U.S. International Services

Cross-Border Trade in 2007 and Services Supplied Through Affiliates in 2006

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THE BUREAU of Economic Analysis (BEA) takes a broad perspective in this presentation of U.S. international sales and purchases of services by including information on (1) services that cross borders and are thus included in the international transactions accounts as exports and imports and (2) services supplied by multinationals' affiliates through the channel of direct investment. This approach acknowledges the extent to which multinational companies (MNCs) provide services using affiliates located in—but owned outside of—the markets they serve and highlights the importance of proximity to customers in the delivery of services, which leads many companies to serve foreign markets, partly or wholly, through their affiliates. In 2006 (the latest year for which data on services supplied through affiliates are available), as in previous years, the majority of both services supplied and services obtained internationally was through affiliates (table A and chart 1).[1]

This year's presentation introduces several improvements. Broadly, these improvements include more detailed data on cross-border trade in services and new measures of services provided through affiliates in the insurance, wholesale trade, and retail trade industries. (See the section "Revisions and Improvements.")

More detailed trade data

For cross-border trade, more detailed data by type of service were collected, beginning with 2006. As a result, new statistics on total trade for several types of services are available for the first time; previously, only statistics for unaffiliated trade were available for these services. Most of these services are components of "other private services." New statistics on total trade in royalties and license fees by type of intangible asset are also now available; previously, detail by type of asset

1. The statistics on services supplied through affiliates cover nonbank majority-owned affiliates, irrespective of the percentage of ownership. They are limited to nonbank affiliates because annual data on sales of services by bank affiliates currently are not available.

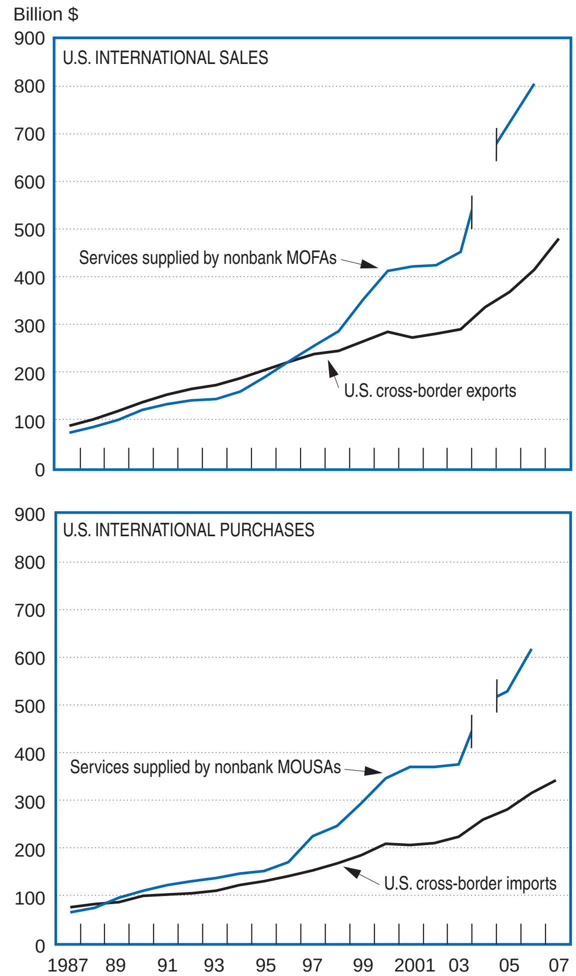
Table A. Sales of Services to Foreign and U.S. Markets

[Billions of dollars]

	U.S. sales to foreign markets		Foreign sales to the U.S. market	
	Across border	Through foreign affiliates	Across border	Through U.S. affiliates
2005	368	725	279	527
2006	415	806	314	616
2007	480	n.a.	341	n.a.

n.a. Not available

Chart 1. U.S. International Sales and Purchases of Private Services, 1987–2007[1]



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

1. The data for services supplied through majority-owned affiliates are shown through 2006, 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.

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was only available for unaffiliated transactions.

Highlights of the new detail by type of service for the cross-border trade statistics include the following:

- Within "business, professional, and technical (BPT) services," the importance of "management and consulting services" has increased. "Management and consulting services" is now the second largest type of service within both BPT receipts and payments. Detail on total trade by country and area further highlights the importance of Europe, which now accounts for half of total BPT receipts and payments; in prior years, Europe accounted for approximately 40 percent of trade.
- Within royalties and license fees, trade in rights related to industrial processes is the largest component of both total trade and affiliated trade. Detail on total trade by country reveals that rights related to industrial processes also dominate trade with the major U.S. trading partners. In prior years, for receipts, "general use computer software" was an equally large component of trade for many countries.

Improved measure of services through affiliates

For services provided through affiliates, a new measure, called "services supplied through affiliates," was introduced. The new measure is more akin to output than the old measure, which was entirely based on sales. This new measure better captures the services provided by three important industries: insurance, wholesale trade, and retail trade. In all other industries, services supplied continue to be measured in terms of sales.

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

- The new measure reveals the important role of wholesale trade affiliates as service providers. Among both U.S. multinationals' foreign affiliates and foreign multinationals' U.S. affiliates, services supplied by wholesalers, which now include the distributive services that they provide, were the largest, by far, of any industry sector. In 2006, affiliates in wholesale trade accounted for 23 percent of all services supplied to foreign persons by foreign affiliates; wholesale trade accounted for one-quarter of services supplied to the U.S. market by U.S. affiliates. This is a markedly different picture of services supplied through affiliates by industry sector; in the old series, wholesale trade affiliates were small suppliers of services because their sales in trade were recorded as sales of goods, leaving only their secondary activities in other service industries to be recorded as sales of services. Recognition of the distributive services provided by affiliates also boosted the importance of affiliates in retail trade and in manufacturing—the latter as a result of secondary activities in wholesale trade—as service suppliers.
- In contrast to the larger role of wholesalers as service providers, the new measure of services supplied reveals a smaller role for affiliates classified in insurance. U.S. affiliates in insurance have historically accounted for the largest share of services sold to U.S. persons; insurance has also been among the top industries for foreign affiliates providing services abroad. Although they are still important, affiliates

Data Sources

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

BEA conducts several mandatory surveys of trade in services; some surveys are targeted to specific services industries. 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 and the Quarterly Survey of Transactions Between U.S. Financial Services Providers and Foreign Persons. These surveys as well as 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 1999 Benchmark Survey.*

For a summary of the changes in survey methodology used for cross-border services for 1990–2003, see "Improvements to BEA's Estimates of U.S. International Services, 1990–2003" in Borga and Mann, SURVEY OF CURRENT BUSINESS 83 (October 2003): 74–76. For a summary of the changes in 2002–2006, see the appendixes on improvements in the October SURVEY articles in 2003–2006. The SURVEY articles for 1994–2007 are available at <www.bea.gov/scb/index.htm>.

classified in insurance now appear to be smaller service providers because the new measure recognizes that a portion of premiums are used to pay claims.

Cross-border trade

In 2007, U.S. cross-border exports of private services of $480.0 billion exceeded cross-border imports of $341.1 billion, resulting in a surplus in cross-border private services trade of $138.9 billion, which was up strongly from a $101.4 billion surplus in 2006. In contrast to the persistent deficit on international trade in goods, which was $819.4 billion in 2007, the United States has historically run a surplus on international trade in services.

U.S. exports of cross-border services rose 16 percent in 2007, up from a 13 percent increase in 2006; U.S. imports of cross-border services increased 9 percent, down from a 12 percent increase (table B). In both 2006 and 2007, all major categories of services increased for both exports and imports; however, most categories of U.S. exports accelerated in 2007, while most categories of U.S. imports decelerated (table C).

Table C. Cross-Border Services

[Percent change from the preceding year]

	Exports		Imports	
	2006	2007	2006	2007
Private services	13	16	12	9
Travel	5	13	5	6
Passenger fares	5	16	5	4
Other transportation	12	11	5	3
Royalties and license fees	12	14	–3	5
Other private services [1]	18	18	28	15

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

For cross-border exports, "other private services" had the largest increase in both dollar and percentage terms, accounting for over half of the increase in total exports in 2007. Within "other private services," "business, professional, and technical services" and financial services had the largest increases. "Other private services" also had the largest dollar and percentage increases in cross-border imports, accounting for more than two-thirds of the total increase in 2007. "Business, professional, and technical services" and insurance services were both significant contributors to the increase.

Services supplied through affiliates

In 2006, U.S. companies' foreign affiliates supplied foreign markets with services of $806.3 billion, and foreign companies' U.S. affiliates supplied the United States with services of $615.9 billion. The difference between services supplied abroad by foreign affiliates and those supplied in the United States by U.S. affiliates was $190.5 billion in 2006, down from $197.9 billion in 2005.

Services supplied to foreign persons through U.S. companies' foreign affiliates increased 11 percent in 2006 after increasing 13 percent in 2005. Services supplied grew in all major areas and in all major industry sectors. A pickup in economic growth in many major

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

	Through cross-border trade [1]		Through nonbank majority-owned affiliates [2]	
	U.S. exports (receipts)	U.S. imports (payments)	Sales to foreign persons by foreign affiliates of U.S. companies [3]	Sales to U.S. persons by U.S. affiliates of foreign companies
	Billions of dollars			
1986	77.5	64.7	60.5	n.a.
1987	87.0	73.9	72.3	62.6
1988	101.0	81.0	83.8	73.2
1989	117.9	85.3	99.2	94.2
1990	137.2	98.2	121.3	109.2
1991	152.4	99.9	131.6	119.5
1992	164.0	103.5	140.6	128.0
1993	171.6	109.4	142.6	134.7
1994	186.7	120.3	159.1	145.4
1995	203.7	128.7	190.1	149.7
1996	222.1	138.8	223.2	168.4
1997	238.5	151.5	255.3	(4) 223.1
1998	244.4	165.6	286.1	245.5
1999	265.1	183.0	(5) 353.2	293.5
2000	284.0	207.4	413.5	344.4
2001	272.8	204.1	421.7	367.6
2002	279.6	209.0	423.5	367.6
2003	290.2	221.9	452.5	374.1
2004	336.3	258.1	(2), (6) 642.8	(2) 501.5
2005	368.5	279.5	725.0	527.1
2006	415.3	313.9	806.3	615.9
2007	480.0	341.1	n.a.	n.a.
	Percent change from preceding year			
1987	12.2	14.2	19.5	....
1988	16.0	9.5	15.9	17.0
1989	16.8	5.3	18.4	28.7
1990	16.4	15.1	22.2	15.9
1991	11.1	1.8	8.5	9.5
1992	7.6	3.5	6.8	7.1
1993	4.6	5.8	1.5	5.3
1994	8.8	9.9	11.6	8.0
1995	9.1	7.0	19.4	2.9
1996	9.0	7.8	17.4	12.5
1997	7.4	9.1	14.4	(4)
1998	2.5	9.4	12.0	10.1
1999	8.5	10.5	(5)	19.6
2000	7.1	13.3	17.1	17.3
2001	–3.9	–1.6	2.0	6.7
2002	2.5	2.4	0.4	(*)
2003	3.8	6.2	6.8	1.8
2004	15.9	16.3	(2), (6)	(2)
2005	9.6	8.3	12.8	5.1
2006	12.7	12.3	11.2	16.8
2007	15.6	8.7	n.a.	n.a.

n.a. Not available

* A non-zero value between –0.05 and 0.05 percent.

