

U.S. International Services

Trade in Services in 2013 and Services Supplied Through Affiliates in 2012

By Alexis N. Grimm and Charu S. Krishnan

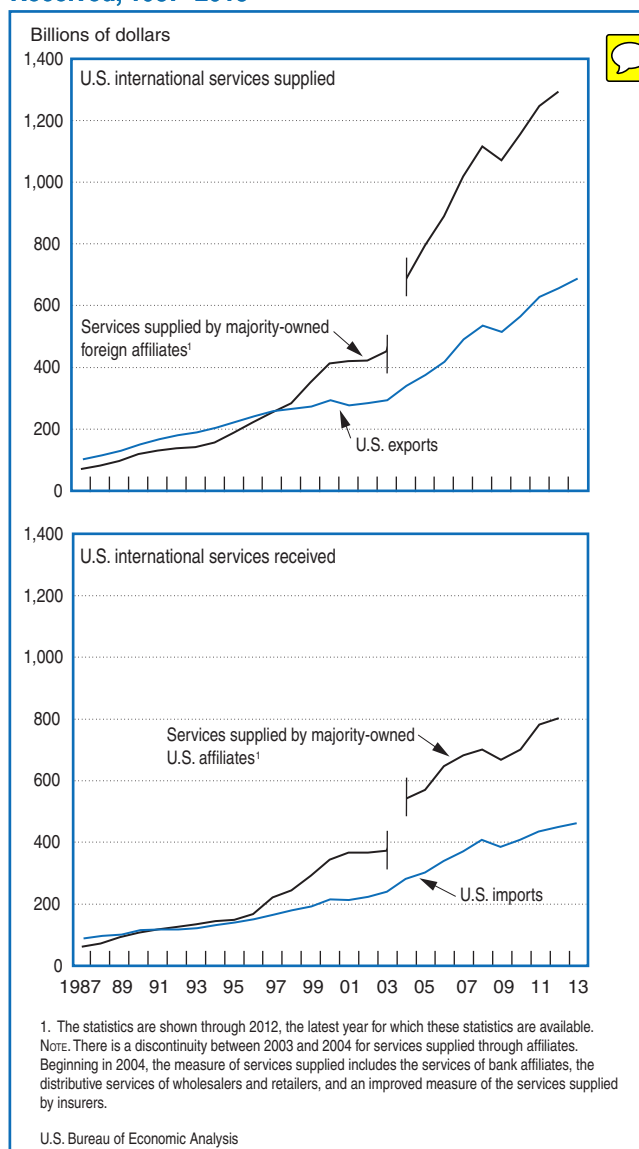
TO PROVIDE a broad perspective on services provided by and to the United States in international markets, this article presents information on services provided, both in the conventional sense—that is, trade in services—and on services supplied through the channel of direct investment by affiliates of multinational enterprises (MNEs).¹ Trade in services in this article refers to exports and imports that are included in the U.S. international transactions accounts (ITAs). Services supplied through affiliates refers to services supplied by majority-owned affiliates of MNEs through the channel of direct investment. It covers transactions between foreign affiliates of U.S. companies and foreign residents, both in the local economy and in other foreign markets, and transactions between U.S. affiliates of foreign companies and U.S. residents. Because of the importance of proximity to customers in the delivery of services, many MNEs serve foreign markets partly or wholly through their affiliates located in, or close to, the markets they serve. In 2012, as in previous years, the majority of services both delivered and obtained by the United States internationally was through affiliates (table A and chart 1).

In June 2014, the Bureau of Economic Analysis (BEA) introduced a new presentation of the ITAs as

part of a comprehensive restructuring of the international economic accounts to more closely align them with international statistical guidelines for compiling balance of payments statistics.² The presentation of

2. For a detailed description of the revisions to BEA's international trade in services statistics and table presentation, see Jeffrey R. Bogen, Mai-Chi Hoang, Kristy L. Howell, and Erin M. Whitaker "Comprehensive Restructuring and Annual Revision of the U.S. International Transactions Accounts" SURVEY OF CURRENT BUSINESS 94 (July 2014).

Chart 1. U.S. International Services Supplied and Received, 1987–2013



1. The term "affiliates" in this article refers to majority-owned affiliates. The statistics on services supplied through affiliates cover the full value of services provided by majority-owned affiliates, irrespective of the percentage of ownership. For more information, see "Comparing U.S. Trade in Services and Services Supplied Through Affiliates" on page 24. [More information on the definitions and coverage of trade in services and services supplied through affiliates](#) is available at the Bureau of Economic Analysis' Web site.

Table A. Services Supplied to Foreign and U.S. Persons Through Trade and Through Affiliates

	To foreign persons		To U.S. persons	
	Through trade (U.S. exports)	Through foreign affiliates of U.S. companies	Through trade (U.S. imports)	Through U.S. affiliates of foreign companies
Billions of dollars				
2011.....	627.8	1,247.0	435.8	781.6
2012.....	654.9	1,293.0	450.4	801.9
2013.....	687.4	n.a.	462.1	n.a.
Percent change from the preceding year				
2011.....	11.4	7.9	6.5	11.5
2012.....	4.3	3.7	3.4	2.6
2013.....	5.0	n.a.	2.6	n.a.

n.a. Not available

NOTE: Historical statistics for 1986 forward are available on the BEA Web site.

trade in services in this article has been modified from that of past years to align with the restructured ITAs, which now include nine broad categories of services rather than seven. As part of this alignment, this year's article includes statistics on services provided to, and received from, nonresidents by U.S. government agencies, both military and nonmilitary, as part of a new category "government goods and services n.i.e." (not included elsewhere). With this change, this article now provides detailed information on all trade in services, not just trade in private services. For more information on the definitions and methodology of the major trade in services categories, see *Part III in International Economic Accounts: Concepts and Methods*.

In 2013, U.S. exports of services were \$687.4 billion, and U.S. imports of services were \$462.1 billion, resulting in a services trade surplus of \$225.3 billion (chart 2).³ The United States retained its position as the world's leader in exports and imports of services.⁴ In 2012—the latest year for which statistics are available—services supplied to foreign markets through majority-owned foreign affiliates of U.S. multinational enterprises were \$1,293.0 billion. Services supplied to the United States through majority-owned U.S. affiliates of foreign multinationals were \$801.9 billion.

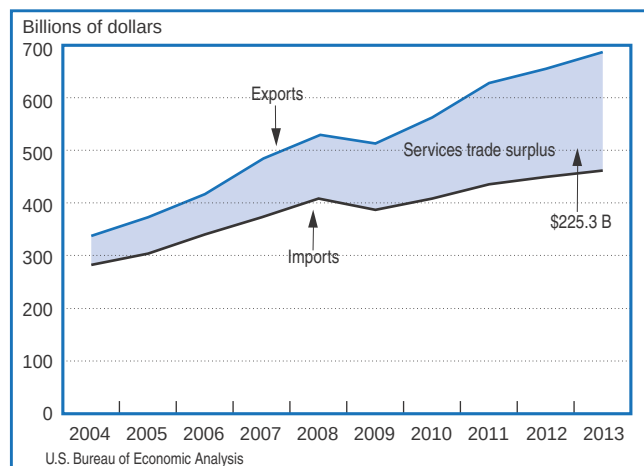
U.S. Trade in Services 2013

In 2013, the U.S. surplus on trade in services increased 10 percent, to \$225.3 billion, after increasing 6 percent in 2012. In contrast to the persistent U.S. deficit on trade in goods, which was \$701.7 billion in 2013, the United States has historically recorded a surplus on trade in services (chart 2). Growth in exports acceler-

3. The statistics in this article are consistent with the less detailed quarterly statistics published in table 3.1 of the international transactions accounts.

4. World Trade Organization (WTO) Press Release 721 (April 14, 2014); www.wto.org.

Chart 2. U.S. International Services Trade Surplus, 2004–2013



ated in 2013, while growth in imports continued to decelerate from the relatively high rate of 2011 (table A). This occurred as the real gross domestic product (GDP) of the United States and some of its major trading partners grew at a slower rate in 2013 than in 2012 (chart 3). In addition, the value of the U.S. dollar relative to the currencies of many of the major U.S. trading partners was largely unchanged in 2013 (chart 4).

Both exports and imports reached record levels. For exports, the largest increases were in travel (for all purposes including education), \$11.9 billion, and in financial services, \$7.5 billion (table B). For imports, the

Chart 3. Growth in Real GDP by Major Area

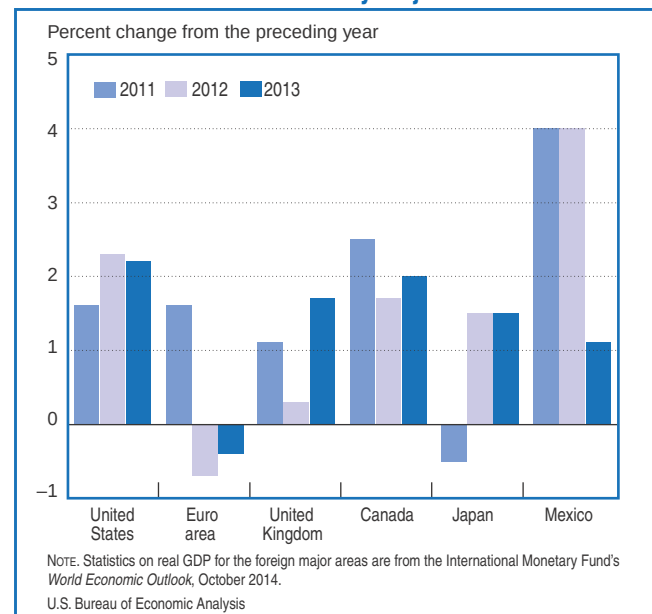
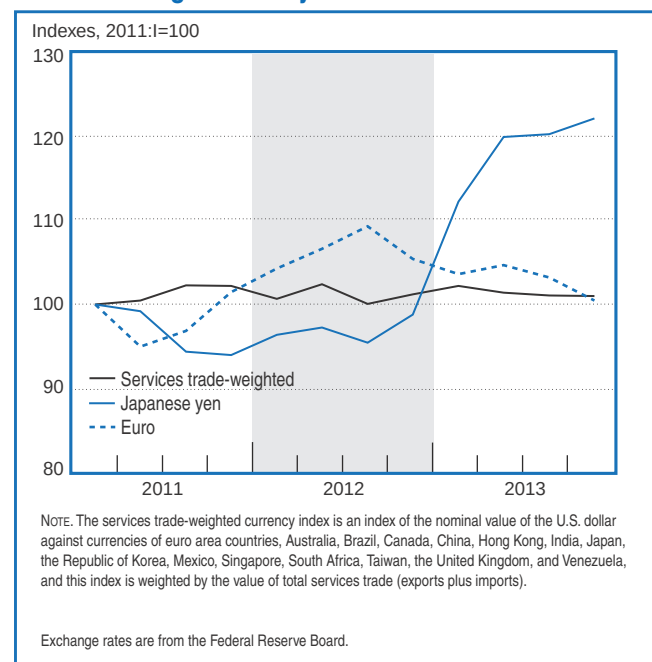


Chart 4. Foreign Currency Price of the U.S. Dollar



largest increases were in transport, \$5.7 billion, and in other business services, \$5.4 billion. Summary statistics on trade in services by category and the five largest countries in each category are presented on pages 6–15. For more detailed statistics, see tables 1–7.2 that accompany this article.

Growth in exports accelerated to 5 percent in 2013 from 4 percent in 2012 (table B). The pace of growth varied by type of service. For exports, all categories except insurance grew, and the largest percentage increases were in financial services, 10 percent, and maintenance and repair services, 8 percent. The growth in financial services reflected growth in financial management, financial advisory, and custody services. The growth in maintenance and repair services reflected growth in industrial-type maintenance services.

For imports, five of the nine categories grew, and the largest percentage increases were in financial services, 10 percent, and in transport, 7 percent. The growth in financial services reflected growth in financial management, financial advisory, and custody services and in credit card and other credit-related services. The growth in transport reflected growth in sea and air transport.

