased activity in reinsurance. For life insurance affiliates, increases were centered in the Asia and Pacific region, where affiliates continued to expand their presence in response to deregulation, opening of insurance markets to foreign investors, and growth in demand. In this area, affiliates in Japan accounted for the largest portion of the total increase.

In "professional, scientific, and technical services," the increase reflected sales growth by affiliates in the "computer systems design and related services" and "architectural, engineering, and related services" industries. In computer systems design and related

Supplemental Estimates of Insurance, Trade Services, and Financial Services Sold Through Affiliates–Continues

In its efforts to improve its estimates of sales of services sold through affiliates, BEA has addressed issues in the measurement of three important types of services—insurance, wholesale and retail trade services, and financial services.[1] Last year, BEA presented experimental estimates of these services supplied to U.S. residents through U.S. affiliates of foreign multinational companies in 2002. This year, these estimates have been expanded to include new estimates of insurance and trade services supplied through U.S. affiliates for 2003–2005. In addition, BEA introduces experimental estimates of insurance, trade, and financial services supplied to foreign residents through foreign affiliates of U.S. multinational companies for 2004 and of insurance and trade services for 2005.

The measurement of insurance, trade, and financial services supplied through affiliates is complicated by special factors. For example, sales may include nonservice elements or may exclude the value of services supplied without an explicit charge. To overcome such difficulties, BEA has developed new methodologies, initiated new data collections, and drawn on data from outside sources.

For 2005, the improved measures of insurance and trade services raised the total estimate of services supplied to U.S. residents through U.S. affiliates $126.5 billion to $515.5 billion and raised the estimate of services supplied to foreign residents through foreign affiliates $147.7 billion to $676.2 billion. The data to estimate financial services were only collected on benchmark surveys; for 2002, services sold to U.S. residents through U.S. affiliates rose an additional $30.5 billion with the inclusion of financial services supplied by bank affiliates. For 2004, sales of services to foreign residents through foreign affiliates rose an additional $38.3 billion. These estimates are experimental but indicate how the new measures will compare to the current measures. An article providing detail on the methodologies will be published in a forthcoming issue of the SURVEY OF CURRENT BUSINESS.

Insurance

BEA's current measure of sales of insurance services through affiliates is services-related operating revenue, which consists mostly of premium income but also includes fees for auxiliary insurance services. This measure fails to capture two important aspects of insurance services. First, a portion of premiums does not represent the value of insurance services but is simply the amount of funds that flow from all policyholders to policyholders who suffer losses. Second, insurance companies earn investment income on funds that are considered to be the property of policyholders; this income partly compensates the companies for providing insurance services.

The new measure of insurance services uses a net premiums approach, as recommended by international economic

1. See Obie G. Whichard and Maria Borga, "Selected Issues in the Measurement of U.S. International Services," SURVEY OF CURRENT BUSINESS 82 (June 2002): 36–56.

Impact of Changes in the Measurement of Insurance, Wholesale and Retail Trade, and Financial Services on the Estimates of Goods Sold and Services Provided by Majority-Owned Affiliates, 2002–2005

[Billions of dollars]

	Sales to U.S. residents through MOUSAs							
	2002		2003		2004		2005	
	Services provided	Goods sold [1]	Services provided	Goods sold [1]	Services provided	Goods sold [1]	Services provided	Goods sold [1]
Current measure	367.6	1,421.1	374.1	1,500.9	382.0	1,647.5	389.0	1,807.2
Effects of new measures:								
Insurance services	–40.4	0.0	–49.3	0.0	–44.9	0.0	–44.5	0.0
Wholesale and retail trade	134.9	–134.9	138.2	–138.2	163.0	–163.0	171.0	–171.0
Financial services	30.5	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New measure	492.6	1,286.2	463.0	1,362.7	500.0	1,484.5	515.5	1,636.3
	Sales to foreign residents through MOFAs							
	2002		2003		2004		2005	
	Services provided	Goods sold	Services provided	Goods sold	Services provided	Goods sold	Services provided	Goods sold
Current measure	423.5	1,738.2	452.5	2,039.7	483.0	2,387.2	528.5	2,659.6
Effects of new measures:								
Insurance services	n.a.	n.a.	n.a.	n.a.	–55.9	0.0	–52.9	0.0
Wholesale and retail trade	n.a.	n.a.	n.a.	n.a.	197.6	–197.6	200.6	–200.6
Financial services	n.a.	n.a.	n.a.	n.a.	38.3	0.0	n.a.	n.a.
New measure	n.a.	n.a.	n.a.	n.a.	663.0	2,189.6	676.2	2,459.0

n.a. Not available
MOUSAs Majority-owned U.S. affiliates
MOFAs Majority-owned foreign affiliates

