

U.S. International Services

Trade in Services in 2016 and Services Supplied Through Affiliates in 2015

By Shari A. Allen and Alexis N. Grimm

THIS ARTICLE highlights statistics on international services that the Bureau of Economic Analysis (BEA) releases annually. These statistics cover both U.S. international trade in services and services supplied by majority-owned U.S. and foreign affiliates of multinational enterprises (MNEs).¹ Trade in services refers to exports and imports of services—that is, services traded between U.S. residents and nonresidents—that are included in the broader set of U.S. international transactions accounts (ITAs) released by BEA. Services supplied through affiliates refers to services supplied by MNEs through the channel of direct investment; this set of statistics covers transactions between majority-owned foreign affiliates of U.S. companies and foreign residents, both in the host country and in other foreign markets, and transactions between majority-owned U.S. affiliates of foreign companies and U.S. residents.² Because of the importance of physical proximity to customers in the delivery of certain types of services, many MNEs serve foreign markets partly or wholly through their affiliates located in, or close to, the markets they serve rather than through

trade. As in previous years, the majority of services both provided by and to the United States internationally in 2015 was through affiliates (table A and chart 1).³

3. Comparing trade in services with services supplied through affiliates is difficult because of differences in coverage and classification. For example, distributive services are included in services supplied through affiliates but not in services trade; statistics on trade in services are collected and published by type of service, but services supplied through affiliates are collected and published by the affiliate's primary industry. For more information, see "Definition of International Services" on BEA's Web site.

1. More information on the definitions and coverage of trade in services and services supplied through affiliates is available on the Bureau of Economic Analysis Web site. For more information on the definitions and methodology of the major categories of trade in services, see "Part III: Statistical Methodologies" in *International Economic Accounts: Concepts and Methods*.

2. 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.

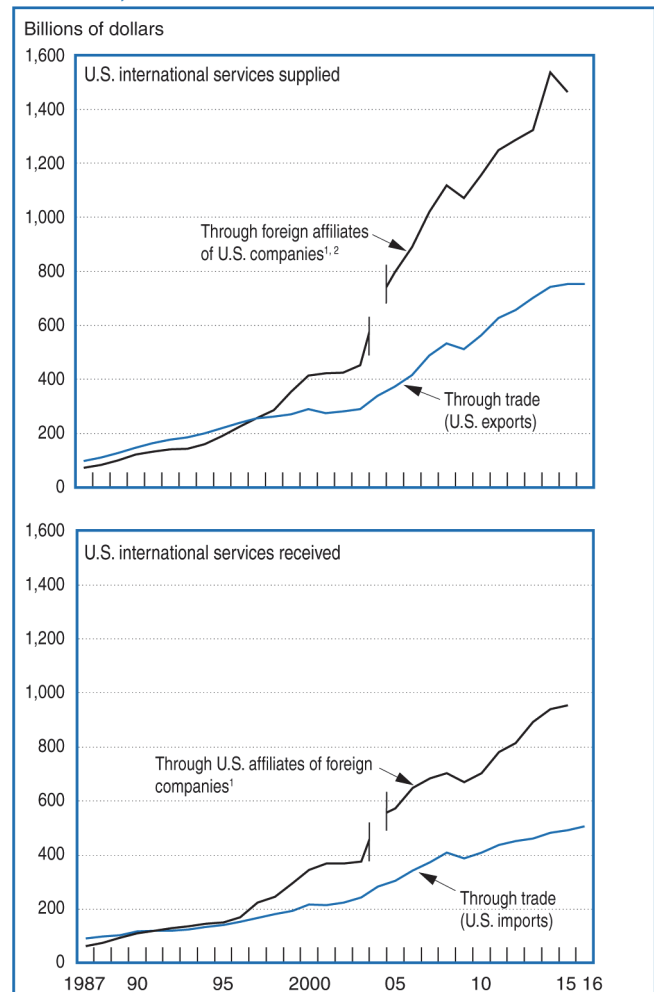
Table A. U.S. International Services Supplied and Received, 2014–2016

	Services supplied		Services received	
	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				
2014	741.9	1,534.8	480.8	940.4
2015	753.2	1,463.5	491.7	952.5
2016	752.4	n.a.	504.7	n.a.
Percent change from preceding year				
2014	5.8	16.1 ¹	4.3	5.4
2015	1.5	-4.6	2.3	1.3
2016	-0.1	n.a.	2.6	n.a.

n.a. Not available

1. The large increase in 2014 can be partly attributed to improved coverage of reporting enterprises. See "The Effect of the Benchmark Survey of U.S. Direct Investment Abroad on Services Supplied Through Foreign Affiliates" in Alexis N. Grimm and Maya Ortiz, "U.S. International Services," SURVEY OF CURRENT BUSINESS 96 (December 2016) for more information.

Chart 1. U.S. International Services Supplied and Received, 1987–2016



1. Statistics are shown through 2015, the latest year they are available. The discontinuity between 2003 and 2004 marks the incorporation of the services of bank affiliates, the distributive services of wholesalers and retailers, and an improved measure of the services supplied by insurers beginning in 2004.

2. The large increase in 2014 can be partly attributed to improved coverage of reporting enterprises. See "The Effect of the Benchmark Survey of U.S. Direct Investment Abroad on Services Supplied Through Foreign Affiliates" in Alexis N. Grimm and Maya Ortiz, "U.S. International Services," SURVEY 96 (December 2016) for more information.

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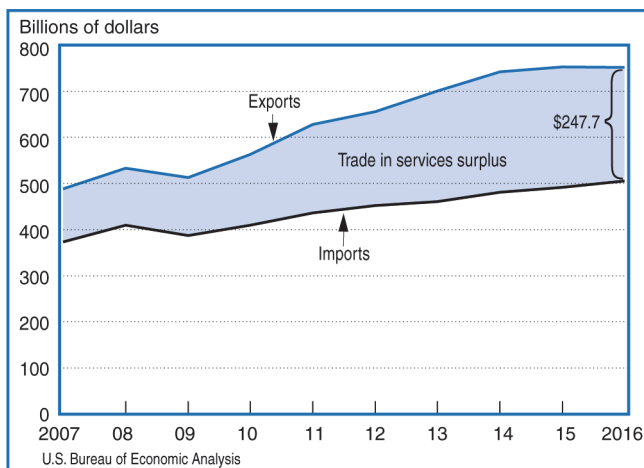
In October 2017, BEA expanded and standardized the geographic and industry detail it presents in its statistics on services supplied internationally through majority-owned affiliates. For more information, see the box “Data Availability and Expansion and Standardization of BEA’s Statistics on Services Supplied Through Affiliates.”

In 2016, U.S. exports of services were \$752.4 billion, and U.S. imports of services were \$504.7 billion, resulting in a services trade surplus of \$247.7 billion (chart 2).⁴ The United States retained its position as the world’s leader in international trade in services, accounting for 16 percent of the world’s exports and 11 percent of the world’s imports.⁵ In 2015—the latest year for which statistics are available—services supplied to foreign markets through foreign affiliates of U.S. MNEs were \$1,463.5 billion. Services supplied to the United States through U.S. affiliates of foreign MNEs were \$952.5 billion. A discussion of U.S. trade in services in 2016 begins in the next section and includes a section on trade in information and communications technology (ICT) and potentially ICT-enabled services; a discussion of services supplied through affiliates in 2015 begins on page 20.

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

5. World Trade Organization and United Nations Conference on Trade and Development Quarterly Trade in Commercial Services.

Chart 2. U.S. International Services Trade Surplus, 2007–2016



Data Availability and Expansion and Standardization of BEA’s Statistics on Services Supplied Through Affiliates

For detailed statistics for U.S. international services, see tables 1.1–5.4. Statistics on trade in services and statistics on services supplied internationally through majority-owned affiliates can also be accessed through BEA’s **interactive tables**. The interactive tables cover additional years of data and supplemental detail not available in the tables that accompany this article.

In October 2017, the Bureau of Economic Analysis (BEA) expanded and standardized the geographic and industry detail it presents in its statistics on services supplied internationally through majority-owned affiliates. These statistics are available in the tables that accompany this article and that are available in BEA’s **interactive tables**, beginning with statistics for 2014 (see the table below for a comparison of the previous presentation with the new presentation). These statistics now separately present all countries with which the United States has significant transactions, including all countries separately presented in BEA’s trade in services statistics. The expansion of the industry detail also standardized the set of major industries for all statistics on services supplied through affiliates, including those presented in this article, which improves the comparability across tables.

Comparison of the Previous and New Country and Industry Detail Presented in BEA’s Services Supplied Through Affiliates Statistics

	Number of countries and areas		Number of industries and industry groupings	
	Previous	New	Previous	New
Services supplied to foreign persons by U.S. MNEs through their majority-owned foreign affiliates				
Table 4.1. By industry of affiliate and by country of affiliate	18	26	108	112
Table 4.2. By country of affiliate and by destination	70	104	.....	.....
Table 4.3. By industry of affiliate and by destination .....	.....	.....	78	112
Table 4.4. By country of affiliate and by industry of affiliate	70	104	16	17
Services supplied to U.S. persons by foreign MNEs through their majority-owned U.S. affiliates				
Table 5.1. By industry of affiliate and by country of UBO	12	27	68	104
Table 5.2. By country of UBO	71	105	.....	.....
Table 5.3. By industry of affiliate .....	.....	.....	93	104
Table 5.4. By country of UBO and by industry of affiliate	71	105	16	17

MNEs Multinational enterprises
 UBO Ultimate beneficial owner
 Not applicable

U.S. Trade in Services in 2016

The United States has historically recorded a surplus on trade in services as the value of exports has exceeded the value of imports (chart 2). The surplus decreased \$13.7 billion in 2016, to \$247.7 billion, after increasing \$0.3 billion in 2015. The decrease in 2016 was the first annual decrease in the surplus since 2003. Exports of services decreased \$0.8 billion, or less than 1 percent, in 2016 after growing \$11.2 billion, or 2 percent, in 2015, and imports of services increased \$12.9 billion, or 3 percent, in 2016 after growing \$11.0 billion, or 2 percent, in 2015 (table B). These changes in services trade occurred as the current-dollar gross domestic product (GDP) of the United States and of some of its major trading partners grew at a slower rate in 2016 than in 2015 (chart 3). In addition, in 2016, the U.S. dollar appreciated relative to the currencies of many major U.S. trading partners, making U.S. services more expensive to customers in those countries (chart 4). Five of the nine major services categories in BEA's standard presentations contributed to the surplus on trade in services in 2016 (chart 5, page 5). The largest surplus was in travel, \$82.3 billion, of which 70 percent was accounted for by a surplus in personal travel, a category that includes health-related, education-related, and other personal travel. The surplus in charges for the use of intellectual property was \$80.1 billion, of

which 67 percent was accounted for by a combined surplus on trade in intellectual property associated with computer software and with industrial processes.

Chart 3. Growth in Nominal GDP by Major Area

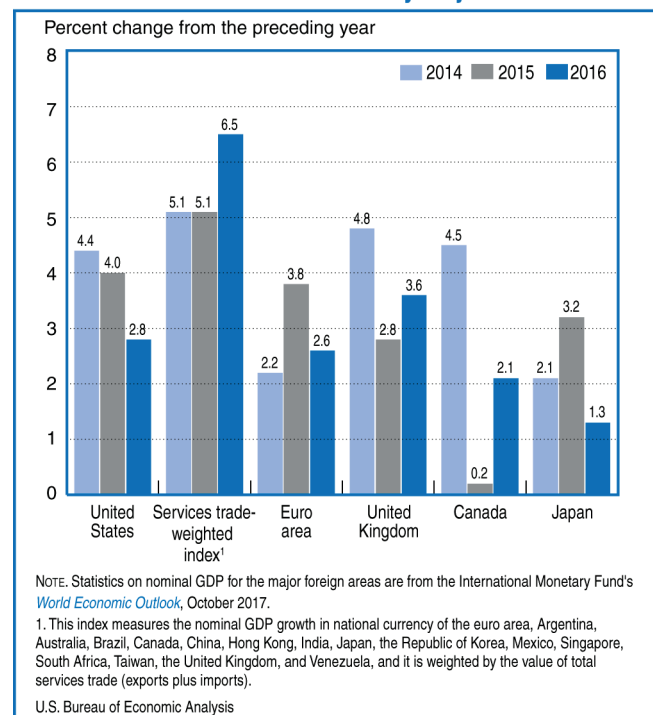
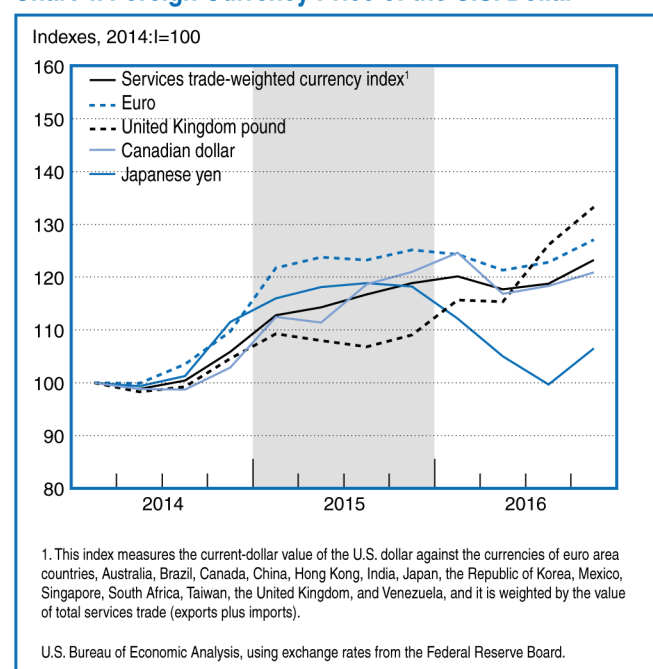


Table B. Change From Preceding Year in Trade in Services

	Exports		Imports	
	2015	2016	2015	2016
Billions of dollars				
Total services	11.2	-0.8	11.0	12.9
Maintenance and repair services n.i.e.	2.3	2.2	1.5	-0.2
Transport	-3.1	-3.3	2.9	-0.2
Travel (for all purposes including education)	13.5	0.5	9.1	8.9
Insurance services	-1.1	0.1	-3.2	0.3
Financial services	-4.4	-4.4	0.9	-0.1
Charges for the use of intellectual property n.i.e.	-5.3	(*)	-2.1	4.5
Telecommunications, computer, and information services	1.0	0.8	-0.2	0.6
Other business services	7.7	5.6	4.9	-0.7
Government goods and services n.i.e.	0.6	-2.4	-2.6	-0.1
Percent				
Total services	1.5	-0.1	2.3	2.6
Maintenance and repair services n.i.e.	10.7	9.5	19.8	-2.2
Transport	-3.4	-3.8	3.1	-0.2
Travel (for all purposes including education)	7.0	0.3	8.6	7.8
Insurance services	-6.4	0.7	-6.3	0.5
Financial services	-4.1	-4.3	3.4	-0.4
Charges for the use of intellectual property n.i.e.	-4.1	0.0	-5.1	11.4
Telecommunications, computer, and information services	2.8	2.2	-0.6	1.6
Other business services	6.0	4.1	5.2	-0.7
Government goods and services n.i.e.	3.2	-11.1	-10.9	-0.3

An asterisk (*) indicates a nonzero value that rounds to zero. n.i.e. Not included elsewhere

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



U.S. Trade in Services in 2016

The decrease in services exports in 2016 reflected decreases in three of the nine major services categories (table B). Government goods and services decreased 11 percent, and financial services and transport each decreased 4 percent. The increase in services imports in 2016 reflected increases in four of the nine major services categories. The four services categories that increased were charges for the use of intellectual property (11 percent), travel (8 percent), telecommunications, computer, and information services (2 percent), and insurance services (1 percent).