By area, Europe remained the largest market for U.S. services exports, followed by the Asia and Pacific region. By country, the top 10 markets for U.S. exports

in 2013 were nearly unchanged from those in 2012; Korea replaced Australia as the tenth largest market in 2013 (table C). Canada was the top market for exports in 2013; the top categories of exports were travel (for all purposes including education) and charges for the use of intellectual property n.i.e. The United Kingdom was the second largest market for exports in 2013; the top categories of exports were financial services and

Table B. Change from Preceding Year in Trade in Services

	Exports		Imports	
	2012	2013	2012	2013
Billions of dollars				
Total services.....	27.1	32.6	14.6	11.8
Maintenance and repair services n.i.e.	0.8	1.2	-0.3	-0.4
Transport.....	3.8	3.7	3.7	5.7
Travel (for all purposes including education)	10.4	11.9	10.6	4.4
Insurance services.....	1.4	-0.4	-2.5	-2.7
Financial services.....	-1.7	7.5	-0.4	1.7
Charges for the use of intellectual property n.i.e.....	2.2	3.7	3.4	-0.5
Telecommunications, computer, and information services	2.9	1.3	-0.6	0.7
Other business services.....	7.3	3.6	4.1	5.4
Government goods and services n.i.e.....	-0.1	0.3	-3.4	-2.5
Percent				
Total services.....	4.3	5.0	3.4	2.6
Maintenance and repair services n.i.e.	5.9	7.8	-3.2	-4.4
Transport.....	4.7	4.4	4.5	6.7
Travel (for all purposes including education)	6.9	7.4	11.8	4.3
Insurance services.....	9.4	-2.6	-4.4	-5.2
Financial services.....	-2.1	9.7	-2.3	10.1
Charges for the use of intellectual property n.i.e.....	1.8	2.9	9.5	-1.2
Telecommunications, computer, and information services	10.1	4.1	-1.8	2.2
Other business services.....	6.5	3.0	4.9	6.1
Government goods and services n.i.e.....	-0.3	1.1	-11.0	-9.0

Table C. U.S. Trade in Services by Type and Country, 2013

(Millions of dollars)

	Total services	Maintenance and repair services n.i.e.	Transport	Travel (for all purposes including education) ²	Insurance services	Financial services	Charges for the use of intellectual property n.i.e.	Telecommunications, computer, and information services	Other business services	Government goods and services n.i.e.
Exports										
All countries.....	687,410	16,295	87,267	173,131	16,096	84,066	129,178	33,409	123,447	24,522
Total for the 10 largest countries ¹	371,632	(D)	48,442	103,349	8,611	36,843	79,982	(D)	65,533	2,863
Canada.....	63,281	1,483	8,280	22,737	2,869	5,545	9,916	2,661	9,365	425
United Kingdom.....	60,269	1,816	7,948	9,834	1,611	13,976	8,980	4,936	10,818	350
Japan.....	46,270	702	9,282	12,152	1,685	3,156	9,535	1,222	8,073	463
China.....	37,761	789	4,813	18,694	125	2,799	5,780	492	3,930	338
Ireland.....	31,777	(D)	705	1,307	475	2,395	14,395	(D)	11,012	33
Mexico.....	29,855	739	4,228	14,998	483	1,594	3,266	907	3,246	395
Germany.....	27,529	568	4,874	5,552	281	3,085	6,441	1,133	5,360	234
Switzerland.....	27,346	124	1,819	1,948	441	1,255	10,150	1,344	10,204	61
Brazil.....	26,640	654	4,297	9,237	313	2,115	4,238	4,222	1,346	218
Korea, Republic of.....	20,904	461	2,196	6,890	328	923	7,281	299	2,179	346
Other countries.....	315,778	(D)	38,825	69,782	7,485	47,223	49,196	(D)	57,914	21,659
Imports										
All countries.....	462,134	7,620	90,754	104,677	50,454	18,683	39,015	32,877	92,710	25,343
Total for the 10 largest countries ¹	254,900	4,848	39,260	42,484	41,041	11,195	(D)	(D)	53,624	10,430
United Kingdom.....	47,779	2,625	7,571	7,316	4,998	5,796	3,666	2,371	12,443	992
Germany.....	32,873	413	7,406	3,328	3,069	687	3,937	1,180	6,750	6,103
Canada.....	30,452	1,327	5,750	7,549	774	1,516	811	4,696	7,783	246
Japan.....	30,006	128	7,949	2,867	357	1,002	11,583	535	3,017	2,569
Bermuda.....	24,676	(*)	1,131	293	22,801	168	(D)	(D)	183	13
Switzerland.....	22,004	49	2,624	934	6,380	449	5,492	420	5,468	188
India.....	19,042	29	468	2,859	36	317	283	10,367	4,639	44
Mexico.....	17,766	174	1,799	11,127	53	400	593	940	2,556	123
France.....	15,219	79	3,865	4,462	620	709	1,982	726	2,636	140
Ireland.....	15,083	24	697	1,749	1,953	151	2,116	232	8,149	12
Other countries.....	207,234	2,772	51,494	62,193	9,413	7,488	(D)	(D)	39,086	14,913

(*) Transactions between zero and \$500,000.

n.i.e. Not included elsewhere

(D) Suppressed to avoid the disclosure of data of individual companies.

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

2. All travel purposes include (1) business travel, including expenditures by border, seasonal, and other short-term workers and (2) personal travel, including health-related and education-related travel.

other business services.

Europe remained the largest source of U.S. services imports, followed by the Asia and Pacific region. By country, the top 10 sources of U.S. imports in 2013 were nearly unchanged from those in 2012; Ireland replaced China as the tenth largest provider of services to the United States in 2013. The United Kingdom was the top provider of services to the United States; the top categories of imports were other business services and transport. Germany was the second-largest provider of services to the United States; the top categories of imports were transport and other business services.

Services trade includes trade between unaffiliated parties and trade within multinational enterprises. Trade within MNEs (affiliated trade) accounted for 27 percent of exports in 2013, down 1 percent from 2012. Affiliated trade accounted for 28 percent of imports in 2013, up 1 percent from 2012. For exports, growth in unaffiliated trade increased 2 percentage points in 2013, from 4 percent to 6 percent, and growth in affiliated trade decreased 2 percentage points, from 5 percent to 3 percent. For imports, growth in unaffiliated trade decreased 2 percentage points in 2013, from 3 percent to 1 percent, and growth in affiliated trade increased 1 percentage point, from 5 percent to 6 percent.

Services Supplied Through Affiliates in 2012

U.S. international services delivered via the channel of direct investment consist of (1) services supplied to local markets and other foreign markets by foreign affiliates of U.S. MNEs and (2) services supplied to the U.S. market by U.S. affiliates of foreign MNEs. In 2012, services supplied by U.S. MNEs to foreign markets through their affiliates increased to \$1,293.0 billion from \$1,247.0 billion in 2011. Services supplied by foreign MNEs to the United States through their U.S. affiliates increased to \$801.9 billion from \$781.6 billion. The difference between international services supplied through affiliates to foreign markets and to U.S. markets was \$491.1 billion in 2012, compared with \$462.4 billion in 2011. Selected summary statistics on services supplied by foreign affiliates of U.S. MNEs for certain countries and industries of the affiliate and on services supplied by U.S. affiliates of foreign MNEs for certain countries of ultimate beneficial owner (UBO) and industries of the affiliate are presented on pages 16–19.⁵

5. 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 by 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 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.

For more detailed statistics, see tables 8–10.2 that accompany this article.

Services supplied abroad through foreign affiliates of U.S. MNEs grew 4 percent in 2012 after growing 8 percent in 2011. The sharp decline in growth reflected weaker economic growth in many of the major markets served by affiliates as well as in emerging markets (chart 3). In Europe, the euro area slid into recession in 2012, and growth in the United Kingdom was less than half of 1 percent. Canada's real GDP growth also slowed but remained higher than that of Europe. Growth in emerging markets and developing economies, such as Mexico, slipped slightly. This weakened the expansion of services supplied by affiliates in markets that in 2011, had accounted for more than half of the growth. Japan's real GDP growth rebounded in 2012 after a contraction in 2011 that at least partly resulted from the March 2011 earthquake and tsunami.

The value of the dollar relative to the currencies of many of the U.S.'s largest trading partners was largely unchanged throughout 2012. However, in Japan, the dollar strengthened against the yen (chart 4).

Services supplied abroad through affiliates increased in all major regions, but the largest increases were for affiliates in the Asia and Pacific region, followed by affiliates in Europe and in South and Central America. In Asia and Pacific, all major industry categories grew; the largest increases were in professional, scientific, and technical services and in insurance. More than two-fifths of the growth in services supplied in Asia and Pacific was due to increases in services supplied by affiliates in China, where economic growth slipped but was still robust, and in Australia, one of the fastest growing advanced economies in 2012. Services supplied by affiliates in Europe grew 2 percent despite Europe's weak economic situation; about two-thirds of the growth was due to a sharp increase in growth in services supplied in Ireland, particularly in information services supplied to unaffiliated customers in other countries. Increases for European affiliates in information services and in retail trade more than offset large decreases in banking and finance and in wholesale trade. Despite weak economic growth in South and Central America, services supplied by affiliates grew 8 percent in 2012, led by increases in Mexico and in Chile; more than half of the increase was in finance and insurance and in professional, scientific, and technical services.

Services supplied by foreign affiliates of U.S. MNEs increased in most major industry categories, but approximately two-thirds of the total increase was in professional, scientific, and technical services, in information services, and in retail trade. In professional, scientific, and technical services, the largest increases were in architectural, engineering, and related

services and in computer systems design and related services. In information services, more than half of the increase was in “Internet service providers, web search portals, data processing services, Internet publishing and broadcasting, and other information services,” mainly in services supplied by affiliates that provide Internet search and social networking services and by affiliates in software publication services, particularly in Ireland. In retail trade, the inclusion of services supplied by newly acquired foreign affiliates accounted for more than half of the increase, and the largest increases were in general merchandise and miscellaneous store retailers.

U.S. MNEs not only supply services to foreign markets via the channel of direct investment through foreign affiliates (the focus of this article), but they also supply services to the U.S. market. Services supplied to foreign markets accounted for 92 percent, and services supplied to the U.S. market accounted for the remaining 8 percent of foreign affiliates’ \$1,405.7 billion in services supplied worldwide in 2012. Services supplied to foreign markets through the channel of direct investment include services provided by U.S. MNEs’ affiliates to both their local markets and other foreign markets. In 2012, transactions in the local market accounted for 72 percent of services supplied worldwide by affiliates, while transactions with parties in other foreign markets accounted for 20 percent.

In 2012, services supplied to the U.S. market by U.S. affiliates of foreign MNEs grew 3 percent, down from 11 percent in 2011, despite somewhat stronger U.S. economic growth (chart 3). Growth in services supplied through affiliates was unevenly distributed by region of UBO, and affiliates with UBOs in Europe and in Asia and Pacific together more than accounted for the growth. For affiliates with UBOs in Europe, more than half of the increase was in German-headquartered affiliates, particularly those in finance and insurance. Growth in services supplied by affiliates with UBOs in Europe increased in most major industries; the largest increases were in professional, scientific, and technical services, especially advertising and related services, and in wholesale trade. For affiliates with UBOs in Asia and Pacific, the increase was driven by growth in U.S. affiliates with UBOs in Japan, which accounted for more than 80 percent of the total increase in services supplied by affiliates with UBOs in Asia and Pacific. By industry, the largest increases in Asia and Pacific were in wholesale trade and in administration, support, and waste management, particularly in employment services. For affiliates of UBOs in all other major regions, services supplied grew weakly (South and Central America and Canada) or contracted (the Middle East,

the United States, Other Western Hemisphere, and Africa).

Services supplied by U.S. affiliates of foreign MNEs increased in seven of the eight major industry categories; the largest increases were in wholesale trade, in professional, scientific, and technical services, and in administration, support, and waste management. Higher sales of many types of goods led to increases in distributive services supplied by U.S. affiliates in wholesale trade that were spread across subindustries but that were concentrated in affiliates with UBOs in Asia and Pacific (particularly in Japan) and in Europe. Additions of affiliates to the BEA survey universe due to foreigners acquiring or establishing U.S. affiliates strongly contributed to the increases in professional, scientific, and technical services and in administration, support and waste management. In professional, scientific, and technical services, most of the increase was in advertising and related services, especially for affiliates with UBOs in France, and in computer systems design and related services, particularly for affiliates with UBOs in Germany. In administration, support, and waste management, the increase was mostly in employment services, and the largest increases were for affiliates with UBOs in Japan. Decreases in services supplied by affiliates in transportation and warehousing, particularly affiliates with UBOs in Canada, and in finance and insurance partly offset increases in other industries.