1. The goods sold to U.S. residents by U.S. affiliates have been estimated by subtracting their exports of goods from their total goods sold.

services, sales increased because of a continuing shift in affiliates' activities away from equipment manufacturing and toward the provision of services. Sales were also boosted by the entrance of new affiliates to the universe of majority-owned foreign affiliates through acquisitions or corporate reorganizations. In

Supplemental Estimates of Insurance, Trade Services, and Financial Services Sold Through Affiliates

accounting guidelines.[2] The new measure subtracts a proxy measure of insurers' expectations about losses at the time they set their premiums, called normal losses. Normal losses are estimated using the long-term relationship between premiums earned and losses incurred. The new measure also includes a measure of premium supplements, representing income earned on funds insurers hold on policyholders' behalf, such as prepaid premiums and reserves against outstanding losses, which insurers use to defray their expenses. The income is treated as accruing to policyholders, who pay it back to insurers as supplements to premiums to cover the full cost of the insurance services they receive.

To estimate the new measure of insurance services, BEA began collecting data on the premiums earned and losses paid by U.S. affiliates with operations in insurance on the 2002 benchmark survey of inward direct investment. These items were subsequently added to the follow-on annual surveys and the surveys of outward direct investment, beginning with the 2004 benchmark survey. Data for these new items are combined with data on the domestic insurance industry from A.M. Best to estimate the new measure of insurance services supplied through affiliates.[3]

For U.S. affiliates in 2005, normal losses, which are deducted from premiums earned, were estimated to be $49.9 billion, and premium supplements, which are added to premiums earned, were estimated to be $5.4 billion, resulting in a reduction in the estimate of services provided to U.S. residents of $44.5 billion. For foreign affiliates in 2005, normal losses were estimated to be $55.9 billion, and premium supplements were estimated to be $3.1 billion, for a reduction in the estimate of services provided to foreign residents of $52.9 billion.

Wholesale and retail trade

The wholesale and retail trade industries provide distributive services—selling, or arranging for the sale of, goods to intermediate and final users. Currently, BEA treats the total value of sales associated with wholesale and retail trade as sales of goods. Thus, the estimates of services provided by wholesalers and retailers cover only secondary activities of these affiliates; the estimates do not cover their distributive services. For example, repair services provided by a car dealer are included in the estimates of sales of services, but the distributive services they provide in selling cars is not. Instead, the value of these distributive services is included in the estimates of sales of goods through affiliates.

To construct estimates of distributive services supplied through affiliates, BEA began collecting data on the cost of goods sold and the beginning- and end-of-year inventories of goods for resale on its 2002 benchmark survey of inward direct investment. These items have also been included on subsequent annual surveys of inward direct investment and on the surveys of outward direct investment, beginning with the 2004 benchmark survey.

The inclusion of the new measure of distributive services significantly raises the values of services provided through affiliates. For 2005, the estimate of services provided to U.S. residents through U.S. affiliates increases $171.0 billion, or 44 percent. Because the value of these services is currently included in the estimates of sales of goods in BEA's broader statistics on the activities of affiliates, this amount is a reclassification from goods to services. Thus, sales of goods to U.S. residents would be reduced by $171.0 billion, or 9 percent. For 2005, the new measure of distributive services provided to foreign residents through foreign affiliates increases $200.6 billion due to the inclusion of trade services, or 38 percent, and the estimate of goods sold falls to $2,459.0 billion, or 8 percent.

Financial services

BEA's current coverage of sales through affiliates excludes estimate of financial services provided by bank affiliates. This exclusion causes a potentially large gap in the coverage of financial services sold through affiliates.

To better account for bank affiliates, BEA collected data on the 2002 benchmark survey of inward direct investment that can be used as the basis for estimating U.S. bank affiliates' explicit fees for services (which are separately charged by banks) and implicit fees for services (which banks earn by paying lower interest rates on deposits than they charge on loans). Similar data items were added to the 2004 benchmark survey of outward direct investment.

Services provided by U.S. bank affiliates to U.S. residents for 2002 were estimated to be $30.5 billion—$14.1 billion from explicit fees and commissions and an imputed value of $16.4 billion for services not explicitly charged. For 2004, services supplied to foreign residents through foreign bank affiliates were estimated to be $38.3 billion—$24.3 billion in explicit sales of services and an imputed value of $14.0 billion for services not explicitly charged.