Summary Statistics for Trade in Services

Summary statistics on trade in services by category and by the five largest trading partners in each category are presented in tables E–N and charts 6–12. For more detailed statistics, see tables 1.1–2.3 that accompany this article.

The value of U.S. services exported to the top 10 recipient countries accounted for 55 percent of total services exports in 2016 (table C). By major region, Europe remained the largest market for U.S. services exports in 2016, followed by Asia and Pacific. By country, the United Kingdom was the largest market; the top categories of exports to the United Kingdom were financial services and travel. China was the second-largest market for exports in 2016, surpassing Canada which had been one of the top two markets for U.S. exports since 2007; the top categories of exports to China were travel and charges for the use of intellectual property, mainly intellectual property associated with industrial processes and trademarks.

The value of U.S. services imports from the top 10 source countries accounted for 55 percent of total services imports in 2016. By major region, Europe remained the largest source of U.S. services imports, followed by Asia and Pacific. By country, the United Kingdom was

Table C. U.S. Trade in Services by Type and Country, 2016

[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	752,368	25,628	84,318	205,940	16,348	98,180	124,453	36,455	142,231	18,814
Total for the top 10 countries ¹	416,824	11,062	44,296	105,803	9,183	64,982	76,019	19,384	(D)	(D)
United Kingdom	65,729	2,577	7,378	12,920	2,515	13,908	9,250	4,295	12,705	180
China	54,157	1,730	4,927	30,720	642	3,368	7,960	655	3,653	501
Canada	53,957	2,075	6,271	15,936	1,892	6,405	7,977	3,202	9,789	412
Ireland	46,629	(D)	641	1,486	473	2,742	18,713	1,362	21,085	(D)
Japan	44,154	1,187	9,608	10,887	2,208	3,331	6,799	1,509	8,022	603
Switzerland	32,584	346	2,235	1,859	150	1,299	10,965	1,712	13,962	57
Mexico	32,045	717	3,886	17,459	413	1,507	3,748	1,086	2,734	495
Germany	31,638	1,635	4,758	6,456	226	2,449	7,234	1,350	7,328	202
United Kingdom Islands, Caribbean ³	31,593	(D)	70	168	281	28,261	128	75	(D)	(D)
Brazil	24,338	549	4,522	7,912	383	1,712	3,245	4,138	1,717	160
Other countries	335,544	14,566	40,022	100,137	7,165	33,198	48,434	17,071	(D)	(D)
Imports										
All countries	504,654	8,810	96,827	123,618	48,077	25,629	44,392	36,851	98,922	21,528
Total for the top 10 countries ¹	278,184	5,614	41,724	50,275	40,156	15,852	33,520	26,972	53,936	10,136
United Kingdom	51,698	2,443	8,091	8,512	4,121	8,763	3,653	2,285	13,058	772
Germany	33,395	346	7,815	3,193	2,599	593	6,024	927	6,830	5,067
Japan	31,004	90	8,326	2,966	368	1,470	11,029	479	2,794	3,483
Canada	29,950	1,465	5,356	7,856	485	2,006	1,378	3,751	7,398	254
India	25,808	47	558	3,197	84	543	377	14,639	6,314	49
Bermuda	24,629	(*)	1,081	368	22,126	621	16	191	220	5
Mexico	24,569	254	3,077	16,152	29	356	746	978	2,848	129
Switzerland	23,763	533	2,341	1,160	7,024	526	5,437	360	6,185	199
Ireland	16,917	(D)	935	2,110	2,815	274	2,206	2,762	(D)	12
France	16,451	(D)	4,144	4,760	505	700	2,654	600	(D)	166
Other countries	226,470	3,196	55,103	73,343	7,921	9,777	10,872	9,879	44,986	11,392

An asterisk (*) indicates a nonzero value that rounds to zero.

n.i.e. Not included elsewhere

D Suppressed to avoid disclosure of data of individual companies.

1. The rank is based on the total value of services exports or imports in 2016.

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.

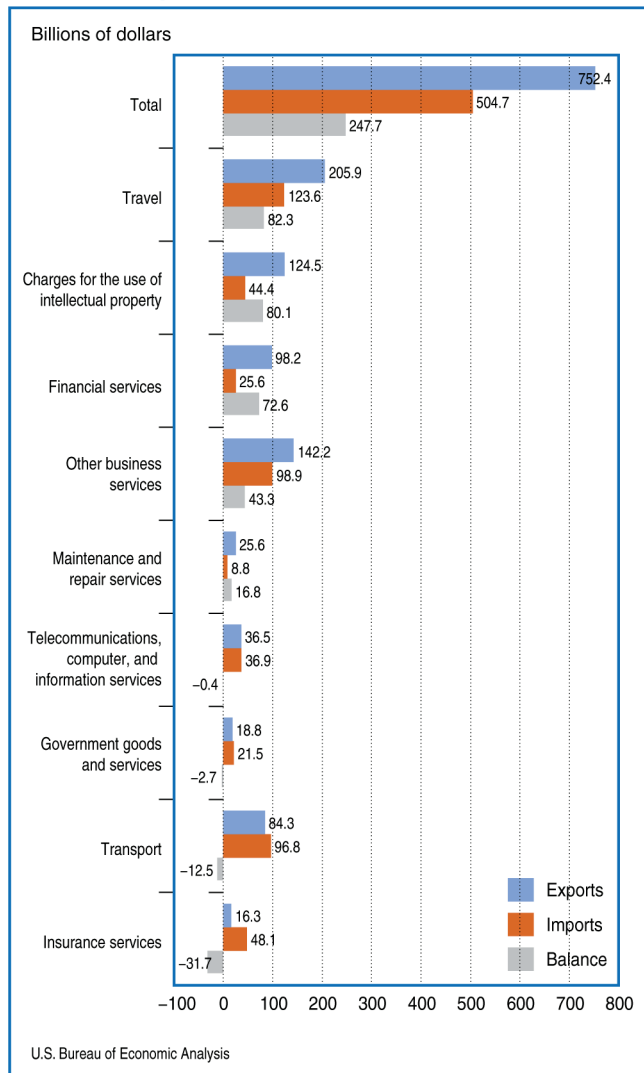
3. United Kingdom Islands, Caribbean comprises the British Virgin Islands, the Cayman Islands, Montserrat, and the Turks and Caicos Islands.

U.S. Trade in Services in 2016

the largest provider of services to the United States in 2016; the top categories of imports from the United Kingdom were “other” business services (mainly professional and management consulting services) and finan-

cial services. Germany was the second-largest provider of services to the United States in 2016; the top categories of imports from Germany were transport and “other” business services (mainly research and development services).

Chart 5. Composition of Trade in Services, 2016



U.S. services trade includes trade between unaffiliated parties and trade within MNEs, or affiliated trade. Affiliated trade accounted for 30 percent of U.S. services exports in 2016, up from 29 percent in 2015, and accounted for 29 percent of U.S. services imports in 2016, nearly the same percentage as in 2015 (table D). Unaffiliated services exports decreased 2 percent in 2016, after increasing 2 percent in 2015, while growth in affiliated services exports increased to 3 percent in 2016 from 1 percent in 2015. Growth in unaffiliated services imports was nearly unchanged from 2015 at 2 percent, while growth in affiliated services imports increased to 3 percent in 2016 from 2 percent in 2015.

Table D. Trade in Services by Affiliation Type, 2015–2016

	Millions of dollars		Percent change from preceding year		Percent of total trade in services	
	2015	2016	2015	2016	2015	2016
Exports of services						
Total exports of services	753,150	752,368	1.5	-0.1	.....	.....
Unaffiliated	532,662	524,279	1.6	-1.6	70.7	69.7
Affiliated	220,488	228,089	1.2	3.4	29.3	30.3
U.S. parents' exports to their foreign affiliates	178,748	181,947	-0.3	1.8	23.7	24.2
U.S. affiliates' exports to their foreign parent groups	41,740	46,142	8.6	10.5	5.5	6.1
Imports of services						
Total imports of services	491,740	504,654	2.3	2.6	.....	.....
Unaffiliated	349,303	357,581	2.2	2.4	71.0	70.9
Affiliated	142,437	147,074	2.4	3.3	29.0	29.1
U.S. parents' imports from their foreign affiliates	91,119	94,936	3.9	4.2	18.5	18.8
U.S. affiliates' imports from their foreign parent groups	51,318	52,138	-0.1	1.6	10.4	10.3

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

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

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Maintenance and repair services n.i.e.					
exports	21,149	23,406	25,628	2,222	9.5
Exports by country:					
Total exports for the top five countries ¹	7,299	8,201	10,123	1,922	23.4
United Kingdom.....	2,228	2,507	2,577	70	2.8
France.....	1,267	1,616	2,106	490	30.3
Canada.....	1,652	1,709	2,075	366	21.4
China.....	1,248	1,456	1,730	274	18.8
Germany.....	904	913	1,635	722	79.1
Other countries.....	13,850	15,205	15,505	300	2.0
Maintenance and repair services n.i.e.					
imports	7,520	9,010	8,810	-200	-2.2
Imports by country:					
Total imports for the top five countries ¹	4,102	5,013	5,568	555	11.1
United Kingdom.....	1,836	2,502	2,443	-59	-2.4
Canada.....	1,427	1,536	1,465	-71	-4.6
Singapore.....	580	537	608	71	13.2
Switzerland.....	37	110	533	423	384.5
China.....	222	328	519	191	58.2
Other countries.....	3,418	3,997	3,242	-755	-18.9

Exports of maintenance and repair services increased in 2016, partly reflecting increased exports to Asia and Pacific, Europe, and Canada.

By country, the largest increases were in exports to Germany, France, and Canada. The increases to these three countries accounted for 71 percent of the total increase in maintenance and repair services.

Imports of maintenance and repair services decreased, reflecting decreased imports from Latin America and Other Western Hemisphere and Canada.

n.i.e. Not included elsewhere

1. The rank is based on the total value of exports or imports of maintenance and repair services n.i.e. in 2016.

U.S. Trade in Services—Transport

Table F. Transport

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Transport exports	90,729	87,609	84,318	-3,291	-3.8
Sea transport	18,161	18,044	18,078	34	0.2
Freight	4,325	3,816	3,691	-125	-3.3
Port	13,836	14,228	14,386	158	1.1
Air transport	68,053	64,944	61,548	-3,396	-5.2
Passenger	44,071	41,976	38,770	-3,206	-7.6
Freight	14,261	12,906	12,473	-433	-3.4
Port	9,721	10,062	10,305	243	2.4
Other modes of transport	4,515	4,621	4,692	71	1.5
Exports by country:					
Total exports for the top five countries ¹	35,965	34,413	32,942	-1,471	-4.3
Japan	10,053	9,814	9,608	-206	-2.1
United Kingdom	8,229	8,089	7,378	-711	-8.8
Canada	7,422	6,507	6,271	-236	-3.6
China	5,144	5,054	4,927	-127	-2.5
Germany	5,117	4,949	4,758	-191	-3.9
Other countries	54,764	53,196	51,376	-1,820	-3.4
Transport imports	94,188	97,061	96,827	-234	-0.2
Sea transport	36,254	37,295	35,097	-2,198	-5.9
Freight	34,013	35,005	32,709	-2,296	-6.6
Port	2,241	2,290	2,388	98	4.3
Air transport	53,697	55,851	57,874	2,023	3.6
Passenger	34,890	35,494	37,198	1,704	4.8
Freight	7,197	7,895	6,951	-944	-12.0
Port	11,610	12,462	13,724	1,262	10.1
Other modes of transport	4,237	3,915	3,856	-59	-1.5
Imports by country:					
Total imports for the top five countries ¹	34,871	35,393	35,292	-101	-0.3
Japan	7,942	8,400	8,326	-74	-0.9
United Kingdom	7,908	8,010	8,091	81	1.0
Germany	7,870	7,813	7,815	2	0.0
South Korea	5,590	5,886	5,704	-182	-3.1
Canada	5,561	5,284	5,356	72	1.4
Other countries	59,317	61,668	61,535	-133	-0.2

1. The rank is based on the total value of exports or imports of transport services in 2016.

Exports of transport services decreased in 2016 for the second consecutive year. The decrease in 2016 reflected a 5 percent decrease in air services, which accounted for 73 percent of exports of transport services in 2016 (chart 6).

Exports of air passenger services decreased, reflecting a decrease in average airfares.

By country, the largest decrease in total transport services exports was in exports to the United Kingdom, which accounted for 22 percent of the total decrease in exports in 2016.

Collectively, the value of exports to countries other than the top five decreased, with the largest decreases in exports to India, Mexico, and Colombia.

Imports of transport services decreased, led by a 6 percent decrease in sea transport services, which accounted for 36 percent of imports of transport services in 2016 (chart 7). The decrease in sea transport services was mostly offset by an increase in air transport services.

Imports of sea freight services decreased 7 percent. By country, the largest decreases were in imports from Japan, Romania, and Germany.

The top five countries accounted for 36 percent of total U.S. imports of transport services.

Collectively, imports from countries other than the top five decreased, with the largest decreases in imports from Romania, Taiwan, and China.

