

U.S. International Services

Cross-Border Trade in 2008 and Services Supplied Through Affiliates in 2007

By Jennifer Koncz-Bruner and Anne Flatness

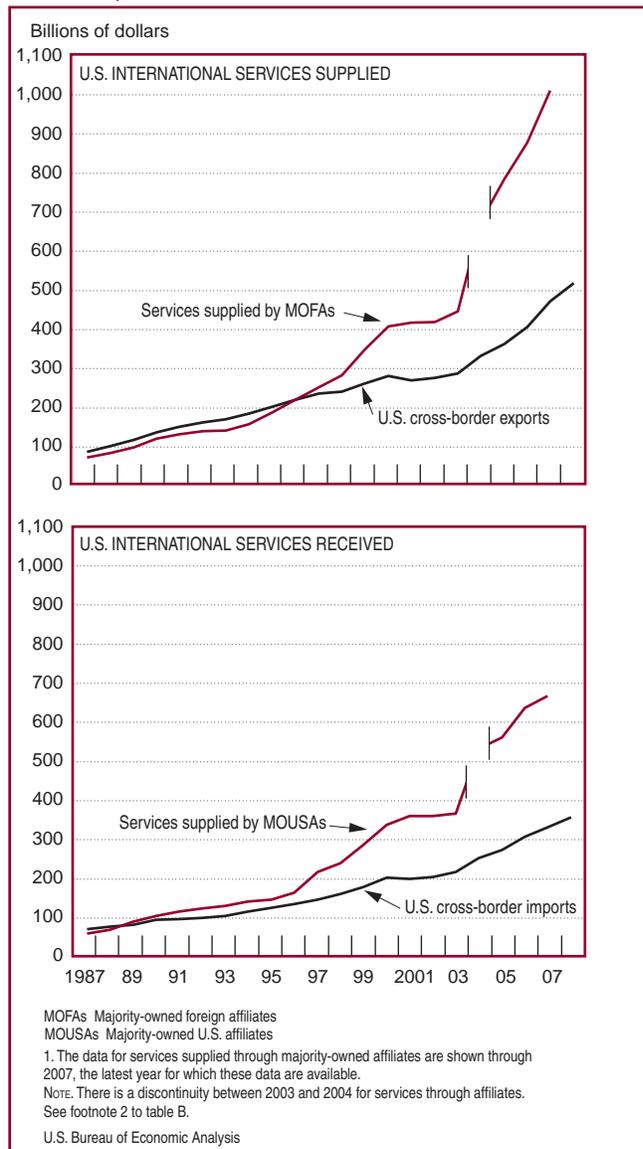
THIS presentation of services provided to and by the United States in international markets takes a broad perspective by including information on both exports and imports of services in the conventional sense—that is, services that cross borders—as well as services supplied through the channel of direct investment by affiliates of multinational companies (MNCs). This approach recognizes the importance of proximity to customers in the delivery of services, which leads many MNCs to serve foreign markets, at least in part, through their affiliates that are located in, but owned outside of, the markets they serve. In 2007 (the latest year for which data on services supplied through affiliates are available), as in previous years, the majority of services both supplied and obtained by the United States in international markets was through affiliates (table A and chart 1).¹

This year’s presentation introduces a major improvement to the statistics on services supplied through affiliates by including services provided by bank affiliates. Previously, annual source data were not available for banks, and the absence of statistics for services provided by bank affiliates resulted in a major difference in the coverage between statistics for cross-border trade and statistics for services supplied through affiliates. The new statistics for banks complete the improvements started last year with the introduction of new treatments of insurance and wholesale

and retail trade; the new measure of services supplied through affiliates is available starting with 2004.²

2. For a discussion of the improved measures of insurance and wholesale and retail trade services introduced last year, see the section “Revisions and Improvements” in the October 2008 article in this series. For a more detailed description on the incorporation of bank affiliates, see the section “Revisions and Improvements” in this article.

Chart 1. U.S. International Services Supplied and Received, 1987–2008¹



1. The statistics on services supplied through affiliates cover majority-owned affiliates, irrespective of the percentage of ownership.

Table A. Services Supplied to Foreign and U.S. Markets
[Billions of dollars]

	Supplied to foreign markets		Supplied to U.S. market	
	Across border	Through foreign affiliates	Across border	Through U.S. affiliates
2006	411	890	314	648
2007	478	1,026	338	678
2008	526	n.a.	364	n.a.

n.a. Not available

MOFAs Majority-owned foreign affiliates
 MOUSAs Majority-owned U.S. affiliates
 1. The data for services supplied through majority-owned affiliates are shown through 2007, the latest year for which these data are available.
 NOTE: There is a discontinuity between 2003 and 2004 for services through affiliates. See footnote 2 to table B.

U.S. Bureau of Economic Analysis

Highlights of the new measure of services supplied through bank affiliates include the following:

- For 2007, the inclusion of the new measures for foreign bank affiliates and nonbank affiliates of U.S. banks boosted total services supplied to foreign persons through majority-owned affiliates of U.S. companies 12 percent and increased total services supplied to U.S. persons by foreign companies' majority-owned affiliates 8 percent. (See page 37.)
- The inclusion of bank affiliates' services supplied did not substantively alter geographic patterns by country or region. European affiliates remain the largest providers of services abroad in 2007. For services supplied to the United States, U.S. affiliates with ultimate beneficial owners in Europe remain the largest service suppliers.
- The incorporation of services supplied by bank affiliates altered the relative importance of certain industry sectors, particularly for foreign affiliates. For services supplied abroad through foreign affiliates in 2007, finance and insurance became the largest services-providing industry sector. For services supplied to the U.S. market through U.S. affiliates, the inclusion of banks boosted the importance of the finance and insurance sector, though it remained the second largest services-providing industry.
- The inclusion of services supplied by bank affiliates had a small effect on growth rates in 2004–2007 of services supplied to foreign markets and no substantive effect on growth of services supplied to the U.S. market.

In addition to the improved measure of services supplied through affiliates, the statistics on cross-border trade continue to reflect the improvements introduced last year from integrated survey data collection on total trade for detailed types of royalties and license fees and business, professional, and technical services for 2006–2008.³

Cross-border trade highlights

- In 2008, U.S. cross-border exports of private services were \$525.8 billion and cross-border imports were \$364.4 billion (table B).⁴ The resulting surplus in cross-border private services trade was \$161.4 billion, an increase of 15 percent from the previous year. In contrast to the persistent deficit on goods trade, which was \$840.3 billion in 2008, the United

3. For more on the new integrated data collection on total trade for detailed types of royalties and license fees and BPT services, see the section "Revisions and Improvements" in the October 2008 article in this series.

4. Private services exclude services transactions by the U.S. government or military. The statistics in this article are consistent with the less detailed quarterly statistics published in table 3 of the international transaction accounts. See www.bea.gov/international/bp_web.

Table B. Services Supplied 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)	To foreign persons by foreign affiliates of U.S. companies ³	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	336.3	258.1	(²) 684.9	(²) 540.9
2005	368.5	279.5	795.6	571.2
2006	410.8	313.9	889.8	648.3
2007	478.1	338.2	1,025.8	677.8
2008	525.8	364.4	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	(¹)
2003	3.8	6.2	6.8	1.8
2004	15.9	16.3	(²)	(²)
2005	9.6	8.3	16.2	5.6
2006	11.5	12.3	11.8	13.5
2007	16.4	7.7	15.3	4.6
2008	10.0	7.7	n.a.	n.a.

n.a. Not available

¹ A non-zero value between -0.05 and 0.05 percent.

² The statistics for 2006–2007 are revised from those published in last year's article in this series. See Anne Flatness, Erin M. Whitaker, and Robert E. Yuskavage, "Annual Revision of the U.S. International Accounts," *Survey of Current Business* 89 (July 2009): 35–47.

³ Beginning in 2004, services provided by bank affiliates and, for majority-owned foreign affiliates, services supplied by the nonbank affiliates of U.S. banks are included in the statistics on services supplied. In addition, the statistics are presented as "services supplied" rather than "sales of services" from 2004 forward. Services supplied adds 1) wholesalers' and retailers' distributive services; 2) insurers' premium supplements; and 3) banks' implicitly-charged services; it subtracts a proxy measure of insurers' expectations of losses to sales of services. The new measures result in a net increase in services provided. See the section "Revisions and Improvements" in this article.

⁴ For 1986–88, the statistics 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, primarily the exclusion of investment income from sales of services by affiliates in finance and insurance.

⁵ 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 (NAICS); the statistics for prior years were based on codes derived from the 1987 Standard Industrial Classification (SIC) System. This change resulted in a redefinition of sales of services by affiliates and 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 *Survey* 79 (October 1999): 61.

⁶ Beginning in 1999, sales by foreign affiliates were classified as goods or services based on industry codes derived from NAICS; the statistics for prior years were based on codes derived from the 1987 SIC. This change resulted in a redefinition of sales of services by affiliates and 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 *Survey* 81 (November 2001): 58.

States has historically had a surplus on services trade.

- Cross-border exports of private services increased 10 percent (\$47.7 billion) in 2008, compared with a 16 percent (\$67.3 billion) increase in 2007 (table C). Growth in other private services and royalties and license fees slowed, outweighing faster growth in passenger fares and other transportation.