Maria Borga

2. Guidance for compiling the national accounts is provided by the Commission of European Communities, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations, and World Bank, *System of National Accounts, 1993* (Brussels/Luxembourg, New York, Paris, and Washington, 1993). Guidance for compiling statistics on trade in services for the international transactions accounts is provided in International Monetary Fund, *Balance of Payments Manual,* 5th edition (Washington, 1993). The Commission of European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, United Nations Conference on Trade and Development, and World Trade Organization, *Manual on Statistics of International Trade in Services* (Geneva, Luxembourg, New York, Paris, Washington, 2002) provides guidance for compiling data on cross-border trade in services and services delivered through affiliates.

3. See A.M. Best Company, *Best's Aggregates and Averages: Property-Casualty, United States* (Oldwick, NJ) and A.M. Best Company, *Best's Aggregates and Averages: Life/Health, United States* (Oldwick, NJ) for 1996–2006.

architectural, engineering, and related services, the increase was geographically broad based and reflected new contract awards in response to strong demand for energy and metals.

In utilities, affiliates in natural gas distribution had the largest increase, reflecting growth in existing affiliates' sales and the establishment of new affiliates.

U.S. affiliates' sales in the United States

In 2005, sales of services to U.S. residents by foreign companies' nonbank majority-owned U.S. affiliates were $389.0 billion. By area, affiliates with ultimate beneficial owners (UBOs) in Europe had by far the largest sales of services, accounting for two-thirds of the total. Affiliates with UBOs in Asia and Pacific accounted for the next largest share of sales (11 percent), followed by affiliates with UBOs in Canada (10 percent) and in Latin America and Other Western Hemisphere (10 percent). By country, affiliates with UBOs in the United Kingdom had the largest sales ($68.0 billion), followed by affiliates with UBOs in Germany ($54.6 billion) and in France ($50.9 billion).

By industry sector, U.S. affiliates in "finance (except depository institutions) and insurance" had the largest sales of services to U.S. persons, accounting for 26 percent of the total, followed by affiliates in "professional, scientific and technical services" and in information, which each accounted for 12 percent of the total. In "finance (except depository institutions) and insurance," affiliates in insurance accounted for 76 percent of sales. In "professional, scientific, and technical services," affiliates in advertising and related services had the largest sales, accounting for 42 percent of the total, followed by affiliates in computer systems design and related services. In information, affiliates in telecommunications and in publishing industries had the largest sales.

U.S. affiliates' sales of services in the United States grew 2 percent in 2005, essentially the same rate as in 2004. This continued the pattern of relatively modest growth in recent years. Corporate restructurings held down overall growth in sales of services in 2005, particularly in the information sector. In information, some affiliates became minority owned and thus exited the universe of majority-owned affiliates. Decreased sales by affiliates in nonlife insurance also dampened overall growth as some affiliates adopted more stringent underwriting guidelines that reduced the volume of policies written and others divested or restructured parts of their U.S. businesses.

The modest growth in sales in 2005 was largely attributable to existing affiliates rather than to sales by newly acquired or established affiliates, despite increased spending by foreign companies to acquire or establish U.S. businesses.[15] The growth in sales of services was broadly based by area of UBO and industry sector. Increases partly reflected a shift in some affiliates' activities into services and away from manufacturing. Also, as was the case for U.S. sales of services abroad through foreign affiliates, some industry-specific factors resulted in increased sales. For example, strong demand for oil and gas boosted U.S. affiliates' sales of services in several supporting industries, primarily support activities for oil and gas operations (which is classified in mining in tables 11.1 and 11.2), because of stronger demand for drilling services.

U.S. affiliates' sales of services to U.S. persons increased $7.1 billion in 2005. The largest increase was accounted for by Europe ($5.8 billion), followed by Canada ($3.7 billion) and Latin America and Other

Acknowledgments

The estimates of cross-border trade were prepared by the following staff members of the Balance of Payments Division and the Direct Investment Division.

Travel and passenger fares—Joan E. Bolyard and Laura L. Brokenbaugh

Other transportation—Patricia A. Brown

Royalties and license fees and "other private services," affiliated—Gregory G. Fouch (for transactions of U.S. affiliates) and Mark W. New (for transactions of U.S. parents)

Royalties and license fees and "other private services," unaffiliated—Christopher J. Emond, Pamela Aiken, Suhail Ally, Felix Anderson, Stacey Ansell, Damon C. Battaglia, Rachel Blanco, Annette Boyd, Faith M. Brannam, Jamela Des Vignes, Hope R. Jones, Eddie L. Key, Kiesha Middleton, Steven J. Muno, Mark Samuel, Gregory Tenentes, John A. Sondheimer, Robert A. Becker, Anne Flatness, Vivian Wong, and Matthew J. Argersinger.