Chart 6. Transport Exports by Type, 2016

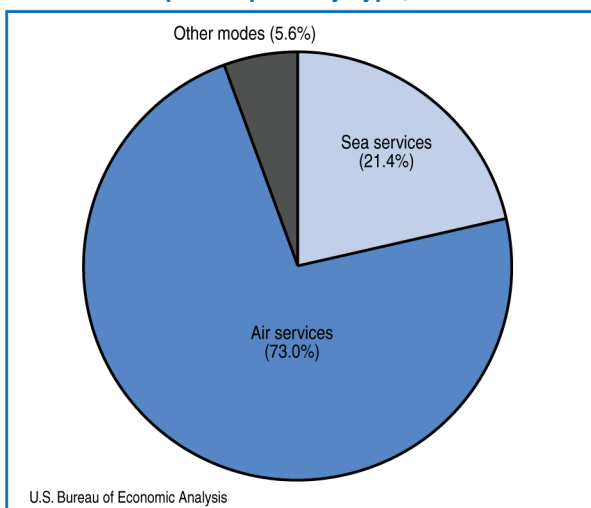
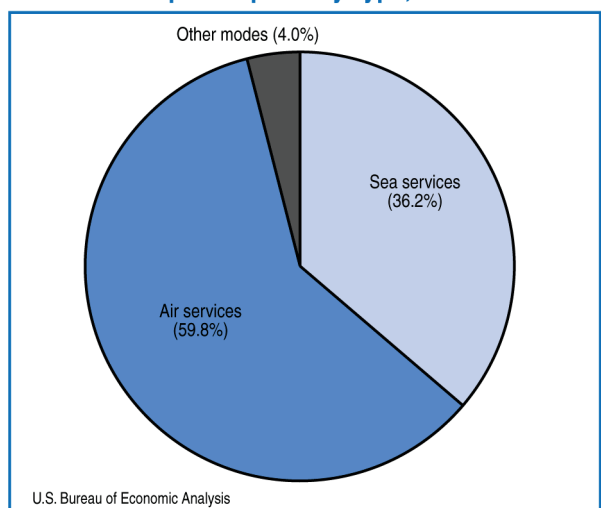


Chart 7. Transport Imports by Type, 2016



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

Table G. Travel (for All Purposes Including Education)

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Travel exports	191,918	205,418	205,940	522	0.3
Business.....	43,716	43,201	40,960	-2,241	-5.2
Expenditures by border, seasonal, and other short-term workers.....	7,738	8,267	8,971	704	8.5
Other business travel.....	35,978	34,934	31,989	-2,945	-8.4
Personal.....	148,203	162,218	164,980	2,762	1.7
Health related.....	3,468	3,597	3,751	154	4.3
Education related.....	30,958	35,388	39,425	4,037	11.4
Other personal travel.....	113,777	123,232	121,804	-1,428	-1.2
Exports by country:					
Total exports for the top five countries ¹	79,881	85,362	89,110	3,748	4.4
China.....	23,717	27,677	30,720	3,043	11.0
Mexico.....	15,722	16,732	17,459	727	4.3
Canada.....	20,993	17,229	15,936	-1,293	-7.5
United Kingdom.....	11,119	13,397	12,920	-477	-3.6
India.....	8,330	10,327	12,075	1,748	16.9
Other countries.....	112,037	120,056	116,830	-3,226	-2.7
Travel imports	105,668	114,723	123,618	8,895	7.8
Business.....	17,299	16,152	15,879	-273	-1.7
Expenditures by border, seasonal, and other short-term workers.....	1,249	1,321	1,383	62	4.7
Other business travel.....	16,050	14,831	14,496	-335	-2.3
Personal.....	88,368	98,571	107,739	9,168	9.3
Health related.....	1,624	1,828	2,057	229	12.5
Education related.....	6,964	7,248	7,584	336	4.6
Other personal travel.....	79,780	89,495	98,097	8,602	9.6
Imports by country:					
Total imports for the top five countries ¹	37,850	41,087	44,066	2,979	7.3
Mexico.....	12,668	14,675	16,152	1,477	10.1
United Kingdom.....	7,195	7,705	8,512	807	10.5
Canada.....	7,408	7,220	7,856	636	8.8
Italy.....	5,960	6,544	6,786	242	3.7
France.....	4,619	4,943	4,760	-183	-3.7
Other countries.....	67,818	73,636	79,552	5,916	8.0

Exports of travel services increased in 2016, mainly reflecting increased exports to travelers from Asia and Pacific (chart 8).

Education-related travel exports increased as both the number of international students studying in the United States and their average expenditures increased. By country, the largest increases were in exports to India, China, and Saudi Arabia, which combined accounted for 54 percent of total education-related travel exports.

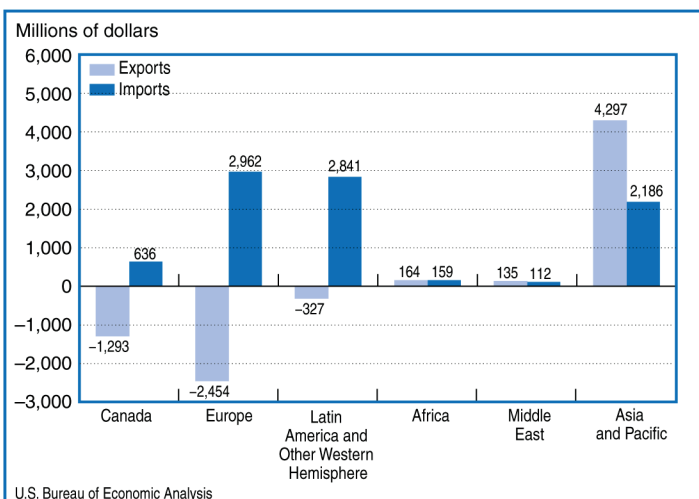
Imports of travel services increased, reflecting increases in imports of U.S. residents traveling in Europe and in Latin America and Other Western Hemisphere (chart 8).

By country, Mexico remained the largest market for U.S. travel abroad in 2016, accounting for 13 percent of U.S. imports of travel services.

Imports from countries other than the top five increased, with the largest increases in imports from Thailand, China, and Spain.

1. The rank is based on the total value of exports or imports of travel (for all purposes including education) in 2016.

Chart 8. Travel Exports and Imports by Region: Change From 2015 to 2016



U.S. Trade in Services—Insurance Services

Table H. Insurance Services

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Insurance services exports	17,333	16,229	16,348	119	0.7
Reinsurance	11,474	11,834	13,050	1,216	10.3
Direct insurance	3,969	2,885	2,038	-847	-29.4
Auxiliary insurance services	1,890	1,510	1,260	-250	-16.6
Exports by country:					
Total exports for the top five countries ¹	10,847	9,726	10,142	416	4.3
United Kingdom	2,100	2,595	2,515	-80	-3.1
Japan	2,079	1,857	2,208	351	18.9
Bermuda	2,884	2,351	2,105	-246	-10.5
Canada	2,929	1,876	1,892	16	0.8
Australia	854	1,046	1,423	377	36.0
Other countries	6,486	6,503	6,206	-297	-4.6
Insurance services imports	51,011	47,822	48,077	255	0.5
Reinsurance	44,683	41,840	41,835	-5	0.0
Direct insurance	4,791	4,138	4,076	-62	-1.5
Auxiliary insurance services	1,536	1,844	2,165	321	17.4
Imports by country:					
Total imports for the top five countries ¹	42,820	40,148	39,911	-237	-0.6
Bermuda	23,732	22,598	22,126	-472	-2.1
Switzerland	6,342	5,584	7,024	1,440	25.8
United Kingdom	4,963	4,515	4,121	-394	-8.7
United Kingdom Islands, Caribbean	4,783	4,691	3,824	-867	-18.5
Ireland	2,999	2,761	2,815	55	2.0
Other countries	8,191	7,674	8,166	492	6.4

1. The rank is based on the total value of exports or imports of insurance services in 2016.

Exports of insurance services increased in 2016, reflecting an increase in reinsurance that was mostly offset by decreases in direct insurance and auxiliary insurance services. By region, the overall increase mainly reflected an increase in exports to Asia and Pacific that was mostly offset by a decrease in exports to Latin America and Other Western Hemisphere.

Exports to the top five countries accounted for 62 percent of total insurance services exports.

Insurance exports to Australia increased, reflecting a 37 percent increase in reinsurance services.

Imports of insurance services increased, reflecting a 17 percent increase in auxiliary insurance services.

Imports of reinsurance services were nearly unchanged. Decreases of \$1.0 billion in imports from the United Kingdom Islands, Caribbean and of \$0.7 billion from Bermuda were very nearly offset by an increase of \$1.5 billion from Switzerland and a small net increase from countries other than these three.

Imports from the top five countries accounted for 83 percent of total insurance services imports.

Bermuda remained the largest market for imports of insurance services; however, there was an overall decrease in 2016.

U.S. Trade in Services—Financial Services

Table I. Financial Services

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Financial services exports	106,949	102,595	98,180	-4,415	-4.3
Securities brokerage	10,603	9,632	9,362	-270	-2.8
Underwriting and related services.....	2,736	2,193	2,235	42	1.9
Financial management.....	49,739	47,966	41,668	-6,298	-13.1
Financial advisory and custody.....	7,360	7,065	6,728	-337	-4.8
Credit card and other credit-related services	20,172	19,627	20,689	1,062	5.4
Other ¹	16,339	16,111	17,498	1,387	8.6
Exports by country:					
Total exports for the top five countries ²	63,821	60,758	55,528	-5,230	-8.6
United Kingdom Islands, Caribbean	35,468	33,225	28,261	-4,964	-14.9
United Kingdom	14,539	14,070	13,908	-162	-1.2
Canada	6,554	6,042	6,405	363	6.0
Luxembourg.....	3,879	4,038	3,506	-532	-13.2
Australia.....	3,381	3,383	3,448	65	1.9
Other countries	43,128	41,837	42,652	815	1.9
Financial services imports	24,883	25,740	25,629	-111	-0.4
Securities brokerage	3,695	3,629	3,714	85	2.3
Underwriting and related services.....	752	737	631	-106	-14.4
Financial management.....	8,863	9,075	7,988	-1,087	-12.0
Financial advisory and custody.....	2,723	3,097	2,888	-209	-6.7
Credit card and other credit-related services	6,099	6,352	7,152	800	12.6
Other ¹	2,751	2,849	3,256	407	14.3
Imports by country:					
Total imports for the top five countries ²	14,885	15,380	14,747	-633	-4.1
United Kingdom.....	9,235	9,515	8,763	-752	-7.9
Canada	1,897	1,799	2,006	207	11.5
Japan	1,108	1,265	1,470	205	16.2
Hong Kong.....	1,510	1,639	1,400	-239	-14.6
United Kingdom Islands, Caribbean	1,135	1,162	1,108	-54	-4.6
Other countries.....	9,998	10,360	10,882	522	5.0

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

2. The rank is based on the total value of exports or imports of financial services in 2016.

Financial services exports decreased in 2016; this is the second consecutive year in which a decrease occurred. The decrease in 2016 mainly reflected a decrease in financial management services. A decrease in exports to the United Kingdom Islands, Caribbean was partly offset by increases to Asia and Pacific and Canada.

Exports of financial services to the United Kingdom Islands, Caribbean decreased 15 percent in 2016 after decreasing 6 percent in 2015.

Exports of financial services to Luxembourg decreased 13 percent in 2016.

Collectively, exports to countries other than the top five countries increased. The largest increases were in exports to China, Germany, and Mexico.

Financial services imports decreased, mainly reflecting a decrease in financial management services; this decrease was partly offset by an increase in credit card and other credit-related services. By region, the decrease in total financial services imports mainly reflected a decrease in imports from Europe.

The United Kingdom continued to be the largest source country for U.S. imports of financial services, but it experienced the largest decrease, \$0.8 billion, or 8 percent.

Imports from countries other than the top five countries increased collectively. The largest increases were in imports from Belgium, Singapore, and Germany.

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

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

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Charges for the use of intellectual property n.i.e. exports	129,716	124,442	124,453	11	0.0
Industrial processes.....	48,181	45,640	47,512	1,872	4.1
Computer software.....	39,177	36,761	36,621	-140	-0.4
Trademarks.....	16,765	15,325	14,601	-724	-4.7
Franchise fees.....	5,784	5,252	5,268	16	0.3
Audio-visual and related products.....	19,759	21,407	20,369	-1,038	-4.8
Other intellectual property.....	51	57	83	26	45.6
Exports by affiliation:					
Unaffiliated.....	47,222	46,817	46,412	-405	-0.9
Affiliated.....	82,494	77,625	78,041	416	0.5
By U.S. parents to their foreign affiliates.....	77,525	71,785	69,395	-2,390	-3.3
By U.S. affiliates to their foreign parents.....	4,969	5,840	8,647	2,807	48.1
Exports by country:					
Total exports for the top five countries ¹	54,350	52,771	54,865	2,094	4.0
Ireland.....	18,516	17,912	18,713	801	4.5
Switzerland.....	10,807	11,012	10,965	-47	-0.4
United Kingdom.....	9,697	9,424	9,250	-174	-1.8
Canada.....	8,747	8,432	7,977	-455	-5.4
China.....	6,583	5,991	7,960	1,969	32.9
Other countries ²	75,366	71,671	69,588	-2,083	-2.9
Charges for the use of intellectual property n.i.e. imports	41,983	39,858	44,392	4,534	11.4
Industrial processes.....	23,765	21,178	23,200	2,022	9.5
Computer software.....	6,714	6,768	7,423	655	9.7
Trademarks.....	3,719	3,708	3,567	-141	-3.8
Franchise fees.....	174	76	62	-14	-18.4
Audio-visual and related products.....	7,534	8,017	10,023	2,006	25.0
Other intellectual property.....	78	110	118	8	7.3
Imports by affiliation:					
Unaffiliated.....	13,635	11,515	13,725	2,210	19.2
Affiliated.....	28,349	28,342	30,668	2,326	8.2
By U.S. parents from their foreign affiliates.....	6,729	6,970	6,905	-65	-0.9
By U.S. affiliates from their foreign parents.....	21,620	21,373	23,762	2,389	11.2
Imports by country:					
Total imports for the top five countries ¹	28,400	26,020	28,797	2,777	10.7
Japan.....	12,445	9,972	11,029	1,057	10.6
Germany.....	4,270	4,578	6,024	1,446	31.6
Switzerland.....	5,320	4,935	5,437	502	10.2
United Kingdom.....	4,012	4,075	3,653	-422	-10.4
France.....	2,353	2,460	2,654	194	7.9
Other countries ²	13,583	13,838	15,595	1,757	12.7

Exports associated with the use of intellectual property increased slightly in 2016. An increase in charges associated with industrial processes was mostly offset by decreases in charges associated with audio-visual and related products and trademarks (chart 9).

Charges associated with industrial processes increased, mainly reflecting increases in exports to China, Singapore, and the Netherlands.

Charges associated with audio-visual and related products decreased, mainly reflecting decreases in exports to Germany, the Netherlands, and Canada.