1. The estimates for 2004–2006 are revised from those published in last year's article in this series. See Christopher L. Bach, "Annual Revision of the U.S. International Accounts, 1974–2007," Survey of Current Business 88 (July 2008): 36–52.

2. The estimates for 2004–2006 are presented for the first time as "services supplied" rather than "sales of services." Services supplied adds a measure of wholesalers' and retailers' distributive services and insurers' premium supplements and subtracts a proxy measure of insurers' expectations of losses to sales of services, resulting in a net increase in services provided. See the section "Revisions and Improvements" in this article.

3. For 1986–88, the estimates 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.

4. Beginning in 1997, sales by U.S. affiliates were classified as goods or services based on industry codes derived from the North American Industry Classification System (NAICS); the estimates 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.

5. Beginning in 1999, sales by foreign affiliates were classified as goods or services based on industry codes derived from NAICS; the estimates 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.

6. Beginning in 2004, the nonbank units of U.S. banks (including bank and financial holding companies), which previously filed separately, were required to be consolidated on the reports of the banks that owned them. Because the sales of services estimates cover only affiliates of nonbank U.S. parents, the change in reporting requirements caused the affiliates of the affected parents to drop out of the data. As a result, the measured change in sales between 2003 and 2004 was reduced by about 2 percent. (A parallel change was introduced in the series on sales by U.S. affiliates of foreign companies in 2002, but it did not result in a material discontinuity in the estimates.)

markets served by affiliates—including the United Kingdom and several other European countries, Japan, and Mexico—fueled an increase in demand for services. Newly acquired or established affiliates in a wide range of industries also contributed to the overall increase, as did slight depreciation of the dollar against the euro and the British pound and a larger depreciation against the Canadian dollar, which boosted the dollar value of services supplied by foreign affiliates. In contrast, the dollar appreciated against the Japanese yen, which dampened the dollar value of services supplied by Japanese affiliates and likely contributed to slower growth than in 2005. Industry-specific factors also contributed to the overall increase in 2006. The largest increase was in "finance (except banks) and insurance," largely reflecting favorable financial market conditions in 2006.[2]

2. Throughout this article, "finance (except banks) and insurance" refers to "finance (except depository institutions) and insurance," which is the industry title that appears in the tables.

Services supplied to the U.S. market by foreign multinationals' U.S. affiliates grew 17 percent in 2006, over three times as fast as the 5 percent growth in 2005. Despite steady growth of the U.S. economy, services supplied were up in most major industry sectors. Acquisitions contributed to increases in several industries as new affiliates entered the universe and existing affiliates expanded their operations through acquisitions. Increases also reflected some industry-specific factors. Affiliates in wholesale trade had the largest increase in 2006, mainly reflecting improved margins and larger sales volumes as well as strong demand for commodities.

Comparing cross-border trade and services through affiliates

It is difficult to precisely compare cross-border trade in services and services supplied through affiliates because of differences in coverage and classification. One difference in coverage, which BEA is working

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

The estimates of cross border transactions cover both affiliated and unaffiliated transactions between U.S. residents and foreign residents. Affiliated transactions consist of intrafirm trade within multinational companies—specifically, 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.

to address, is the inclusion of services provided by banks in the cross-border trade statistics but not in the services supplied by affiliates statistics, which cover only U.S. multinationals' nonbank foreign affiliates and nonbank U.S. affiliates.[3] Despite these differences, the wide disparity between cross-border transactions and those through affiliates suggests that direct investment is the larger channel of delivery for both U.S. sales and U.S. purchases of services in international markets (charts 1, 2, and 3).

The remainder of this article consists of four main sections. The first section presents preliminary statistics on cross-border exports and imports of private services for 2007 and revised statistics for 2004–2006. The second section presents preliminary statistics on services supplied through affiliates for 2006 and revised statistics for 2005. The third section discusses revisions and improvements to the statistics, including a detailed description of the changes in presentation that arose from the reconfiguration of the cross-border trade surveys and a discussion of the change to a "services supplied" measure of services delivered through affiliates. The fourth section highlights planned improvements to the statistics on U.S. international services.

3. BEA has initiated the data collections necessary to estimate these services in its most recent benchmark surveys for U.S. direct investment abroad and foreign direct investment in the United States, and beginning with 2007, the annual survey of foreign affiliates of bank U.S. reporters and bank foreign affiliates of nonbank U.S. reporters.

Another difference in coverage is the inclusion of distributive services in services supplied through affiliates but not in cross-border trade in services; the distributive services associated with importing and exporting goods is included (but not separately identifiable) in the value of trade in goods. The difference in classification arises because data on cross-border trade in services are collected and published by type of service, whereas data on services supplied through affiliates are collected and tabulated by primary industry of the affiliate.

Types of Cross-Border Services: Coverage and Definitions

"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 "other business, professional, and technical services" in table 1.

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

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

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

"Business, professional, and technical services" 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 OF CURRENT BUSINESS 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.

U.S. Cross-Border Trade in 2007

U.S. exports of private services (receipts) increased 16 percent to $480.0 billion in 2007 after increasing 13 percent in 2006. U.S. imports of private services (payments) increased 9 percent to $341.1 billion in 2007 after increasing 12 percent in 2006. The services surplus has increased sharply, rising 37 percent in 2007, up from a 14 percent increase in 2006. The services surplus has increased for 4 straight years.

Gross domestic product (GDP) growth in the majority of the United States' major trading partners slowed in 2007. Real GDP growth in the euro area fell to 2.6 percent in 2007 from 2.8 percent in 2006, growth in Canada decreased to 2.7 percent from 3.1 percent, growth in Japan fell to 2.1 percent from 2.4 percent, and growth in Mexico slowed to 3.2 percent from 4.9 percent. GDP growth in the United Kingdom, however, increased to 3.0 percent in 2007 from 2.8 percent in 2006.[4] Despite this general slowing of economic growth, U.S. services exports to the majority of these countries grew more rapidly, partly as the result of depreciation of the U.S. dollar against their currencies. In 2007, the U.S. dollar depreciated 8

4. Data are from the International Monetary Fund, *World Economic Outlook* (October 2008).

Chart 2. U.S. International Sales and Purchases of Services by Major Area in 2006

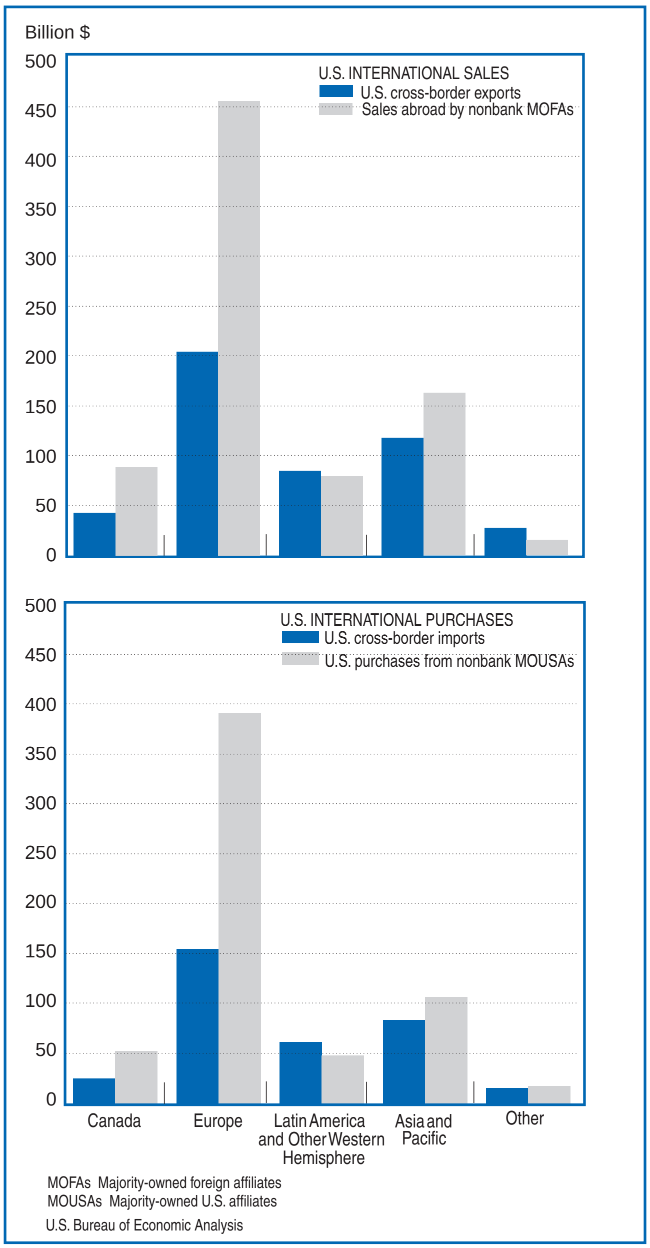
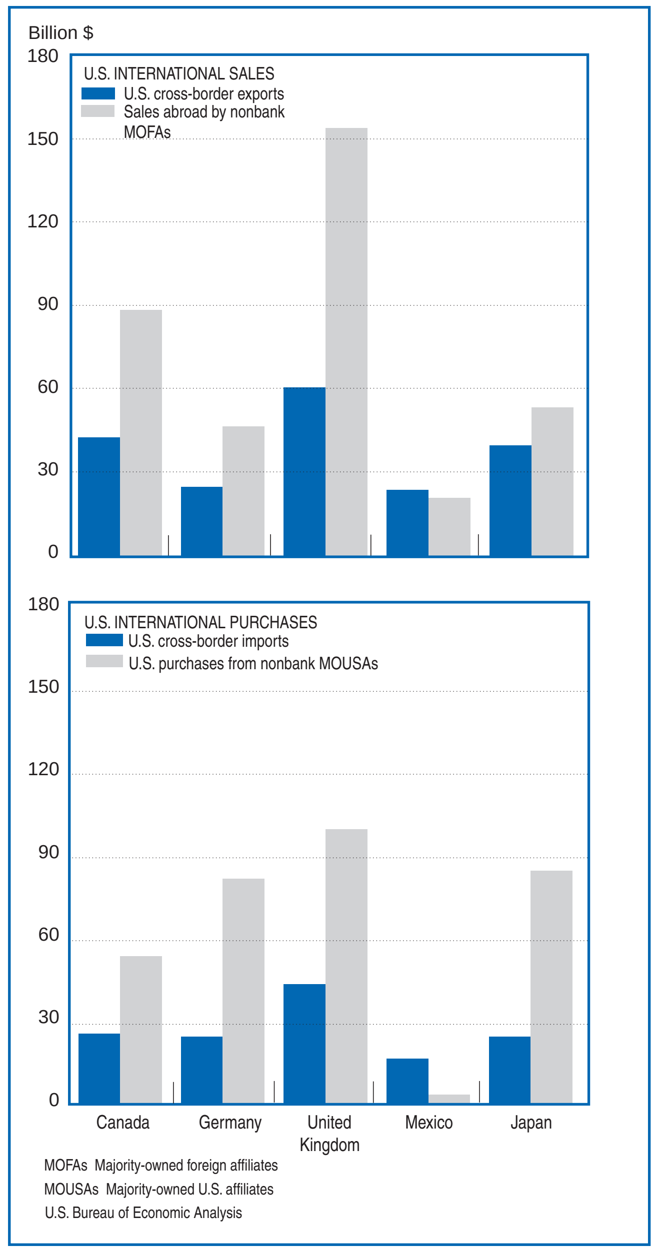