Foreign MNEs not only supply services to the U.S. market via the channel of direct investment through U.S. affiliates (the focus of this article), but also to other markets. However, U.S. market transactions typically account for the vast majority of their services supplied worldwide, as they did in 2012, when U.S. market transactions accounted for 91 percent of U.S. affiliates’ \$883.3 billion in services supplied worldwide. This large share reflects the dominant size of the U.S. market, compared with the sizes of other nearby markets.

Data Availability

Detailed statistics for U.S. international services accompany this article in tables 1–10.2. For the first time, trade in services statistics and statistics on services supplied internationally through majority-owned affiliates can be accessed through [BEA’s interactive tables](#). These tables cover additional years of data and supplemental detail not available in the tables that accompany this article.

U.S. Trade in Services—Maintenance and Repair Services

Table D. Maintenance and Repair Services n.i.e.

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Maintenance and repair services n.i.e. exports	14,279	15,115	16,295	1,179
Exports by country:				
Total exports for the five largest countries	4,558	5,169	5,551	382
United Kingdom	1,711	1,742	1,816	73
Canada	877	1,429	1,483	54
China	854	741	789	48
Mexico	481	634	739	105
Singapore	635	621	725	103
Other countries	9,721	9,946	10,743	797
Maintenance and repair services n.i.e. imports	8,236	7,970	7,620	–351
Imports by country:				
Total imports for the five largest countries	5,907	5,844	5,903	59
United Kingdom	2,566	2,457	2,625	169
Canada	1,371	1,348	1,327	–21
Brazil	1,127	1,129	987	–142
Singapore	551	586	552	–35
Germany	292	325	413	88
Other countries	2,329	2,126	1,717	–410

Exports of maintenance and repair services increased 8 percent, reflecting increased exports to Europe and to the Middle East.

Exports to countries other than the top five increased 8 percent, reflecting strong increases to European countries, such as Italy, Ireland, and France.

Imports of maintenance and repair services decreased 4 percent, reflecting decreased imports from Latin America and Other Western Hemisphere and from Asia and Pacific.

Imports from the United Kingdom increased 7 percent in 2013 after decreasing 4 percent in 2012.

U.S. Trade in Services—Transport

Table E. Transport
[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Transport exports	79,830	83,592	87,267	3,675
Sea services	16,460	17,055	17,175	120
Freight	4,124	4,178	3,987	-191
Port	12,336	12,877	13,188	311
Air services	59,015	61,683	65,522	3,839
Passenger	36,763	39,364	41,642	2,278
Freight	13,482	13,871	14,321	450
Port	8,770	8,448	9,559	1,111
Other modes	4,355	4,854	4,570	-284
Exports by country:				
Total exports for the five largest countries	31,805	33,521	35,197	1,676
Japan	8,227	8,963	9,282	319
Canada	7,945	8,016	8,280	264
United Kingdom	6,912	7,290	7,948	658
Germany	4,399	4,685	4,874	189
China	4,322	4,567	4,813	246
Other countries	48,025	50,071	52,070	1,999
Transport imports	81,377	85,029	90,754	5,725
Sea services	31,369	33,206	36,256	3,050
Freight	29,703	31,401	34,189	2,788
Port	1,666	1,805	2,067	262
Air services	45,834	47,458	50,232	2,774
Passenger	26,747	29,565	32,029	2,464
Freight	6,613	6,177	6,325	148
Port	12,474	11,716	11,878	162
Other modes	4,174	4,365	4,266	-99
Imports by country:				
Total imports for the five largest countries	30,611	32,011	34,031	2,020
Japan	7,082	7,426	7,949	523
United Kingdom	6,786	7,074	7,571	497
Germany	6,412	6,913	7,406	493
Canada	5,455	5,629	5,750	121
Korea, Republic of	4,876	4,969	5,355	386
Other countries	50,766	53,018	56,723	3,705

Transport exports increased 4 percent. The growth was driven by a 6 percent increase in air services, which accounted for 75 percent of exports in transport in 2013 (chart 5).

Air passenger services increased 6 percent, reflecting an increase in the number of foreign visitors on U.S. airlines. Average airfares decreased.

Air port services increased 13 percent, reflecting a large increase in exports to Europe.

Exports to the United Kingdom increased 9 percent, reflecting increases in air port services and air passenger services and in other modes of transport.

Transport imports increased 7 percent, reflecting increases in sea services and in air services. Sea services accounted for 40 percent of transport imports, air services accounted for 55 percent in 2013 (chart 6).

Air passenger services increased 8 percent, reflecting increases in the number of U.S. travelers on foreign airlines and in average airfares.

Imports from countries other than the five largest markets increased 7 percent. The larger increases were in imports from Asian countries, such as Taiwan, China, and Hong Kong.

Chart 5. Transport Exports by Type, 2013

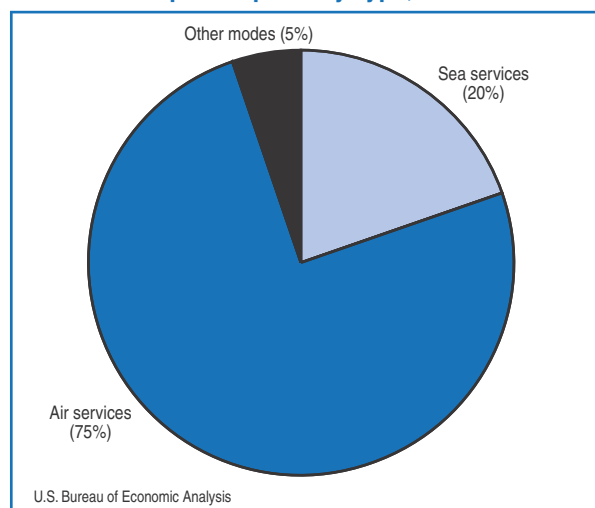
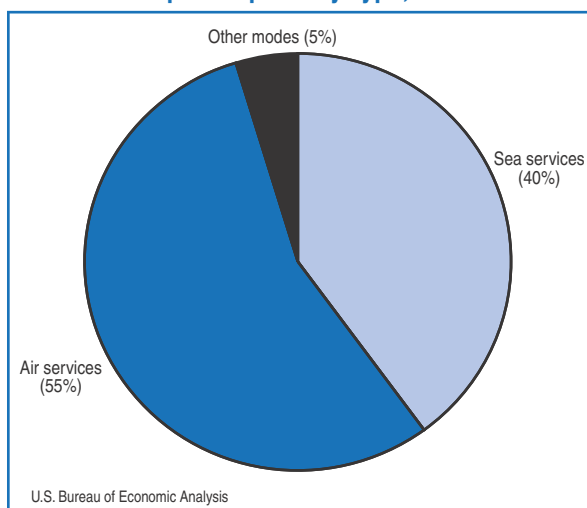


Chart 6. Transport Imports by Type, 2013



U.S. Trade in Services—Travel (for All Purposes Including Education)

Table F. Travel (for All Purposes Including Education)

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Travel exports.....	150,867	161,249	173,131	11,882
Business	40,281	39,272	39,396	124
Expenditures by border, seasonal, and other short-term workers.....	6,367	6,633	7,018	385
Other business travel.....	33,914	32,639	32,378	-261
Personal	110,586	121,978	133,736	11,758
Health related.....	3,032	3,176	3,312	136
Education related	22,823	24,858	27,241	2,383
Other personal travel.....	84,731	93,944	103,182	9,238
Exports by country:				
Total exports for the five largest countries.....	65,704	73,809	78,415	4,606
Canada.....	20,422	21,759	22,737	978
China.....	11,877	15,864	18,694	2,830
Mexico.....	13,383	14,225	14,998	773
Japan.....	9,977	11,834	12,152	318
United Kingdom.....	10,045	10,127	9,834	-293
Other countries	85,163	87,440	94,716	7,276
Travel imports	89,700	100,317	104,677	4,360
Business	20,675	20,104	21,228	1,124
Expenditures by border, seasonal, and other short-term workers.....	1,116	1,148	1,195	47
Other business travel.....	19,559	18,956	20,033	1,077
Personal	69,024	80,213	83,449	3,236
Health related.....	1,139	1,282	1,443	161
Education related	5,782	6,103	6,490	387
Other personal travel.....	62,103	72,828	75,516	2,688
Imports by country:				
Total imports for the five largest countries.....	32,450	35,474	36,320	846
Mexico.....	9,109	9,809	11,127	1,318
Canada.....	7,365	7,610	7,549	-61
United Kingdom.....	5,978	7,117	7,316	199
Italy.....	5,887	6,164	5,866	-298
France.....	4,111	4,774	4,462	-312
Other countries	57,250	64,843	68,357	3,514

Travel exports increased 7 percent as the number of foreign visitors to the United States increased while their average expenditures were nearly unchanged.

Education-related exports increased 10 percent as the number of foreign students in the United States increased more than 7 percent and average tuition increased 1 percent.

Travel exports to China increased 18 percent in 2013, reflecting a 24 percent increase in education-related travel and a 14 percent increase in other business travel and other personal travel.

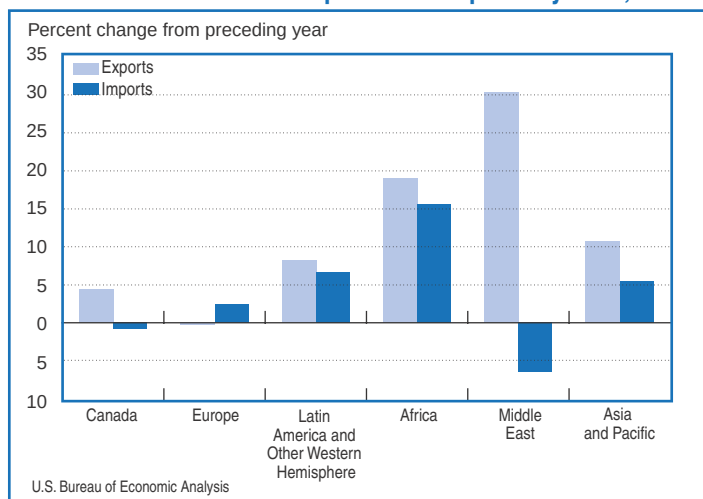
Travel exports to the United Kingdom decreased 3 percent, reflecting a decrease in average travel expenditures. The number of visitors from the United Kingdom increased.

Exports to countries other than the five largest markets increased 8 percent with strong increases in exports to countries in the Middle East (chart 7).

Travel imports increased 4 percent in 2013 after increasing 12 percent in 2012; the deceleration was due to slower growth in the number of U.S. travelers abroad and to slower growth in their average expenditures in 2013.

Imports from Mexico increased 13 percent. Mexico remained the largest market for U.S. travel abroad in 2013 resulting from increases in the number of U.S. travelers to Mexico and in their average expenditures.

Chart 7. Growth in Travel Exports and Imports by Area, 2013



U.S. Trade in Services—Insurance Services

Table G. Insurance Services
[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Insurance services exports.....	15,114	16,534	16,096	-438
Reinsurance.....	9,345	11,077	10,505	-572
Direct insurance.....	4,129	4,038	4,203	165
Auxiliary insurance services.....	1,640	1,420	1,388	-32
Exports by country:				
Total exports for the five largest countries.....	9,014	9,775	9,757	-18
Canada.....	2,884	2,989	2,869	-120
Bermuda.....	2,503	2,491	2,691	200
Japan.....	1,580	1,941	1,685	-256
United Kingdom.....	1,489	1,621	1,611	-10
Australia.....	558	733	901	168
Other countries.....	6,100	6,759	6,339	-420
Insurance services imports.....	55,654	53,203	50,454	-2,749
Reinsurance.....	49,157	46,317	44,177	-2,140
Direct insurance.....	4,881	5,028	4,911	-117
Auxiliary insurance services.....	1,616	1,858	1,366	-492
Imports by country:				
Total imports for the five largest countries.....	43,712	41,470	39,201	-2,269
Bermuda.....	27,283	24,450	22,801	-1,649
Switzerland.....	5,481	6,156	6,380	224
United Kingdom.....	5,454	5,665	4,998	-667
Germany.....	3,117	3,032	3,069	37
Ireland.....	2,377	2,167	1,953	-214
Other countries.....	11,942	11,733	11,253	-480

Exports of insurance decreased 3 percent in 2013, mainly because of a 5 percent decrease in reinsurance that was driven by a decrease in exports to Europe.