The estimates of sales of services through majority-owned affiliates were prepared by staff members of the Direct Investment Division.

The information in tables 1, 2, 3, and 5 was consolidated by John A. Sondheimer. Computer programming for data estimation and the generation of the other tables were provided by Marie Colosimo, Ian P. Dusenberry, Carole J. Henry, Neeta B. Kapoor, Fritz H. Mayhew, Xia Ouyang, and Tara L. O'Brien.

15. According to data from BEA's survey of new foreign direct investment in the United States, which covers only transactions involving U.S. businesses that are newly acquired or established by foreign direct investors, outlays to acquire or establish U.S. businesses increased from $86.2 billion in 2004 to $91.4 billion in 2005. For additional information, see Lawrence McNeil, "Foreign Direct Investment in the United States," SURVEY 87 (June 2007): 44–51. For more information on foreign direct investment in the United States and the operations of both new and existing affiliates, see Thomas Anderson, "U.S. Affiliates of Foreign Companies: Operations in 2005," SURVEY 87 (August 2007): 194–211 and Marilyn Ibarra and Jennifer Koncz, "Direct Investment Positions for 2006: Country and Industry Detail," SURVEY 87 (July 2007): 21–36.

Western Hemisphere ($1.9 billion). Within Europe, affiliates with UBOs in the United Kingdom more than accounted for the increase. Sales increases for British-owned affiliates were largest in "professional, scientific, and technical services," especially advertising and related services and architectural, engineering, and related services, and in transportation and warehousing. For Canadian-owned affiliates, the largest increase was in utilities, mainly natural gas distribution, followed by "finance (except depository institutions) and insurance," mainly life insurance. In contrast, sales of services to U.S. residents by affiliates with UBOs in Asia and Pacific decreased. The decrease was more than accounted for by affiliates with UBOs in Australia and reflected corporate reorganizations through which U.S. affiliates that were previously majority owned became minority owned.

By industry sector, U.S. affiliates in administration, support, and waste management had the largest dollar increase in sales to U.S. persons ($4.5 billion), followed by affiliates in transportation and warehousing ($2.8 billion) and in mining ($2.7 billion). In administration, support, and waste management, the largest portion of the increase was attributable to affiliates in waste management and remediation services. The increase reflected a change in the industry classification of some affiliates from manufacturing to waste management and remediation services as well as acquisitions of U.S. companies in this industry. In transportation and warehousing, the largest increase was in support activities for transportation, reflecting increased activity by existing affiliates; sales by affiliates acquired by foreign companies in 2005 also contributed. In mining, the increase was attributable to affiliates in support activities for oil and gas operations, where increases in demand and higher prices for contracted offshore drilling boosted sales. In contrast, sales of services to U.S. residents by affiliates in information declined. The decrease reflected corporate reorganizations through which affiliates that were previously majority owned became minority owned and thus exited the universe of nonbank majority-owned U.S. affiliates.

Revisions

The revised estimates of cross-border trade in services published in this article are consistent with the less detailed estimates that were published in the July 2007 SURVEY. The revised estimates of sales through affiliates are presented for the first time. The revised estimates published in this article supersede those presented in the October 2006 SURVEY.

Cross-border trade. The estimates of cross-border exports of private services for 2005 have been revised up $7.3 billion, or 2 percent, to $367.8 billion, and the estimates of cross-border imports have been revised up $1.0 billion, or less than 1 percent, to $281.6 billion. For 2004, exports were revised up $5.0 billion, or 2 percent, to $333.0 billion, and imports were revised up $1.9 billion, or less than 1 percent, to $259.2 billion. For 2003, exports were revised up $1.1 billion, or less than 1 percent, while imports were virtually unrevised.

These revisions to the estimates of cross-border trade in services reflect the regular annual revisions that are released in June and are published in the international transactions accounts in the July SURVEY. These revisions generally reflect the incorporation of regular source data as well as statistical and methodological improvements.

Sales through affiliates. The estimates of sales through affiliates for 2005 are preliminary. The estimates for 2004 have been revised to incorporate newly available and improved source data, to correct errors or omissions, or to implement other changes resulting from the regular annual revision of the data on multinational companies' operations. Estimates for 2003 and preceding years are unchanged.

For 2004, the estimates of sales of services abroad through nonbank majority-owned foreign affiliates of nonbank U.S. multinational companies were revised down $6.6 billion, or 1 percent, to $483.0 billion. The estimates of sales of services to U.S. persons by nonbank majority-owned U.S. affiliates of foreign multinational companies were revised down $0.8 billion, or less than 1 percent, to $382.0 billion.