Chart 3. U.S. International Sales and Purchases of Services by Major Country in 2006



percent against both the euro and the British pound and 5 percent against the Canadian dollar.[5] Exports of services to Japan, however, decreased, partly reflecting slower GDP growth in Japan as well as a 1 percent appreciation of the U.S. dollar against the yen.

GDP growth in the United States followed the global pattern, falling from 2.8 percent to 2.0 percent. This slowdown likely contributed to the slower increase in U.S. imports of services.

Much of the increase in exports of private services was in “other private services,” especially “business, professional, and technical services” and financial services. “Royalties and license fees” and travel also contributed significantly to the increase in exports. Much of the increase in imports of private services was in “other private services,” especially “business, professional, and technical services,” insurance services, and financial services.

Growth in U.S. exports accelerated or held steady in 2007 for every major services category except “other transportation.” Growth in U.S. imports, however, varied; payments for travel and “royalties and license fees” grew faster than in 2006, while passenger fares, “other transportation,” and “other private services” grew slower.

Europe continued as the largest market for both exports and imports of private services, accounting for 43 percent of exports and 45 percent of imports in 2007 (chart 4). Asia and Pacific was the second largest market, accounting for 25 percent of both exports and imports. The United Kingdom, Canada, Japan, and Germany continued as the United States’ largest services trading partners (table D). In 2007, Canada surpassed Japan to become the second largest trading partner.

Trade within multinational companies (affiliated trade) accounted for 28 percent of U.S. exports of private services in 2007 and for 22 percent of imports. The growth in both affiliated and unaffiliated exports

5. Annual exchange rates are period averages.

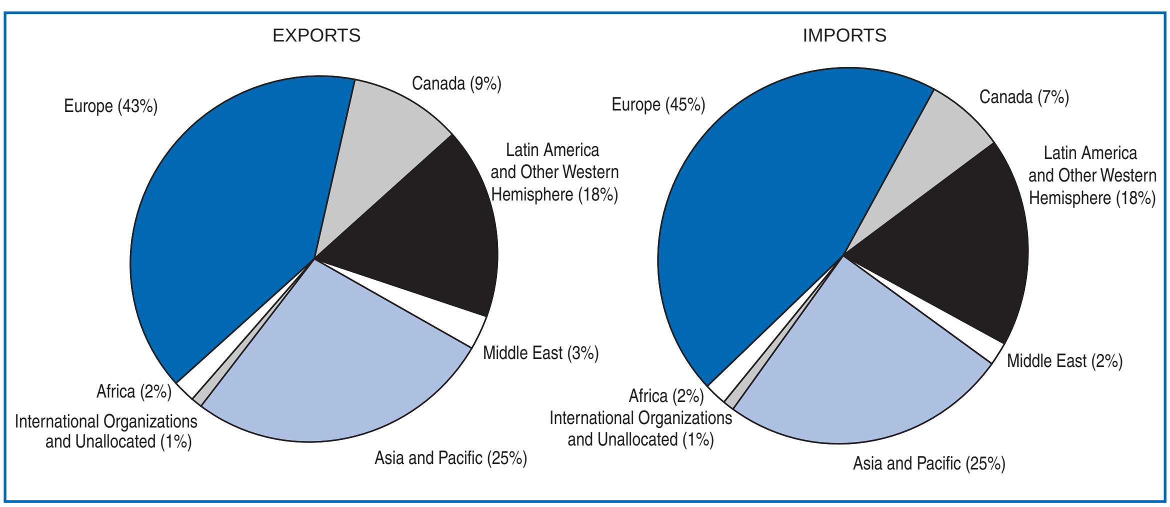
Table D. Cross-Border Services Exports and Imports by Type and Country, 2007

[Millions of dollars]

	Total private services	Travel	Passenger fares	Other transportation	Royalties and license fees	Other private services
	Exports					
All countries	**479,980**	**96,712**	**25,586**	**51,586**	**82,614**	**223,482**
10 largest countries [1]	**272,407**	**56,617**	**15,082**	**25,542**	**55,477**	**119,689**
United Kingdom	60,661	11,936	3,002	4,467	8,859	32,397
Canada	42,889	12,852	3,318	3,423	6,294	17,002
Japan	40,227	11,019	3,451	4,058	7,400	14,299
Germany	25,371	4,007	1,149	3,573	6,448	10,194
Mexico	23,758	7,194	2,331	1,457	2,156	10,620
Ireland	20,877	1,424	294	416	9,066	9,677
France	16,035	2,696	627	1,636	3,360	7,716
Switzerland	15,698	893	202	798	7,466	6,339
China	14,180	2,081	618	2,653	1,879	6,949
Korea, Republic of	12,711	2,515	90	3,061	2,549	4,496
Other countries	**207,573**	**40,095**	**10,504**	**26,044**	**27,137**	**103,793**
	Imports					
All countries	**341,126**	**76,167**	**28,486**	**67,050**	**25,048**	**144,375**
10 largest countries [1]	**199,388**	**37,185**	**12,725**	**27,521**	**20,508**	**101,449**
United Kingdom	42,965	5,989	4,516	4,623	2,621	25,216
Canada	24,577	7,248	399	4,915	748	11,267
Japan	24,470	3,379	1,280	6,633	7,415	5,763
Germany	24,186	2,867	3,078	5,347	2,842	10,052
Bermuda	16,527	389	0	1,328	115	14,695
Mexico	15,602	10,334	793	1,062	134	3,279
Switzerland	14,925	696	407	907	3,163	9,752
France	14,612	3,129	1,675	2,032	2,756	5,020
Ireland	11,923	1,085	435	266	616	9,521
India	9,601	2,069	142	408	98	6,884
Other countries	**141,738**	**38,982**	**15,761**	**39,529**	**4,540**	**42,926**

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

Chart 4. U.S. Cross-Border Services Transactions: Share by Area in 2007



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increased in 2007, while the growth in affiliated and unaffiliated imports both slowed. More information on affiliated and unaffiliated trade is available in the tables following this article.

Travel

Receipts. U.S. travel receipts increased 13 percent to $96.7 billion in 2007, following a 5 percent increase in 2006 (table C). The increase in 2007 marks the fourth straight year of growth, following 3 years of declines. The 2007 increase is the largest percentage increase since the turnaround began in 2004. The acceleration in 2007 reflects faster growth in receipts from overseas and Canadian visitors; growth in receipts from Mexican visitors slowed.

Travel receipts from overseas visitors increased strongly, rising 12 percent to $76.7 billion in 2007 after rising 3 percent in 2006. The faster growth was largely the result of a 10 percent increase in the number of visitors, following no growth in 2006. Growth in the number of visitors was encouraged by the fall in the value of the U.S. dollar against most major foreign currencies, which decreased costs for foreign visitors in the United States and outweighed the effects of higher airfares. All major areas contributed to the rise in receipts, with particularly strong growth in receipts from South and Central America (excluding Mexico) and Europe, which increased 20 percent and 15 percent, respectively. Receipts from Asia increased 6 percent, as a 4 percent decrease in the number of visitors from Japan was more than offset by a 15 percent increase in visitors from other Asian countries.

Travel receipts from Canada increased 24 percent to $12.9 billion in 2007, following a 14 percent increase in 2006. The 2007 increase reflected increases in both the number of Canadian visitors and their average expenditures. The continued appreciation of the Canadian dollar against the U.S. dollar likely contributed to the strong growth in receipts.

Travel receipts from Mexico increased less than 1 percent to $7.2 billion in 2007, following a 5 percent increase in 2006. Growth in receipts for travel to the interior of the United States rose 9 percent, more than accounting for the increase and mostly resulting from an increase in the number of visitors. A 12 percent decrease in the number of border trips led to a 5 percent decrease in receipts for border travel. Increased documentation requirements may have contributed to the decrease in border travel.

Payments. U.S. travel payments increased 6 percent to $76.2 billion in 2007 after rising 5 percent in 2006. Like travel receipts, payments increased for the fourth straight year, following 3 years of declines. Growth in payments for U.S. travel to overseas destinations and to Mexico contributed to the increase, outweighing a decrease in payments to Canada.

Payments for travel overseas increased 7 percent to $58.6 billion in 2007, following an increase of 5 percent in 2006. Growth in the number of U.S. travelers overseas slowed, falling to 4 percent from 5 percent in 2006. Europe continued as the top recipient of U.S. travel payments, followed by Asia and Pacific and Latin America (excluding Mexico). Although Asia and Pacific was the second largest recipient of U.S. travel payments, Latin America (excluding Mexico) was the second largest recipient of U.S. travelers in 2007. This difference in ranking may reflect the different costs facing travelers in those areas.