Exports to Canada decreased 4 percent because of decreases in both reinsurance and direct insurance. Despite the decrease, Canada remained the top market for U.S. insurance services overall as well as for direct insurance.

Exports to Japan decreased 13 percent, mainly because of a decrease in reinsurance. Reinsurance premium imports decreased 8 percent after increasing 24 percent in 2012. (Premiums typically increase sharply following major disasters, such as the March 2011 earthquake and tsunami.)

Imports of insurance services decreased 5 percent, mainly reflecting a decrease in reinsurance.

Imports of reinsurance services decreased despite an increase in reinsurance premium imports that reflected an increase after Superstorm Sandy in 2012. Although premiums increased, reinsurance services decreased because claims payable increased more than premiums. (For information on how insurance services are calculated see [Part III](#) in *International Economic Accounts: Concepts and Methods*.)

Insurance imports from Bermuda continued to decrease, falling 7 percent from imports in 2012.

U.S. Trade in Services—Financial Services

Table H. Financial Services

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Financial services exports	78,271	76,605	84,066	7,461
Brokerage.....	17,030	13,951	13,732	-219
Underwriting.....	4,194	2,115	2,148	33
Credit card and other credit-related.....	13,506	15,542	16,864	1,322
Management.....	20,952	21,449	24,838	3,390
Advisory.....	7,540	7,523	8,844	1,321
Other ¹	15,050	16,026	17,640	1,614
Exports by country:				
Total exports for the five largest countries.....	27,804	27,685	29,409	1,724
United Kingdom.....	13,705	13,043	13,976	933
Canada.....	5,090	5,359	5,545	186
Australia.....	2,905	3,106	3,390	284
Belgium-Luxembourg.....	2,718	2,847	3,342	495
Japan.....	3,386	3,330	3,156	-174
Other countries.....	50,467	48,920	54,657	5,737
Financial services imports	17,368	16,975	18,683	1,708
Brokerage.....	3,270	2,966	3,105	139
Underwriting.....	531	547	532	-15
Credit card and other credit-related.....	5,245	5,332	6,160	828
Management.....	2,926	2,828	3,575	747
Advisory.....	1,449	1,650	1,779	130
Other ¹	3,946	3,652	3,531	-121
Imports by country:				
Total imports for the five largest countries.....	8,894	8,470	9,710	1,240
United Kingdom.....	4,891	4,811	5,796	985
Canada.....	1,260	1,351	1,516	165
Japan.....	967	919	1,002	83
France.....	978	703	709	6
Germany.....	798	686	687	1
Other countries.....	8,474	8,505	8,973	468

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

Exports of financial services increased 10 percent in 2013 after decreasing 2 percent in 2012. The largest increase was in financial management services.

Exports of financial management services increased 16 percent. Overall rising equity markets contributed to the growth in assets under management. Several hedge funds posted large increases in exports of financial management services as a result of increases in performance fees collected.

Exports to countries other than the top five increased 12 percent, reflecting larger increases in exports to Germany and China.

Imports of financial services imports increased 10 percent in 2013 after decreasing 2 percent in 2012. The largest increases were in credit card and other credit-related services and in financial management services.

Imports of credit card and other credit-related services increased 16 percent. Imports of credit card services increased more than other credit-related services, reflecting stronger consumer confidence and increased consumer spending in 2013.

Imports from countries other than the top five increased 6 percent, reflecting larger increases in imports from Hong Kong and Australia.

U.S. Trade in Services—Charges for the Use of Intellectual Property

Table I. Charges for the Use of Intellectual Property n.i.e.

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Charges for the use of intellectual property n.i.e., exports	123,333	125,492	129,178	3,686
Industrial processes	43,897	43,252	44,978	1,726
Computer software	39,459	40,506	42,907	2,401
Trademarks	16,167	16,798	16,704	-94
Franchise fees	5,733	5,940	6,095	155
Audio-visual and related products	17,865	18,884	18,398	-486
Other intellectual property	212	113	97	-16
Exports by affiliation:				
Unaffiliated	44,653	47,716	50,622	2,907
Affiliated	78,680	77,776	78,556	779
By U.S. parents to their foreign affiliates	74,743	72,821	72,860	39
By U.S. affiliates to their foreign parents	3,937	4,955	5,696	741
Exports by country:				
Total exports for the five largest countries	53,246	52,954	52,976	23
Ireland	14,692	13,437	14,395	958
Switzerland	8,715	9,365	10,150	786
Canada	10,170	9,882	9,916	34
Japan	11,106	10,479	9,535	-944
United Kingdom	8,563	9,791	8,980	-811
Other countries	70,087	72,539	76,202	3,663
Charges for the use of intellectual property n.i.e., imports	36,087	39,502	39,015	-487
Industrial processes	21,506	22,262	22,353	91
Computer software	5,697	6,888	6,633	-254
Trademarks	4,626	4,329	4,466	138
Franchise fees	156	167	177	10
Audio-visual and related products	3,644	5,474	5,275	-199
Other intellectual property	458	383	112	-272
Imports by affiliation:				
Unaffiliated	10,977	12,118	11,335	-784
Affiliated	25,110	27,384	27,681	297
By U.S. parents from their foreign affiliates	6,076	6,716	6,491	-225
By U.S. affiliates from their foreign parents	19,035	20,668	21,190	522
Imports by country:				
Total imports for the five largest countries	22,176	24,995	26,794	1,799
Japan	7,077	9,056	11,583	2,527
Switzerland	5,247	5,530	5,492	-38
Germany	3,934	4,069	3,937	-132
United Kingdom	3,798	4,174	3,666	-508
Ireland	2,120	2,166	2,116	-50
Other countries ¹	13,911	14,507	12,221	-2,286

1. Other countries also includes "international organizations and unallocated." Imports reflecting charges for the use of intellectual property to international organizations are often substantial.

Exports that reflect charges for the use of intellectual property increased 3 percent, mostly reflecting an increase in charges associated with computer software (chart 8).

Exports that reflect charges associated with the use of computer software increased 6 percent, mostly reflecting increased exports to Europe, particularly to Ireland.

Exports to Ireland increased 7 percent, maintaining the country's position as the top recipient of exports that reflect these charges.

Exports to Japan decreased 9 percent in 2013, causing it to drop to the fourth-largest recipient of exports from the second-largest recipient.

Imports that reflect charges for the use of intellectual property decreased 1 percent. The largest decrease was in charges associated with other intellectual property and computer software (chart 9).

Unaffiliated imports decreased 6 percent, driven by decreases in imports that reflect charges for the use of industrial processes from Europe and of charges for the use of audio-visual and related products from international organizations. Audio-visual and related products dropped from a high level in 2012, which included charges for the rights to broadcast the London Summer Olympic Games.

Imports from Japan increased 28 percent, mainly reflecting an increase in charges associated with the use of industrial processes.

Chart 8. Charges for the Use of Intellectual Property, Exports by Type

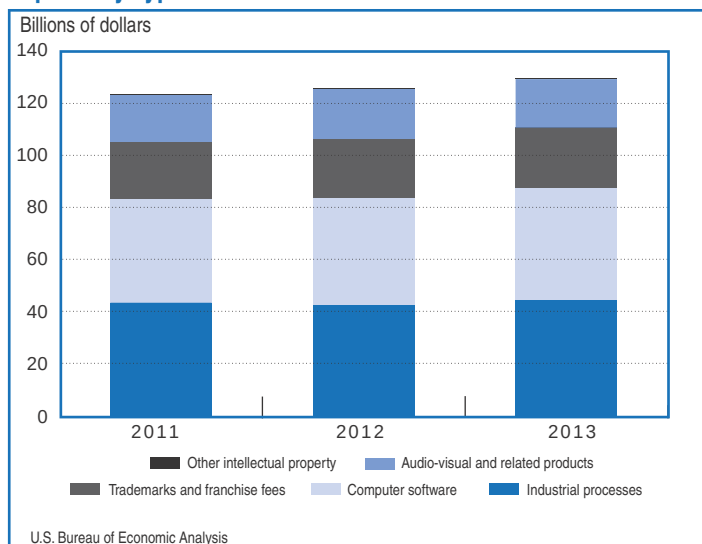
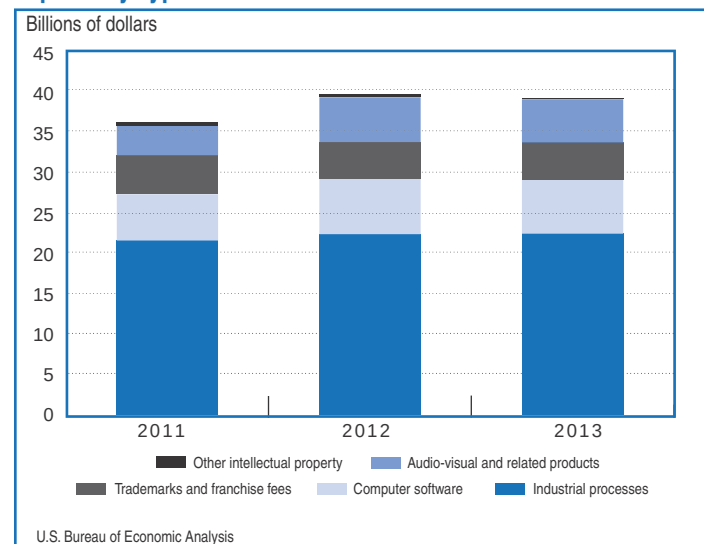


Chart 9. Charges for the Use of Intellectual Property, Imports by Type



U.S. Trade in Services—Telecommunications, Computer, and Information Services

Table J. Telecommunications, Computer, and Information Services

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Telecommunications, computer, and information services exports	29,171	32,103	33,409	1,305
Telecommunications services	12,424	13,756	14,154	398
Computer services	11,361	12,086	12,346	260
Information services	5,386	6,261	6,909	648
Exports by country:				
Total exports for the five largest countries	12,478	14,044	14,428	383
United Kingdom	4,455	4,963	4,936	-27
Brazil	3,560	4,064	4,222	158
Canada	2,473	2,480	2,661	181
Switzerland	1,131	1,418	1,344	-74
Argentina	858	1,120	1,265	145
Other countries	16,693	18,059	18,981	922
Telecommunications, computer, and information services imports	32,756	32,156	32,877	721
Telecommunications services	7,039	7,182	7,298	116
Computer services	23,879	23,221	23,643	422
Information services	1,839	1,753	1,936	183
Imports by country:				
Total imports for the five largest countries	20,798	20,556	20,374	-183
India	9,698	10,116	10,367	251
Canada	5,475	5,284	4,696	-588
United Kingdom	2,788	2,453	2,371	-82
China	1,341	1,568	1,760	192
Germany	1,496	1,136	1,180	44
Other countries	11,958	11,600	12,504	904

Exports of telecommunications, computer, and information services increased 4 percent in 2013 after increasing 10 percent in 2012.

Exports of information services increased 10 percent. The largest increases were in exports to Ireland and the United Kingdom.

The United Kingdom remained the largest recipient of exports in 2013 despite decreasing 1 percent in 2013. This decrease was largely the result of a decrease in computer services.

Imports of telecommunications, computer, and information services increased 2 percent in 2013 after decreasing 2 percent in 2012.

Imports of computer services increased 2 percent. The largest increases were in imports from Europe and from Asia and Pacific.

Imports from Canada decreased 11 percent, mainly reflecting a decrease in computer services.