By country, Ireland continued to be the largest recipient of U.S. exports associated with the use of intellectual property, accounting for 15 percent in 2016.

Exports to China increased \$2.0 billion, or 33 percent, mainly reflecting an increase in charges associated with industrial processes.

Exports to countries other than the top five decreased, with the largest decreases in exports to Taiwan, Japan, and Belgium.

Imports associated with the use of intellectual property increased, mainly reflecting an increase in charges associated with industrial processes and audio-visual and related products (chart 10).

The top five countries accounted for 65 percent of total imports associated with the use of intellectual property.

Imports from countries other than the top five increased, with the largest increases in imports from China, Australia, and Luxembourg.

n.i.e. Not included elsewhere
 1. The rank is based on the total value of exports or imports of charges for the use of intellectual property n.i.e. in 2016.
 2. Other countries includes international organizations. Payments to international organizations for the use of intellectual property are often substantial.

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

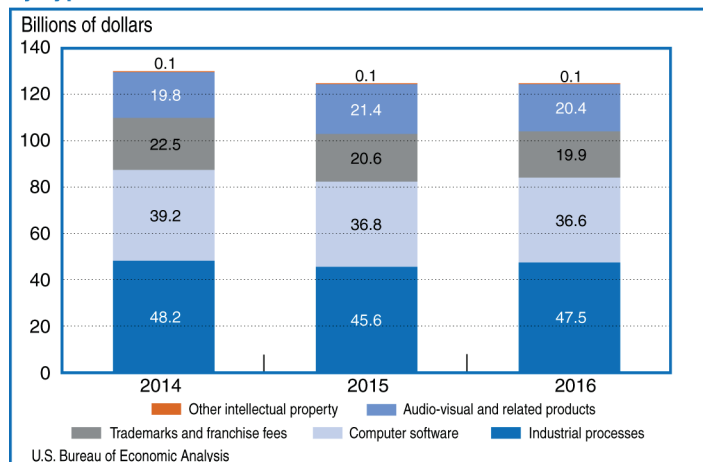
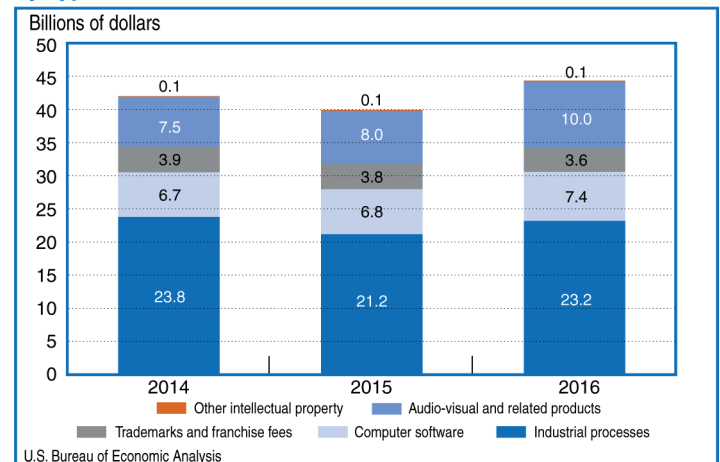


Chart 10. Charges for the Use of Intellectual Property Imports by Type



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

Table K. Telecommunications, Computer, and Information Services

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Telecommunications, computer, and information services exports	34,691	35,664	36,455	791	2.2
Telecommunications services.....	13,539	12,587	12,225	-362	-2.9
Computer services	13,991	15,828	17,283	1,455	9.2
Information services	7,160	7,249	6,947	-302	-4.2
Exports by country:					
Total exports for the top five countries ¹	15,002	15,078	14,938	-140	-0.9
United Kingdom	4,760	4,666	4,295	-371	-8.0
Brazil	4,598	4,173	4,138	-35	-0.8
Canada	2,989	3,034	3,202	168	5.5
Switzerland	1,358	1,610	1,712	102	6.3
Argentina	1,297	1,595	1,591	-4	-0.3
Other countries.....	19,689	20,586	21,517	931	4.5
Telecommunications, computer, and information services imports	36,502	36,270	36,851	581	1.6
Telecommunications services.....	6,757	6,280	5,476	-804	-12.8
Computer services	27,285	27,507	28,989	1,482	5.4
Information services	2,461	2,484	2,386	-98	-3.9
Imports by country:					
Total imports for the top five countries ¹	23,639	24,181	24,800	619	2.6
India	12,910	14,149	14,639	490	3.5
Canada	5,013	3,997	3,751	-246	-6.2
Ireland.....	1,825	2,298	2,762	464	20.2
United Kingdom	2,654	2,509	2,285	-224	-8.9
Philippines	1,237	1,228	1,363	135	11.0
Other countries.....	12,863	12,089	12,051	-38	-0.3

1. The rank is based on the total value of exports or imports of telecommunications, computer, and information services in 2016.

Exports of telecommunications, computer, and information services increased in 2016 for the fourteenth consecutive year. By region, the largest increase was in exports to Asia and Pacific.

Telecommunication services decreased, mainly reflecting decreases in exports to the United Kingdom, Canada, and Brazil.

Computer services increased; increases in exports to Canada, Switzerland, India, and Mexico accounted for nearly half of the increase.

Collectively, exports to countries other than the top five countries increased. The largest increases were in exports to Ireland, India, and the Netherlands. Increases to these three countries accounted for 72 percent of the total increase in exports.

Imports of telecommunications, computer, and information services increased. By region, the largest increase was in imports from Asia and Pacific.

Imports of telecommunications services decreased, mainly reflecting decreases in imports from the United Kingdom, Mexico, and Canada.

Imports of computer services increased, mainly reflecting increases in imports from India and Ireland.

The top five countries accounted for 67 percent of total telecommunications, computer, and information services imports.

By country, India remained the largest market for imports of telecommunications, computer, and information services, accounting for 40 percent of the total in 2016.

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

Table L. Other Business Services Exports

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Other business services exports	128,915	136,622	142,231	5,609	4.1
Research and development services.....	32,731	34,539	37,176	2,637	7.6
Professional and management consulting services.....	60,945	66,784	74,021	7,237	10.8
Legal services.....	9,115	9,076	9,225	149	1.6
Accounting, auditing, and bookkeeping services.....	1,395	1,482	1,631	149	10.1
Business and management consulting and public relations services.....	39,429	43,376	49,271	5,895	13.6
Advertising.....	11,007	12,850	13,894	1,044	8.1
Technical, trade-related, and other business services.....	35,238	35,299	31,034	-4,265	-12.1
Architectural and engineering services.....	11,946	11,341	9,475	-1,866	-16.5
Construction.....	1,882	2,525	1,404	-1,121	-44.4
Industrial engineering.....	3,315	2,484	2,181	-303	-12.2
Operating leasing services.....	7,261	6,908	6,725	-183	-2.6
Other ¹	10,835	12,040	11,250	-790	-6.6
Exports by affiliation:					
Unaffiliated.....	49,901	51,235	48,156	-3,079	-6.0
Affiliated.....	79,014	85,386	94,076	8,690	10.2
By U.S. parents to their foreign affiliates.....	51,957	55,729	63,425	7,696	13.8
By U.S. affiliates to their foreign parents.....	27,057	29,658	30,650	992	3.3
Exports by country:					
Total exports for the top five countries ²	51,089	58,364	66,162	7,798	13.4
Ireland.....	15,396	17,252	21,085	3,833	22.2
Switzerland.....	11,094	12,539	13,962	1,423	11.3
United Kingdom.....	11,482	12,613	12,705	92	0.7
Canada.....	9,341	9,326	9,789	463	5.0
Singapore.....	3,776	6,634	8,621	1,987	30.0
Other countries.....	77,826	78,258	76,069	-2,189	-2.8

Exports of “other” business services increased, mainly reflecting increases in professional and management consulting services and in research and development services; the increases were partly offset by a decrease in technical, trade-related, and other business services (chart 11).

Exports of business and management consulting and public relations services increased, reflecting a relatively large increase in exports to Europe, particularly to Germany and Switzerland.

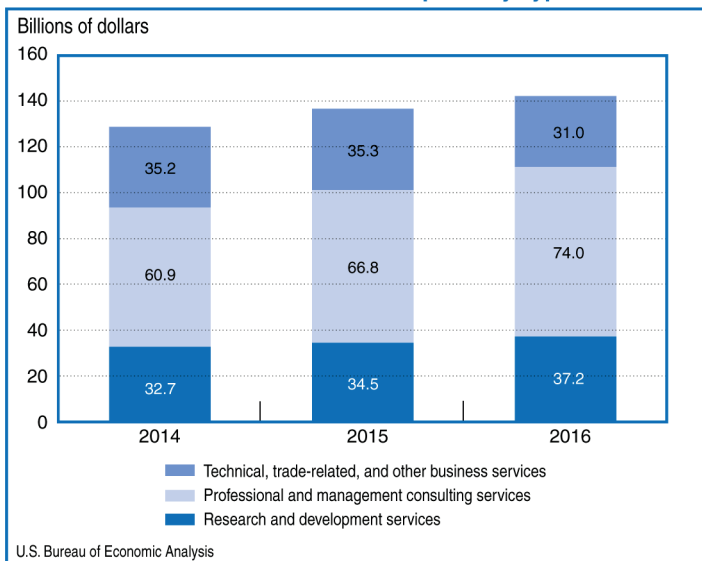
Exports of technical, trade-related, and other business services decreased, mainly reflecting decreases in architectural and engineering services and in construction services. By region, the largest decreases were to Latin America and Other Western Hemisphere, particularly Mexico, and to Asia and Pacific, particularly Australia and China.

By country, the largest increases in “other” business services exports were to Ireland, Singapore, and Switzerland.

Collectively, exports of “other” business services to countries other than the top five decreased. The largest decrease was in exports to the Netherlands.

1. This category includes mining, trade-related services, sports and performing arts, training services, and other business services n.i.e. (not included elsewhere).
 2. The rank is based on the total value of exports of other business services in 2016.

Chart 11. Other Business Services Exports by Type



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

Table M. Other Business Services Imports

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Other business services imports	94,771	99,665	98,922	-743	-0.7
Research and development services	30,869	32,202	34,243	2,041	6.3
Professional and management consulting services	38,969	40,423	40,169	-254	-0.6
Legal services	2,110	2,143	2,455	312	14.6
Accounting, auditing, and bookkeeping services	2,668	2,927	3,005	78	2.7
Business and management consulting and public relations services	30,274	31,343	30,507	-836	-2.7
Advertising	3,917	4,011	4,203	192	4.8
Technical, trade-related, and other business services	24,933	27,040	24,510	-2,530	-9.4
Architectural and engineering services	5,392	5,555	4,467	-1,088	-19.6
Construction	2,219	2,915	1,552	-1,363	-46.8
Industrial engineering	2,690	2,706	2,690	-16	-0.6
Operating leasing services	3,733	3,605	3,618	13	0.4
Other ¹	10,899	12,259	12,182	-77	-0.6
Imports by affiliation:					
Unaffiliated	27,694	31,335	29,031	-2,304	-7.4
Affiliated	67,077	68,330	69,891	1,561	2.3
By U.S. parents from their foreign affiliates....	48,685	50,447	54,038	3,591	7.1
By U.S. affiliates from their foreign parents....	18,392	17,883	15,853	-2,030	-11.4
Imports by country:					
Total imports for the top five countries ²	38,281	40,587	39,785	-802	-2.0
United Kingdom	13,660	13,931	13,058	-873	-6.3
Canada	6,894	7,274	7,398	124	1.7
Germany	7,070	7,358	6,830	-528	-7.2
India	5,191	5,893	6,314	421	7.1
Switzerland	5,466	6,131	6,185	54	0.9
Other countries	56,490	59,078	59,137	59	0.1

In 2016, imports of “other” business services decreased; a decrease in technical, trade-related, and other business services was mostly offset by an increase in research and development services (chart 12).

Imports of research and development services increased, mainly reflecting an increase in imports from Asia and Pacific.

Imports of technical, trade-related, and other business services decreased, mainly reflecting decreases in construction services and in architectural and engineering services. By region, the largest decreases in imports were from Latin America and Other Western Hemisphere, particularly Mexico, and from Europe, particularly the United Kingdom.

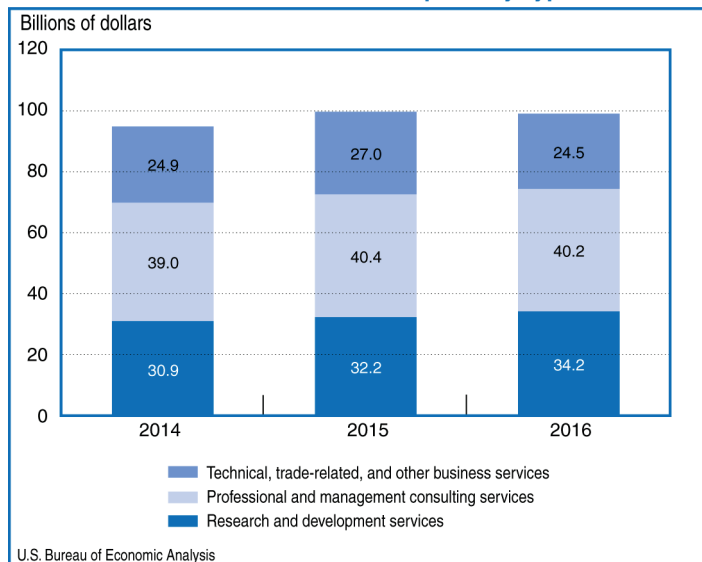
The top five countries accounted for 40 percent of total U.S. imports of “other” business services.

Imports from countries other than the top five countries increased collectively. The largest increases were in imports from Finland, China, and Singapore.

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

2. The rank is based on the total value of imports of other business services in 2016.

Chart 12. Other Business Services Imports by Type



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

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

	2014	2015	2016	Change 2015–2016	
	Millions of dollars			Millions of dollars	Percent
Government goods and services n.i.e. exports	20,518	21,165	18,814	-2,351	-11.1
Total exports by region ¹	20,518	21,165	18,814	-2,351	-11.1
Asia and Pacific	9,612	9,386	6,677	-2,709	-28.9
Middle East	3,631	4,431	4,903	472	10.7
Europe	2,458	2,521	2,371	-150	-6.0
International organizations and unallocated...	2,318	2,171	2,181	10	0.5
Latin America and Other Western Hemisphere	1,359	1,402	1,520	118	8.4
Africa	791	901	751	-150	-16.6
Canada	351	354	412	58	16.4
Government goods and services n.i.e. imports	24,236	21,592	21,528	-64	-0.3
Total imports by region ¹	24,236	21,592	21,528	-64	-0.3
Europe	10,745	9,282	9,510	228	2.5
Asia and Pacific	8,780	7,712	7,577	-135	-1.8
Middle East	3,166	3,129	2,948	-181	-5.8
Latin America and Other Western Hemisphere	648	610	669	59	9.7
Africa	603	560	570	10	1.8
Canada	293	293	254	-39	-13.3
International organizations and unallocated...	(*)	6	0	-6	-100.0

Exports of government goods and services decreased, mainly reflecting a decrease in exports to Asia and Pacific. Exports to the Middle East increased.