Travel payments to Canada decreased 2 percent in 2007, following a 3 percent increase in 2006. The number of U.S. travelers to Canada fell 11 percent in 2007, continuing a downward trend that began in 2000. Travel to Canada by car decreased especially sharply, falling 13 percent. The fall in the value of the U.S. dollar against the Canadian dollar and increased documentation requirements may have contributed to the decrease in travel to Canada. The fall in the value of the U.S. dollar likely also contributed to increased average expenditures by U.S. travelers in Canada, with the result being only a modest decline in total travel payments.

Travel payments to Mexico increased 3 percent in 2007, following a 1 percent increase in 2006. The number of U.S. visitors to Mexico decreased 7 percent, led by an 8 percent decrease in travel to the border area. State Department warnings to citizens traveling to Mexico, particularly the border area, and increased documentation requirements likely contributed to the decrease. The number of travelers to the interior of Mexico, however, increased slightly, rising 1 percent. Expenditures by travelers to the interior of Mexico are higher than those traveling across the border. Payments for travel to the interior rose 6 percent, offsetting a 4 percent decline in payments for border travel and leading to an overall increase in travel payments to Mexico.

Passenger fares

Receipts. U.S. receipts of passenger fares increased 16 percent to $25.6 billion in 2007, following a 5 percent increase in 2006 (table C). The acceleration was due to growth in the number of visitors arriving from overseas, as deprecation of the U.S. dollar against other major currencies made the United States an attractive destination for foreign travelers. Receipts from overseas passengers increased 20 percent, following no increase in 2006. Higher airfares also contributed to the rise in passenger fares.

U.S.-flag carriers continued to increase international capacity in 2007, increasing the number of departures and available seat miles on international flights. Despite the increased capacity, load factors also increased, indicating strong demand for travel. The number of foreign visitors flying on U.S.-flag carriers increased 12 percent in 2007. This strong demand allowed air carriers to pass along increased costs to passengers in the form of higher airfares, contributing to the increase in passenger fares receipts. Receipts from all major areas increased, with those from Europe showing particularly strong growth.

Payments. U.S. payments for passenger fares increased 4 percent to $28.5 billion in 2007 after increasing 5 percent in 2006. For the second year in a row, much of the increase reflected higher airfares; the number of U.S. travelers on foreign-flag carriers increased less than 1 percent. Passenger fare payments to Latin America and Other Western Hemisphere increased strongly, rising 12 percent. Payments to Europe, however, were flat.

Other transportation

Receipts. U.S. receipts for “other transportation services” increased 11 percent to $51.6 billion in 2007 after increasing 12 percent in 2006 (table C). Both freight and port services increased in 2007, reflecting higher export and import volumes and higher fuel prices. The volume of exports of goods from the United States increased 8 percent in 2007, bunker fuel prices increased 3 percent, and jet fuel prices increased 5 percent.

Freight receipts increased 13 percent, to $19.6 billion, led by a 30 percent increase in receipts for ocean freight. Most of the increase in ocean freight receipts reflected an increase in export volume, which was partly attributable to the fall in the value of the U.S. dollar. The increase in export volume created a container shortage leading to an increase in freight rates that further increased receipts. Air freight receipts also contributed to the increase, rising 10 percent.

Port services receipts increased 11 percent to $32.0 billion, reflecting increases in ocean, air, and other port services. The increase mostly reflected increases in export and import volumes transported by foreign carriers and higher fuel costs.

“Other transportation services” receipts from all major areas increased in 2007. The increase was especially strong in receipts from Africa and the Middle East; receipts from each of those areas grew over 20 percent. Receipts from Asia and Pacific grew 6 percent; increases from China, Hong Kong, and the Republic of Korea more than offset a decrease in receipts from Japan.

Payments. U.S. payments for “other transportation services” increased 3 percent to $67.1 billion in 2007, following a 5 percent increase in 2006. Increases in fuel prices along with continued, but slower, growth in goods imports contributed to the increase. The volume of goods imports increased 2 percent in 2007, following a 6 percent increase in 2006.

Port services payments rose 10 percent, more than accounting for the increase in transportation payments. Both air and ocean port services increased, mostly from higher fuel prices.

Freight services payments decreased less than 1 percent in 2007, as a decrease in ocean freight was partly offset by an increase in air freight. The slight decrease in ocean freight was largely the result of slowed growth in import volume, particularly from Asia. Import volumes from Asia fell from double-digit growth in 2004 and 2005 to no growth in 2007.

“Other transportation” payments to all major areas except Asia and Pacific increased in 2007. The increase in payments to Africa was particularly strong, followed by Europe and Latin America and Other Western Hemisphere. Payments to Asia and Pacific changed little, led by a small decrease in freight payments which largely reflected flat import volume from Asia.

Royalties and license fees

Receipts. U.S. receipts of royalties and license fees increased 14 percent to $82.6 billion in 2007 after increasing 12 percent in 2006. All major types of intangible assets except “other intangibles” contributed to the increase. In 2007, as in 2006, receipts for the use of industrial processes (including patents) connected with the production of goods accounted for the largest share of total royalties and license fees receipts, 45 percent, followed by receipts for general use computer software and for trademarks. Together these types of assets account for over 90 percent of total royalties and license fees receipts. Among these types of assets, trademarks had the strongest growth, 20 percent, followed by computer software, which rose 17 percent.

Data Availability

The estimates of cross-border trade for 1986–2007 and the estimates of services supplied through majority-owned affiliates for 1989–2006 can be downloaded from BEA’s Web site. To access these files, go to <www.bea.gov>, under “International,” click on “Trade in Goods and Services” and then, look under “International Services” for “Cross-border trade for 1986–2007 and services supplied through affiliates for 1986–2006.”

Affiliated transactions account for a large share of royalties and license fees partly because it is easier for firms with intangible property to exercise control over its use within affiliated relationships. In multinational firms, parent companies are most often the holders of intangible property. U.S. parents' receipts of royalties and license fees from their foreign affiliates accounted for more than 90 percent of total affiliated receipts in both 2006 and 2007. U.S. affiliates' receipts from their foreign parent groups accounted for the remainder.

This year, for the first time, BEA is able to publish details on total receipts for all types of intangible assets. By type of intangible asset, the data on affiliated receipts are heavily weighted toward industrial processes and general use computer software. Receipts for industrial processes account for approximately 50 percent of affiliated receipts, and receipts for computer software account for approximately 25 percent. Because industrial processes account for such a large share of affiliated trade, receipts for industrial processes continue to account for the majority of total trade despite recent sharp increases in unaffiliated receipts for computer software rights. Unaffiliated computer software royalties and license fees have grown rapidly in recent years and have accounted for the largest share of unaffiliated receipts since 2006, followed by fees for industrial processes.

The new presentation of total trade has revealed new details about the types of intangible assets purchased by major U.S. trading partners. Industrial processes dominate total receipts from most major countries, including the United Kingdom and Germany; rights to computer software was the largest category of receipts from both countries in the old presentation, which showed this detail only for unaffiliated receipts. The new affiliated detail has also revealed significant receipts for trademarks from Japan and Switzerland; receipts for trademarks from these nations were much smaller in the previous presentation.

In recent years, several U.S. parent companies have located their intellectual property in Ireland for a variety of reasons. Ireland surpassed Japan and the United Kingdom in 2007 to become the top source country for U.S. receipts of total royalties and license fees.

Payments. U.S. payments of royalties and license fees increased 5 percent to $25.0 billion in 2007 after decreasing 3 percent in 2006. As with receipts, rights related to industrial processes, general use computer software, and trademarks accounted for the majority of payments. Industrial processes, however, accounted for a larger share of total payments than for receipts. In 2007, payments for the use of industrial processes increased 7 percent, payments for general use computer software increased 17 percent, and payments for the use of trademarks increased 23 percent. In both 2006 and 2007, affiliated payments accounted for over 75

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 2006, 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 (table 9.2). 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 not 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 included in trade in goods.

percent of total payments for royalties and license fees. In 2007, payments by U.S. affiliates to their foreign parent groups accounted for nearly 90 percent of affiliated payments.

This year, for the first time, BEA is able to present details on total payments for all types of intangible assets. As with total and unaffiliated payments, affiliated payments for royalties and license fees are dominated by payments for the rights to industrial processes, for computer software, and for trademarks. Payments for industrial processes, however, account for a larger share of affiliated trade (74 percent) than unaffiliated trade (67 percent).

The new presentation of total payments has revealed new details about the composition of U.S. payments to major suppliers of intangible property rights. Payments to Japan, the top supplier of intangible property rights to the United States, are almost exclusively for industrial processes. Industrial processes also dominate payments to top suppliers Switzerland, France, and the United Kingdom but not to the same extent as payments to Japan. Germany is the only top supplier for which the largest U.S. payments are for a type of asset other than industrial processes; payments for general use computer software account for approximately 50 percent of total payments to Germany.

Unaffiliated payments of royalties and license fees decreased 4 percent in 2007 to $5.4 billion, following a 31 percent increase in 2006. Unaffiliated payments tend to spike in years when there are major international sporting events because U.S. companies pay international sports organizations or their representatives for the rights to broadcast and record the event. Such a spike occurred in 2006 when U.S. firms paid to broadcast the Winter Olympics and the soccer World Cup. After the spike in total payments for broadcasting rights in 2006, payments fell 79 percent in 2007 to $0.2 billion.

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 18 percent to $223.5 billion in 2007, the same rate of increase as in 2006 (table C). "Business, professional, and technical services" and financial services were the largest contributors to the increases in both years (table 1 and tables 5–7). U.S. payments for "other private services" increased 15 percent to $144.4 billion, a slowdown from a 28 percent increase in 2006. The largest increases in both years were in "business, professional, and technical services" and in insurance services.

Education

Receipts. U.S. receipts for education services increased 7 percent to $15.7 billion in 2007 after increasing 4 percent in 2006. As in the past 3 years, increased tuition was the primary cause of the increase in U.S. receipts. Tuition at public and private 4-year colleges and universities increased 6 percent for the 2007–2008 academic year.[6] The total number of foreign students enrolled in U.S. schools increased for the first time since the 2002–2003 academic year, rising 3 percent.

The number of foreign students from India increased 10 percent. India continued as the leading country of origin for foreign students. China and the Republic of Korea were the second and third top countries of origin, respectively. Together, students from India, China, and the Republic of Korea accounted for more than one-third of all foreign students enrolled in the United States. Foreign student enrollments from Middle Eastern countries increased 25 percent. The number of Saudi Arabian students in the United States has more than doubled from the 2005–2006 academic year.

Payments. U.S. payments for education services increased 1 percent to $4.5 billion in 2007 after increasing 12 percent in 2006. Although the number of students who participated in study abroad programs increased 9 percent, the length of time that students spent abroad declined; as a result, growth in payments was slower than previously recorded. The majority of students opted to study abroad during summer sessions, during the January term, or for periods of 8 weeks or less.