U.S. Trade in Services—Other Business Services Exports

Table K. Other Business Services Exports

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Other business services exports	112,568	119,892	123,447	3,555
Research and development services	25,761	28,080	30,052	1,972
Professional and management consulting services	49,645	53,539	55,758	2,219
Legal services	7,704	8,379	9,177	798
Accounting, auditing, and bookkeeping services	1,116	1,216	1,198	-18
Business and management consulting and public relations services	34,551	36,546	36,763	217
Advertising	6,274	7,397	8,620	1,223
Technical, trade-related, and other business services	37,162	38,273	37,637	-636
Architectural and engineering services	11,359	12,672	12,915	243
Construction	3,099	3,154	2,590	-564
Industrial engineering	5,658	3,758	3,427	-331
Operating leasing services	7,691	8,342	8,520	178
Other ¹	9,354	10,348	10,186	-162
Exports by affiliation:				
Unaffiliated	47,515	48,040	48,842	802
Affiliated	65,053	71,852	74,604	2,752
By U.S. parents to their foreign affiliates	41,174	45,527	47,052	1,525
By U.S. affiliates to their foreign parents	23,879	26,325	27,552	1,227
Exports by country:				
Total exports for the five largest countries	43,615	47,797	49,472	1,675
Ireland	10,320	10,372	11,012	640
United Kingdom	10,104	10,198	10,818	620
Switzerland	8,063	10,515	10,204	-311
Canada	8,052	9,240	9,365	125
Japan	7,076	7,472	8,073	601
Other countries	68,953	72,095	73,975	1,880

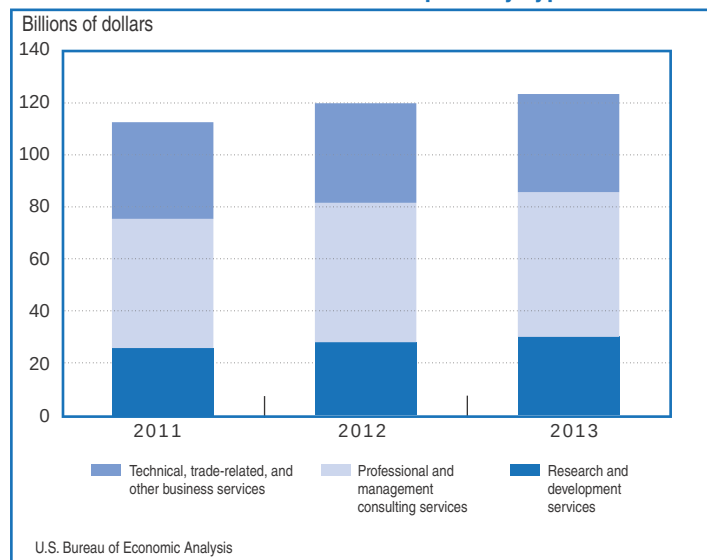
1. This category includes mining, trade-related services, sports and performing arts, training services, and other business services n.i.e.

Exports of other business services increased 3 percent, mainly due to increases in professional and management consulting services and in research and development services.

Exports of professional and management consulting services increased 4 percent. The largest increase was in exports to Asia and Pacific. These exports accounted for 45 percent of total exports of other business services in 2013 (chart 10).

Exports to Switzerland decreased 3 percent, reflecting decreases both in professional and management consulting services and in research and development services.

Chart 10. Other Business Services Exports by Type



U.S. Trade in Services—Other Business Services Imports

Table L. Other Business Services Imports

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Other business services imports	83,289	87,347	92,710	5,363
Research and development services	26,558	28,713	32,142	3,429
Professional and management consulting services	32,270	33,269	34,480	1,211
Legal services	1,943	2,050	1,995	-55
Accounting, auditing, and bookkeeping services	2,246	2,212	2,454	242
Business and management consulting and public relations services	24,996	25,762	26,900	1,138
Advertising	3,087	3,245	3,131	-114
Technical, trade-related, and other business services	24,461	25,365	26,088	723
Architectural and engineering services	4,391	4,800	5,256	456
Construction	2,927	3,253	2,651	-602
Industrial engineering	3,655	3,518	3,178	-340
Operating leasing services	2,024	2,715	3,481	766
Other ¹	11,465	11,079	11,522	443
Imports by affiliation:				
Unaffiliated	26,215	26,729	26,658	-71
Affiliated	57,074	60,618	66,052	5,434
By U.S. parents from their foreign affiliates	42,482	44,375	48,096	3,721
By U.S. affiliates from their foreign parents	14,593	16,243	17,956	1,713
Imports by country:				
Total imports for the five largest countries	35,449	37,204	40,593	3,389
United Kingdom	13,631	12,642	12,443	-199
Ireland	5,569	6,244	8,149	1,905
Canada	7,121	7,493	7,783	290
Germany	4,385	5,792	6,750	958
Switzerland	4,743	5,033	5,468	435
Other countries	47,840	50,143	52,117	1,974

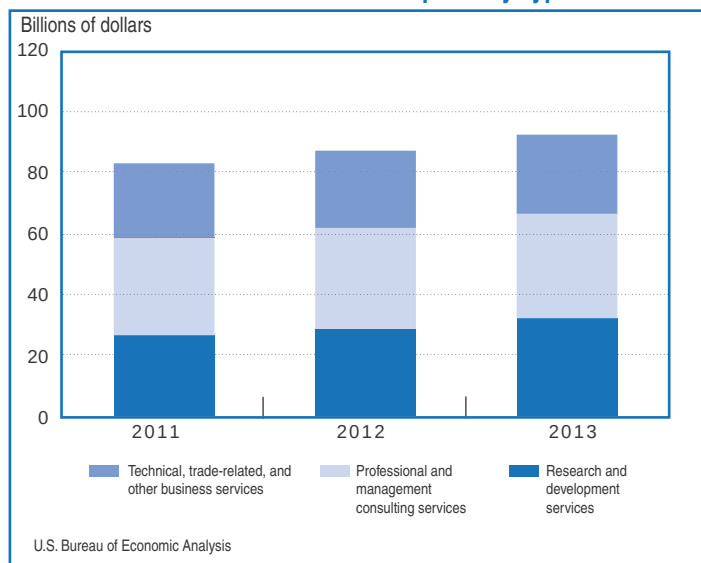
1. This category includes mining, trade-related services, sports and performing arts, training services, and other business services n.i.e. (not included elsewhere)

Imports of other business services increased 6 percent, mainly because of a 12 percent increase in research and development services.

The increase in research and development services was driven by an increase in imports from Europe; imports from Latin America and Other Western Hemisphere and the Middle East also increased strongly. Imports of research and development services accounted for 35 percent of total imports of other business services in 2013 (chart 11).

Imports of other business services from Ireland increased 31 percent, driven by a 32 percent increase in research and development services.

Chart 11. Other Business Services Imports by Type



U.S. Trade in Services—Government Goods and Services

Table M. Government Goods and Services n.i.e.

[Millions of dollars]

	2011	2012	2013	Change 2012– 2013
Government goods and services n.i.e. exports	24,348	24,267	24,522	255
Exports by country:				
Total exports for the five largest countries	2,800	3,491	4,010	519
Saudi Arabia	1,022	1,599	2,126	527
Taiwan	403	588	601	13
Japan	617	535	463	-72
Canada	406	378	425	47
Mexico	352	391	395	4
Other countries	21,548	20,776	20,512	-264
Government goods and services n.i.e. imports	31,293	27,861	25,343	-2,518
Imports by country:				
Total imports for the five largest countries	14,927	14,402	13,514	-888
Germany	7,242	6,656	6,103	-553
Japan	2,612	2,740	2,569	-171
Korea, Republic of	2,525	2,509	2,529	20
Italy	1,443	1,393	1,321	-72
United Kingdom	1,105	1,104	992	-112
Other countries	16,366	13,459	11,829	-1,630

Exports of government goods and services increased 1 percent, with stronger growth in exports to Asia and Pacific.

Imports decreased 9 percent, reflecting large decreases in imports from Asia and Pacific, Europe, and the Middle East.

Imports from countries other than the largest five markets decreased 12 percent, with larger decreases in imports from Taiwan, Belgium-Luxembourg, and Canada.

Services Supplied by Affiliates—To Foreign Persons Through Foreign Affiliates

Table N. Services Supplied to Foreign Persons by U.S. MNEs Through Their Majority-Owned Foreign Affiliates by Selected Country of the Affiliate

[Millions of dollars]

	2011	2012	Change 2011– 2012
All Countries	1,247,000	1,292,992	45,992
Canada	126,155	127,472	1,317
Europe	629,409	640,779	11,370
France	48,787	46,900	-1,887
Ireland	74,637	82,272	7,635
Spain	16,484	14,909	-1,575
Switzerland	61,227	62,700	1,473
United Kingdom	193,749	194,943	1,194
Latin America and Other Western Hemisphere	146,811	158,157	11,346
South and Central America	111,527	119,832	8,305
Brazil	37,514	38,678	1,164
Chile	9,981	11,520	1,539
Mexico	37,620	40,722	3,102
Other Western Hemisphere	35,284	38,325	3,041
Bermuda	13,944	16,689	2,745
Africa	12,837	15,462	2,625
South Africa	5,033	7,307	2,274
Middle East	14,625	16,291	1,666
Asia and Pacific	317,162	334,831	17,669
Australia	50,431	54,271	3,840
China	34,900	39,068	4,168
India	16,270	17,818	1,548
Japan	75,383	77,586	2,203
Singapore	50,274	53,192	2,918

MNEs Multinational enterprises

In Europe, services supplied by affiliates increased modestly in 2012 (chart 12). However, as a result of significant increases in other regions, Europe's share of all services supplied to foreign persons dropped to less than half of the worldwide total. This is the lowest share for Europe since 1999, the first year for which BEA published statistics by region on services supplied by affiliates (chart 13).

In Ireland, services supplied by affiliates increased. Most of the increase was in information services. The increase was largest for affiliates that provide internet search and social networking services and for software publishers.

In Chile, services supplied increased in most major industries, and more than half of the increase was in professional, scientific, and technical services, especially architectural, engineering, and related services.

In Bermuda, services supplied increased, and most of the increase was attributable to existing affiliates in finance and insurance and in real estate and rental and leasing.

In South Africa, services supplied increased, and the increase was almost fully accounted for by acquisitions of affiliates in retail trade.

In China, services supplied increased and the increase was widespread across industries. The largest increases were in accommodation and food services and in wholesale trade.

In India, services supplied increased, and the increase was largely due to an increase in professional, scientific, and technical services, especially in computer systems design and related services.

Chart 12. Growth in Services Supplied Through Affiliates to Foreign Persons by Major Area of Affiliate, 2011 and 2012

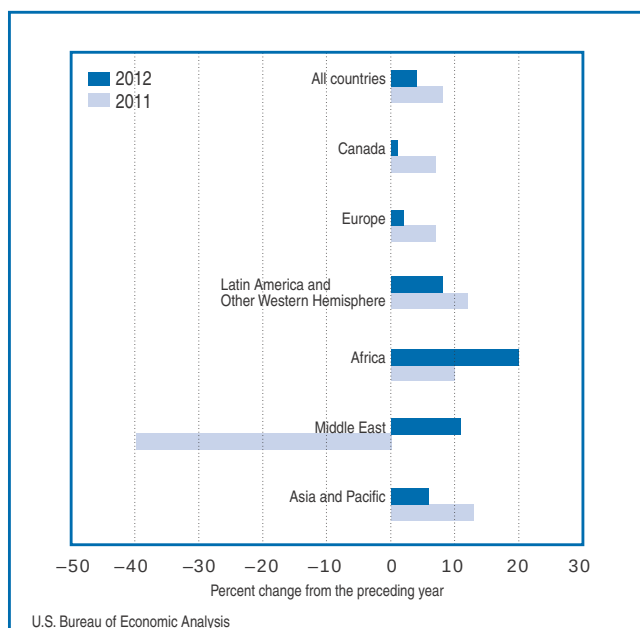
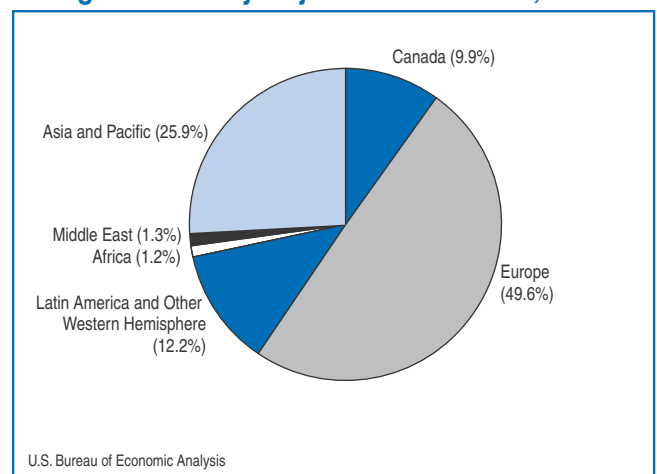


Chart 13. Services Supplied Through Affiliates to Foreign Persons by Major Area of Affiliate, 2012



Services Supplied by Affiliates—To Foreign Persons Through Foreign Affiliates

Table O. Services Supplied to Foreign Persons by U.S. MNEs Through Their Majority-Owned Foreign Affiliates by Selected Industry of the Affiliate

[Millions of dollars]

	2011	2012	Change 2011– 2012
All Industries	1,247,000	1,292,992	45,992
Manufacturing	31,938	30,788	-1,150
Transportation equipment	4,546	2,869	-1,677
Wholesale trade	237,344	238,119	775
Professional and commercial equipment and supplies	79,523	79,468	-55
Retail trade	91,623	101,017	9,394
Information	162,338	172,334	9,996
Publishing industries	50,328	53,585	3,257
Broadcasting (except internet)	13,206	14,092	886
Finance and insurance	224,642	226,833	2,191
Finance	164,700	161,004	-3,696
Insurance carriers and related activities	59,942	65,829	5,887
Real estate and rental and leasing	39,183	43,387	4,204
Professional, scientific, and technical services	182,930	194,705	11,775
Architectural, engineering, and related services	29,952	35,748	5,796
Computer systems design and related services	81,648	85,251	3,603
Management, scientific, and technical consulting	21,440	21,933	493
Other industries	277,001	285,809	8,808
Mining	37,257	43,015	5,758
Utilities	40,693	37,903	-2,790
Transportation and warehousing	61,563	59,940	-1,623
Accommodation and food services	47,628	51,560	3,932

MNEs Multinational enterprises

In transportation equipment manufacturing, services supplied decreased. More than half of the decrease was in Europe, where declining motor vehicle sales contributed to a drop in services supplied in secondary activities, particularly in wholesaling.