Imports of government goods and services decreased, reflecting decreases in imports from the Middle East and from Asia and Pacific that were partly offset by an increase in imports from Europe.

An asterisk (*) indicates a nonzero value that rounds to zero.
n.i.e. Not included elsewhere
¹. The rank is based on the total value of exports or imports of government goods and services n.i.e. by region in 2016.

ICT Services and Potentially ICT-Enabled Services in 2016

BEA's statistics on trade in information and communications technology (ICT) and potentially ICT-enabled services complement BEA's standard presentation of international trade in services statistics by providing insight into the extent to which ICT may be used to facilitate trade in services. ICT services are used to facilitate information processing and communication; ICT-enabled services are services delivered over ICT networks.¹ It is not possible to precisely identify services trade that is ICT-enabled because BEA collects data on trade in services by category based on the Extended Balance of Payments Services Classification (EBOPS 2010), which is based on the type of service traded and not on the mode of delivery.² BEA therefore measures a related, but more broadly defined, concept, *potentially* ICT-enabled services, which include services that *can* predominantly be delivered remotely over ICT networks without identifying the services that *are* delivered over ICT networks.³ Potentially ICT-enabled services include ICT services.

In 2016, exports of ICT services increased 1 percent to \$66.1 billion after decreasing 2 percent in 2015. Imports of ICT services increased 3 percent to \$41.9 billion after decreasing less than 1 percent in 2015. The larger increase in imports than in exports resulted in a \$0.4 billion decrease in the ICT services trade surplus to \$24.2 billion in 2016 (chart 13 and table O). Exports of potentially ICT-enabled services increased 1 percent to \$403.5 billion after decreasing 1 percent in 2015. Imports of potentially ICT-enabled services increased 2 percent to \$244.0 billion after decreasing less than 1 percent in 2015. The larger increase in imports than in exports resulted in a \$1.8 billion decrease in the trade surplus on

potentially ICT-enabled services to \$159.5 billion.

By type of service, the increase in both exports and imports of ICT services reflected an increase in computer services. For potentially ICT-enabled services by type of service, the largest dollar and percentage increases in exports were in exports of potentially ICT-enabled services in "other" business services, primarily professional and management consulting services and research and development services (table P and chart 14). The increase in potentially ICT-enabled services in "other" business

Chart 13. ICT and Potentially ICT-Enabled Services in Total Trade in Services, 2016

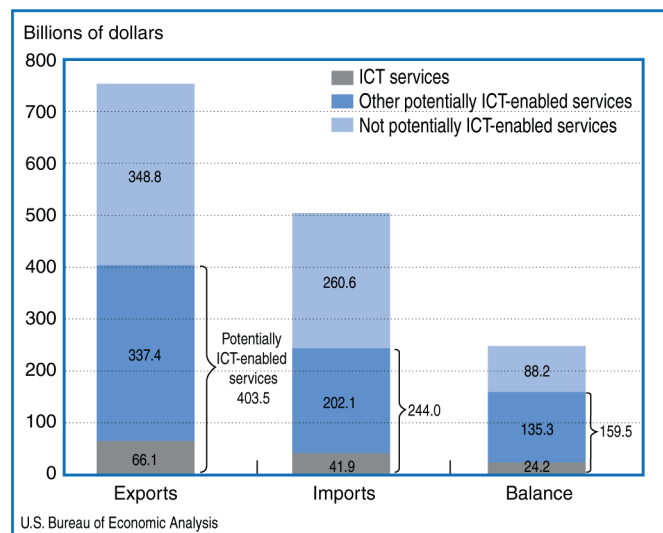


Table O. Change From Preceding Year in Trade in ICT and Potentially ICT-Enabled Services

	Exports		Imports	
	2015	2016	2015	2016
Billions of dollars				
Total services.....	11.2	-0.8	11.0	12.9
Potentially ICT-enabled services.....	-3.0	4.1	-1.1	5.9
ICT services.....	-1.5	1.0	-0.2	1.3
Other potentially ICT-enabled services.....	-1.5	3.1	-0.9	4.5
Not potentially ICT-enabled services.....	14.3	-4.9	12.0	7.0
Percent				
Total services.....	1.5	-0.1	2.3	2.6
Potentially ICT-enabled services.....	-0.8	1.0	-0.4	2.5
ICT services.....	-2.3	1.5	-0.5	3.3
Other potentially ICT-enabled services.....	-0.4	0.9	-0.4	2.3
Not potentially ICT-enabled services.....	4.2	-1.4	5.0	2.8

ICT Information and communications technology
Potentially ICT-Enabled services include ICT services

1. ICT services include three categories of services from BEA's published statistics on international trade in services: telecommunications services, computer services, and charges for the use of intellectual property associated with computer software. For a detailed description of how ICT and potentially ICT-enabled statistics are defined, see Alexis N. Grimm, "Trends in U.S. Trade in Information and Communications Technology (ICT) Services and in ICT-Enabled Services," SURVEY OF CURRENT BUSINESS 96 (May 2016).

2. The EBOPS guidelines were established by the *Manual on Statistics of International Trade in Services* (Geneva: United Nations Department of Economic and Social Affairs, 2010) and *Balance of Payments and International Investment Position Manual, Sixth Edition* (Washington, DC: International Monetary Fund, 2009).

3. Statistics on potentially ICT-enabled services are composed of BEA's published statistics on international trade in insurance services; financial services; charges for the use of intellectual property n.i.e.; telecommunications, computer, and information services; and certain other services included in "other" business services.

ICT Services and Potentially ICT-Enabled Services in 2016

services was partly offset by a decrease in financial services. For imports, the largest dollar and percentage increase was in charges for the use of intellectual property. Imports increased for all other major service types except

financial services. The 2016 trade surplus on potentially ICT-enabled services was largest for charges for the use of intellectual property and for financial services (chart 15).

Chart 14. Percent Change in Potentially ICT-Enabled Trade in Services by Major Service Category, 2016

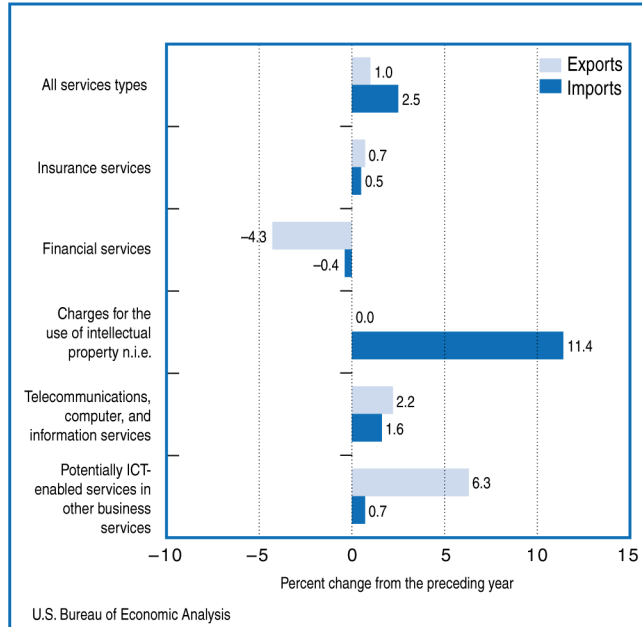


Chart 15. Trade in Potentially ICT-Enabled Services by Major Service Category, 2016

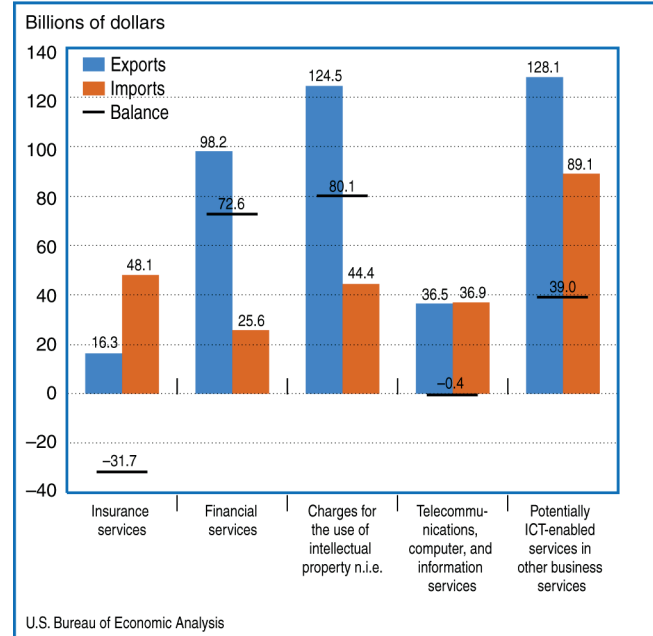


Table P. Trade in ICT Services and in Potentially ICT-Enabled Services by Major Service Category and Affiliation, 2015–2016 [Millions of dollars]

	Total			Unaffiliated			Affiliated		
	Level	Change	2015–2016	Level	Change	2015–2016	Level	Change	2015–2016
	2015	2016		2015	2016		2015	2016	
Exports									
ICT services	65,176	66,129	953	29,567	29,893	326	35,609	36,235	626
Potentially ICT-enabled services	399,446	403,540	4,094	185,529	182,208	-3,321	213,917	221,331	7,414
Insurance services ¹	16,229	16,348	119	16,229	16,348	119			
Financial services	102,595	98,180	-4,415	64,251	62,358	-1,893	38,344	35,822	-2,522
Charges for the use of intellectual property n.i.e.	124,442	124,453	11	46,817	46,412	-405	77,625	78,041	416
Telecommunications, computer, and information services	35,664	36,455	791	19,317	19,566	249	16,347	16,889	542
Potentially ICT-enabled services in other business services	120,516	128,103	7,587	38,915	37,524	-1,391	81,602	90,579	8,977
Imports									
ICT services	40,555	41,888	1,333	9,999	9,067	-932	30,556	32,821	2,265
Potentially ICT-enabled services	238,130	244,012	5,882	104,956	106,007	1,051	133,174	138,005	4,831
Insurance services ¹	47,822	48,077	255	47,822	48,077	255			
Financial services	25,740	25,629	-111	10,912	10,856	-56	14,827	14,773	-54
Charges for the use of intellectual property n.i.e.	39,858	44,392	4,534	11,515	13,725	2,210	28,342	30,668	2,326
Telecommunications, computer, and information services	36,270	36,851	581	9,824	8,985	-839	26,447	27,866	1,419
Potentially ICT-enabled services in other business services	88,440	89,063	623	24,883	24,364	-519	63,557	64,699	1,142
Addenda									
Total services exports	753,150	752,368	-782	532,662	524,279	-8,383	220,488	228,089	7,601
Total services imports	491,740	504,654	12,914	349,303	357,581	8,278	142,437	147,074	4,637

ICT Information and communications technology
 Not applicable
 n.i.e. Not included elsewhere
 1. Insurance services transactions are considered to be unaffiliated even when they are between affiliated companies because the services are considered to be provided to the policyholders who pay the

insurance premiums and who are unaffiliated with either company. The only insurance services considered to be affiliated are primary insurance transactions between a U.S. company that is not an insurance company and an affiliated foreign insurance company, such as a captive foreign insurance affiliate. Data on these affiliated insurance services are not separately available.
 Potentially ICT-enabled services include ICT services.

ICT Services and Potentially ICT-Enabled Services in 2016

By major region, the largest markets for exports of ICT services in 2016 were Europe, Asia and Pacific, and Latin America and Other Western Hemisphere—the same regions, in order, that were the largest markets for all services exports (table Q). More than half of the exports of ICT services to Europe and to Asia and Pacific were exports associated with the use of intellectual property in computer software. For exports to Latin America and Other Western Hemisphere, the largest component of ICT services was telecommunications services. The largest sources of ICT imports were Asia and Pacific and Europe. Nearly 90 percent of ICT imports from Asia and Pacific were imports of computer services, most of which

were from India. Computer services was also the largest component of ICT services imports from Europe.

For some regions and countries, exports and imports of potentially ICT-enabled services were suppressed to avoid the disclosure of data of individual companies. In 2016, the values of potentially ICT-enabled exports for Europe and Africa and the values of potentially ICT-enabled imports for Africa and Middle East are suppressed. For major regions in which one or more component of potentially ICT-enabled services exports or imports was suppressed, a range of feasible values is presented to facilitate the discussion of potentially ICT-enabled services exports, imports, and trade balances

Table Q. Trade in ICT Services and Potentially ICT-Enabled Services by Major Area, 2014–2016

[Millions of dollars]

	2014						2015						2016					
	ICT services ¹			Potentially ICT-enabled services ¹			ICT services ¹			Potentially ICT-enabled services ¹			ICT services ¹			Potentially ICT-enabled services ¹		
	Point value	Lower bound	Upper bound	Point value	Lower bound	Upper bound	Point value	Lower bound	Upper bound	Point value	Lower bound	Upper bound	Point value	Lower bound	Upper bound	Point value	Lower bound	Upper bound
Exports																		
All countries	66,707			402,473			65,176			399,446			66,129			403,540		
Canada.....	5,045			29,306			4,805			27,150			4,841			27,814		
Europe.....	27,012			179,048			25,855			180,757			27,565			(D) 185,032	188,962	
Latin America and Other Western Hemisphere	15,609			88,204			15,546			(D) 83,949	88,070	15,007				76,444		
Africa.....	912			6,197			824			(D) 5,445	6,546	813				(D) 5,172	6,317	
Middle East.....	920			9,609			982			9,496		982				9,570		
Asia and Pacific.....	17,208			89,931			17,163			91,083		16,921				96,890		
International organizations and unallocated	(*)			178			(*)			103		0				71		
Imports																		
All countries	40,755			239,189			40,555			238,130			41,888			244,012		
Canada.....	4,981			14,726			3,969			13,865			3,743			13,862		
Europe.....	(D)	13,350	14,737	109,089			(D)	13,643	14,607	110,045			15,521			111,494		
Latin America and Other Western Hemisphere	3,198			48,155			(D) 3,106	3,155	46,536			2,947				45,514		
Africa.....	311			2,381			241			(D) 1,955	2,493	195				(D) 1,910	2,482	
Middle East.....	(D)	875	1,142	4,731			1,064			5,106		1,115				(D) 5,560	5,849	
Asia and Pacific.....	16,630			59,033			17,631			60,278		18,367				63,778		
International organizations and unallocated	0			1,073			0			(D) 5	20	0				1,227		
Balance																		
All countries	25,951			163,284			24,621			161,316			24,241			159,528		
Canada.....	64			14,580			836			13,285			1,098			13,952		
Europe.....	(D)	12,276	13,663	69,959			(D)	11,247	12,211	70,712			12,043			(D) 73,538	77,468	
Latin America and Other Western Hemisphere	12,411			40,049			(D) 12,391	12,440	(D) 37,413	41,534	12,060					30,930		
Africa.....	601			3,815			583			(D) 2,952	4,591	618				(D) 2,690	4,406	
Middle East.....	(D)	-222	45	4,878			-82			4,390		-133				(D) 3,721	4,010	
Asia and Pacific.....	578			30,898			-468			30,805		-1,446				33,111		
International organizations and unallocated	(*)			-895			(*)			(D) 84	98	0				-1,156		

An asterisk "(*)" indicates a nonzero value that rounds to zero.
 D Suppressed to avoid the disclosure of data of individual companies.
 Not applicable
 ICT Information and communications technology

1. When the statistics for one or more components of ICT or potentially ICT-enabled services exports are suppressed to avoid the disclosure of data of individual companies, a range of possible values is established by the lower bound and upper bound columns. For more information see footnote 4 in this section.
 Potentially ICT-enabled services include ICT services.