Table C. Cross-Border Services
[Change from preceding year]

	Percent			
	Exports		Imports	
	2007	2008	2007	2008
Private services.....	16	10	8	8
Travel.....	13	13	6	4
Passenger fares.....	16	23	3	15
Other transportation.....	12	14	3	8
Royalties and license fees.....	19	9	5	8
Other private services ¹	18	6	13	8
	Billions of dollars			
	Exports		Imports	
	2007	2008	2007	2008
Private services.....	67.3	47.7	24.3	26.2
Travel.....	11.3	13.0	4.3	3.4
Passenger fares.....	3.6	6.0	0.9	4.2
Other transportation.....	5.3	7.4	1.8	5.0
Royalties and license fees.....	13.1	7.8	1.1	2.0
Other private services ¹	34.0	13.5	16.2	11.6

1. Other private services consists of education; financial services; insurance services; telecommunications; business, professional, and technical services; and other services.

- Cross-border imports increased 8 percent (\$26.2 billion) in 2008, the same rate as in 2007. Slower growth in other private services and travel offset faster growth in the other major categories.

Services through affiliates highlights

- In 2007, foreign affiliates of U.S. companies supplied foreign markets with services totaling \$1,025.8 billion, and U.S. affiliates of foreign companies supplied the U.S. market with services of \$677.8 billion. The difference between foreign affiliates' services supplied abroad and U.S. affiliates' services supplied in the United States was \$348.0 billion in 2007, compared with \$241.5 billion in 2006.
- Services supplied abroad by foreign affiliates increased 15 percent in 2007 after increasing 12 percent in 2006. Services supplied increased despite a slowdown in economic growth in many major markets served by affiliates. The depreciation of the U.S. dollar against several major currencies in 2007 boosted the dollar value of services supplied by affiliates in several markets.
- Services supplied by U.S. affiliates to the U.S. market grew 5 percent in 2007, after increasing 14 percent in 2006. This significant slowdown coincided with

the broader slowdown in U.S. economic growth in 2007. Services supplied by existing affiliates contributed most to the increase, but increases due to acquisitions were also substantial.

Comparing cross-border trade and services through affiliates

Differences in coverage and classification make it difficult to precisely compare cross-border trade in services with services supplied through affiliates. For instance, a difference in classification arises because data on cross-border trade in services are collected and published by type of service, but data on services supplied through affiliates are collected and tabulated by the affiliate's primary industry.⁵ Despite these difficulties, the large value of the difference between U.S. cross-border transactions in services and those provided through affiliates suggests that the latter is the larger channel of delivery for services both provided and

5. An example of a difference in coverage is due to the inclusion of distributive services in services supplied through affiliates but not in the cross-border trade statistics. The distributive services associated with importing and exporting goods are included, but not separately identifiable, in the value of trade in goods.

Data Sources

The statistics in this article are primarily based on data from surveys conducted by the Bureau of Economic Analysis (BEA), but the statistics for 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. For cross-border trade, data on the majority of types of private services are collected on the Quarterly Survey of Transactions in Selected Services and Intangible Assets with Foreign Persons. This survey and all the other surveys of international services are available on BEA's Web site at www.bea.gov/international/index.htm#surveys.

The data on services supplied through 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: Final Results From the 2002 Benchmark Survey* and *U.S. Direct Investment Abroad: Final Results From the 2004 Benchmark Survey*.

For a summary of changes in survey methodology and other improvements to cross-border services statistics, see the "Catalog of Major Revisions to the U.S. International Accounts, 1976–2008" on BEA's Web Site at www.bea.gov/international/index.htm.

obtained in international markets (charts 1, 2, and 3).

The remainder of this article is organized as follows:

- The first section presents preliminary statistics on cross-border exports and imports of private services for 2008 and revised statistics for 2006–2007 (see page 26).
- The second section presents preliminary statistics on services supplied through affiliates for 2007 and revised statistics for 2006 (see page 33).
- The third section discusses revisions and improvements to the statistics (see page 37).
- The fourth section highlights planned improvements to the statistics on U.S. international services (see page 38).

Data Availability

The cross-border trade statistics for 1986–2008 and the statistics on services provided through majority-owned affiliates for 1989–2007 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,” look under “International Services” for “Cross-border trade for 1986–2008 and services provided through affiliates for 1986–2007.”

Chart 2. U.S. International Services by Major Area in 2007

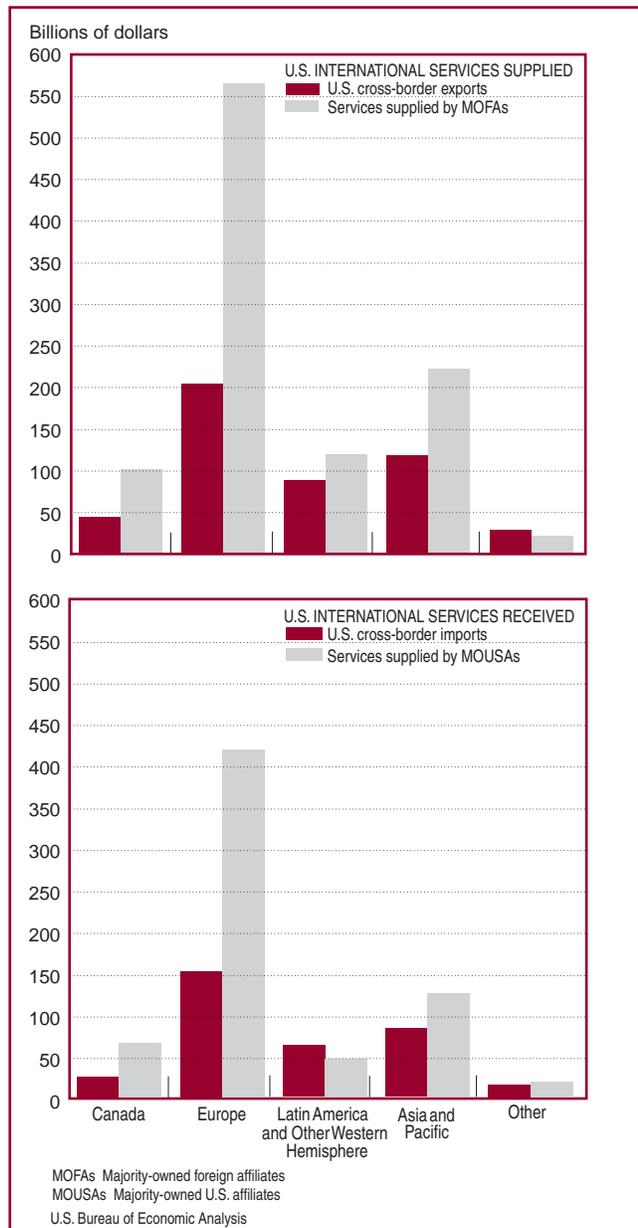
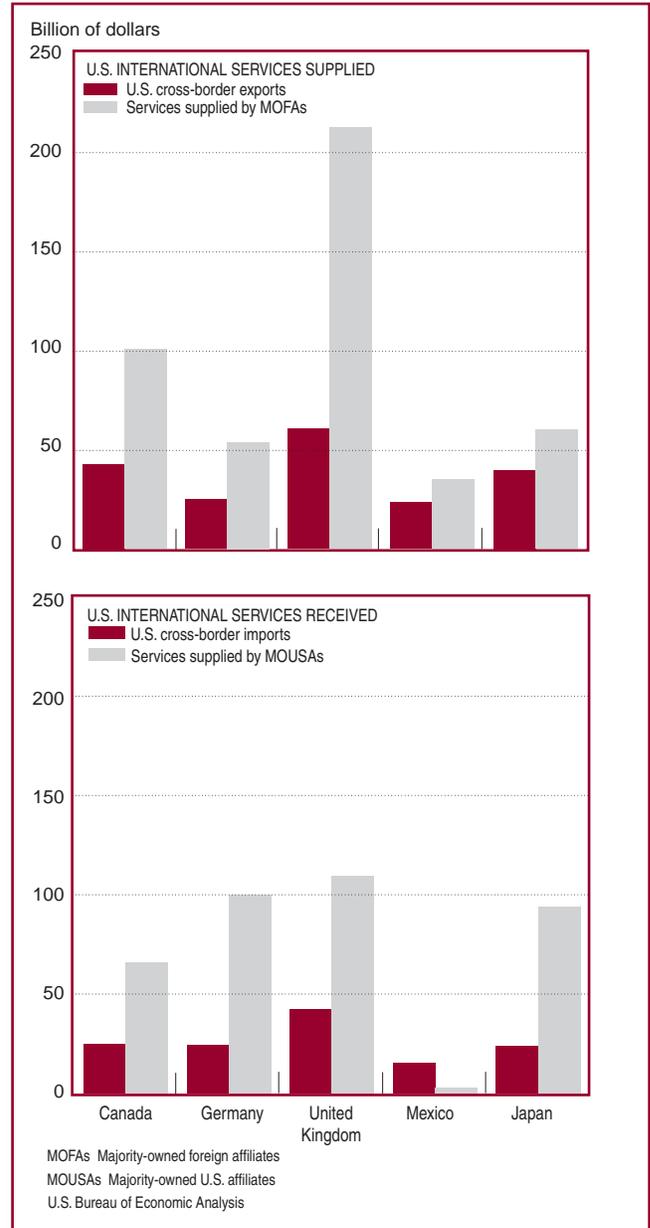


Chart 3. U.S. International Services by Major Country in 2007



U.S. Cross-Border Trade in 2008

U.S. exports of private services (receipts) increased 10 percent to \$525.8 billion in 2008 after increasing 16 percent in 2007, and U.S. imports of private services (payments) increased 8 percent to \$364.4 billion, the same rate of increase as in 2007. As a result, the services surplus increased 15 percent to \$161.4 billion, making 2008 the fifth consecutive year the services surplus has increased.