In retail trade, services supplied increased. More than half of the increase was due to the acquisition of new affiliates in several subindustries, especially in Europe.

In finance and insurance, the increase in insurance services supplied exceeded the decrease in finance services. More than half of the increase in insurance was accounted for by an increase in premiums earned at existing affiliates in Japan, particularly affiliates in life insurance carriers. The decrease in finance were more than accounted for by a decrease in services supplied by affiliates in the United Kingdom, especially in banking and commodities trading.

In real estate and rental and leasing, services supplied increased. Nearly half of the increase was in intercompany sales of intellectual property licensing activities, which is included in “lessors of nonfinancial intangible assets.” This increase represented a strong reversal from negative growth in 2011 (chart 14).

In architectural, engineering, and related services, services supplied increased. The increase was mainly related to new projects in mining, power, and petrochemicals undertaken by affiliates in several countries, particularly Australia.

In mining, services supplied increased. The increase was due to growth in support activities for oil and gas operations supplied by new and existing affiliates.

Chart 14. Growth in Services Supplied Through Affiliates to Foreign Persons by Major Industry of Affiliate, 2011 and 2012

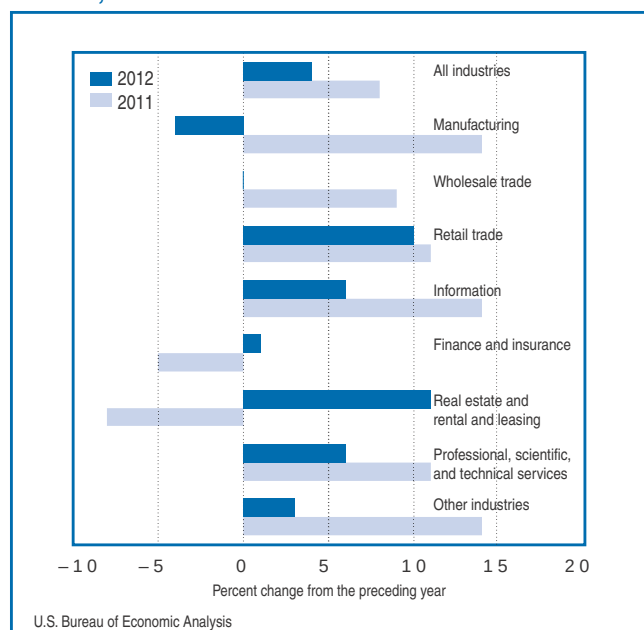
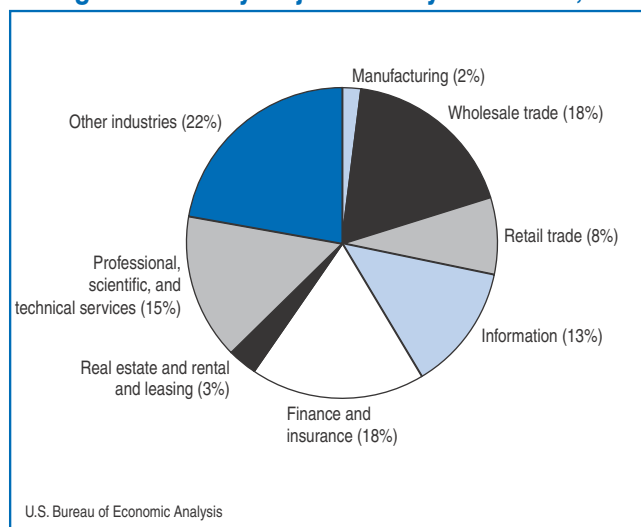


Chart 15. Services Supplied Through Affiliates to Foreign Persons by Major Industry of Affiliate, 2012



Services Supplied by Affiliates—To U.S. Persons Through U.S. Affiliates

Table P. Services Supplied to U.S. Persons by Foreign MNEs Through Their Majority-Owned U.S. Affiliates by Selected Country of UBO

[Millions of dollars]

	2011	2012	Change 2011– 2012
All Countries	781,551	801,921	20,370
Canada	80,656	80,947	291
Europe	476,809	489,715	12,906
France	82,003	81,524	-479
Germany	109,087	116,730	7,643
Italy	8,544	10,360	1,816
Netherlands	42,436	41,395	-1,041
Spain	11,376	10,022	-1,354
Switzerland	58,819	61,149	2,330
United Kingdom	114,226	116,330	2,104
Latin America and Other Western Hemisphere	41,912	42,377	465
South and Central America	8,503	9,311	808
Mexico	5,776	6,524	748
Other Western Hemisphere	33,408	33,066	-342
Africa	415	341	-74
Middle East	10,915	10,277	-638
Saudi Arabia	(D)	1,617	(D)
Asia and Pacific	161,514	169,474	7,960
Australia	19,039	17,892	-1,147
China	1,388	1,658	270
Hong Kong	4,234	4,881	647
Japan	101,055	107,609	6,554
Korea, Republic of	12,753	14,157	1,404
United States	9,330	8,791	-539

MNEs Multinational enterprises

UBO Ultimate beneficial owner

D Suppressed to avoid the disclosure of the data of individual companies.

For Germany, services supplied increased, and nearly every major industry category contributed to the increase. The largest increase was for existing affiliates in finance and insurance.

For Spain, services supplied decreased, and the decrease was more than accounted for by a decrease in finance that was mostly due to the transfer of ownership from foreign MNEs to U.S. companies of some affiliates, resulting in a decrease in total services supplied by U.S. affiliates of foreign MNEs.

For the United Kingdom, services supplied increased, and the largest increases were in accommodation and food services (mainly in food services and drinking places) and in finance and insurance.

For Other Western Hemisphere, services supplied decreased, mostly because of the sales to U.S. companies of some mining affiliates that had secondary activities in wholesaling. Liquidations of some affiliates in finance also contributed to the decrease. This contraction, combined with slower growth for South and Central America, led to much slower growth for Latin America and Other Western Hemisphere in 2012 than in 2011 (chart 16).

For Saudi Arabia, services supplied decreased sharply. The decrease was more than accounted for by a decrease in services supplied in manufacturers' secondary activities, as a result of some manufacturing affiliates divesting their retail trade operations.

For Japan, services supplied increased, and the largest increases were in wholesale trade and in administration, support, and waste management, mainly as a result of acquisitions of U.S. affiliates in employment services.

Chart 16. Growth in Services Supplied Through Affiliates to U.S. Persons by Major Area of Ultimate Beneficial Owner, 2011 and 2012

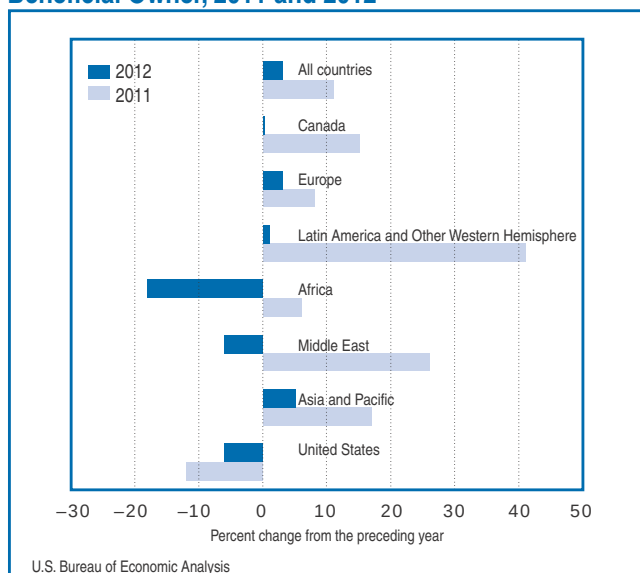
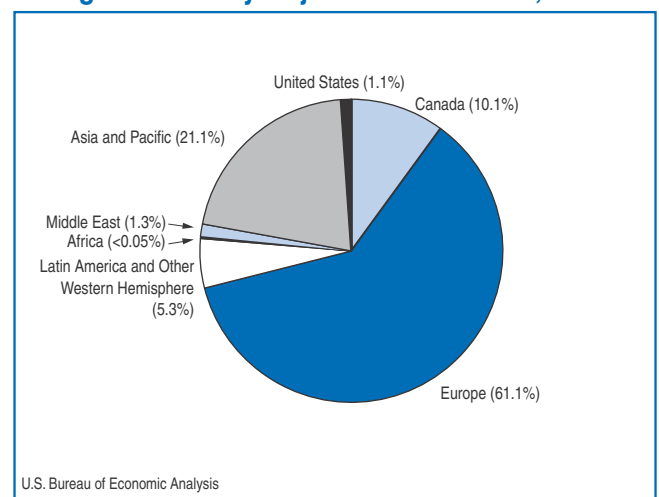


Chart 17. Services Supplied Through Affiliates to Foreign Persons by Major Area of Affiliate, 2012



Services Supplied by Affiliates—To U.S. Persons Through U.S. Affiliates

Table Q. Services Supplied to U.S. Persons by Foreign MNEs Through Their Majority-Owned U.S. Affiliates by Selected Industry of the Affiliate

[Millions of dollars]

	2011	2012	Change 2011– 2012
All Industries	781,551	801,921	20,370
Manufacturing	79,245	81,673	2,428
Transportation equipment	24,438	25,446	1,008
Wholesale trade	133,989	141,786	7,797
Motor vehicles and motor vehicle parts and supplies	30,334	31,037	703
Professional and commercial equipment and supplies	16,471	16,999	528
Retail trade	41,040	43,696	2,656
Information	68,300	69,271	971
Telecommunications	31,848	33,114	1,266
Finance and insurance	170,059	168,513	-1,546
Finance	103,774	102,499	-1,275
Insurance carriers and related activities	66,284	66,015	-269
Real estate and rental and leasing	19,359	19,882	523
Professional, scientific, and technical services	83,650	88,015	4,365
Architectural, engineering, and related services	11,736	12,306	570
Computer systems design and related services	20,145	20,942	797
Advertising and related services	31,027	33,310	2,283
Other industries	185,908	189,084	3,176
Mining	33,564	33,068	-496
Transportation and warehousing	51,025	49,478	-1,547
Administration, support, and waste management	38,023	41,369	3,346
Accommodation and food services	27,130	28,269	1,139

MNEs Multinational enterprises

In manufacturing, services supplied increased in affiliates' secondary activities, especially for affiliates in transportation equipment and machinery manufacturing.

In wholesale trade, services supplied increased, and the large increase was widespread across subindustries. The largest increase was in electrical goods merchant wholesalers, but services supplied by affiliates in other durable- and nondurable-goods wholesaling also grew substantially.

In information, growth in telecommunications services supplied more than offset a significant decrease in services supplied in software publishing. Growth was especially strong in wireless telecommunications.