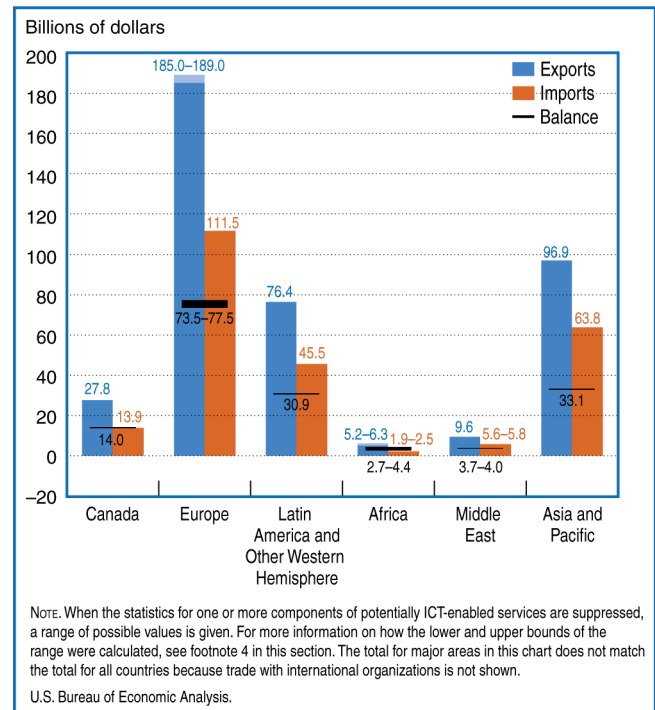
ICT Services and Potentially ICT-Enabled Services in 2016

for the major regions (table Q and chart 16).⁴ The largest markets for potentially ICT-enabled services exports in 2016 were Europe, Asia and Pacific, and Latin America and Other Western Hemisphere (table Q and chart 16). For exports of potentially ICT-enabled services to Europe, the largest major categories were the potentially ICT-enabled services in “other” business services and charges for the use of intellectual property. For Asia and Pacific, the largest major export categories of potentially ICT-enabled services were charges for the use of intellectual property and the potentially ICT-enabled services in “other” business services. Nearly half of exports of potentially ICT-enabled services to Latin America and Other Western Hemisphere was in financial services.

The largest sources of imports of potentially ICT-enabled services were Europe, Asia and Pacific, and Latin America and Other Western Hemisphere. For imports from Europe, the largest major categories of services were the potentially ICT-enabled services in “other” business services and charges for the use of intellectual property. For Asia and Pacific, the largest major category

was the potentially ICT-enabled services in “other” business services and telecommunications, computer, and information services. For Latin America and Other Western Hemisphere, more than half of imports of potentially ICT-enabled services were in insurance services.

Chart 16. Trade in Potentially ICT-Enabled Services by Major Area, 2016



4. All of the values of ICT and potentially ICT-enabled services exports, imports, and trade balance that are suppressed for major areas in 2014–2016 are suppressed because certain components are suppressed. In most cases, the components that are suppressed are relatively small parts of the total. For major areas where one or more components are suppressed, table Q and chart 16 include an upper bound and lower bound that establish a range of possible values. The lower bound is equal to the sum of all unsuppressed services included in ICT or potentially ICT-enabled services. The upper bound is calculated as the sum of the unsuppressed services and higher-level aggregates that include the suppressed services less any other components of that aggregate that are not included in ICT or potentially ICT-enabled services.

Services Supplied Through Affiliates in 2015

U.S. international services delivered via the channel of direct investment consist of (1) services supplied to the host country and other foreign markets by foreign affiliates of U.S. multinational enterprises (MNEs) and (2) services supplied to the U.S. market by U.S. affiliates of foreign MNEs. In 2015, services supplied by U.S. MNEs to foreign markets through their affiliates decreased to \$1,463.5 billion from \$1,534.8 billion in 2014. Services supplied by foreign MNEs to the U.S. market through their U.S. affiliates increased to \$952.5 billion from \$940.4 billion. The difference between international services supplied through affiliates to foreign markets and the services supplied to the U.S. market was \$511.1 billion in 2015, compared with \$594.4 billion in 2014. By region, all such differences were positive, and the largest differences were for Europe, Latin America and Other Western Hemisphere, and Asia and Pacific.¹

Services supplied abroad through foreign affiliates of U.S. MNEs decreased 5 percent (\$71.2 billion) in 2015 despite moderate economic growth, as measured by growth in nominal gross domestic product (GDP), in many of the top markets served by affiliates (chart 3, page 3). In Europe, the euro area grew for the second straight year, with growth picking up from 2014, and the United Kingdom continued its moderate growth that kicked off in 2010. Japan's growth was also moderate and was up nearly 1 percentage point from 2014. Canada experienced weak GDP growth in 2015, dropping nearly 4 percentage points from 2014. As in recent years, growth in many emerging markets, such as China and Mexico, outpaced growth in advanced economies.

The value of the dollar relative to the currencies of

many of the U.S.'s largest trading partners rose from 2014 to 2015, resulting in a decrease in the dollar value of services provided by foreign affiliates in local currencies (chart 4, page 3). Absent any other changes (for example, in the quantity or foreign-currency price of services supplied), this would tend to reduce the recorded value of services supplied in dollar terms.

Services supplied abroad through affiliates decreased in all major regions. Affiliates in Europe and in Asia and Pacific accounted for nearly two-thirds of the \$71.2 billion decrease. In Europe, home to six of the top ten countries in terms of services supplied by foreign affiliates in 2015 (table R), the largest decreases in services supplied were for affiliates in Germany, Switzerland, and France; these decreases were partly offset by an increase in services supplied through affiliates in Ireland. Decreases in services supplied through affiliates in wholesale trade accounted for more than half of the overall decrease for Europe. South and Central America dropped sharply in 2015; affiliates in Brazil accounted for more than half of the decrease, and affiliates in Mexico accounted for more than a quarter.

Services supplied by foreign affiliates of U.S. MNEs decreased in six of the nine major industry categories in 2015. Affiliates in wholesale trade, "other" industries, and finance and insurance, accounted for three quarters of the decrease. In wholesale trade, more than half of the decrease was accounted for by decreases in services supplied through affiliates in "other" wholesale trade, particularly wholesalers of machinery, equipment, and supplies and wholesalers of farm product raw material; services supplied by professional and commercial equipment and supplies wholesalers also fell sharply. Services supplied through affiliates in wholesale trade decreased in every major region, but affiliates in Europe accounted for nearly 60 percent of the decrease. Decreases in services supplied through affiliates in "other" industries were spread across several industries but were largest in utilities and in arts, entertainment, and recreation. Nearly a third of the decrease in "other" industries was in services supplied through affiliates in Canada. Services supplied in finance and insurance also decreased significantly.

Foreign affiliates not only supply services to foreign markets, but they also supply services to the U.S. market (which are classified as U.S. imports of services). Services supplied to foreign markets, which include local markets and other foreign markets, accounted for 88 percent of the \$1,657.6 billion in services supplied by foreign affiliates worldwide in 2015. Services supplied to the U.S.

1. It is not meaningful to highlight the difference between services supplied through affiliates to foreign markets and to U.S. markets by industry partly because of differences in the level of industry consolidation between foreign affiliates of U.S. companies and U.S. affiliates of foreign companies.

Summary Statistics for Services Supplied Through Affiliates

Summary statistics for services supplied by foreign affiliates of U.S. MNEs for certain selected countries and industries of the affiliate are presented in tables T–U and charts 17–20. Statistics on services supplied by U.S. affiliates of foreign MNEs for certain countries of the UBO and industries of the affiliate are presented in tables V–W and charts 21–24. For more detailed statistics, see tables 4.1–5.4 in this article or in the [interactive tables](#) on BEA's Web site.

Services Supplied Through Affiliates in 2015

Table R. Services Supplied to Foreign Persons by Industry and by Country of the Foreign Affiliate and to U.S. Persons by Industry of the U.S. Affiliate and by Country of the Ultimate Beneficial Owner (UBO), 2015
[Millions of dollars]

	All industries	Mining	Manu- facturing	Wholesale trade	Retail trade	Information	Finance and insurance	Real estate and rental and leasing	Professional, scientific, and technical services	Other industries
Services supplied to foreign persons by U.S. MNEs through their majority-owned foreign affiliates by country of the foreign affiliate										
All countries	1,463,536	44,226	34,859	231,158	105,258	244,084	237,435	64,329	231,143	271,043
Total for the top 10 countries ¹	922,793	13,858	25,609	160,408	70,913	178,247	126,929	44,352	141,221	161,255
United Kingdom.....	230,615	6,247	8,263	18,489	21,001	33,368	57,500	6,693	38,388	40,666
Canada.....	121,330	3,948	2,865	17,658	22,439	8,856	10,522	5,063	16,571	33,407
Ireland.....	115,167	(D)	(D)	6,877	133	66,785	9,307	(D)	15,452	6,505
Singapore.....	80,032	1,143	1,194	24,526	2,200	22,993	8,558	1,815	8,116	9,487
Switzerland.....	76,594	(D)	341	28,310	3,972	5,480	3,014	(D)	16,789	4,939
Japan.....	68,793	0**	324	10,857	4,832	7,825	22,155	1,597	13,262	7,941
Germany.....	66,499	637	2,010	15,103	6,395	11,182	4,496	1,807	10,231	14,637
Netherlands.....	61,006	(D)	(D)	12,039	1,614	13,157	5,019	2,956	8,641	12,951
China.....	55,195	442	1,569	17,316	5,908	2,669	1,816	1,031	7,796	16,648
France.....	47,563	261	3,380	9,233	2,418	5,932	4,543	1,747	5,975	14,074
Other countries.....	540,743	30,368	9,250	70,750	34,345	65,836	110,507	19,977	89,922	109,788
Services supplied to U.S. persons by foreign MNEs through their majority-owned U.S. affiliates by country of the UBO										
All countries	952,467	33,158	91,253	172,618	55,266	112,567	169,068	24,015	108,242	186,281
Total for the top 10 countries ²	778,976	20,608	82,745	139,049	44,163	98,094	147,953	17,691	87,888	140,785
Japan.....	152,823	16	14,116	60,448	6,321	(D)	20,681	1,358	4,034	(D)
United Kingdom.....	134,621	4,220	10,700	8,837	5,105	20,580	21,797	6,248	18,058	39,077
Germany.....	131,985	0	30,065	14,424	7,762	(D)	20,341	2,474	6,802	(D)
Canada.....	99,993	1,391	5,431	7,913	11,513	8,378	28,280	6,491	8,711	21,885
France.....	93,935	(D)	6,070	6,323	3,190	(D)	19,401	(D)	35,939	(D)
Switzerland.....	48,926	3,739	7,401	3,245	664	111	19,980	257	391	13,139
Netherlands.....	47,182	(D)	(D)	7,389	9,575	3,760	(D)	712	(D)	(D)
Korea, Republic of.....	24,098	1	377	22,558	(D)	218	230	(D)	377	282
Bermuda.....	23,164	(D)	(D)	6,125	(D)	(D)	(D)	60	(D)	(D)
Ireland.....	22,248	(D)	(D)	1,787	5	37	(D)	(D)	(D)	(D)
Other countries.....	173,491	12,550	8,508	33,569	11,103	14,473	21,115	6,323	20,354	45,496

MNEs Multinational enterprises

D Suppressed to avoid disclosure of data of individual companies.

1. The rank is based on the total value of services supplied to foreign persons by U.S. MNEs through

their majority-owned foreign affiliates.

2. The rank is based on the total value of services supplied to U.S. persons by foreign MNEs through their majority-owned U.S. affiliates.

market accounted for the remaining 12 percent (table S). In 2015, transactions in the affiliates' local market ac-

counted for 67 percent of services supplied worldwide through affiliates, while transactions in other foreign markets accounted for 22 percent. Services supplied by foreign affiliates worldwide decreased 4 percent in 2015; services supplied to foreign markets decreased 5 percent, and services supplied to the U.S. market decreased 2 percent. For services supplied to foreign markets in 2015, services supplied to the affiliates' local market decreased 6 percent, and services supplied to other foreign markets decreased 1 percent.