Growth in the gross domestic product (GDP) of the United States' major trading partners slowed substantially in late 2008 as the global economic slowdown took hold, likely contributing to the slowdown in the growth of services exports. In 2008, real GDP growth fell to 0.7 percent from 2.7 percent in the euro area, to 0.7 percent from 2.6 percent in the United Kingdom, to 0.4 percent from 2.5 percent in Canada, and to 1.3 percent from 3.3 percent in Mexico.⁶ In Japan, real GDP declined 0.7 percent in 2008 after growing 2.3 percent. Despite the slowdown in growth, U.S. services exports remained strong in 2008. The fall in the value of the U.S. dollar against other major currencies, especially in the first half of the year, likely contributed to the continued growth in U.S. exports.

Real GDP growth in the United States also fell, dropping to 0.4 percent from 2.1 percent in 2007. Despite the slowdown in economic activity, U.S. imports of services grew at the same rate as in 2007.

For both exports and imports, all major categories of services increased. For exports, the largest dollar in-

creases were in other private services—particularly business, professional, and technical services—and in travel. Royalties and license fees, other transportation, and passenger fares also contributed significantly to the increase in total exports. For imports, the largest increase was in other private services, particularly business, professional, and technical services. Other transportation, passenger fares, and travel also contributed significantly.

By area, Europe continued as the largest market for both exports and imports of private services, followed by Asia and Pacific (chart 4). By country, the United Kingdom continued as the United States' largest trading partner for both exports and imports (table D), but the relative importance of several other top trading partners changed. For exports, Netherlands replaced Korea as the tenth largest market. For imports, Germany and Japan surpassed Canada to become the second and third largest suppliers of private services to the United States, France surpassed Mexico to become the sixth largest supplier, and India surpassed Ireland to become the ninth largest supplier.

Trade within multinational companies (affiliated trade) accounted for 26 percent and 22 percent of U.S. services exports and imports respectively. For exports, the rate of growth for both unaffiliated and affiliated trade decreased in 2008. The decrease for affiliated trade was especially sharp, dropping to 4 percent growth from 19 percent in 2007. For imports, the rate of growth for unaffiliated and affiliated trade varied only slightly from 2007 to 2008, growth in unaffiliated imports rose to 8 percent from 7 percent, and growth in affiliated imports fell to 7 percent from 9 percent.

6. Real GDP growth rates are from the International Monetary Fund, *World Economic Outlook* (October 2009).

Chart 4. U.S. Cross-Border Services Transactions: Share by Area in 2008

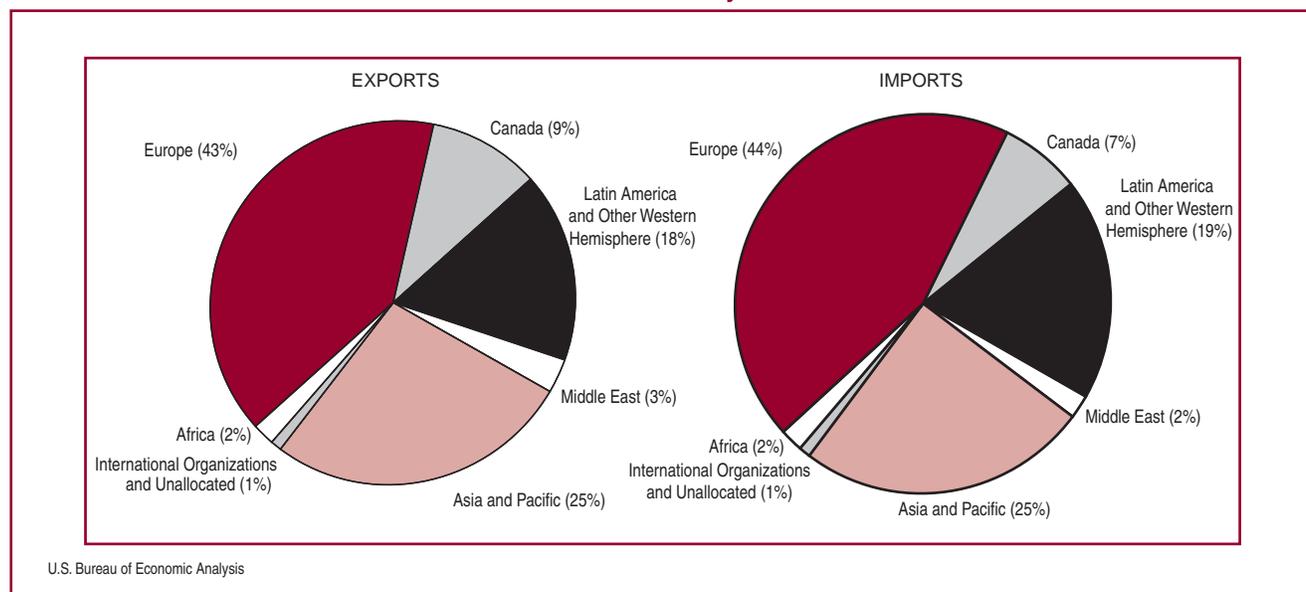


Table D. Cross-Border Services Exports and Imports by Type and Country, 2008

[Millions of dollars]

	Total private services	Travel	Passenger fares	Other transportation	Royalties and license fees	Other private services
Exports						
All countries	525,786	110,090	31,623	58,945	91,599	233,529
10 largest countries ¹	290,160	61,770	18,589	26,456	59,702	123,641
United Kingdom.....	62,545	12,978	3,738	5,000	8,880	31,949
Canada.....	45,775	14,781	3,883	3,711	5,898	17,502
Japan.....	41,245	10,772	3,782	4,527	7,473	14,691
Germany.....	28,160	5,142	1,541	3,508	7,880	10,089
Mexico.....	24,040	7,326	2,416	1,617	2,010	10,671
Ireland.....	22,767	1,598	425	436	11,655	8,653
France.....	17,916	3,797	985	1,831	3,719	7,584
Switzerland.....	17,242	1,083	281	980	7,917	6,981
China.....	15,870	2,717	897	3,173	2,327	6,756
Netherlands.....	14,600	1,576	641	1,675	1,943	8,765
Other countries	235,626	48,320	13,034	32,489	31,897	109,888
Imports						
All countries	364,366	79,743	32,597	72,143	26,616	153,267
10 largest countries ¹	205,096	37,096	14,130	29,955	20,347	103,568
United Kingdom.....	43,537	5,735	4,794	5,259	3,104	24,645
Germany.....	26,366	2,956	3,346	5,762	2,860	11,442
Japan.....	24,483	3,745	1,460	7,154	6,149	5,975
Canada.....	24,421	6,921	396	5,025	667	11,412
Bermuda.....	17,092	358	0	1,319	123	15,292
France.....	16,499	3,169	1,935	2,351	4,226	4,818
Mexico.....	15,758	10,211	889	1,349	105	3,204
Switzerland.....	14,829	658	434	1,044	2,384	10,309
India.....	12,123	2,431	323	385	107	8,877
Ireland.....	9,988	912	553	307	622	7,594
Other countries	159,270	42,647	18,467	42,188	6,269	49,699

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

Travel

Receipts. Foreign visitors spent \$110.1 billion on travel in the United States in 2008, an increase of 13 percent from 2007. Receipts from overseas visitors accounted for the majority of the increase, followed by receipts from Canada; receipts from Mexico increased slightly. The 2008 increase was the result of strong growth in the first three quarters of the year; receipts in the fourth quarter fell as the global economic downturn took hold.

Receipts from overseas visitors increased 15 percent to \$88.0 billion in 2008 as both the number of visitors and their average expenditures increased. The number of visitors from overseas increased 6 percent in 2008, and their average expenditures increased 8 percent. The value of the U.S. dollar against many major currencies, including the euro, fell in 2008, lowering the cost of travel in the United States for foreign visitors. The number of visitors from euro area countries increased 20 percent, leading to growth of more than 20 percent in travel receipts from many of those countries. Growth in receipts from emerging market countries, such as China and Brazil, was also strong. Receipts from the United Kingdom, the United States' largest source of overseas travel receipts, increased

9 percent. Receipts from Japan, the second largest source, decreased 2 percent, continuing a decline that began in 2006.

U.S. travel receipts from Canada increased 12 percent to \$14.8 billion in 2008 as both the number of travelers and their average expenditures increased. The number of Canadian travelers arriving by air increased 8 percent, and the number of travelers arriving by land increased 2 percent.

Travel receipts from Mexico increased 2 percent to \$7.3 billion in 2008 as an increase in receipts for travel from the interior of Mexico outweighed a decrease in border travel. Receipts from travelers from the interior of Mexico, which accounted for 45 percent of Mexican travel receipts, rose 8 percent; the number of travelers and their average expenditures both increased. Receipts from border travelers, however, fell 3 percent as both the number of travelers and their average expenditures fell.

Payments. U.S. travelers abroad spent \$79.7 billion in 2008, a 4 percent increase from the previous year. Growth in travel expenditures overseas more than accounted for the increase; payments to Canada and Mexico decreased. The total number of U.S. travelers visiting foreign countries decreased for the third straight year. This decrease was more than offset by an increase in average expenditures.