The top destinations for U.S. students continued to be the United Kingdom, Italy, Spain, and France, which together hosted 43 percent of U.S. students studying abroad. China, Greece, Mexico, Argentina, and Costa Rica together hosted 14 percent of U.S. students who participated in study-abroad programs. The number of U.S. students participating in study-abroad programs in these five countries increased 22 percent, compared with a 3 percent increase in participation in the top four countries.

Financial services

Receipts. U.S. financial services receipts increased 23 percent to $58.3 billion in 2007, following a 19 percent increase in 2006 (table E). The increase in 2007 reflects strong increases in all types of financial services receipts. "Other services" increased 38 percent, reflecting a surge in securities lending services and continued

6. *Trends in College Pricing 2007* (Princeton, NJ: The College Board); <www.collegeboard.com>.

growth in electronic funds transfer services. Securities transactions increased 21 percent as a result of increased trading in U.S. stocks and bonds, futures, and other financial instruments as well as an increase in underwriting services for foreign securities issued in the United States. Management and advisory services increased 20 percent because of strong merger and acquisition activity until midyear and large inflows of fees to both established and newly formed asset management firms. Credit card and credit-related services also increased, mostly from continued strong growth in credit card transactions.

Table E. Financial Services Transactions, 2006–2007
[Millions of dollars]

	2006	2007
Total receipts	**47,439**	**58,266**
Securities transactions [1]	15,369	18,673
Management and advisory [2]	18,981	22,838
Credit card and other credit related	5,051	5,673
Other [3]	8,038	11,082
Total payments	**14,242**	**18,928**
Securities transactions [1]	2,782	3,399
Management and advisory [2]	5,383	6,834
Credit card and other credit related	815	882
Other [3]	5,262	7,813

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

BEA can now show total trade in the detailed components of financial services beginning in 2006 (table E). The addition of affiliated detail in the subcomponents of financial services did not result in significant changes in each subcomponent's share of the total.

Payments. U.S. financial services payments increased 33 percent to $18.9 billion in 2007, following a 17 percent increase in 2006. More than half of the increase in 2007 was accounted for by an increase in "other services," which reflected continued strong growth in securities lending services and electronic funds transfer services. Management and advisory services increased 27 percent because of continued growth in financial advisory services and in financial management services. Securities transactions were higher as a result of increased trading in foreign stocks and bonds and an increase in underwriting services for U.S. securities issued abroad. Credit card and credit-related services also increased, mostly because of continued growth in credit-related services.

Unlike receipts, the addition of affiliated detail for financial services payments resulted in some changes in the relative importance of the subcomponents presented in table E. While management and advisory services previously accounted for approximately 20 percent of the unaffiliated total, they now account for over 35 percent of total financial services payments. Securities transactions, which had accounted for 30 percent of the unaffiliated total, now account for approximately 20 percent of total payments.

Insurance services

Receipts. U.S. insurance services receipts increased 2 percent to $10.3 billion in 2007 after increasing 33 percent in 2006. A decrease in premiums was the main reason for the slowdown.[7] Premium rates generally fell in 2007. This was particularly important for reinsurance, the rates for which increased sharply in 2006, following Hurricane Katrina. For 2007, Canada remained the largest market for U.S. insurance exports. Also in 2007, Japan surpassed the United Kingdom to become the second largest market. Insurance services to Canada were mainly primary insurance, while those provided to Japan and the United Kingdom were largely reinsurance.

Payments. Payments for insurance services increased 14 percent to $42.8 billion in 2007 after a 30 percent increase in 2006. Increases in both primary and reinsurance, partly the result of increased premium payments, contributed to the increase in 2007. Payments for primary insurance rose at a faster rate than those for reinsurance. In 2007, Bermuda was the largest provider of insurance services to the United States, and Ireland replaced Switzerland as the second largest provider. These countries mainly provide reinsurance services. The United Kingdom is the largest provider of primary insurance.

Telecommunications

Receipts. U.S. receipts for telecommunications services increased 14 percent in 2007 to $8.3 billion from $7.3 billion in 2006. BEA can now show total trade in telecommunications for the first time, beginning with 2006. Previously, affiliated transactions in telecommunications were not separately identifiable.[8] Affiliated receipts are particularly important for the United Kingdom and Brazil; the United Kingdom is now shown as the top market for U.S. telecommunications services, followed by Brazil.

Payments. U.S. payments for telecommunications services increased 15 percent to $7.3 billion in 2007 from $6.4 billion in 2006. Affiliated payments, which are included for the first time beginning in 2006, are

7. Although the measure of insurance services is affected by premiums, only part of the change in premiums is assumed to represent charges for insurance services. See the box "Types of Cross-Border Services: Coverage and Definitions" for more information about how BEA estimates insurance services.
8. 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 may be traded through affiliated or unaffiliated channels.

not as significant for telecommunications payments as they are for receipts, accounting for 29 percent of total payments in 2007, compared with 41 percent of total receipts. However, as with receipts, affiliated payments are particularly important for the United Kingdom. The United Kingdom is now one of the top two providers of telecommunications services to the United States, along with Mexico.

Business, professional, and technical services

Receipts. U.S. receipts for "business, professional, and technical (BPT) services" increased 20 percent to $107.7 billion in 2007 after increasing 17 percent in 2006. In 2007, all major categories of services contributed to the increase in BPT receipts. Of the major service types, receipts for "other BPT services" had the strongest growth, increasing 29 percent after increasing 22 percent in 2006. "Computer and information services" had the second highest growth, rising 23 percent after increasing 10 percent. "Research, development, and testing (R&D) services" had the next highest growth, increasing 15 percent, followed by "management and consulting services" and "operational leasing services," which both increased 12 percent. Both unaffiliated and affiliated services increased in 2007, but affiliated receipts grew slightly faster than unaffiliated receipts.

This year, for the first time, BEA is able to publish statistics on total receipts for all types of BPT services, including the subcomponents of "other BPT." While the share of affiliated receipts in total receipts remained largely unchanged at slightly less than 50 percent in 2007, the additional information on the composition of affiliated trade in services resulted in changes in the detailed picture of U.S. receipts for BPT services.

"Other BPT services" continue to account for the largest share of BPT receipts, 41 percent in 2007. However, "management and consulting services" is now the second largest major type of BPT services provided by the United States, and "R&D services" is the third largest.[9] For both of these service types, affiliated receipts far outstrip unaffiliated receipts and account for over 85 percent of total receipts. The dominance of affiliated trade in these categories is likely related to the ability of companies to maintain control over their intellectual property and management structure in an affiliated relationship. For the fourth and fifth largest service types, "computer and information services" and "operational leasing services," unaffiliated receipts account for the majority of receipts, as they do for "other BPT services."

For the majority of service types within "other BPT," the addition of affiliated detail has not caused major changes to their relative importance; affiliated receipts account for less than 20 percent of total receipts for the majority of "other BPT services." An exception is advertising services, where affiliated transactions account for over 60 percent of total receipts; total receipts for advertising services account for a larger share of total "other BPT" receipts, 9 percent, than they do for unaffiliated "other BPT" receipts, 4 percent.

The addition of affiliated transactions to the country detail for BPT services resulted in several changes in the relative importance of certain areas and countries. Receipts from Europe now account for almost 50 percent of total BPT receipts, whereas in the previous

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9. Beginning with data collected for 2006, the definition of "management and consulting services" was changed to include allocated expenses (amounts received by a parent company from its affiliate for general overhead and stewardship). This caused a redistribution of affiliated receipts from "other BPT services" to "management and consulting services." With this change and the additional detail by type of service, "other BPT services" accounted for less than 20 percent of affiliated receipts in 2006 and 2007. Data for years prior to 2006 are revised to capture this change; see the section "Revisions and Improvements" for additional information.

series covering only unaffiliated transactions, they accounted for only 40 percent of the unaffiliated total. In addition, the Netherlands became a top 10 export market for U.S. BPT services, as did Ireland.

In 2007, the United Kingdom remained the largest export market for U.S. BPT services receipts, followed by Canada and Japan. However, as a result of the introduction of the new statistics on affiliated transactions, the composition of receipts from these nations has changed. For all of these countries, there were increases in the shares accounted for by "management and consulting services" and R&D services. The increase in the R&D share was particularly large for Japan.

Payments. U.S. payments for BPT services increased 13 percent to $68.8 billion in 2007, compared with a 30 percent increase in 2006. Increases slowed for all major service types except "operational leasing," with especially significant slowdowns in "computer and information services," "management and consulting services," and "other BPT services." Payments for "operational leasing services" decreased 10 percent, a slightly smaller decrease than for 2006. Increases for both affiliated and unaffiliated payments slowed significantly in 2007. In both 2006 and 2007, transactions with affiliated parties accounted for nearly 70 percent of total payments.

As was the case with receipts, BEA is now able to publish data on total trade for all BPT services payments, not just those with unaffiliated parties. As a result of the new detail on affiliated trade in services, there are changes in the detailed picture of U.S. payments for BPT services.

"Management and consulting services" now joins "other BPT services" as the largest categories of BPT payments; each accounted for approximately 30 percent of the total in 2007.[10] The next largest category is "computer and information services," followed by "R&D services." In all major BPT categories except "other," affiliated payments are larger than unaffiliated payments. For "management and consulting services," affiliated payments account for nearly 90 percent of the total, and for "computer and information services," for more than 75 percent. In contrast, affiliated payments for "other BPT services" account for less than 40 percent of total payments.

The addition of affiliated detail caused some changes in the relative importance of the service types within "other BPT services." "Construction, architectural, and engineering services" is the third largest type of "other BPT" services, followed by legal services. These positions were reversed in the prior, unaffiliated only presentation. Also, unlike receipts, several types of services within "other BPT" payments—such as "installation, maintenance, and repair of equipment" and "industrial engineering"—have a significant affiliated component.

The switch to presenting total rather than unaffiliated trade also resulted in changes in the distribution of BPT payments across countries and areas. Affiliated payments account for the majority of total payments; therefore, the differences in payments that result from the addition of the detailed affiliated data are often of a larger magnitude than those seen in receipts, especially for individual countries and areas.