Current Efforts to Improve the Estimates

As part of its efforts to improve the data on international services, BEA has recently initiated several changes in methodology and data collection.[16] Some of these changes have already been implemented, and others are underway.

16. For a summary of the improvements implemented from 1990–2003, see the appendix "Improvements to BEA's Estimates of U.S. International Services, 1990–2003," in Borga and Mann, SURVEY 83 (October 2003): 74–76. For a summary of changes initiated from 2004–2006, see the appendix on improvements included in each October SURVEY article in this series since 2003.

Data Availability

The estimates of cross-border trade for 1986–2006 and the estimates of sales through majority-owned affiliates for 1989–2005 can be downloaded from BEA's Web site. To access these files, go to <www.bea.gov> under "International," click on "Trade in Goods and Services" and then, look under "International Services" for "Cross-border trade for 1986–2006 and sales through affiliates for 1986–2005."

Reconfiguration of surveys of cross-border trade. BEA has consolidated its collection of cross-border services transactions. Beginning with the 2006 BE–120 Benchmark Survey of Transactions in Selected Services and Intangible Assets with Foreign Persons conducted in early 2007, transactions with affiliated and unaffiliated foreign persons are reported on the same form. That practice continues with the BE–125 Quarterly Survey of Transactions in Selected Services and Intangible Assets with Foreign Persons and the BE–185 Quarterly Survey of Financial Services Transactions Between U.S. Financial Services Providers and Foreign Persons for 2007 onward. Previously, BEA had collected data on affiliated and unaffiliated transactions on separate surveys.

This change should improve the quality of BEA's estimates because the collection of unaffiliated and affiliated transactions on the same form should reduce the potential for duplicate reporting or for omissions. BEA is also collecting data on types of services for affiliated transactions at the same level of detail as unaffiliated transactions. Collecting both unaffiliated and affiliated transactions in the same detail will allow for a more complete picture of services trade by type of service. Moreover, detailed data on affiliated services are of analytical interest for several purposes, including addressing questions related to offshore outsourcing. BEA has also included an open-ended "other services" category to capture transactions in services not collected elsewhere, which will make the estimates more comprehensive. Finally, BEA has taken a number of steps to simplify reporting and to reduce the burden on reporters, such as eliminating the requirement to report detailed information about trade in several types of services for which U.S. trade has been small.

Because of the time required to address transitional reporting issues, BEA has only partly incorporated data from the new surveys into the estimates of cross-border service transactions in this article. The new survey data covering 2006 will be incorporated in the international transactions accounts tables published in the July 2008 SURVEY OF CURRENT BUSINESS and in the October 2008 article in this series.

Data sources for travel. BEA is exploring the use of data on expenditures made by U.S. travelers abroad and foreign travelers in the United States using credit cards.

BEA's current estimates of travel services largely use a method that involves multiplying the number of travelers by their average expenditures. The numbers of travelers are based on data provided by U.S. immigration authorities. Their average expenditures are based on information collected on a survey administered to travelers leaving the United States while they are in flight or in the boarding area. This survey requires departing foreign visitors to recall the amount of expenditures that they made during their trip, and it requires departing U.S travelers to predict the amount of expenditures that they plan to make on their upcoming trip.

A methodology based on credit card-based information on travel expenditures has the potential to result in higher quality estimates. Credit card transactions and ATM withdrawals can provide accurate data on a large portion of spending by travelers abroad and in the United States. To provide a basis for expanding these data to include transactions using all forms of payment, BEA plans to conduct a survey that will collect information from travelers on the proportion of their expenditures abroad made using various means—such as credit cards, cash withdrawals from ATMs, and traveler's checks. It would use the data from this survey to expand the credit card data to cover travel service purchases made using all spending methods.

Strategies to improve coverage. BEA is working with the Census Bureau to obtain information from the Census Bureau's 2006 Company Organization Survey (COS) that would enable BEA to expand its mailing list of companies that receive its surveys of cross-border transactions. To help identify companies that may be missing from BEA's mailing list, the 2006 COS included new screening questions on whether the reporting company imported services. In addition, the sample of companies covered by the COS was significantly expanded. This information will be used by BEA to identify services importers and to augment its mailing lists for its surveys.

Annual surveys of banks. BEA is currently working to add coverage of banks to its annual survey of U.S. direct investment abroad. The survey would collect information on sales of services as well as other measures of operations by foreign bank affiliates of U.S. parent companies and by nonbank foreign affiliates with U.S. bank parents. The initial year of coverage would be 2007. Currently, these entities are only covered on benchmark surveys that are conducted every 5 years. The introduction of annual survey coverage for banks represents an important step in improving the data on international services and fills a gap in coverage.

Tables 1–11.2 follow.