U.S. payments for overseas travel increased 7 percent to \$62.6 billion in 2008. The number of U.S. travelers going overseas decreased 1 percent in 2008, the first annual decrease since 2002. Europe, the destination of a third of overseas travelers, led the decrease with a 6 percent fall in travelers. The fall in the value of the U.S. dollar, which raised the costs of overseas travel for U.S. residents, as well as the increased cost of airfare, likely contributed to the decrease. In contrast, the average expenditures of overseas travelers increased, leading to the overall increase in overseas travel payments.

Travel payments to Canada decreased 7 percent to \$6.9 billion in 2008. The number of travelers to Canada decreased 12 percent, continuing a downward trend that began in 2000.

U.S. travel payments to Mexico were \$10.2 billion in 2008, a decrease of 1 percent. Payments to Mexico decreased for the first time since 1999. A decrease in payments for travel to the interior of Mexico more than accounted for the decrease. While the number of travelers to the Mexican interior increased 5 percent, their average expenditures decreased 6 percent. In contrast, the number of travelers to the border decreased 1 percent, continuing a downward trend that began in 2006, but their average expenditures increased, resulting in a 2 percent increase in payments.

Types of Cross-Border Services: Coverage and Definitions

The cross-border trade statistics cover both affiliated and unaffiliated transactions between U.S. residents and foreign residents. Affiliated transactions consist of trade within multinational companies—specifically, trade between U.S. parent companies and their foreign affiliates and 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 intangible assets—including patents, trade secrets, and other proprietary rights—that are used in connection with the production of goods, copyrights, trademarks, franchises, rights to broadcast live events, software licensing fees, and other intellectual property rights.

Other private services. These accounts consist of education, financial services, insurance services, 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 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 services 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 covers a variety of services, such as legal services, accounting services, and advertising services (see the list in table 1).

The “other services” component of other private services receipts consists 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. The “other services” component of other private services payments consists 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.

Passenger fares

Receipts. Passenger fare receipts of U.S. carriers rose 23 percent to \$31.6 billion in 2008, the largest increase since 1990. Growth in receipts from overseas air passengers was particularly strong, rising 32 percent as both airfares and the number of overseas visitors traveling on U.S.-flag carriers increased. A sharp rise in the cost of jet fuel contributed to the increase in airfares, and the weakness of the U.S. dollar relative to most major currencies contributed to the increase in visitors to the United States. Overseas visitors have been increasingly flying on U.S. airlines; in 2008, almost half of foreign visitors used U.S.-flag carriers, compared with 41 percent in 2004.

Passenger fare receipts for air travel from Mexico and Canada increased, as did interline settlements and foreign-to-foreign receipts. Interline settlement receipts are for passenger transport services provided by a U.S.-flag carrier for a foreign-flag carrier through a code sharing or similar arrangement. Foreign-to-foreign receipts are for U.S. carriers' transport of foreign passengers between two foreign points. In contrast, receipts for ocean travel fell. Total passenger fare receipts from all major areas increased, with growth from Europe, the largest market, being strong.

Payments. Passenger fare payments to foreign carriers increased 15 percent to \$32.6 billion in 2008. The increase was almost entirely due to higher airfares. Payments to overseas air carriers increased 17 percent despite a 2 percent drop in the number of U.S. travelers on foreign-flag carriers. Payments to Canadian and Mexican carriers also increased, as did interline settlement payments. Passenger fare payments for ocean travel fell, continuing a trend that began in 2004. The sharp increase in airfares led to increased passenger fare payments to all major markets; the Middle East and Africa increased more than 60 percent.

Other transportation

Other transportation services cover freight charges for transporting exports and imports of goods and expenses that transportation companies incur in U.S. and foreign ports. U.S. receipts for other transportation services were \$58.9 billion in 2008, a 14 percent increase from 2007. Both freight and port services contributed to the increase. U.S. payments for other transportation services were \$72.1 billion, an 8 percent increase from 2007. Although they account for only a third of total other transportation payments, port services accounted for the entire increase. Europe remained the United States' largest trading partner for both receipts and payments of other transportation services, followed by Asia and Pacific.

Freight

Receipts. U.S. receipts increased 13 percent to \$22.4 billion in 2008, reflecting increases in both air and ocean freight. Receipts for air freight increased at a faster rate, 15 percent, than those for ocean freight, 10 percent. Export volumes and freight rates both increased. The volume of U.S. goods exports increased 7 percent in 2008 as an increase in export volumes in the first half of 2008 more than outweighed a decrease later in the year. Freight rates increased as the increase in the volume of goods trade led to container shortages, particularly for ocean freight. Higher fuel costs, which companies passed on to consumers in the form of surcharges, also contributed to the increase in freight rates.

Payments. U.S. payments decreased for the second consecutive year, falling 1 percent to \$45.2 billion in 2008. The decrease in 2008 was led by a 3 percent decrease in payments for air freight; payments for ocean freight also decreased slightly. The decrease in freight payments reflected a 3 percent decrease in import volumes. Freight rates, however, increased, likely reflecting increased fuel costs.

Port services

Receipts. U.S. receipts were \$36.6 billion in 2008, a 15 percent increase from 2007, mostly reflecting increased fuel prices. Receipts for ocean port services rose faster than those for air port services; ocean port services now account for half of total port services. In 2008, Asia and Pacific passed Europe to become the largest market for U.S. port services, a move largely driven by sharp increases in exports of air port services to Korea and Hong Kong.

Payments. U.S. payments were \$26.9 billion in 2008, a 25 percent increase from 2007. The increase was mostly accounted for by air port services, which account for the vast majority of payments. Air port payments increased 26 percent, largely reflecting higher fuel costs. Ocean port payments also increased. Payments to Europe and to Latin America and Other Western Hemisphere led the increase, each rising over 30 percent in 2008. Payments to Asia and Pacific rose only 11 percent, as an increase in air port payments was partly offset by a decrease in ocean port payments.

Royalties and license fees

Receipts. U.S. receipts of royalties and license fees increased 9 percent to \$91.6 billion in 2008, led by dollar increases in the three types of intangible assets with the highest receipts: industrial processes (including patents) used in connection with the production of goods, general use computer software, and trademarks. As in

prior years, receipts for these three types of assets combined accounted for more than 90 percent of both affiliated and unaffiliated receipts. Receipts for industrial processes are the largest in total trade and affiliated trade, and receipts for computer software are the largest in unaffiliated trade.

Affiliated transactions account for the majority of royalty and license fee receipts, partly because it is easier for firms with intellectual property to exercise a degree of control over its distribution and use within affiliated relationships. However, unaffiliated receipts have been growing faster than affiliated receipts, resulting in a drop in the affiliated share of total receipts from 76 percent in 2004 to 66 percent in 2008. In multinational firms, parent companies are most often the holders of intellectual property; U.S. parents' receipts of royalties and license fees from their foreign affiliates accounted for more than 90 percent of total affiliated receipts, U.S. affiliates' receipts from their foreign parent groups account for the remainder.

Unaffiliated receipts increased 15 percent to \$31.3 billion in 2008, following a 33 percent increase in 2007. Receipts from the sales of rights to general-use computer software have been growing rapidly, accounting for almost 75 percent of the increase in each of the past 2 years.

Ireland was the top source for total receipts of royalties and license fees. While not a significant source of unaffiliated or U.S. affiliates' receipts, it accounted for one-fifth of U.S. parent receipts. In recent years, several U.S. parent companies have located some of their intellectual property in Ireland for a variety of reasons. The United Kingdom and Switzerland are the largest sources for U.S. affiliates' receipts, and Japan is the largest source for unaffiliated receipts.

Payments. U.S. payments of royalties and license fees increased 8 percent to \$26.6 billion in 2008. As with receipts, industrial process, computer software, and trademarks accounted for more than 90 percent of total payments. Industrial processes and rights for broadcasting and recording live events were the largest contributors to growth in payments in 2008. Payments for trademarks rose 4 percent, and payments for computer software declined.

Affiliated payments rose less than 1 percent as a decrease in U.S. affiliates' payments to their foreign parents—mainly rights related to industrial processes and general use computer software—was offset by an increase in U.S. parents' payments to their foreign affiliates—mainly rights related to industrial processes and trademarks. As a result, affiliated payments accounted for 70 percent of U.S. payments of royalties and license fees in 2008, down from 75 percent in 2007.

Unaffiliated payments increased 31 percent, a sharp acceleration from 3 percent growth in 2007. Unaffiliated payments spike in years when there are major

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 delivery—cross-border trade and services supplied through affiliates. 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. As a result, the total value of these services may be scattered across several categories of cross-border trade and services supplied through affiliates in the tables following this article and in BEA's international transactions accounts.

Cross-border receipts for computer and data processing services and database and other information services are shown under business, professional, and technical services in tables 1 and 7. Computer-related services delivered to foreign markets through cross-border software-licensing agreements, such as onsite licenses, are included in general-use computer software under royalties and license fees in table 4.¹

The wages of U.S. residents who provide computer services to nonresidents are included in compensation receipts in the international transactions accounts (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 international transactions accounts 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.

In 2007, as in prior years, sales of computer-related services to foreign residents through foreign affiliates exceeded cross-border exports of these services, reflecting the advantages of a local commercial presence when delivering these services to foreign customers. The available data on services supplied through affiliates are classified by the primary industry of the affiliate rather than by type of service; computer-related services may also be supplied through affiliates in several other industries, particularly machinery manufacturing and wholesale trade.