Affiliated payments are particularly important for Europe and Asia and Pacific. In 2007, payments to Europe accounted for 49 percent of total BPT payments, and payments to Asia and Pacific, for 28 percent. Under the unaffiliated only presentation, trade with Europe accounted for approximately 40 percent of unaffiliated trade, and Asia and Pacific, for approximately 20 percent. By country, the United Kingdom has replaced Canada as the top provider of BPT services to the United States, and India is now the third largest provider. Payments to the United Kingdom and Canada are widely disbursed among the various types of BPT services. "Management and consulting services" account for approximately 30 percent of the total for both countries. The United Kingdom is also a significant provider of R&D services, and Canada is a significant provider of "computer and information services." In contrast, more than 65 percent of services provided by India are "computer and information services."

Film and television tape rentals

Receipts. U.S. receipts for film and television tape rentals increased 23 percent to $15.0 billion in 2007 after increasing 21 percent in 2006. Film and television tape rentals cover the rights to display, reproduce, and distribute U.S. motion pictures and television programming abroad. Although receipts for film and television tape rentals do not directly correspond to box office totals, the increase in international box office revenue in 2007 was likely a factor in the increase in U.S. receipts.

Payments. U.S. payments for film and television tape rentals increased 32 percent to $1.4 billion in 2007, up from a 13 percent increase in 2006. U.S. payments continue to lag far behind receipts, reflecting the leading role of U.S. companies in global markets for motion picture and television programming.

10. As with receipts, beginning with data collection in 2006, the definition of management and consulting was broadened to include allocated expenses. Payments for "other BPT services" now account for less than 20 percent of affiliated payments.

Services Supplied Through Affiliates in 2006

As mentioned previously, this article features new measures of services provided through affiliates, called services supplied through affiliates, which incorporate improved measures of services in the important insurance, wholesale trade, and retail trade industries. The new measures of services supplied are substantially higher than the old sales-based measures, due to the recognition of the distributive services provided by affiliates with operations in wholesaling and retailing.[11] Based on the new measures, wholesale trade accounted for the largest share of services supplied, by far, for both foreign affiliates and U.S. affiliates in 2006; in contrast, the relative importance of affiliates in "finance (except banks) and insurance" as service suppliers declined because of the recognition that the portion of insurance premiums that is used to pay claims is more appropriately treated as a transfer than as a component of insurance services. In contrast, the historical patterns in the sales of services statistics show affiliates classified in wholesale trade as relatively small service providers, and affiliates in "finance (except banks) and insurance" have been the largest sellers of services.

In 2006, nonbank U.S. multinationals supplied services of $873.6 billion worldwide through their nonbank majority-owned affiliates, up 11 percent from 2005 (table F). Foreign multinationals supplied services of $673.4 billion worldwide through their nonbank majority-owned U.S. affiliates in 2006, up 17 percent.

Services supplied to parties located in the same country as the affiliate tend to dominate affiliates' transactions in services as well as in goods.[12] In 2006, 71 percent of services produced by U.S. multinationals' foreign affiliates were supplied to local markets, and 58 percent of goods were supplied to local markets. In 2006, as in past years, an even larger share of the output of foreign multinationals' U.S. affiliates has been supplied to local persons, reflecting the large size and attractiveness of the U.S. market. For U.S. affiliates, 91 percent of services were supplied to the local market, and 91 percent of goods were also supplied to local customers.[13]

11. For a more detailed description of the new measures, see the section "Revisions and Improvements" in this article. In 2006, services supplied by foreign affiliates exceeded sales of services by 29 percent, and services supplied by U.S. affiliates exceeded sales of services by 35 percent.

12. For more on the allocation of the new measures of insurance and wholesale and retail trade services by destination, see "Revisions and Improvements."

13. 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 2006, exports accounted for 9 percent of U.S. affiliates' sales of goods.

Services supplied by U.S. multinationals' foreign affiliates to local markets and to other foreign markets and services supplied by foreign multinationals' U.S. affiliates to the U.S. market both represent the delivery of services to international markets through the channel of direct investment. 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).[14] 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 location for 2005 and 2006. 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 2005 and 2006.

Services supplied by foreign affiliates to foreign persons

In 2006, nonbank U.S. multinational companies supplied services totaling $806.3 billion to foreign persons

14. 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.

Table F. Services Supplied by U.S. MNCs Through Their Nonbank MOFAs and by Foreign MNCs Through Their Nonbank MOUSAs, 2005–2006

[Millions of dollars]

	2005	2006
Services supplied through MOFAs		
Total	**786,771**	**873,640**
To affiliated persons	159,140	178,725
To unaffiliated persons	627,630	694,915
To U.S. persons	61,734	67,330
To U.S. parents	45,792	48,294
To unaffiliated U.S. persons	15,942	19,036
To foreign persons	725,036	806,310
To other foreign affiliates	113,348	130,431
To unaffiliated foreign persons	611,688	675,879
Local sales	559,263	619,293
To other foreign affiliates	24,585	27,930
To unaffiliated foreigners	534,677	591,363
To other countries	165,774	187,017
To other foreign affiliates	88,763	102,502
To unaffiliated foreigners	77,011	84,516
Services supplied through MOUSAs		
Total	**576,296**	**673,367**
To U.S. persons	527,135	615,851
To foreign persons	49,161	57,516
To the foreign parent group	25,355	29,714
To foreign affiliates	3,048	3,222
To other foreigners	20,759	24,580

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

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

through their nonbank majority-owned foreign affiliates. By area, affiliates in Europe, by far, supplied the most services to foreign persons—57 percent of the total. Affiliates in Asia and Pacific were also large suppliers of services to foreign persons, accounting for 20 percent of the total. Within Europe, affiliates in the United Kingdom accounted for the largest share of the total (34 percent), followed by Germany (10 percent) and Switzerland (9 percent). Within Asia and Pacific, affiliates in Japan accounted for the largest share of the total (33 percent), followed by affiliates in Australia (16 percent) and Singapore (12 percent).

By industry sector, foreign affiliates classified in wholesale trade were the largest suppliers of services to foreign persons in 2006, accounting for 23 percent of the total. Within wholesale trade, services supplied were largest for wholesalers of professional and commercial equipment and supplies, accounting for over one-quarter of the total. Services supplied by affiliates in professional, scientific, and technical services and in "finance (except banks) and insurance" were also relatively large in 2006. Within professional, scientific, and technical services, affiliates in computer systems design and related services accounted for 46 percent of services supplied. In "finance (except banks) and insurance," affiliates in nonbank finance accounted for 58 percent of the total; services supplied by affiliates in "securities, commodity contracts, and other intermediation and related activities" were particularly large.

Services supplied to foreign persons by nonbank majority-owned affiliates of nonbank U.S. companies increased 11 percent in 2006 after increasing 13 percent in 2005. Services supplied by foreign affiliates grew in all major geographic areas and in every major industry sector in 2006. A pickup in economic growth in many major host markets served by foreign affiliates boosted the demand for their services.[15] Affiliates that entered the universe of nonbank majority-owned foreign affiliates through increased investment in previously minority-owned affiliates, acquisitions, and newly established affiliates contributed to increases in several industry sectors, including information, accommodations and food services, wholesale trade, "finance (except banks) and insurance," and administration, support, and waste management. The depreciation of the U.S. dollar against certain major currencies—such as the euro, the British pound, and the Canadian dollar—also contributed to the increase by lifting the dollar value of services supplied by affiliates; however, appreciation against the Japanese yen contributed to slower growth in 2006 than in 2005 by lowering the dollar value of services provided by Japanese affiliates.[16] Some industry-specific factors also contributed to the growth in services supplied through foreign affiliates in 2006. For example, in "finance (except banks) and insurance," which had the largest dollar increase, improved financial market conditions and higher trade volumes and prices for commodities boosted commissions and fees for services provided by affiliates in "securities, commodity contracts, and other intermediation and related activities."

In 2006, the value of services supplied by foreign affiliates increased in all major areas. The largest increase, by far, was for affiliates in Europe, which accounted for 56 percent of the overall increase. The next largest increase was for Asia and Pacific, which accounted for 19 percent of the increase. Within Europe, affiliates in the United Kingdom and Ireland accounted for nearly two-thirds of the increase. In the United Kingdom, affiliates in information had the largest increase, followed by those in "finance (except banks) and insurance" and accommodations and food services. The increase in information was broadly based; the largest increase was in telecommunications, where acquisitions boosted activity. In "finance (except banking) and insurance," affiliates in "securities, commodity contracts, and other intermediation and related activities" accounted for much of the increase because of favorable market conditions and growth in fee income. In accommodations and food services, acquisitions contributed most to the increase. In Ireland, affiliates in real estate and rental and leasing (which includes "lessors of nonfinancial intangible assets") had the largest increase, which reflected a step-up in intellectual property licensing activities.

Within Asia and Pacific, increases were generally widespread by country; affiliates in Singapore, Australia, and Japan had the largest increases and together accounted for almost half of the region's overall increase. In Singapore, affiliates in wholesale trade contributed most to the increase, as affiliates' activities shifted away from manufacturing and toward the provision of distributive services and as wholesale trade margins improved. In Australia, affiliates in information, especially publishing industries, contributed most to the increase in services supplied. In Japan, affiliates in "finance (except banks) and insurance" more than accounted for the overall increase. Within "finance (except banks) and insurance," higher prices for

15. In 2006, real GDP growth in the United Kingdom rose to 2.8 percent from 2.1 percent in 2005; in the euro area, it rose to 2.8 percent from 1.6 percent; in Japan, it rose to 2.4 percent from 1.9 percent; in Canada, it rose to 3.1 percent from 2.9 percent; and in Mexico, it rose to 4.9 percent from 3.1 percent. Data are from the International Monetary Fund, *World Economic Outlook* (October 2008).

16. In 2006, the dollar depreciated less than 1 percent against the euro, 1 percent against the British pound, and 6 percent against the Canadian dollar. It appreciated 6 percent against the Japanese yen. Annual exchange rates are period averages.

commodities, such as precious metals, and favorable financial market conditions boosted services supplied in nonbank finance (particularly in "securities, commodity contracts, and other intermediation and related activities"), and improved underwriting margins boosted insurance affiliates' services output.

By industry sector, increases were broadly based in 2006; services supplied increased for all major industry sectors. The largest increase was in "finance (except banks) and insurance" ($16.1 billion), followed by information ($13.7 billion) and "professional, scientific, and technical services" ($9.3 billion). Affiliates in these three industry sectors accounted for almost half of the overall increase. Within "finance (except banks) and insurance," affiliates in nonbank finance—especially those in "securities, commodity contracts, and other intermediation and related activities"—contributed most to the increase, which was geographically widespread. The increase in 2006 reflected a larger volume of transactions related to mergers and acquisitions, debt and equity underwriting, and other advisory services as well as higher equity market valuations that boosted assets under management on which fees are earned. Services supplied by affiliates in insurance also increased, particularly in Asia and Pacific and in Latin America and Other Western Hemisphere.