Finance and insurance is the largest major industry category for services supplied to U.S. persons by affiliates with foreign UBOs (chart 19). Finance decreased more than insurance, and the decrease was more than accounted for by acquisitions of U.S. affiliates by U.S. companies and liquidations of affiliates in banking. Services supplied by affiliates in insurance decreased as a result of a decline in premiums, especially in life insurance.

In advertising and related services, services supplied increased, and more than three-quarters of the increase was in affiliates with UBOs in France.

In administration, support, and waste management, services supplied increased, and the increase was mostly due to an increase in employment services, especially for affiliates with UBOs in Japan.

Chart 18. Growth in Services Supplied Through Affiliates to U.S. Persons by Major Industry of Affiliate, 2011 and 2012

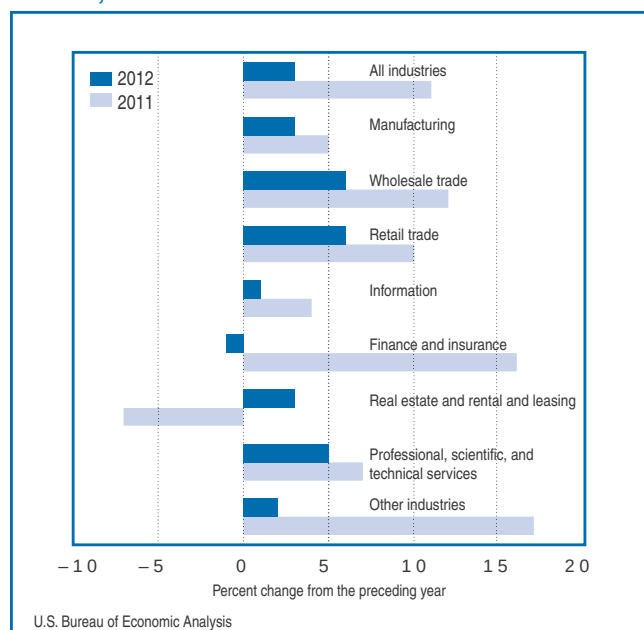
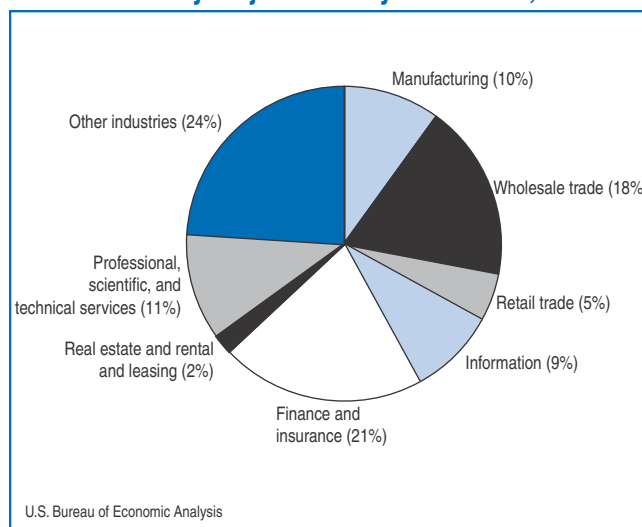


Chart 19. Services Supplied Through Affiliates to U.S. Persons by Major Industry of Affiliate, 2012



Revisions

The revised statistics published in this article supersede those presented in the October 2013 Survey of Current Business.

Trade in services. The revised statistics on trade in services published in this article are consistent in both value and presentation with the less detailed statistics by type of service published in the July 2014 Survey, which included a substantial restructuring of the trade in services statistics.¹ This section uses the old presentation of services trade so that readers can compare this year's revisions to those presented in previous October SURVEY articles.

Exports and imports for 1999–2012 were revised. The revisions for 1999–2012 reflect revisions resulting from a new methodology to measure travel exports and imports as well as a revision to the number of U.S. travelers for travel imports and passenger fare imports.² Additionally, the revisions for 2011 and 2012 reflect newly available and revised source data for all types of services (table R).

Travel exports were revised upward for 1999 and for 2010–2012 and were revised downward for all other

years as a result of the new travel methodology. Travel imports were revised downward for 1999–2003 and were revised upward for all other years as a result of the new travel methodology and the revisions to the number of U.S. travelers. The downward revision to the number of U.S. travelers also resulted in downward revisions to passenger fare imports for 1999–2013.

For 2011 and 2012, total exports and imports were revised slightly upward. The largest revision was to exports for 2011, which was revised upward 0.9 percent. Imports were revised upward 0.1 percent for 2011. For 2012, exports were revised upward 0.1 percent, and imports were revised upward 0.5 percent. For exports, the main contributor to the upward revisions for 2011 was travel and for 2012, royalties and license fees. For imports, the main contributor to the upward revisions for 2011 and 2012 was travel.

Services supplied through affiliates. The statistics for services supplied through affiliates for 2012 are preliminary. The statistics for 2011 were revised to incorporate newly available and revised source data. For 2011, services supplied to foreign persons by U.S. multinational enterprises (MNEs) through their majority-owned foreign affiliates were revised downward 3.1 percent (\$40.0 billion). Services supplied to the United States by foreign MNEs through their majority-owned U.S. affiliates were revised upward 3.7 percent (\$27.6 billion).

1. For additional information, see Jeffrey R. Bogen, Mai-Chi Hoang, Kristy L. Howell, and Erin M. Whitaker "Comprehensive Restructuring and Annual Revision of the U.S. International Transactions Accounts" SURVEY OF CURRENT BUSINESS 94 (July 2014).

2. For additional information, see "Improving the International Services Statistics" on the next page.

Table R. Revisions to Trade in Services, 1999–2012

[Billions of dollars]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Exports														
Revised	269.1	287.5	271.3	277.2	287.6	336.0	371.4	413.4	484.6	527.2	505.2	559.1	622.7	649.9
Previously Published	268.8	288.0	276.5	283.4	294.1	341.7	376.6	421.4	489.3	533.0	508.7	555.7	617.0	649.3
Amount of Revision	0.3	-0.5	-5.2	-6.3	-6.5	-5.8	-5.2	-7.9	-4.6	-5.8	-3.5	3.4	5.7	0.5
Imports														
Revised	190.3	213.0	210.3	220.3	239.3	279.5	301.5	336.4	367.3	402.0	378.5	404.6	430.2	444.8
Previously Published	195.2	218.4	216.4	225.8	242.4	280.3	300.4	335.0	365.6	401.3	381.8	404.9	429.7	442.5
Amount of Revision	-4.8	-5.3	-6.0	-5.5	-3.1	-0.8	1.2	1.4	1.7	0.6	-3.3	-0.3	0.5	2.3

Improving the International Services Statistics

The Bureau of Economic Analysis (BEA) continues to improve its statistics on international services. Some changes have now been implemented, and others are under way.¹

Improved methodology for travel, improved source data for travel and air passenger transport, and an expanded definition of travel

Beginning with statistics for 1999, BEA has implemented an improved methodology for estimating exports and imports of travel services. This methodology is the outcome of an extensive review of the methodology and data sources used to compile travel statistics for transactions with countries other than Canada and Mexico. During the review process, BEA considered several alternative approaches to estimating travel transactions, such as using a survey of credit, debit, and charge card issuers and a one-time survey of international travelers that measured travelers' propensities for using different payment methods. After a thorough evaluation of the alternatives, BEA chose to continue the previous general methodology of multiplying the number of travelers by an estimate of average travel expenditures. Key data sources have not changed; however, the use of the data has been refined, and new supplemental source data have been introduced. Average expenditures continue to be based on information from the Survey of International Air Travelers (SIAT) administered by the International Trade Administration of the U.S. Department of Commerce. Under the new methodology, the SIAT information is used to establish baseline estimates of average travel expenditures, which are supplemented with information from (1) the survey of credit, debit, and charge card issuers administered by BEA, (2) other sources of information on traveler expenditures, including studies commissioned by BEA, and (3) bilateral comparisons of BEA's source data and other countries' source data. The baseline estimates are adjusted to account for particular limitations often faced by expenditure surveys, including underreported spending.

BEA continues to use data on the number of travelers collected by the U.S. Department of Homeland Security (DHS) to estimate travel and air passenger transport (previously called "passenger fares"), but it has intro-

duced two significant improvements in the use of these data. First, BEA has fully incorporated the number of outbound U.S. travelers that the DHS began collecting under an improved electronic method in July 2010. The change in collection methods revealed that for some countries, the number of U.S. travelers estimated under the earlier collection method was significantly higher than the number of U.S. travelers reported under the new electronic collection method. To correct this overestimation and to avoid a break in series between July 2010 and the prior periods, BEA has revised downward the number of outbound travelers used in the statistics on imports of both travel and passenger fares back to January 1999. Second, BEA has developed an improved method for allocating outbound U.S. travelers to individual countries for its statistics on travel imports. This method is based on the relationships observed in the SIAT data between the U.S. traveler's initial country of disembarkation outside the United States and the ultimate country or countries of destination.

In addition to the methodological changes, the definition of travel has been broadened to include both health-related travel and education-related travel as well as expenditures on goods and services by border, seasonal, and other short-term workers, all of which were previously classified under other private services.² The expanded definition brings the U.S. trade in services statistics into closer alignment with international guidelines as outlined in the *Balance of Payments and International Investment Position Manual*, Sixth Edition (BPM6), and improves the comparability of BEA's travel statistics with those of other countries. To distinguish between the new definition and the previous definition, the category has been renamed "travel (for all purposes including education)."

In addition to the expanded definition of travel, BEA has introduced statistics on business travel and on personal travel. The distinction between business travel and personal travel is based on the main purpose of travel and not on the type of good or service consumed. Business travel includes (1) expenditures by border, seasonal, and other short-term workers and (2) other business travel. Personal travel covers travel for all nonbusiness purposes, including (1) health-related travel, (2) education-related travel, and (3) other personal travel. BEA

1. See the "Catalog of Major Revisions to the U.S. International Accounts, 1976–2008" on BEA's Web site. For changes implemented from 2009–2013, see the appendixes on improvements in each October SURVEY article in this series. See also Bogen, Hoang, Howell, and Whitaker "Comprehensive Restructuring and Annual Revision of the U.S. International Transactions Accounts."

2. The new methodology detailed earlier does not apply to health-related or education-related travel or to expenditures by border, seasonal, and other short-term workers.

Improving the International Services Statistics

uses information from the SIAT to separate what was defined as travel under the previous definition—that is, expenditures by those traveling for all purposes other than health, education, or short-term work—into other business travel and other personal travel.

Improvements to the benchmark survey of insurance transactions

BEA has made several changes to the 2013 Benchmark Survey of Insurance Transactions by U.S. Insurance Companies with Foreign Persons (BE-140). The 2013 benchmark survey, currently under way, asks companies to provide additional detail on large, infrequent insurance contracts. These contracts are defined as reinsurance contracts with premiums assumed or ceded that are \$1 billion or more than the size of the average regular contracts in the prior year. These transactions can result in significant variations in the insurance services statistics. The additional information on these transactions will allow BEA to better assess the components of these contracts.

Additionally, totals are collected for each type of insurance transaction for all companies, regardless of the size of their transactions. This is a change from the previous benchmark survey, where data by type of transaction was voluntary if the total for each type of transaction was \$2 million or less. The additional information on large, infrequent reinsurance transactions and the expanded mandatory collection of data by type of transaction will allow BEA to improve the measurement of insurance services in the international transactions accounts.

Identifying the types of transactions of intellectual property

As part of BEA's ongoing efforts to bring the international economic accounts into closer alignment with *BPM6* guidelines, BEA has begun the process of identifying the rights to use intellectual property, the rights to reproduce or distribute intellectual property, and the outright sales and purchases of intellectual property. Under *BPM6*, the classification of each type of transaction depends on the type of intellectual property. Transactions in rights to reproduce or distribute intellectual property and some transactions in rights to use intellectual property should be classified under charges for the use of intellectual property n.i.e. Transactions related to the outright purchase or sale of intellectual property and certain transactions related to its use should be reclassi-

fied to the respective services categories. For example, outright sales and purchases of outcomes of research and development, such as the outright sale or purchase of a patent or a copyright, should be recorded in research and development services, whereas transactions in the rights to use such outcomes should be recorded under charges for the use of intellectual property.