1. 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, so it is also included in trade in goods.

international sporting events because U.S. companies pay international sports organizations, or their representatives, for the rights to broadcast and record the events. Such a spike occurred in 2008 when U.S. firms paid to broadcast the summer Olympic games.

Japan was the largest destination of payments by the United States for intangible assets. Payments to Japan are almost entirely by U.S. affiliates for the rights to industrial processes. France is the next largest destination and the largest destination for payments to unaffiliated parties.

Other private services

Other private services consists of education, financial services, insurance services, telecommunications, and business, professional, and technical services. U.S. receipts for other private services increased 6 percent to \$233.5 billion in 2008, and U.S. payments for other private services increased 8 percent to \$153.3 billion. Business, professional, and technical services was the largest contributor to the increase in both receipts and payments (table 1 and tables 5–7).

Education

Receipts. U.S. receipts for education services increased 12 percent to \$17.8 billion in 2008 as the number of foreign students studying in the United States and their average tuition increased. The number of foreign students increased 7 percent in 2008, the second straight year of growth following declines from academic years 2002–2003 through 2005–2006. Average tuition increased 6 percent at private and public 4-year universities and colleges.

India, China, and South Korea remain the leading countries of origin for foreign students in the United States. In the 2007–2008 academic year, the number of foreign students from each of these countries increased more than 10 percent. Saudi Arabia is now one of the top 10 countries of origin; the number of students from Saudi Arabia increased 25 percent in the 2007–2008 academic year.

Payments. U.S. payments for education services increased 9 percent to \$5.2 billion in 2008. The number of U.S. students who studied abroad increased 8 percent, but the length of their studies declined, with 55 percent electing to pursue a study-abroad program with a duration of 8 weeks or less.

Of the U.S. students who studied abroad, more than half elected to go to European countries, mainly the United Kingdom, Italy, Spain, and France. However, U.S. students are increasingly electing to study in emerging markets, particularly those in Asia and Pacific.

Financial services

Receipts. U.S. financial services receipts decreased 2 percent to \$60.2 billion in 2008, following a 28 percent increase in 2007 (table E). Receipts for management and advisory services led the decline, falling 13 percent, a sharp turnaround from 33 percent growth in 2007, as both financial management and financial advisory services fell amid a period of financial market turmoil. Securities transaction services also decreased; heightened liquidity restraints in global markets caused a drop in foreign securities issued in the United States, leading to a decrease in underwriting services. Increases in “other” financial services, largely a result of increases in electronic funds transfer receipts, and in credit card and other credit-related services were partly offsetting.

Payments. U.S. financial services payments decreased 3 percent to \$19.1 billion in 2008, following a 34 percent increase in 2007. Declines in financial management and advisory services, which decreased 13 percent in 2008 following a 27 percent increase in 2007, and in “other” financial services accounted for the decrease. Within “other” financial services, a sharp drop in securities lending services led the decrease, partly offset by continued growth in electronic funds transfer services. In contrast to these decreases, securities transaction services and credit card and other credit-related services continued to increase.

Insurance services

Receipts. U.S. receipts for insurance services increased 6 percent to \$10.8 billion in 2008, reflecting increases in receipts for reinsurance and for primary and other insurance. Premiums received for primary insurance increased 4 percent, while those for reinsurance were flat. Canada remained the largest market for U.S. insurance services in 2008, but the relative importance of other major markets changed. Bermuda replaced

Table E. Financial Services Transactions, 2006–2008

[Millions of dollars]

	2006	2007	2008
Total receipts	47,882	61,393	60,190
Securities transactions ¹	15,554	19,064	18,784
Management and advisory ²	19,431	25,781	22,369
Credit card and other credit-related	4,928	5,701	6,368
Other ³	7,968	10,848	12,668
Total payments	14,733	19,750	19,143
Securities transactions ¹	2,882	3,818	4,711
Management and advisory ²	5,922	7,523	6,547
Credit card and other credit-related	785	852	899
Other ³	5,144	7,558	6,986

1. Includes brokerage services and underwriting and private placement services.

2. Includes financial management services and financial advisory and custody services.

3. Includes securities lending, electronic funds transfer, and other financial services.

Japan as the second largest market, and Japan fell to fourth behind the United Kingdom. In addition, the significance of Switzerland continued to increase; receipts from Switzerland nearly doubled in 2008, making Switzerland the fifth largest market for U.S. insurance services.

Payments. U.S. payments for insurance services rose 3 percent to \$42.9 billion in 2008, the smallest rate of increase since 2005. An increase in payments for re-insurance services, partly reflecting an increase in premiums paid, was the largest contributor to the increase. Payments for primary and other insurance also increased: payments for auxiliary insurance services more than doubled, offsetting a decrease in primary insurance services. Bermuda remained the largest supplier of insurance services to the United States in 2008, followed by Switzerland and Ireland.

Telecommunications

Receipts. U.S. receipts for telecommunications services increased 14 percent to \$9.2 billion in 2008. Affiliated telecommunications receipts led the increase, rising 31 percent to \$3.9 billion, while receipts for unaffiliated telecommunications services increased 4 percent to \$5.2 billion.⁷ Affiliated receipts have been growing faster than unaffiliated receipts because receipts for value-added telecommunications services—such as satellite broadcasting, business communication, and data network management and operation—account for a larger share of affiliated receipts and have been growing much faster than basic telecommunications services.

Receipts from Latin America and Other Western Hemisphere grew 23 percent to \$3.6 billion in 2008, surpassing Europe as the largest market for U.S. telecommunications services. Increases from this region were driven by growth in U.S.-owned Latin American firms, particularly in Brazil, where affiliated receipts increased 34 percent.

Payments. U.S. payments for telecommunications services increased 2 percent to \$7.2 billion in 2008. As with receipts, growth in affiliated payments was much faster than that for unaffiliated payments. Payments decreased to every major region in 2008, except for Europe. In 2008, the United Kingdom replaced Mexico as the largest provider of telecommunication services to the United States.

7. Transactions in basic telecommunications services are deemed to be unaffiliated, even when the services flow through affiliated channels, because they represent the distribution of revenues collected from unaffiliated customers. Other types of telecommunications services, such as value-added services, are classified as either affiliated or unaffiliated.

Business, professional, and technical services

Receipts. U.S. receipts for business, professional, and technical (BPT) services increased 11 percent to \$113.5 billion in 2008. Research, development, and testing services (R&D services) was the largest contributor, rising \$2.8 billion, or 20 percent, followed by management and consulting services (including allocated expenses).⁸ All types of services, except database and other information services, industrial engineering services, and advertising, increased in 2008.

Affiliated receipts rose slightly faster and contributed more to the total increase than unaffiliated receipts, although unaffiliated receipts continued to account for a larger share of total receipts. For most services, unaffiliated receipts exceeded affiliated receipts. However, for management and consulting services, R&D services, and advertising services, the vast majority of transactions continued to be between affiliated parties. In addition, in 2008, affiliated receipts exceeded unaffiliated receipts for accounting, auditing, and bookkeeping services for the first time.

By area, Europe remained the largest market for U.S. exports of BPT services, followed by Asia and Pacific. Management and consulting services continued to lead receipts from both regions in 2008 and continued to be more important for Europe, where it accounted for 30 percent of total receipts, than for Asia and Pacific, where it accounted for 18 percent. By country, the United Kingdom remained the largest market for U.S. BPT services, although receipts grew only 3 percent, and Japan overtook Ireland and Canada to become the second largest market. Receipts from Japan rose 23 percent, while those from Canada rose 2 percent, and those from Ireland fell 9 percent.

Payments. U.S. payments for BPT services increased 15 percent to \$76.3 billion in 2008. R&D services was the largest contributor, rising \$3.1 billion, or 27 percent, followed by management and consulting services (including allocated expenses) and computer and data processing services. Management and consulting services retained its position as the largest component of BPT payments, accounting for 28 percent of total payments.

Affiliated payments rose more slowly than unaffiliated payments—13 percent, compared with 20 percent—but accounted for more of the total increase. Management and consulting services was the largest contributor to the affiliated increase, followed closely by R&D services. For unaffiliated services, R&D services was the largest contributor. Unlike re-

8. Allocated expenses are funds received by a parent company from its affiliates for general overhead and expenses.

ceipts, payments to affiliated parties were larger than payments to unaffiliated parties for many types of services.

By area, payments from Asia and Pacific increased \$4.6 billion, or 25 percent, accounting for almost half of the 2008 increase. Although they were only the third largest component of payments to Asia and Pacific, R&D services had the largest increase, followed closely by computer and data services, the largest component. By country, the United Kingdom, Canada, and India remained the top three providers of BPT services. Payments to all three increased in 2008; payments to India grew the fastest, 31 percent.

Film and television tape rentals

Receipts. Receipts for film and television tape rentals decreased 6 percent to \$13.6 billion in 2008, a reversal from a 12 percent increase in 2007. Film and television tape rentals cover the rights to display, reproduce, and distribute U.S. motion pictures and television programming abroad. International ticket sales for the largest U.S. filmmakers rose slightly in 2008; however, cross-border receipts for film and television tape rentals do not necessarily correspond to foreign box office totals.