In information, increases were widespread; the largest changes were in publishing industries and "Internet, data, and other information services."[17] In publishing industries, "newspaper, periodical, book, and database publishers" contributed the most to the change because of the establishment of new affiliates in late 2005. In "Internet, data, and other information services," the increase mainly reflected growth in foreign affiliates' market penetration and user base.

In "professional, scientific, and technical services," the largest increase was in architectural, engineering, and related services; the increase was broadly based by affiliate host country and reflected a pickup in contract awards as demand for these services was stimulated by investments in facilities to process or extract commodities such as oil, gas, and metals. Additionally, the establishment of affiliates in advertising and related services boosted services supplied in "professional, scientific, and technical services."

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

Foreign companies' nonbank majority-owned U.S. affiliates supplied U.S. residents with services totaling $615.9 billion in 2006. By area, affiliates with UBOs in Europe supplied the most services, by far, accounting for 63 percent of the total. Affiliates with UBOs in Asia and Pacific accounted for the next largest share (17 percent). Within Europe, affiliates with UBOs in the United Kingdom supplied the most services to the United States, accounting for a quarter of the region's total, followed by those with UBOs in Germany (21 percent) and in France (16 percent). Within Asia and Pacific, affiliates with UBOs in Japan accounted for 78 percent of the total.

By industry sector, services supplied to U.S. persons by U.S. affiliates in wholesale trade were largest, accounting for a quarter of the total, followed by affiliates in "finance (except banks) and insurance" and in manufacturing. In wholesale trade, petroleum and petroleum product wholesalers supplied the most services. In "finance (except banks) and insurance," services supplied by affiliates in insurance and in nonbank finance contributed in nearly equal parts to the total. In manufacturing, affiliates in transportation equipment and in chemicals were the largest suppliers of services.

Services supplied to the United States by U.S. affiliates grew 17 percent in 2006, compared with 5 percent in 2005. This pickup breaks from the pattern of relatively modest growth that has persisted in the past few years. The acceleration occurred although U.S. economic growth remained steady in 2006. By country of the affiliate's UBO, the increase was broadly based. Services supplied by affiliates that entered the universe of nonbank majority-owned affiliates through increased investment in previously minority-owned affiliates, acquisitions, and establishments of new affiliates contributed to increases in several industry sectors, including wholesale trade, "finance (except banks) and insurance," and transportation and warehousing.[18] Industry-specific factors also contributed to the increase in 2006. Increases were particularly strong in wholesale trade and in mining (particularly in support activities for oil and gas operations), as high demand for commodities, including petroleum products

17. "Internet, data, and other information services" is used here and later in this article as shorthand for "internet service providers, web search portals, data processing services, internet publishing and broadcasting, and other information services," which is the industry name that appears in the tables.

18. According to data from BEA's survey of new foreign direct investment in the United States, which covers transactions involving U.S. businesses that are newly acquired or established by foreign direct investors, outlays to acquire or establish U.S. businesses increased from $91.4 billion in 2005 to $165.3 billion in 2006. For additional information on foreign direct investment in the United States and the operations of both new and existing affiliates, see Y. Louise Ku-Graf, "Foreign Direct Investment in the United States: New Investment in 2007," Survey of Current Business 88 (June 2008): 33–40. For more information on the operations of both new and existing affiliates, see Thomas Anderson, "U.S. Affiliates of Foreign Companies: Operations in 2006," Survey 88 (August 2008): 186–203 and Marilyn Ibarra and Jennifer Koncz, "Direct Investment Positions for 2007: Country and Industry Detail," Survey 88 (July 2008): 20–35.

and metals, bolstered services supplied in 2006.

Services supplied to U.S. persons by U.S. affiliates increased $88.7 billion in 2006. Services supplied increased for affiliates with UBOs in all of the major geographic areas. The largest increase was by affiliates with UBOs in Europe ($60.6 billion), which accounted for 68 percent of the total, followed by those with UBOs in Latin America and Other Western Hemisphere ($11.5 billion). Within Europe, affiliates with UBOs in Switzerland had the largest increase, followed by those with UBOs in Germany and in the United Kingdom. For Switzerland, the largest increase was for affiliates in wholesale trade, which mainly reflected higher sales and improved margins. For German-owned affiliates, the increase was broadly based by industry; the largest increases were in information, especially telecommunications, and in wholesale trade. For U.K.-owned affiliates, manufacturing had the largest increase, reflecting secondary sales in services by firms that were acquired late in 2005. Within Latin America and Other Western Hemisphere, the largest increases were for affiliates with UBOs in Bermuda and Venezuela. For Bermuda, the increase was broadly based by industry sector. For Venezuela, affiliates in wholesale trade contributed the most to the increase.

By industry sector, affiliates in wholesale trade had the largest dollar increase ($24.6 billion), followed by those in “finance (except banks) and insurance” ($18.4 billion) and in manufacturing ($13.4 billion). Together, affiliates in these three industry sectors accounted for 64 percent of the overall increase. In wholesale trade, increases were generally widespread and reflected strong demand, high sales volumes, and improved trade margins. Acquisitions by existing U.S. affiliates also contributed to the increase. Within wholesale trade, the largest share of the increase was attributable to petroleum and petroleum product wholesalers.

In “finance (except banks) and insurance,” affiliates in nonbank finance contributed the most to the increase, particularly those in “securities, commodity contracts, and other intermediation and related activities.” The increase reflected increased volume of activity on which fees are earned as well as the establishment of new affiliates involved in commodity contract brokering. Additionally, services supplied by insurance affiliates increased substantially because of a variety of factors, including the entrance of new affiliates and corporate reorganizations.

Within manufacturing, affiliates in chemicals and in transportation equipment contributed the most to the increase. Changes in some affiliates’ primary industry classification from other industries to manufacturing contributed to the overall increase in this sector.[19] In chemicals, services supplied were boosted by new or expanded secondary activities in services, such as licensing or wholesaling. In transportation equipment, growing product sales volumes were accompanied by growth in supporting services activities.

Revisions and Improvements

The revised estimates of 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 estimates by type of service that were published in the July 2008 SURVEY OF CURRENT BUSINESS. The estimates of services supplied through affiliates are presented here for the first time. The estimates published in this article supersede those presented in the October 2007 SURVEY.

This article also incorporates a number of changes in content and layout associated with a wider BEA effort to improve its collection of statistics on international services, both cross-border trade and through affiliates.[20] These changes, outlined below, will continue in subsequent versions of this article.

Cross-border trade. The estimates of cross-border exports of private services were revised up $11.0 billion, or 3 percent, for 2006, and the estimates of cross-border imports were revised up $6.1 billion, or 2 percent. For 2005, cross-border exports were revised up $0.7 billion, or less than 1 percent, and cross-border imports were revised down $2.1 billion, or less than 1 percent. For 2004, cross-border exports were revised up $3.3 billion, or 1 percent, and cross-border imports were revised down $1.0 billion, or less than 1 percent.

In addition to the regular updates of source data, these revisions fully incorporate data from BEA’s new, consolidated surveys of cross-border services transactions. Beginning with the 2006 BE–120 Benchmark Survey of Transactions in Selected Services and Intangible Assets with Foreign Persons and continuing with the 2007 BE–125 Quarterly Survey of Transactions in Selected Services with Foreign Persons and the 2007 BE–185 Quarterly Survey of Transactions Between U.S. Financial Services Providers and Foreign Persons, transactions with affiliated and unaffiliated persons are collected on the same form and in the same detail. Collecting affiliated and unaffiliated data together reduces

19. 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.

20. For a history of the recent changes in BEA’s methodology for collecting data on international services transactions, see Christopher L. Bach, “Annual Revision of the U.S. International Accounts, 1974–2007,” SURVEY 88 (July 2008): 36–52.

the potential for duplicate reporting or omissions. Previously, BEA collected data on affiliated and unaffiliated transactions on separate surveys.

Collecting affiliated transactions on the BE–120, BE–125 and BE–185 surveys has allowed BEA to collect additional detail by type of service for affiliated trade in services. As a result, BEA can identify affiliated trade in these services beginning with data for 2006 for telecommunications and subcomponents of "royalties and license fees" and "other business, professional, and technical services." Previously, affiliated trade in these services was not separately identifiable. The presentation in data tables 1, 4, 5, and 7 has been altered to show total trade rather than only unaffiliated trade at the sub-component level.

In table 1, the items formerly in the addenda are now shown in the main table under "other business, professional, and technical services." The format of the entire table has also been altered to show only total trade in specific types of services. Except for the items formerly in the addenda, data on affiliated and unaffiliated trade in each service type are available in the subsequent tables. For the items formerly in the addenda, detail on affiliated and unaffiliated trade is available in a supplemental table on BEA's Web site at <www.bea.gov/international/intlserv.htm>.

In tables 4, 5, and 7, country detail for the subcomponents of "royalties and license fees," "other private services," and "business, professional, and technical services" is now presented as total trade rather than only unaffiliated trade. The layout of these tables has also been changed to include additional information, formerly in tables 1 and 8, on trade by type of affiliation and on trade in "film and television tape rentals." The table "Other Private Services by Affiliation of Transactors" (formerly table 8) will no longer be published because these statistics are now included in table 5. In addition, Ireland has been added to the country stub in tables 2 through 7. For all tables, these changes begin with data year 2006 and will continue forward. The format of the tables for 2005 and prior years is unchanged, although the data have been updated to include the most recent revisions.

The incorporation of data from the BE–120, BE–125, and BE–185 surveys has also resulted in significant revisions to the estimates of affiliated trade in "financial services," "computer and information services," "management and consulting services," "research, development, and testing services," and "other business, professional, and technical services." For "management and consulting services," these revisions are largely the result of a change in definition; "management and consulting services" now includes allocated expenses (amounts received by a parent company from its affiliate for general overhead and stewardship). Allocated expenses were formerly included in affiliated "other business, professional, and technical services." For the other services, the revisions are the result of significant differences between the affiliated data received on the BE–120, BE–125, and BE–185 surveys, and the data received on previous surveys. BEA has revised the estimates of affiliated trade in "management and consulting services" and "research, development, and testing services" back to 2001, and the estimates of "financial services," "computer and information services," and "other business, professional, and technical services" back to 1997 (the first years for which BEA had previously published figures for each series) to bring these estimates into better alignment with the data reported on the BE–120, BE–125, and BE–185 surveys.