Table S. Services Supplied Through Affiliates by Destination, 2014–2015

	Billions of dollars		Percent change from preceding year		Percent of total services supplied	
	2014	2015	2014	2015	2014	2015
Services supplied by U.S. MNEs through their majority-owned foreign affiliates						
Total services supplied	1,733.7	1,657.6	20.1	-4.4	.....	.....
Services supplied to U.S. persons....	198.9	194.0	63.5	-2.4	11.5	11.7
Services supplied to foreign persons	1,534.8	1,463.5	16.1	-4.6	88.5	88.3
To the host country.....	1,172.3	1,103.8	13.8	-5.8	67.6	66.6
To other foreign countries.....	362.5	359.8	24.3	-0.7	20.9	21.7
Services supplied by foreign MNEs through their majority-owned U.S. affiliates						
Total services supplied	1,039.8	1,043.0	6.2	0.3	.....	.....
Services supplied to U.S. persons....	940.4	952.5	5.4	1.3	90.4	91.3
Services supplied to foreign persons	99.4	90.5	13.5	-9.0	9.6	8.7

MNEs Multinational enterprises

Services supplied to the U.S. market through U.S. affiliates of foreign MNEs grew 1 percent (\$12.1 billion) in 2015, down from 5 percent in 2014, amid a slight slowdown in U.S. economic growth, as measured by growth in nominal GDP (chart 3, page 3). The increase reflected a sharp increase in services supplied through affiliates with ultimate beneficial owners (UBOs) in Asia and Pacific that was partly offset by decreases in services supplied through affiliates with UBOs in Europe and in

Services Supplied Through Affiliates in 2015

Latin America and Other Western Hemisphere.² Services supplied through affiliates with UBOs in Africa and in the Middle East increased. Services supplied through affiliates with UBOs in Asia and Pacific increased 10 percent in 2015; affiliates with UBOs in Japan contributed more than three-fourths of the increase. The increase for Japan strengthened its position as the top UBO country for services supplied by U.S. affiliates in 2015, a spot it has held since it surpassed the United Kingdom in 2013 (table R). Services supplied through affiliates with UBOs in Europe decreased moderately, mostly as a result of decreases for affiliates with UBOs in Switzerland, the United Kingdom, and the Netherlands that were partly offset by increases for affiliates with UBOs in France and Ireland.

Services supplied by U.S. affiliates of foreign MNEs increased in six of the nine major industry categories. Increases in services supplied through affiliates in information and wholesale trade were partly offset by decreases in finance and insurance and in mining. In

2. The UBO of a U.S. affiliate is that person or entity, 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 ultimately owns or controls the U.S. affiliate and therefore ultimately derives the benefits from ownership or control.

information, the increase reflected a significant increase in services supplied by wireless communications carriers, which rebounded after a sharp decrease in 2014. In wholesale trade, the increase reflected increases in services supplied by electrical goods merchant wholesalers, mostly through affiliates with UBOs in the Republic of Korea, and in services supplied by merchant wholesalers of motor vehicles and motor vehicle parts and supplies, largely due to increases for affiliates with UBOs in Japan. The decrease in services supplied through affiliates in finance and insurance was due to a decrease in services supplied by banks.

U.S. affiliates not only supply services to the U.S. market, but they also supply services to other markets (which are classified as U.S. exports of services). However, transactions in the U.S. market account for the vast majority of the services supplied by U.S. affiliates worldwide. In 2015, transactions in the U.S. market accounted for 91 percent of the \$1,043.0 billion in services supplied by U.S. affiliates worldwide (table S). This large share reflects the dominance of the U.S. market, compared with other markets. Services supplied by U.S. affiliates worldwide increased less than 1 percent in 2015; services supplied to the U.S. market increased 1 percent, and services supplied to foreign markets decreased 9 percent.

Data Sources

The statistics in this article are based largely 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. 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 the 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 definitions and methodology used for the trade in services statistics, see [U.S. International Economic Accounts: Concepts and Methods](#).

The data on services supplied through majority-owned affiliates are collected on BEA's benchmark and annual surveys of the activities of multinational enterprises (MNEs). All of BEA's surveys of U.S. MNEs and of U.S. affiliates of foreign MNEs and a guide to reporting requirements for the surveys are available on [BEA's Web site](#). For the methodologies for these surveys, see [Foreign Direct Investment in the United States: Final Results From the 2012 Benchmark Survey and U.S. Direct Investment Abroad: Final Results From the 2009 Benchmark Survey](#) on BEA's Web site. Final results from the 2014 Benchmark Survey of U.S. Direct Investment Abroad will be released on BEA's Web site in November 2017.

Services Supplied by Affiliates—To Foreign Persons Through Foreign Affiliates

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

	2014	2015	Change 2014–2015	
	Millions of dollars		Millions of dollars	Percent
All countries	1,534,775	1,463,536	-71,239	-4.6
Canada.....	138,156	121,330	-16,826	-12.2
Europe.....	776,502	752,310	-24,192	-3.1
France.....	51,267	47,563	-3,704	-7.2
Germany.....	73,588	66,499	-7,089	-9.6
Ireland.....	108,502	115,167	6,665	6.1
Switzerland.....	81,400	76,594	-4,806	-5.9
United Kingdom.....	229,178	230,615	1,437	0.6
Latin America and Other Western Hemisphere	195,608	189,967	-5,641	-2.9
South and Central America.....	139,944	126,548	-13,396	-9.6
Brazil.....	49,221	42,224	-6,997	-14.2
Mexico.....	46,700	42,833	-3,867	-8.3
Other Western Hemisphere.....	55,664	63,419	7,755	13.9
Bahamas.....	11,725	16,888	5,163	44.0
United Kingdom Islands, Caribbean.....	20,538	21,690	1,152	5.6
Africa.....	15,782	14,273	-1,509	-9.6
Middle East.....	21,981	20,946	-1,035	-4.7
Asia and Pacific.....	386,745	364,709	-22,036	-5.7
Australia.....	51,164	44,718	-6,446	-12.6
Hong Kong.....	30,840	29,318	-1,522	-4.9
India.....	23,381	24,501	1,120	4.8
Japan.....	72,516	68,793	-3,723	-5.1
Macau.....	17,340	11,955	-5,385	-31.1
Singapore.....	84,098	80,032	-4,066	-4.8

MNEs Multinational enterprises

In Canada, services supplied fell by 12 percent (chart 17). The largest decrease was in utilities, which coincided with lower natural gas prices in 2015.

In Germany, services supplied decreased, and more than half of the decrease was accounted for by services supplied through affiliates in “other” industries, particularly in utilities and in transportation and warehousing, and through affiliates in wholesale trade, mostly professional and commercial equipment and supplies.

In Ireland, services supplied increased, and more than two-thirds of the increase was accounted for by affiliates in information.

In Brazil, services supplied decreased, largely reflecting a decrease in services supplied through affiliates in “other” industries, mostly in transportation and warehousing and in utilities, and through affiliates in information.

In the Bahamas, services supplied increased sharply, reflecting an increase in services supplied through affiliates in scientific research and development services.

In Australia, services supplied decreased, particularly in services supplied through affiliates in professional, scientific, and technical services and in finance and insurance. The decrease in Australia was the largest in Asia and Pacific and contributed to the drop in the region’s share of services supplied to below 25 percent for the first time since 2010 (chart 18).

Chart 17. Percent Change in Services Supplied to Foreign Persons Through Affiliates by Major Area of Affiliate, 2015

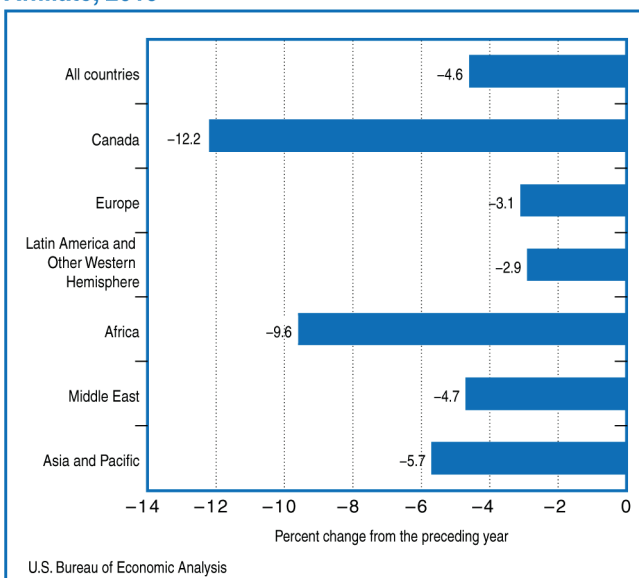
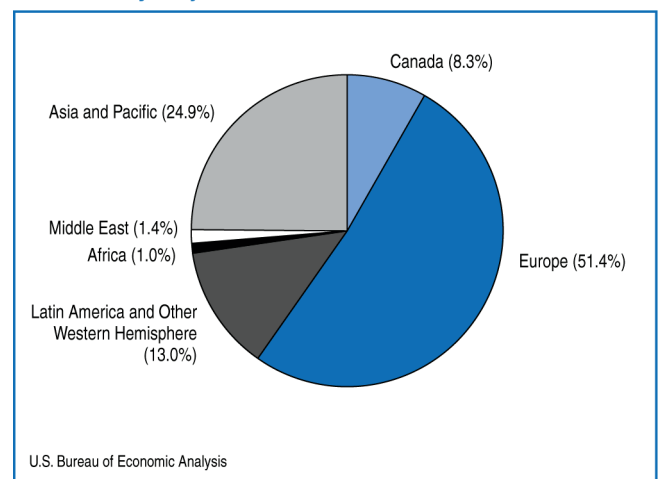


Chart 18. Services Supplied to Foreign Persons Through Affiliates by Major Area of Affiliate, 2015



Services Supplied by Affiliates—To Foreign Persons Through Foreign Affiliates

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

	2014	2015	Change 2014–2015	
	Millions of dollars		Millions of dollars	Percent
All Industries	1,534,775	1,463,536	-71,239	-4.6
Mining	53,900	44,226	-9,674	-17.9
Manufacturing	33,562	34,859	1,297	3.9
Wholesale trade	254,992	231,158	-23,834	-9.3
Professional and commercial equipment and supplies	68,802	61,687	-7,115	-10.3
Retail trade	114,986	105,258	-9,728	-8.5
Information	240,073	244,084	4,011	1.7
Publishing industries	82,960	80,676	-2,284	-2.8
Motion picture and sound recording industries	14,293	12,302	-1,991	-13.9
Finance and insurance	249,174	237,435	-11,739	-4.7
Finance	182,049	172,495	-9,554	-5.2
Insurance carriers and related activities	67,126	64,940	-2,186	-3.3
Real estate and rental and leasing	63,691	64,329	638	1.0
Professional, scientific, and technical services	234,819	231,143	-3,676	-1.6
Architectural, engineering, and related services	34,759	31,608	-3,151	-9.1
Computer systems design and related services	100,519	93,780	-6,739	-6.7
Scientific research and development services	13,416	18,626	5,210	38.8
Advertising and related services	15,564	14,992	-572	-3.7
Other industries	289,578	271,043	-18,535	-6.4
Utilities	36,127	28,675	-7,452	-20.6
Transportation and warehousing	80,070	79,173	-897	-1.1
Arts, entertainment, and recreation	25,331	20,620	-4,711	-18.6

MNEs Multinational enterprises

In mining, services supplied decreased sharply, mostly reflecting a decrease in services supplied through affiliates in support activities for oil and gas operations, largely in Europe (chart 19).

In retail trade, services supplied decreased, reflecting widespread decreases across subindustries. The largest decreases were in general merchandise stores and in “other” retail trade, which was almost entirely accounted for by decreases in services supplied by gaso-line stations and electronics and appliances retailers.

In finance, services supplied decreased, and the decrease was largest for affiliates in Asia and Pacific. Despite the decrease, finance surpassed wholesale trade—which experienced a much larger decrease in 2015—to become the second-largest major industry category for services supplied to foreign persons through affiliates of U.S. MNEs (after “other” industries) (chart 20).

In computer systems design and related services, services supplied decreased, reflecting a decrease in new sales of large-scale software systems, mostly in Europe and in Asia and Pacific.

In utilities, services supplied decreased sharply, mostly because of a decrease in services supplied through affiliates in natural gas distribution, which coincided with a drop in the price of natural gas in 2015.

In arts, entertainment, and recreation, services supplied decreased, reflecting decreases in the revenue of casinos operating in Macau.

Chart 19. Percent Change in Services Supplied to Foreign Persons Through Affiliates by Major Industry of Affiliate, 2015

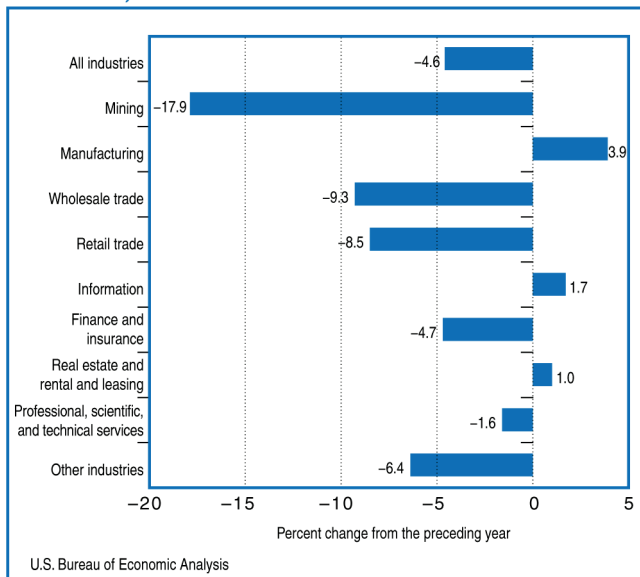
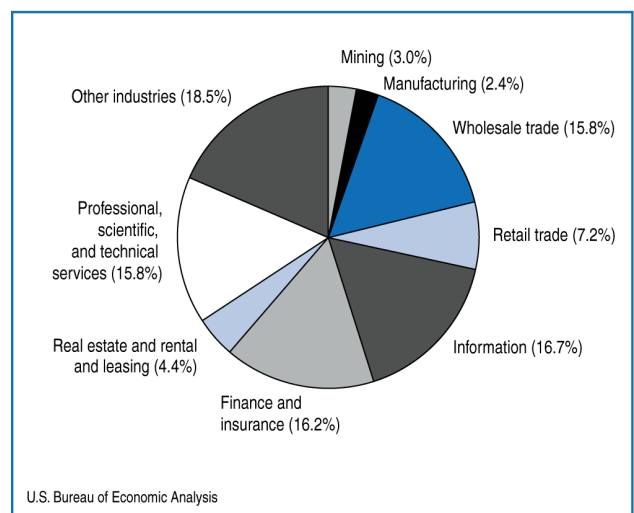


Chart 20. Services Supplied to Foreign Persons Through Affiliates by Major Industry of Affiliate, 2015



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

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

	2014	2015	Change 2014–2015	
	Millions of dollars		Millions of dollars	Percent
All countries	940,359	952,467	12,108	1.3
Canada	100,676	99,993	-683	-0.7
Europe	541,336	537,589	-3,747	-0.7
France	89,650	93,935	4,285	4.8
Germany	131,816	131,985	169	0.1
Ireland	20,246	22,248	2,002	9.9
Netherlands	50,341	47,182	-3,159	-6.3
Switzerland	52,748	48,926	-3,822	-7.2
United Kingdom	137,896	134,621	-3,275	-2.4
Latin America and Other Western Hemisphere	54,035	51,239	-2,796	-5.2
South and Central America	12,281	12,121	-160	-1.3
Mexico	8,624	8,571	-53	-0.6
Other Western Hemisphere	41,753	39,118	-2,635	-6.3
Bermuda	20,938	23,164	2,226	10.6
Africa	612	729	117	19.1
Middle East	11,474	11,504	30	0.3
United Arab Emirates	3,373	2,340	-1,033	-30.6
Asia and Pacific	213,291	234,003	20,712	9.7
Australia	16,681	17,579	898	5.4
India	13,564	14,709	1,145	8.4
Japan	137,140	152,823	15,683	11.4
Korea, Republic of	21,685	24,098	2,413	11.1
Singapore	9,194	9,427	233	2.5
United States	18,935	17,410	-1,525	-8.1

MNEs Multinational enterprises
UBO Ultimate beneficial owner

For Canada, services supplied through affiliates decreased, reflecting decreases in services supplied by life insurance carriers and by affiliates in health care and social assistance. These large decreases were partly offset by increases in professional, scientific, and technical services, in wholesale trade, and in retail trade.