Payments. Payments for film and television tape rentals increased 21 percent to \$1.9 billion in 2008, up significantly from a 2 percent increase in 2007. The increase in payments is partially due to a 49 percent increase in payments to the United Kingdom that is likely related to the success of films produced in that country.

Services Supplied Through Affiliates in 2007

Last year's article introduced a new measure of services provided called "services supplied through affiliates," which incorporated new measures of insurance and wholesale and retail trade services. This year, a major gap in coverage was closed with the inclusion of services supplied by bank affiliates and, for U.S. multinationals, by nonbank affiliates of U.S. banks. The measure of services provided by bank affiliates includes explicit fees and commissions as well as an estimate of services for which the affiliate charges implicitly by paying a lower rate of interest on deposits than they charge on loans. These implicit fees, often referred to as "financial intermediation services indirectly measured," are measured based on differences between interest charged to borrowers and interest paid to depositors. The addition of bank affiliates raises the measure of services supplied relative to the old sales-based measure and the improved measure in-

roduced last year, both of which covered only non-bank affiliates. As mentioned previously, the inclusion of bank affiliates increased services supplied to foreign markets through foreign affiliates and services supplied to U.S. markets through U.S. affiliates 12 percent (\$109.2 billion) and 8 percent (\$47.7 billion) in 2007, respectively. The new measure also boosted the relative importance of affiliates in the finance and insurance sector as service providers.⁹

In 2007, U.S. multinationals supplied services of \$1,112.4 billion worldwide through their majority-owned foreign affiliates, up 15 percent from 2006 (table F). Services supplied by the majority-owned U.S. affiliates of foreign multinationals were \$751.6 billion, up 5 percent from 2006. Typically, transactions with parties located in the same country tend to dominate affiliates' transactions in services as well as in goods. Transactions with parties in the local market accounted for 72 percent of services supplied and 56 percent of goods supplied by the foreign affiliates of U.S. companies in 2007. In 2007, as in many previous years, local transactions accounted for an even larger share of

9. For a more detailed description of the new measures of services supplied through bank affiliates, see the section "Revisions and Improvements" in this article.

Table F. Services Supplied by U.S. MNCs Through Their MOFAs and by Foreign MNCs Through Their MOUSAs, 2006–2007

[Millions of dollars]

	2006	2007
Services supplied through MOFAs		
Total	967,651	1,112,427
To affiliated persons	202,452	224,239
To unaffiliated persons	765,199	888,188
To U.S. persons	77,831	86,586
To U.S. parents	56,496	59,579
To unaffiliated U.S. persons	21,335	27,008
To foreign persons	889,820	1,025,841
To other foreign affiliates	145,956	164,660
To unaffiliated foreign persons	743,864	861,181
Local sales	691,896	796,240
To other foreign affiliates	37,367	50,169
To unaffiliated foreigners	654,530	746,071
To other countries	197,924	229,601
To other foreign affiliates	108,589	114,492
To unaffiliated foreigners	89,335	115,109
Services supplied through MOUSAs		
Total	714,611	751,613
To U.S. persons	648,286	677,815
To foreign persons	66,325	73,798
To the foreign parent group	34,484	41,942
To foreign affiliates	3,546	3,644
To other foreigners	28,296	28,212

NOTE: In this table, services supplied through affiliates are generally defined to be economic outputs that are intangible. Intangible assets 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

services and goods supplied by the U.S. affiliates of foreign companies due to the large size and attractiveness of the U.S. market. Services supplied locally accounted for 90 percent of services supplied and 91 percent of goods supplied by U.S. affiliates in 2007.¹⁰

Services supplied and received by the United States in international markets through the channel of direct investment comprise services supplied by U.S. multinationals' affiliates to both the local market and to other foreign markets and services supplied by foreign multinationals' U.S. affiliates to U.S. persons. These international services deliveries are presented in table 8 by country of the foreign affiliate and by country of the U.S. affiliate's ultimate beneficial owner (UBO).¹¹ Tables 9.1 and 9.2 present services supplied by foreign affiliates cross-classified by primary industry of the affiliate and by country of affiliate for 2006 and 2007. Tables 10.1 and 10.2 present services supplied by U.S. affiliates cross-classified by primary industry of the affiliate and by country of UBO for 2006 and 2007.

Services supplied by foreign affiliates to foreign persons

In 2007, U.S. multinationals supplied services of \$1,025.8 billion to foreign persons through their majority-owned foreign affiliates. By area, affiliates in Europe accounted for over half of all services supplied to international markets through affiliates. Affiliates in Asia and Pacific were also large services suppliers in 2007, accounting for 22 percent of the total. Within Europe, the United Kingdom by far accounted for the largest share of the total (38 percent). The next largest services suppliers were affiliates in Switzerland (10 percent) and Germany (9 percent), which switched positions from 2006 as second and third largest. Within Asia and Pacific, Japan accounted for the largest part of the total (27 percent), followed by Australia (16 percent), and Singapore (14 percent).

By industry sector, foreign affiliates classified in finance and insurance and those in wholesale trade were the largest suppliers of services in 2007, each accounting for 22 percent of the total. Within the finance and insurance sector, three-quarters of the total was attributable to finance, reflecting, in particular, the large

value of services supplied by affiliates in banking and in securities, commodity contracts, and other intermediation and related services. Within wholesale trade, wholesalers of professional and commercial equipment and supplies accounted for the largest share of the total, followed by wholesalers of petroleum and petroleum products and electrical and electronic goods.

In 2007, services supplied to foreign persons by majority-owned foreign affiliates of U.S. companies grew 15 percent after an increase of 12 percent in 2006. Services supplied increased in all major areas in 2007 despite slower economic growth in many important host markets served by foreign affiliates.¹² The depreciation of the U.S. dollar against several major currencies—including the euro, the British pound, and the Canadian and Australian dollars—also boosted services supplied by increasing the dollar value of affiliates' services; meanwhile, the appreciation of the dollar against the Japanese yen dampened growth in the dollar value of services supplied by affiliates in Japan.¹³ Services supplied by newly established affiliates also contributed to the overall increase, especially in Europe. By industry, services supplied increased strongly in wholesale trade and in finance and insurance as a result of services provided by newly established affiliates as well as growth in services by existing affiliates.

Changes by area and country

Services supplied to foreign persons by foreign affiliates grew in each of the major areas in 2007. The largest increase was for European affiliates (\$68.4 billion), which accounted for half of the overall increase. Affiliates in Asia and Pacific had the next largest increase (\$39.9 billion), accounting for 29 percent of the total change.

Within Europe, increases were broadly based, but affiliates in the United Kingdom and Switzerland together accounted for roughly half of the region's increase. In the United Kingdom, services supplied grew for affiliates in nearly all major industries. The largest increase was in finance and insurance, mainly finance, reflecting services provided by newly established affiliates and sales growth for existing affiliates, especially those involved in securities, commodity contracts, and other intermediation and related activities. Much of the growth for existing finance affiliates was due to

10. The shares of local and foreign sales of goods for U.S. affiliates of foreign companies were estimated based on exports of goods shipped because data on these affiliates' sales of goods are not collected by destination. In 2007, exports accounted for 9 percent of U.S. affiliates' sales of goods.

11. 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.

12. In 2007, in the United Kingdom, real GDP growth fell to 2.6 percent from 2.9 percent; in the euro area, real GDP growth fell to 2.7 percent from 2.9 percent; in Canada, it fell from 2.9 percent to 2.5 percent; and in Mexico, it fell from 5.1 percent to 3.3 percent. Data are from the International Monetary Fund, *World Economic Outlook* (October 2009).

13. In 2007, the dollar depreciated 8 percent against both the euro and the British pound, 5 percent against the Canadian dollar, 10 percent against the Australian dollar, and 11 percent against the Brazilian real. In contrast, the dollar appreciated 1 percent against the Japanese yen.

higher trade volumes and equity price levels, which boosted fees and commissions for asset management. Strong growth in services provided by existing banks also contributed. There were also significant increases in wholesale trade, which reflected growth in existing affiliates' distributive services, and in the information sector due to services supplied by foreign affiliates that were acquired in 2006. In Switzerland, affiliates in wholesale trade and in finance and insurance—especially those in securities, commodity contracts, and other intermediation and related activities—were the largest contributors to the increase. The increases reflected services supplied by affiliates that were newly established in 2007 or in 2006, for which 2007 was the first full year of operations. Services supplied abroad also increased substantially for affiliates in France and in the Netherlands. The increase for French affiliates was broadly based, with the largest increase in wholesale trade, mainly reflecting newly established affiliates. In the Netherlands, information had the largest increase, which was mainly due to newly established affiliates.

Within Asia and Pacific, services supplied increased for all major countries except for the Philippines. Affiliates in Singapore contributed most to the increase and accounted for nearly one-quarter of the region's increase, followed by those in Australia (16 percent), Hong Kong (15 percent), and Japan (13 percent). In Singapore, affiliates in wholesale trade and in finance and insurance had the largest increases in services supplied. In wholesale trade, petroleum wholesalers contributed the most to the increase, while banks contributed most to the increase in finance and insurance. In both Australia and Hong Kong, affiliates in finance and insurance were the largest contributors to the increases. In each case, the increases in finance and insurance largely reflected increases in finance, especially for affiliates with securities, commodity contracts, and other intermediation and related activities.

Changes by industry sector

Increases in services supplied to foreign persons were broadly based by industry sector in 2007. The largest increase was in wholesale trade (\$44.4 billion), which accounted for about one-third of the overall increase, followed by finance and insurance (\$36.6 billion). Services supplied also increased strongly in professional, scientific, and technical services and in information.