By providing statistics that distinguish between rights to use, rights to reproduce, and outright purchases or sales, BEA will improve the usefulness and bilateral comparability of BEA's intellectual property statistics. Moreover, the appropriate classification of these transactions will result in statistics that better conform to national economic accounts concepts, including gross domestic product and the net stock of fixed assets and consumer durable goods.

The 2011 Benchmark Survey of Transactions in Selected Services and Intellectual Property with Foreign Persons (BE-120) asked companies to voluntarily distinguish their transactions in the various types of intellectual property. BEA plans to seek the approval of the Office of Management and Budget to make responses to this survey item mandatory so that BEA's statistics in trade in intellectual property will more closely conform to international guidelines.

Manufacturing services on physical inputs owned by others

BEA has not yet implemented the treatment of manufacturing services on physical inputs owned by others ("goods for processing") that is recommended by the *BPM6* international guidelines. Under BEA's current treatment, a change in ownership is imputed when goods enter or leave the United States. The value of those goods is included in goods exports and imports.

Under *BPM6*, goods that are sent abroad for processing without a change in ownership and that are returned to the United States after processing are to be excluded from statistics on trade in goods, and the processing fee charged by the foreign manufacturing service provider should be recorded as U.S. imports of services. Similarly, goods that enter the United States for processing without a change in ownership and that are returned to the country of ownership after processing are to be excluded from statistics on trade in goods, and the processing fee charged by the U.S. manufacturing service provider should be recorded as U.S. exports of services.

In addition, goods sent abroad for processing and

Improving the International Services Statistics

subsequently sold abroad are to be recorded as U.S. exports of goods when they are sold, and any inputs purchased abroad by the U.S. firm and processed abroad should be recorded as U.S. imports of goods; the processing fee should be recorded as U.S. imports of services. Similarly, goods entering the United States for processing and subsequently sold in the United States are to be recorded as U.S. imports of goods when they are sold, and any inputs purchased in the United States by the foreign firm and processed in the United States should be recorded as U.S. exports of goods; the processing fee should be recorded as U.S. exports of services.

Currently, detailed information on the processing fees received and paid by U.S. firms for manufacturing services and on the underlying goods transactions are not available in the U.S. statistical system or are not identifiable in any other source data. Despite these challenges, BEA continues to conduct research to determine feasible approaches for implementing this treatment. BEA plans to move forward on two fronts:

For imports of processing services, BEA is evaluating the addition of questions to BEA surveys that would ask U.S. companies to report their imports from nonresidents for processing services on goods that do not reenter the United States.

In May of 2014, BEA and its sister statistical agencies, the U.S. Census Bureau and the Bureau of Labor Statistics, agreed to carry out a multiyear project to examine the impact of globalization and contract manufacturing services on U.S. businesses and U.S. economic statistics.

Developing a personal, cultural, and recreational services (PCR) category

BEA's new presentation of the international transactions accounts does not separately include the BPM6 standard component "personal, cultural, and recreational (PCR) services" because the source data are not adequate for preparing quarterly statistics on this category. In the BPM6, PCR services are separated into two categories: audiovisual and related services and other PCR services. Many of the transactions that would fall under PCR services are included, but not identifiable, in the BEA categories of "other business services" and "charges for the use of intellectual property n.i.e."

BEA currently presents several PCR service transactions under other business services including the following:

- Fees to performers, athletes, directors, and producers involved with concerts, theatrical and musical productions, sporting events, and similar events
- Remotely provided telemedicine services
- Online nontravel education

BEA currently presents other transactions in PCR services, including licenses to use audio-visual and related products—such as books, movies, and sound recordings—under charges for the use of intellectual property n.i.e. because BEA lacks the source data needed to distinguish between the licenses to use, reproduce, or distribute audio-visual and related products.

BEA plans to enhance the collection of data on its Survey of Transactions in Selected Services and Intellectual Property with Foreign Persons (BE-120/125) to identify service types associated with PCR services and to reclassify them to that category. In addition, BEA plans to explore methods for estimating other types of PCR services that cannot be collected through business surveys.

Plans to introduce financial intermediation services indirectly measured (FISIM)

Financial intermediation services indirectly measured (FISIM) captures the service fees implicitly received by financial intermediaries for their lending and deposit services through the margin between interest payable for loans and deposits and a reference rate that represents an interbank lending rate, such as the federal funds rate. BEA continues to evaluate methods for estimating FISIM exports and imports from data on U.S. bank lending to foreign residents and U.S. bank deposits from foreign residents as well as from data on U.S. loans from, and U.S. deposits with, banks abroad. The inclusion of FISIM estimates in the international transactions accounts will necessitate changes to the BEA estimation methodologies for income receipts and payments and for financial services exports and imports so that the implicit services are included in financial services and only pure interest is included in interest flows. BEA plans to introduce FISIM into the international accounts in a future annual revision.

Comparing U.S. Trade in Services With Services Supplied Through Affiliates

The statistics on U.S. trade in services and services supplied through affiliates represent services provided to, and received from, international markets. These statistics cover all four modes of the supply of services: (1) cross-border supply, (2) consumption abroad, (3) commercial presence, and (4) presence of natural persons.¹

U.S. trade in services covers services between residents and nonresidents delivered through three of these modes: cross-border supply, consumption abroad, and the presence of natural persons. These transactions are recorded as U.S. exports and U.S. imports in the international transactions accounts (ITAs), also called the balance of payments accounts. The trade statistics cover both affiliated and unaffiliated transactions between U.S. residents and foreign residents. Affiliated transactions consist of intrafirm trade within multinational enterprises—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.

Services supplied through affiliates includes the mode commercial presence. The statistics cover transactions between foreign affiliates of U.S. enterprises and foreign residents, both in the local economy and in other foreign markets, and transactions between U.S. affiliates of foreign enterprises and U.S. residents.² However, these transactions are not considered U.S. exports or U.S. imports in the ITAs because under the residency principle of balance-of-payments accounting, affiliates of multinational enterprises are considered residents of the countries where they are located rather than residents of the country of their owners. For affiliates in industries other than wholesale and retail trade, insurance, and banking, services supplied through affiliates are the sales of services reported by multinational enterprises. For wholesale and retail trade, insurance, and banking, specific adjustments are made to reported sales of services to better capture the value of services supplied.³ Sales of services

are defined as sales of intangible outputs; therefore, they generally exclude the sales by establishments in manufacturing, mining (except support activities), agriculture, forestry, fishing, and hunting (except support activities), and construction, which typically produce and sell tangible goods. In cases where a sale consists of both tangible and intangible output that cannot be unbundled, sales are classified based on whichever accounts for the majority of the value. Although intangible outputs are typically associated with activities in certain industries, affiliates in any industry can be providers of services because the classification of an affiliate reflects the affiliate's primary industry of sales.⁴ Affiliates classified in industries that typically produce goods may have secondary activities in services industries; for example, an affiliate classified in manufacturing may have secondary services activities in wholesale trade or in maintenance and repair.

The statistics on trade in services and on services supplied through affiliates together present a more complete picture of services provided to, and received from, international markets. However, differences in coverage and classification make it difficult to precisely compare trade in services with services supplied through affiliates. An example of a difference in coverage is the inclusion of distributive services in services supplied through affiliates but not in the services trade statistics. The distributive services associated with importing and exporting goods is included, but not separately identifiable, in the value of trade in goods. The differences in classification arise because the statistics on trade in services are collected and published by type of service, but those on services supplied through affiliates are collected and published by the affiliate's primary industry. Despite the difficulties in comparing statistics on U.S. trade in services with statistics on services supplied through affiliates, the large difference in value between the two indicates that the services supplied through affiliates is the larger channel of delivery of services in international markets (chart 1 on page 1).

1. For additional information on the modes of supply for services, see *U.S. International Economic Accounts: Concepts and Methods* on Bureau of Economic Analysis' (BEA) Web site. The definitions of key terms used in the text can be found in the glossary to this document.

2. BEA's statistics on services supplied through affiliates cover a broader range of transactions than those included in the General Agreement on Trade in Services (GATS) definition of commercial presence for foreign affiliates of U.S. MNEs. The GATS definition includes services supplied by a foreign affiliate to its respective local economy, but does not include services supplied to other foreign economies.

3. For more detailed information about the computation of services supplied for affiliates in wholesale and retail trade, insurance, and banking, see "Revisions and Improvements" in Jennifer Koncz-Bruner and Anne Flatness, *SURVEY OF CURRENT BUSINESS* 89 (October 2009): 37.

4. For example, computer-related services may be delivered via trade in services transactions through affiliates in several industries, including those classified in computer systems design and related services or in other industries that have secondary activities in computer services; by individuals who are employees of a nonresident employer (the wages of these individuals are recorded in compensation receipts in the international transactions accounts); or may be embedded in the value of goods. For more on the delivery of computer-related services in international markets, see the FAQ "Where can I find information about computer services supplied to foreign markets by U.S. companies or individuals?" on BEA's Web site.

Data Sources and Acknowledgments

Data Sources

The statistics in this article are primarily based on data collected from surveys conducted by the Bureau of Economic Analysis (BEA). Statistics for some services are based on data from a variety of other sources, including U.S. Customs and Border Protection, other federal surveys, private sources, and partner countries.

BEA conducts mandatory surveys of trade in services, some of which are targeted to specific services industries. For trade in services, data on many types of services are collected on the Quarterly Survey of Transactions in Selected Services and Intellectual Property with Foreign Persons (BE-125) and on the related benchmark survey (BE-120). All of BEA's surveys of international services

and a guide to reporting requirements for the surveys are available on BEA's Web site. For additional information on these surveys, on surveys from other sources, and on the trade in services statistics definitions and methodology, see *U.S. International Economic Accounts: Concepts and Methods*.

The data on services supplied through majority-owned affiliates are collected on BEA's surveys of the activities of multinational enterprises. For the methodologies for these surveys, see *Foreign Direct Investment in the United States: 2007 Benchmark Survey, Final Results* and *U.S. Direct Investment Abroad: Final Results From the 2009 Benchmark Survey* on BEA's Web site.

Acknowledgments

The estimates of trade in services and services supplied through affiliates were prepared by the following staff members of the Balance of Payments Division and the Direct Investment Division.

Estimates of trade in services were prepared under the guidance of Michael Mann and Mark Xu. Travel (for all purposes including education) and passenger fares estimates (categorized under transport) were prepared by Laura Brokenbaugh, Edward Dozier, and Charu S. Krishnan. Transport estimates were prepared by Edward Dozier, Anne Flatness, Steven J. Muno, and Gregory Tenentes. Estimates for services other than travel and transport were prepared by Pamela Aiken, Suhail Ally, Felix Anderson, Stacey Ansell, Damon C. Battaglia, Jeffrey Bogen, Faith M. Brannam, Lori Chang, Jamela Des Vignes, Anne Flatness, Hope R. Jones, C. Omar Kebbeh, Eddie L. Key, Kiesha Middleton, Patricia Mosley, Steven J. Muno, Mark Samuel, Charu S. Krishnan, John Sondheimer, Gregory Tenentes, Rodney Thorn, and Clifton Tillman.

The processing of the survey data used to prepare the estimates of services supplied through majority-owned

affiliates was conducted by the following staff members of the Direct Investment Division under the guidance of Mark D. Goddard and Christopher J. Stein: Catherine Ama, George Bogachevsky, Gregory Brace, Kirsten Brew, Polly Cheung, Stephen Corsiglia, James Crim, Constance Deve, Laura Downey, Andre Garber, Brian Goddard, Kenneth Grier, Nazre Jamil, Julie Lampe, James Lashley, Qi Lee, Da-Chin Lin, Sonya Marsh, Kevin McCarthy, Demetria McCormick, Marcia Miller, Amanda Petersen, Amber Phelan, Robert Platner, Kevin Reagan, Makia Riley, Roberto Ruiz, Myriam Rullan, Aqeel Sahibzada, Nancy Steffen, John Starnes, Rick Sylvester, and Daniel Wakjira. Alexis N. Grimm did additional calculations to prepare the statistics on services supplied through affiliates.

The information in tables 1–7.2 was compiled by Anne Flatness and John Sondheimer and in tables 8–10.2 by Neeta B. Kapoor. Computer programming for data estimation and suppression and the generation of the tables was provided by Carole J. Henry, Neeta B. Kapoor, Fritz H. Mayhew, Dan Powell, Gary Sowers, and Greg Tenentes.