Services supplied through affiliates. A new featured measure of services provided by affiliates that incorporates measures of insurance and wholesale and retail trade services that are more akin to services output than the previous value-of-sales measure is introduced in this article. In recognition of this change, the new measure is referred to as "services *supplied* through affiliates," to distinguish it from the old measure referred to as "*sales* of services through affiliates" and to highlight that the new measure is an output-based measure.[21] Insurance and wholesale and retail trade are important industries for multinational companies, and the new measure better captures the services provided through affiliates in these industries than the old sales-based measure.

While the change improves measurement, it introduces a break in series for the measure of services provided through affiliates featured in this article.[22] Beginning with 2004, the statistics on services provided by affiliates reflect the improved measure of the services supplied by insurance and wholesale and retail trade affiliates; statistics presented for prior years reflect sales of services.[23] The improved estimates of

21. As noted earlier, the estimates of services supplied for affiliates' primary and secondary activities in all other industries remain sales of services.

22. At this time, BEA will continue to publish the old sales of services measure, which is based on the value of sales for insurance and trade services, in the detailed tables on the operations of multinational corporations that can be downloaded at no charge from BEA's Web site at <www.bea.gov>.

23. The change to a services-supplied basis was introduced, starting with 2004, because that was the first year for which the new measures are available for both majority-owned foreign affiliates of U.S. companies and majority-owned U.S. affiliates of foreign companies. Statistics on services supplied by majority-owned U.S. affiliates for 2002 and 2003 with limited detail by industry and by country are available at <www.bea.gov/international/intlserv.htm>. Statistics on services supplied by major industry sector for both majority-owned foreign affiliates and majority-owned U.S. affiliates for 2004 are also available at this Web site.

financial services supplied by banks are not yet available and will be incorporated in the services supplied measure that will be published next October, beginning with 2004.

In the past three articles in this series, experimental estimates of insurance, wholesale and retail trade, and financial services were presented as a supplement to the standard statistics on sales through affiliates.[24] These estimates were constructed in order to improve BEA's measure of these services supplied through affiliates and better capture the value of services provided. For example, sales may include some nonservice elements, such as the value of goods being sold by wholesalers and retailers or the portion of insurance premiums set aside for the payment of claims. In addition, sales-based measures may exclude the value of services supplied without an explicit charge, such as the premium supplements of insurers or the unpriced services of banks. Using new methodologies, data collections, and data from outside sources, BEA has constructed improved measures of these services provided by affiliates that address these issues and are more comparable with measures used in BEA's national and industry accounts. Furthermore, the new measure of services supplied eliminates a difference in measurement with the new treatment of insurance services and will close a gap in coverage with the eventual inclusion of financial services provided by bank affiliates.

To better capture the services supplied by insurance affiliates, a proxy measure of insurers' expectations about losses at the time they set their premiums, referred to as "normal" losses, is deducted from their sales, and a measure of premium supplements, which represent income earned on funds insurers hold on policyholders' behalf, is added. To better capture the services of wholesalers and retailers, the value of their distributive services, often referred to as "margin output," is included in the new measure.[25]

Table G presents the effect of the new measures of insurance and wholesale and retail trade services on services supplied. In order to distribute the new measures by destination—for example, services supplied to local or to foreign customers—information on sales of services by destination was used as a basis for allocating the new insurance measures and information on sales of goods by destination was used to allocate the new wholesale and retail trade measures.

The new measures of services provided to foreign markets by U.S. multinationals' foreign affiliates and to the U.S. market by foreign multinationals' U.S. affiliates are substantially higher than the previous measure of sales. For 2006, services supplied abroad by foreign affiliates exceeded sales of services abroad by $182.9 billion, or 29 percent. Services supplied to U.S. residents by U.S. affiliates exceeded sales of services by $160.7 billion, or 35 percent.

In addition to increasing the measures of services delivered to international markets through the channel of direct investment, the incorporation of these measures also alters the relative importance of certain industries as service providers. Historically, "finance (except banks) and insurance" has accounted for the largest share of sales of services for both foreign affiliates' sales abroad and U.S. affiliates' sales to the United States. Conversely, sales of services by affiliates classified in wholesale trade have been small historically because affiliates' sales in that industry were treated as goods and only their secondary activities in services industries were included in the sales-of-services estimates.

The new measure paints a different picture by industry than the old sales-based measure; wholesale trade now accounts for the largest share of both services supplied to foreign persons by foreign affiliates

Table G. Effects of the New Measures of Insurance, Wholesale and Retail Trade, and Financial Services on Services Provided by MOFAs and MOUSAs, 2004–2006

[Billions of dollars]

	2004	2005	2006
Services supplied to foreign residents through MOFAs			
Old *sales* of services measure	483.0	562.2	623.4
Effects of new measures:			
Insurance services	–53.2	–57.4	–52.7
Wholesale and retail trade	213.0	220.3	235.6
Financial services	(1)	n.a.	n.a.
New measure of services *supplied*	642.8	725.0	806.3
Services supplied to U.S. residents through MOUSAs			
Old *sales* of services measure	382.0	388.5	455.2
Effects of new measures:			
Insurance services	–44.6	–43.1	–50.9
Wholesale and retail trade	164.2	181.7	211.6
Financial services	n.a.	n.a.	n.a.
New measure of services *supplied*	501.5	527.1	615.9

n.a. Not available

1. Estimates for banks' financial services, which include a measure of implicitly charged services, are not yet available annually. According to preliminary estimates for 2004, the value of these services provided to foreign persons through affiliates was $38.3 billion. Statistics on banks' financial services will be incorporated into the services supplied through affiliates statistics beginning next year when they become available annually.

MOFAs Majority-owned foreign affiliates

MOUSAs Majority-owned U.S. affiliates

24. For the experimental estimates and for more information on the methods used to construct them, see the box by Maria Borga, "Supplemental Estimates of Insurance, Trade Services, and Financial Services Sold Through Affiliates" in Jennifer Koncz and Anne Flatness "U.S. International Services: Cross-Border Trade in 2006 and Sales Through Affiliates in 2005," SURVEY 87 (October 2007): 109.

25. Previously, BEA treated the total value of sales associated with wholesale and retail trade as sales of goods and the value of their distributive services were included indistinguishably in the statistics on sales of goods through affiliates. The inclusion of wholesalers' and retailers' trade margins in services supplied represents a reallocation of a portion of affiliates' sales from goods to services.

and to U.S. persons by U.S. affiliates, reflecting the important role that wholesale trade affiliates play in selling, or arranging for the sale of, goods. Based on the new measure, affiliates classified in "finance (except banks) and insurance" are no longer the largest providers of services. However, they are still among the largest suppliers for both foreign and U.S. affiliates.[26]

By geographic area, the shift to the new measure does not substantially change the patterns observed by area for services supplied abroad by foreign affiliates. For services supplied to the United States by U.S. affiliates, European-owned affiliates are still the largest providers of services, but the importance of services supplied by affiliates with ultimate beneficial owners in Asia and Pacific, especially Japan, becomes much more substantial.

The estimates of services supplied through affiliates for 2006 are preliminary. The estimates for 2005 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, estimates of services supplied through majority-owned foreign affiliates were revised for 2004, and the (experimental) estimates of services supplied through majority-owned U.S. affiliates were revised for 2002–2004 because of revisions to the output-based measures of insurance and wholesale and retail trade services.

For 2005, the estimates of foreign affiliates' *sales* of services to foreign persons were revised up $33.7 billion, or 6 percent, to $562.2 billion. The new measure of services *supplied* by insurance and wholesale and retail trade affiliates was revised up $15.1 billion, to $162.9 billion. For 2004, sales of services were unchanged and the new measure of insurance and wholesale and retail trade services was revised up $18.1 billion from the previously published experimental estimates.

For 2005, U.S. affiliates' *sales* of services to U.S. persons were revised down $0.5 billion, or about 1 percent, to $388.5 billion and the new measure of services *supplied* by insurance and trade affiliates was revised up $12.2 billion, to $138.6 billion. For 2002–2004, sales of services were unchanged but the measure of insurance and trade services was revised up $1.5 billion for 2004, up $1.6 billion for 2003, and down $2.2 billion for 2002 from the previously published experimental estimates.

26. The relative importance of affiliates in the finance and insurance sector may be boosted when estimates of financial services supplied by banks are incorporated.

Current Efforts to Improve the Estimates

BEA continues to improve its data on international services, with some changes in the process of being implemented and others underway.[27]

Data sources for travel. In an effort to improve its estimates of 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 estimates of travel services, BEA uses a method that involves multiplying the number of travelers by their average expenditures. The number of travelers is based on data provided by U.S. immigration authorities. Their average expenditures are based on information collected on a survey administered to travelers leaving the United States either while they are in flight or in the boarding area. This survey requires departing foreign visitors to recall the amount of expenditures that they made during their trip, and it requires departing U.S travelers to predict the amount of expenditures that they plan to make on their upcoming trip.

A methodology based on credit card travel expenditures has the potential to result in higher quality estimates. Credit card transactions can provide accurate data on a significant portion of spending by travelers abroad and in the United States. BEA has proposed collecting the credit card data 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 will collect information on the proportion of their expenditures abroad made using various means—such as credit cards, cash withdrawals from ATMs, and traveler's checks. If these efforts are successful, BEA will use the data from the survey of travelers to expand the credit card data to cover all spending methods.

Strategies to improve coverage. BEA has received company identification information on U.S. services importers collected in Census Bureau's 2006 Company Organization Survey (COS). To help identify companies that might be missing from BEA's mailing list, the 2006 COS included new screening questions on whether the reporting company imported services. In

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

addition, the sample of companies covered by the COS was significantly expanded. This information has been provided to BEA under data sharing arrangements with Census and is being used to expand its mailing lists to cover U.S. firms that import services but do not currently report on BEA surveys of trade in services.

Annual surveys of banks. BEA has recently added coverage of banks to its annual data collection for U.S. direct investment abroad. Previously, financial and operating data for banks were only collected every 5 years on benchmark surveys. The introduction of annual survey coverage for banks represents an important step in improving the data on international services and filling a gap in coverage of statistics on services supplied through affiliates vis-à-vis the cross-border trade statistics. The survey covers information on sales of services, on interest paid and received that will allow the value of unpriced services of banks to be imputed, and on other measures of operations by foreign bank affiliates of U.S. parent companies and by nonbank foreign affiliates of U.S. bank parents. Annual coverage begins with data for 2007 for U.S. direct investment abroad and has been proposed for foreign direct investment in the United States, beginning with data for 2008; 2007 coverage for foreign direct investment in the United States is provided by a benchmark survey.

Tables 1 through 10.2 follow.