The increase in wholesale trade was geographically widespread, with affiliates in Europe and in Asia and Pacific accounting for the largest shares of the increase for the sector. The increase reflected services supplied by newly established affiliates as well as growth in distributive services provided by existing affiliates and, to

a lesser extent, growth in their secondary services activities, such as professional, scientific, and technical services. Within wholesale trade, affiliates in professional and commercial equipment and supplies had the largest increase. Services supplied were also up significantly in petroleum and petroleum products and in electrical and electronic goods wholesaling.

In finance and insurance, increases were geographically widespread, but European affiliates by far accounted for the largest share of the increase. Within the sector, the increase was concentrated among affiliates in finance, which accounted for over three-quarters of the increase. Increases were particularly strong for affiliates involved in securities, commodity contracts, and other intermediation and related activities, which reflected both increased sales of services by existing affiliates and sales by newly acquired or established affiliates in 2007 or in late 2006. Despite turbulent market conditions in the latter part of the year, sales of services by existing affiliates grew strongly because of increased volume of trading, higher equity prices that boosted fees earned from asset management, and a larger volume of transactions associated with greater merger and acquisition activity. Also within finance, services supplied increased in banking, which was boosted by newly acquired affiliates and growth in services by existing affiliates that resulted from growth in loans and deposits as well as increased investment banking activity.

In professional, scientific, and technical services, computer systems design and related services had the largest increase and partly reflected changes in industry classification as the services activities of some affiliates have become more important than their manufacturing. In information, affiliates in telecommunications accounted for the largest part of the increase, mainly reflecting affiliates that were previously minority owned that became majority owned and thus entered the statistics for services supplied by majority-owned affiliates as well as increased sales due to acquisitions made by existing affiliates.

U.S. affiliates' services supplied in the United States

In 2007, majority-owned U.S. affiliates of foreign companies supplied U.S. persons with services of \$677.8 billion. By area, affiliates with UBOs in Europe accounted for the largest share of the total by far (62 percent). The next largest suppliers of services were affiliates with UBOs in Asia and Pacific, which accounted for 18 percent of the total. Within Europe, affiliates with UBOs in the United Kingdom accounted for over one-quarter of the region's total, followed by affiliates with UBOs in Germany (24 percent) and

France (16 percent). Within Asia and Pacific, affiliates with Japanese UBOs accounted for the majority of services supplied at three-quarters of the region's total.

By industry sector, affiliates classified in wholesale trade supplied the most services to the United States, followed by those in finance and insurance. Together, affiliates in these two industry sectors accounted for 42 percent of total services supplied to U.S. residents. In wholesale trade, services supplied by wholesalers of petroleum and petroleum products, electrical and electronic goods, and motor vehicles and motor vehicle parts and supplies were particularly large. In finance and insurance, affiliates in finance accounted for about two-thirds of the total. Services supplied by affiliates with securities, commodity contracts, and other intermediation and related activities and banking activities were particularly large. Services supplied by affiliates in manufacturing, especially transportation equipment, and in professional, scientific, and technical services, especially advertising and computer systems design and related services, were also substantial.

Services supplied by U.S. affiliates to the United States grew 5 percent in 2007, a significant slowdown from 14 percent growth in 2006. The deceleration coincided with a slowdown in U.S. economic growth in 2007.¹⁴ This marks a return to the more modest growth of many previous years after a year of particularly strong growth in 2006. By country of UBO, the increase was largely attributable to affiliates with UBOs in Asia and Pacific and in Europe, which together accounted for three-quarters of the overall change. Growth in services supplied by existing affiliates accounted for the larger part of the increase, but acquisitions in 2007 or in 2006 that were only operating for the first full year in 2007 also contributed. By industry, the largest increases were in administration, support, and waste management and in professional, scientific, and technical services.

Changes by area and country

In 2007, services supplied to the United States by U.S. affiliates increased \$29.5 billion. Services supplied increased for every major geographic area except for Africa and the United States.¹⁵ The largest increase was for affiliates with UBOs in Asia and Pacific (\$12.6 billion), which accounted for 43 percent of the overall increase. The next largest increases were for Europe (\$9.6 billion or 32 percent of the total) and Canada (\$4.1 billion or 14 percent).

Within Asia and Pacific, affiliates with UBOs in Ja-

pan had the largest increase, followed by those with UBOs in Australia. For Japan, increases were largest in wholesale trade and in finance and insurance. In wholesale trade, increases were widespread among wholesalers of various types of goods. For Australia, the largest contributors to the increase were affiliates in real estate and rental and leasing, followed by finance and insurance; acquisitions boosted services supplied in both of these industries. For affiliates with UBOs in Korea and India, the increases were also substantial. For Korea, affiliates in wholesale trade contributed most to the increase. For India, affiliates in professional, scientific, and technical services contributed most to the increase.

Within Europe, the largest increases were for Germany and the United Kingdom, which together more than accounted for the region's overall change. For Germany, the largest increase was in finance and insurance, especially finance, as some affiliates expanded their U.S. banking activities. Services supplied by German-owned affiliates in information and in wholesale trade also increased substantially. In information, telecommunications was the largest contributor due to growth at existing affiliates, and in wholesale trade, the increase reflected higher margin rates on sales and increased sales volume. For the United Kingdom, the largest increase was in finance and insurance, which reflected growth at existing affiliates in finance, especially those in securities, commodity contracts, and other intermediation and related services that expanded their U.S. operations. Additionally, acquisitions boosted services supplied in insurance. In contrast to, and partly offsetting, these increases within Europe, services supplied by Netherlands-owned affiliates decreased \$5.2 billion, which reflected the exit of some affiliates from the direct investment universe through selloffs to U.S. firms.

Changes by industry sector

By industry sector, increases in services supplied were broadly based in 2007. The largest increases were in administration, support, and waste management (\$7.7 billion), in professional, scientific, and technical services (\$7.6 billion), and in information (\$7.3 billion). Services supplied by affiliates classified in finance and insurance also increased substantially (\$5.8 billion).

In administration, support, and waste management, increases were widespread across several industries, but the largest were in investigative and security services, in waste management and remediation services, and in travel arrangement and reservation services. The change largely reflected an increased focus on services in the operations of affiliates that previously focused on manufacturing goods, which resulted in

14. Real U.S. GDP growth slowed from 2.7 percent in 2006 to 2.1 percent in 2007.

15. The UBO of a U.S. affiliate can be located in the United States. See footnote 11 for more information.

changes in industry classifications.¹⁶ Services supplied by affiliates acquired in 2006 also contributed. In professional, scientific, and technical services, the increase was broadly based by country of UBO and by detailed industry. The largest increases were in computer systems design and related services and in advertising and related services. The increase in computer systems and design was mainly due to sales expansion by existing affiliates and, to a lesser extent, sales by newly acquired affiliates. The increase for advertising reflected sales growth for existing affiliates. In information, increases were widespread, but the largest was in telecommunications, mainly due to increased sales by existing affiliates that grew their subscriber bases.

Revisions and Improvements

The revised statistics on total (unaffiliated and affiliated combined) cross-border trade in services published in this article are consistent in both value and presentation with the less-detailed statistics by type of service that were published in the July 2009 SURVEY OF CURRENT BUSINESS. The statistics for services supplied through affiliates for 2004–2006 are revised and for the first time incorporate services provided by bank affiliates and for U.S. multinationals, services provided by nonbank affiliates of bank parents. The revised statistics published in this article supersede those presented in the October 2008 SURVEY.

Cross-border trade. The statistics for cross-border trade in private services were revised for 2006 and 2007. Cross-border exports were revised down \$4.5 billion, or 1 percent, for 2006 and \$1.8 billion, or less than 1 percent, for 2007. Cross-border imports were revised up less than \$0.1 billion in 2006 and down \$2.9 billion, or 1 percent, in 2007.

The revisions to the cross-border private services statistics reflect regular annual revisions that are released in June and published in the international transactions accounts in the July SURVEY. This year's revisions reflect the incorporation of updated source data and minor statistical and methodological improvements.

Services supplied through affiliates. Last year, a new, featured measure of services provided by affiliates, called *services supplied*, was introduced in this ar-

ticle. The services supplied measure incorporated new measures of insurance and wholesale and retail trade that are more akin to services output than the old “sales of services” measure.¹⁷ This year, the measure of services supplied has been expanded to cover services provided by bank affiliates. In particular, the statistics on services supplied for 2004 forward have been expanded to cover services supplied abroad by majority-owned bank foreign affiliates and nonbank foreign affiliates owned by U.S. banks and services supplied to the United States by foreign companies' U.S. bank affiliates. This closes a gap in coverage for an important industry for multinational companies.

The measure includes explicit fees and commissions and an estimate of the implicit services provided by banks, often referred to as financial intermediation services indirectly measured.¹⁸ The inclusion of these implicit service charges recognizes that banks may charge for their services either explicitly or implicitly based on the difference between interest rates charged to borrowers and interest rates paid to depositors. It is necessary to capture both explicitly and implicitly charged services to measure the value of services supplied by bank affiliates.