For the Netherlands, services supplied decreased; more than half of the decrease was due to decreases in petroleum and petroleum products wholesalers. Decreases in services supplied through affiliates in “other” industries, particularly in administrative and support services, were also large.

For Other Western Hemisphere, services supplied decreased, reflecting a decrease in services supplied by mining affiliates. Services supplied through affiliates with UBOs in Curacao decreased; the decrease was partly offset by increases in services supplied through affiliates with UBOs in Bermuda and in the United Kingdom Islands, Caribbean.

For Africa, services supplied increased sharply (chart 21), reflecting an increase for affiliates in wholesale trade. African-owned U.S. affiliates accounted for less than 0.1 percent of total services supplied in 2015 (chart 22).

For India, services supplied increased, mostly reflecting increases in services supplied in professional, scientific, and technical services, particularly in computer systems design and related services.

For Japan, services supplied increased, mostly reflecting increases in services supplied in information, particularly telecommunications, and in finance and insurance.

Chart 21. Percent Change in Services Supplied to U.S. Persons Through Affiliates by Major Area of Ultimate Beneficial Owner, 2014 and 2015

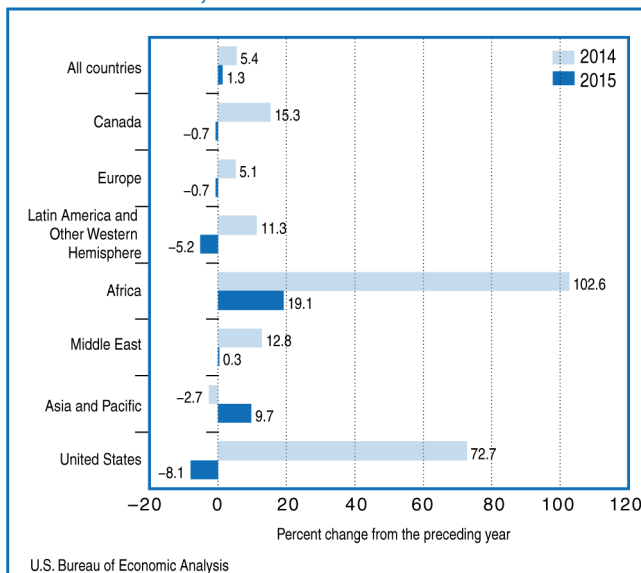
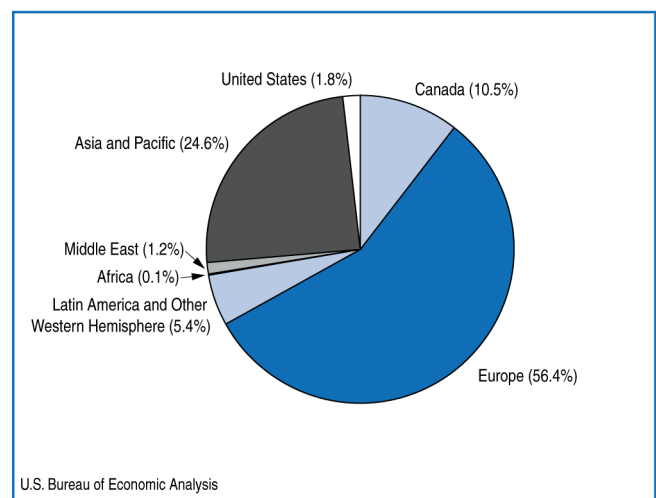


Chart 22. Services Supplied to U.S. Persons Through Affiliates by Major Area of Ultimate Beneficial Owner, 2015



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

Table W. Services Supplied to U.S. Persons by Foreign MNEs Through Their Majority-Owned U.S. Affiliates by Selected Industry

	2014	2015	Change 2014–2015	
	Millions of dollars		Millions of dollars	Percent
All Industries	940,359	952,467	12,108	1.3
Mining	37,451	33,158	-4,293	-11.5
Manufacturing	91,367	91,253	-114	-0.1
Wholesale trade	168,300	172,618	4,318	2.6
Motor vehicles and motor vehicle parts and supplies	34,701	36,403	1,702	4.9
Electrical and electronic goods	29,899	32,871	2,972	9.9
Retail trade	52,055	55,266	3,211	6.2
Information	104,389	112,567	8,178	7.8
Telecommunications	67,180	75,599	8,419	12.5
Finance and insurance	174,137	169,068	-5,069	-2.9
Finance	111,426	104,658	-6,768	-6.1
Insurance carriers and related activities	62,711	64,410	1,699	2.7
Real estate and rental and leasing	23,002	24,015	1,013	4.4
Professional, scientific, and technical services	106,608	108,242	1,634	1.5
Architectural, engineering, and related services	15,422	16,665	1,243	8.1
Computer systems design and related services	28,495	28,339	-156	-0.5
Management, scientific, and technical consulting	16,364	17,220	856	5.2
Advertising and related services	35,574	35,417	-157	-0.4
Other industries	183,050	186,281	3,231	1.8
Transportation and warehousing	57,072	58,301	1,229	2.2
Administration, support, and waste management	45,855	45,632	-223	-0.5
Accommodation and food services	33,586	33,865	279	0.8

MNEs Multinational enterprises

In mining, services supplied through affiliates decreased, reflecting a decrease in support activities for oil and gas operations.

In retail trade, services supplied increased, reflecting increases in clothing and clothing accessories stores and in food and beverage stores.

In telecommunications, services supplied increased, reflecting an increase in services supplied through affiliates in wireless telecommunications; these affiliates recorded higher sales due to an increase in the number of customers. The increase in telecommunications more than accounted for the increase in information, which grew at the fastest rate of all the major industry categories in 2015 (chart 23).

In finance, services supplied decreased, reflecting a decrease for services supplied through affiliates with UBOs in the United Kingdom and Switzerland. The decrease reflected foreign parents' divestment in some banking affiliates that resulted in the former affiliates no longer being owned through the channel of direct investment. This decrease, along with an increase in services supplied through affiliates in wholesale trade, led to finance and insurance falling from the second-largest to the third-largest major industry category in 2015 (chart 24).

In architectural, engineering, and related services, services supplied increased, reflecting the addition of services supplied through U.S. affiliates acquired by Canadian parents.

Chart 23. Percent Change in Services Supplied to U.S. Persons Through Affiliates by Major Industry of Affiliate, 2014 and 2015

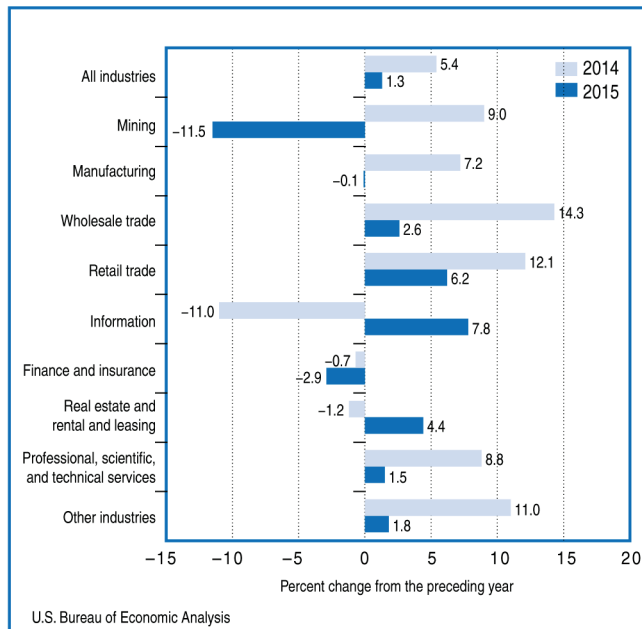
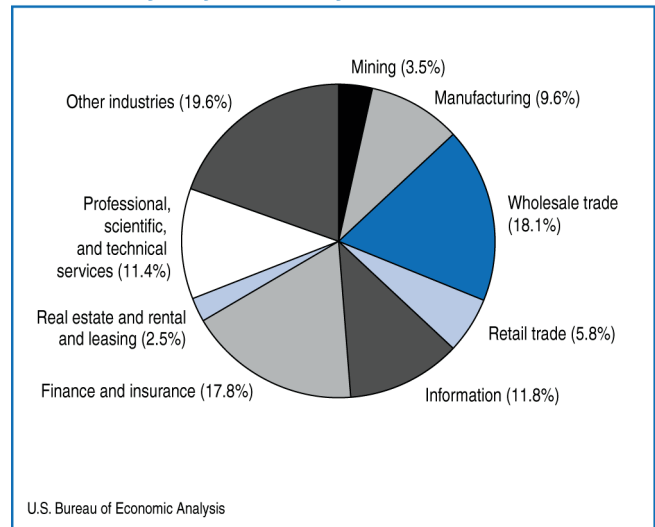


Chart 24. Services Supplied to U.S. Persons Through Affiliates by Major Industry of Affiliate, 2015



Updates to the Statistics

The statistics presented in this article supersede those presented in the December 2016 SURVEY OF CURRENT BUSINESS.

Trade in services. The statistics on trade in services in this article correspond to the less detailed statistics by type of service published in June and highlighted in the July 2017 SURVEY article “[Annual Update of the U.S. International Transactions Accounts](#).”

As noted in the July 2017 article, exports and imports for 2014–2016 were revised to incorporate newly available and revised source data from the Bureau of Economic Analysis (BEA) quarterly surveys of international trade in services and other source data.

Total exports were revised down for 2014, were revised up for 2015, and were little revised for 2016 (table X). Total imports were revised down for 2014 and were revised up for 2015 and 2016. For exports, the main contributors to the downward revision for 2014 were maintenance and repair services and financial services. For 2015, the main contributor to the upward revision was “other” business services. For 2016, the largest the downward revisions were in insurance services and in government goods and services; the largest offsetting upward revision was in charges for the use of intellectual property.

For imports, the main contributor to the downward revision for 2014 was insurance services. For both 2015 and 2016, the main contributor to the upward revision was travel. For additional information on these changes, see the July 2017 SURVEY article.

Services supplied through affiliates. The statistics on services supplied through affiliates for 2015 are prelimi-

nary. The statistics for 2014 were revised to incorporate newly available and revised source data from BEA’s surveys of multinational enterprises (MNEs). For 2014, services supplied to foreign persons by U.S. MNEs through their majority-owned foreign affiliates were revised up (table X). Services supplied to the United States by foreign MNEs through their majority-owned U.S. affiliates were also revised up.

Table X. Previously Published and Revised International Services Statistics, 2014–2016

[Billions of dollars unless otherwise noted]

Trade in services	2014	2015	2016
Exports:			
Revised	741.9	753.2	752.4
Previously published ¹	743.3	750.9	752.4
Amount of revision	-1.3	2.3	(*)
Percent revision	-0.2	0.3	0.0
Imports:			
Revised	480.8	491.7	504.7
Previously published ¹	481.3	488.7	503.0
Amount of revision	-0.5	3.1	1.6
Percent revision	-0.1	0.6	0.3
Services supplied through affiliates	2014	2015	2016
Supplied to foreign persons through foreign affiliates:			
Revised	1,534.8		
Previously published	1,503.4		
Amount of revision	31.4		
Percent revision	2.1		
Supplied to U.S. persons through U.S. affiliates:			
Revised	940.4		
Previously published	918.7		
Amount of revision	21.7		
Percent revision	2.4		

An asterisk (*) indicates a nonzero value that rounds to zero.

1. For 2014 and 2015, previously published estimates for trade in services refer to those included in the international transactions accounts (ITA) release from June 2016, and for 2016 refer to those included in the ITA release from March 2017.

Future Enhancements to the International Services Statistics

The Bureau of Economic Analysis (BEA) continues its efforts to enhance its international economic account statistics.¹ Continued research into potential estimation methodologies along with several significant changes planned for the 2017 Benchmark Survey of Selected Services and Intellectual Property with Foreign Persons (BE-120) will allow BEA to further align its trade in services statistics with international statistical guidelines. Specific improvements planned for the coming years include the following:

- Introducing manufacturing services on physical inputs owned by others
- Introducing measures of implicitly priced financial services, including financial intermediation services indirectly measured (FISIM)
- Introducing a personal, cultural, and recreational services category
- Reclassifying certain transactions related to intellectual property.

For a discussion of the above changes, see “Improving

1. See the “Catalog of Major Revisions to the U.S. International Accounts, 1976–2008” on BEA’s Web site. For changes implemented since 2008, see the appendixes on improvements in each annual SURVEY article in this series or articles on the annual updates of the U.S. international accounts.

the International Services Statistics” in the October 2014 article in this series.²

BEA is also researching ways to further expand the detail it provides by country and by type of service in its trade in services statistics by doing the following:

- Extending the expanded geographical detail introduced in 2016 for the annual services statistics for years before 2013³
- Accelerating the release of geographical detail by publishing bilateral statistics for more countries in the quarterly international transactions accounts
- Expanding the type of service detail for existing categories, including research and development, intellectual property, financial services, and potentially ICT-enabled services
- Considering the feasibility of developing statistics that present international services in different ways, such as by industry of the transactor or by the way that services are delivered.

2. Alexis N. Grimm and Charu S. Krishnan, “U.S. International Services,” SURVEY 94 (October 2014).

3. See Alexis N. Grimm and Maya Ortiz, “U.S. International Services,” SURVEY 96 (December 2016) for more information on the geographic expansion introduced in 2016.

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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.

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The information in the international services tables was compiled by Danielle N. Clavon, Alexis N. Grimm, Neeta B. Kapoor, Benjamin P. Kavanaugh, Mitchell N. Shabani, John A. Sondheimer, and Christopher P. Steiner. Computer programming for data estimation and suppression and the generation of the tables was provided by Matthew Drake, Carole J. Henry, Neeta Kapoor, Fritz H. Mayhew, and Gary Sowers.