The new and old measures of services are presented in table G. The inclusion of services provided by bank affiliates results in significantly higher measures of services supplied to foreign markets by U.S. multinationals' foreign affiliates and to the U.S. market by foreign multinationals' U.S. affiliates.¹⁹ In 2007, services supplied to foreign markets by bank foreign affiliates and nonbank foreign affiliates of U.S. banks added \$109.2 billion, or 12 percent, to the overall measure of

17. Note that the statistics on services supplied for affiliates' primary and secondary activities in all other industries remained sales of services. The change in the measure introduced a break in series in 2004 for the measure of services provided through affiliates. For a discussion on the introduction of the improved measures, see the section “Revisions and Improvements” in the October 2008 article in this series. At this time, BEA will continue to publish the previous sales of services measure in detailed tables on the operations of majority-owned foreign affiliates and of majority-owned U.S. affiliates in 2006 that are available on the BEA Web site. Beginning with the statistics for 2007, the measure of services provided by majority-owned U.S. affiliates in the detailed tables will be the improved measure featured in this article. The detailed tables on the operations of multinational corporations can be downloaded at www.bea.gov.

18. In this article, the incorporation of bank affiliates' financial services begins with 2004 because it was the first year for which the new measures of services supplied are available for both U.S. companies' majority-owned foreign affiliates and foreign companies' majority-owned U.S. affiliates. In addition, statistics on services supplied that include financial services provided by bank affiliates are available at www.bea.gov/international/intlserv.htm by major industry sector for majority-owned foreign affiliates for 2004–2005 and for majority-owned U.S. affiliates for 2002–2005 and by major area for majority-owned U.S. affiliates for 2002–2003.

19. Recall that the measure of services supplied that was introduced last year and that incorporated improved measures of services supplied by affiliates in insurance and wholesale and retail trade was substantially higher than the old sales-based measure. For a further discussion of the effects of the introduction of those new measures, see the section “Revisions and Improvements” in the October 2008 article in this series.

16. Although the reclassification of an affiliate increases (decreases) services supplied in the industries to which (from which) it is classified, the change in industry classification does not affect the overall year-to-year change in services supplied. While changes in industry classification generally do not affect the overall year-to-year change due to offsetting changes among industries, services supplied rose for some affiliates that were classified in administrative, support, and waste management in 2007 so that the overall total did increase and not just services for that industry. Additionally, other affiliates that had been reclassified into this industry from manufacturing in recent years continued to expand their service operations.

services supplied abroad. Services supplied to the U.S. market by U.S. bank affiliates added \$47.7 billion, or 8 percent, to services supplied. Comparing average annual growth rates for services supplied in 2004–2007, the inclusion of banks does not substantively change growth patterns. For services supplied abroad, the inclusion of the new measure for bank affiliates increased the average annual growth rate by 1 percentage point to 14 percent; for services supplied to the United States, average annual growth was unchanged at 8 percent. Similarly, the new measures for banks had little impact on the year-to-year percentage changes for 2007. Services supplied to foreign markets through foreign affiliates grew 15 percent, irrespective of whether banks were included; services supplied to the U.S. market through U.S. affiliates grew 5 percent, including the new bank measures, compared with 4 percent excluding banks.

The inclusion of bank affiliates' services reinforces the importance of the finance and insurance sector in providing services to international markets through the channel of direct investment. For services supplied abroad through foreign affiliates, the inclusion of banks resulted in the finance and insurance sector surpassing wholesale trade and professional, scientific, and technical services to become the largest provider of services, accounting for 22 percent of the total. For services supplied to the U.S. market through U.S. affiliates, the inclusion of banks boosts the importance of the finance and insurance sector, which accounts for 19 percent of the total, though it remains the second largest services-providing industry behind wholesale trade (22 percent of the total). By geographic area, the introduction of new measures of services supplied by bank affiliates and nonbank affiliates of U.S. banks

does not substantively change the relative importance of foreign affiliates in any particular country or region. Affiliates in Europe are still the largest providers of services to international markets, accounting for about 55 percent of the total. Similarly, the introduction of bank affiliates' services supplied does not significantly alter patterns by country of UBO; European-owned affiliates remain the largest providers of services to the United States, accounting for 62 percent of the total.

The statistics on services supplied for 2007 are preliminary. The statistics for 2006 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. Additionally, statistics on services supplied through majority-owned foreign affiliates were revised for 2004–2006 to incorporate the new measures of services supplied by bank affiliates.

For 2006, the statistics on services supplied to foreign persons through foreign affiliates were revised up 10 percent (\$83.5 billion) to \$889.8 billion. The revision was more than accounted for by the addition of services supplied by bank affiliates and nonbank affiliates of U.S. banks (\$93.0 billion). For 2004 and 2005, the upward revision to services supplied in both years reflected the incorporation of the new measure of banks' services, which was \$70.6 billion in 2005 and \$42.1 billion in 2004, as sales of services, the new measure of insurance services, and distributive services were unchanged.

For 2006, services supplied to the United States through U.S. affiliates were revised up 5 percent (\$32.4 billion) to \$648.3 billion. The incorporation of services supplied by banks (\$44.7 billion) more than accounted for the revision. For 2004–2005, the revisions were attributable to the incorporation of banks' services, which were \$44.0 billion in 2005 and \$39.4 billion in 2004.

Table G. Effects of the New Measures of Insurance, Wholesale and Retail Trade, and Banks' Services on Services Supplied by MOFAs and MOUSAs, 2004–2007

[Billions of dollars]

	2004	2005	2006	2007
Services supplied to foreign residents through MOFAs				
Old sales of services measure.....	483.0	562.2	629.8	701.1
Effects of new measures:				
Insurance services	-53.2	-57.4	-48.6	-47.6
Wholesale and retail trade.....	213.0	220.3	215.7	263.1
Banks' services	42.1	70.6	93.0	109.2
New measure of services supplied	684.9	795.6	889.8	1,025.8
Services supplied to U.S. residents through MOUSAs				
Old sales of services measure	382.0	388.5	451.2	483.5
Effects of new measures:				
Insurance services	-44.6	-43.1	-49.7	-55.3
Wholesale and retail trade.....	164.2	181.7	202.1	201.9
Banks' services	39.4	44.0	44.7	47.7
New measure of services supplied	540.9	571.2	648.3	677.8

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

Efforts to Improve the Statistics

BEA continues to improve its international services statistics, with some changes now being implemented and others underway.²⁰

20. For a summary of the improvements implemented in 1990–2003, see the appendix “Improvements to BEA’s Estimates of U.S. International Services, 1990–2003,” in Maria Borga and Michael Mann, “U.S. International Trade in Services,” SURVEY 83 (October 2003): 74–76. For a summary of changes initiated in 2004–2007, see the appendixes on improvements included in each October SURVEY article in this series since 2003. Additionally, a summary of changes and improvements to the international accounts, including cross-border services statistics, see the “Catalog of Major Revisions to the U.S. International Accounts, 1976–2008” on BEA’s Web site at www.bea.gov/international/index.htm.

Data sources for travel. In an effort to improve its statistics on travel services, BEA is exploring a methodology that would combine data on credit card expenditures made by U.S. travelers abroad and foreign travelers in the United States with information on the portion of total spending that was made using credit cards. Efforts to develop both types of information are underway.

For its statistics on travel services, BEA currently uses a method that involves multiplying the number of travelers by average expenditures. The number of travelers is based on data provided by U.S. immigration authorities. Average expenditures are based on information collected on a survey administered to travelers leaving the United States. 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 travel expenditures has the potential to improve the quality of the statistics. Credit card transactions can provide accurate data, drawn from business records, on a significant portion of spending by travelers abroad and in the United States. BEA has begun to collect data on credit card transactions, beginning with data for the first quarter of 2009, by conducting a survey of credit card companies. To provide a basis for expanding these data to reflect transactions using all means of payment, BEA is conducting a survey of travelers that collects information on the proportion of their expenditures abroad made using various means—such as credit cards, cash withdrawals from ATMs, and traveler's checks. When the survey of travelers is completed and the survey of credit card companies has been conducted for a number of quarters, BEA will use the data from these surveys to improve the statistics on travel.

Benchmark insurance survey. BEA has introduced a new benchmark survey, the BE-140 Benchmark Survey of Insurance Transactions by U.S. Insurance Companies with Foreign Persons, covering transactions in 2008. The benchmark insurance survey, which BEA will conduct every 5 years, has lower reporting thresholds than those on BEA's quarterly insurance survey and will provide a basis for BEA to reflect the transactions of firms falling below the quarterly reporting threshold in its statistics. For this benchmark, BEA obtained information from the National Association of Insurance Commissioners to identify insurance companies involved in international transactions but missing from BEA's mailing list, leading to more

comprehensive survey coverage. BEA plans to incorporate the results of the benchmark survey into next year's annual revision, which will be released in June 2010.

Implementing new international standards. In 2008, the International Monetary Fund released the sixth edition of the *Balance of Payments and International Investment Position Manual*, which contains new guidelines on the compilation and presentation of international trade statistics. In addition, in 2010, a group of international organizations will release an updated *Manual on Statistics of International Trade in Services*. BEA has formed a steering committee to examine these new standards and develop a process for implementing them, focusing on those changes that will increase international comparability and better integrate BEA's international, national, regional, and industry accounts. The changes in the new guidelines range from straightforward to complex, and their implementation will be a multiyear process.²¹

21. For more information see the box "Implementing New International Standards" in Anne Flatness, Erin M. Whitaker, and Robert E. Yuskavage, "Annual Revision of the U.S. International Accounts" SURVEY 89 (July 2009): 45.

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