

U.S. International Services

Trade in Services in 2018 and Services Supplied Through Affiliates in 2017

By Shari A. Allen, Thomas Anderson, Alexis N. Grimm, and Michael Mann

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 services supplied by majority-owned foreign affiliates of U.S. companies to foreign residents, both in the host country and in other foreign markets, and services supplied by majority-owned U.S. affiliates of foreign companies to U.S. residents.²

For the basics on how international services are supplied to foreign and U.S. persons, including diagrams with examples, see the [supplement to this article](#).

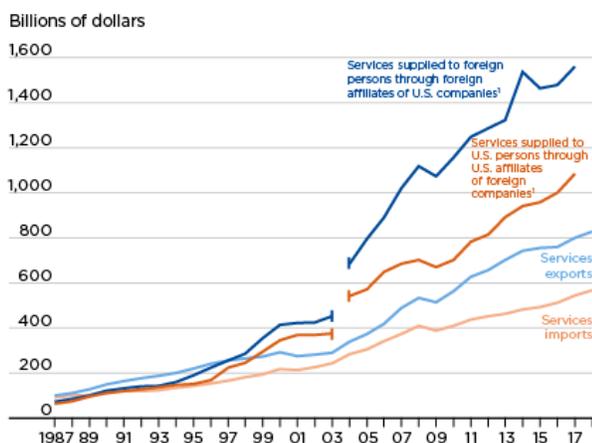
Because of the importance of physical proximity to customers in the delivery of certain types of services, many MNEs serve foreign markets partly or wholly through their affiliates located in, or close to, the markets they serve rather than through trade. As in recent years, about two-thirds of the services provided internationally both by and to the United States in 2017—the latest year for which statistics on services supplied through affiliates are available—were through affiliates (table A and chart 1).³

Table A. U.S. International Services Supplied, 2016–2018

	Services supplied to foreign persons			Services supplied to U.S. persons		
	Total	Through trade (U.S. exports)	Through foreign affiliates of U.S. companies	Total	Through trade (U.S. imports)	Through U.S. affiliates of foreign companies
	Billions of dollars					
2016	2,235.4	758.4	1,477.0	1,511.0	511.6	999.4
2017	2,357.3	799.0	1,558.4	1,626.5	543.9	1,082.6
2018	n.a.	827.0	n.a.	n.a.	567.3	n.a.
Percent change from preceding year						
2016	0.8	0.4	1.0	4.2	4.0	4.3
2017	5.5	5.3	5.5	7.6	6.3	8.3
2018	n.a.	3.5	n.a.	n.a.	4.3	n.a.

n.a. Not available

Chart 1. U.S. International Services Supplied, 1987–2018



1. Statistics are shown through 2017, 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. See Jennifer Koncz and Anne Flatness, "U.S. International Services," Survey 88 (October 2008): 34–36 and Jennifer Koncz-Bruner and Anne Flatness, "U.S. International Services," Survey 89 (October 2009): 37–38 for more information.

U.S. Bureau of Economic Analysis

In 2017, total services supplied by the United States to foreign persons through both trade and foreign affiliates of U.S. companies was \$2.4 trillion, and total services supplied to the United States from foreign persons through both trade and U.S. affiliates of foreign companies was \$1.6 trillion. The difference between total services supplied to foreign persons and supplied to U.S. persons was \$730.8 billion. Total services supplied to foreign persons increased \$121.9 billion, or 5 percent, in 2017 after increasing \$17.3 billion, or 1 percent, in 2016. Total services supplied to U.S. persons increased \$115.5 billion, or 8 percent, in 2017 after increasing \$61.2 billion, or 4 percent, in 2016.

In 2018, U.S. exports of services were \$827.0 billion, and U.S. imports of services were \$567.3 billion (chart 1), resulting in a services trade surplus of \$259.7 billion. The United States accounted for an estimated 14 percent of the world's services exports and for an estimated 10

percent of the world's services imports in 2018.⁴ In comparison, in 2018, the United States accounted for 15 percent of world gross domestic product (GDP).⁵

Exports of services increased \$28.0 billion, or 4 percent, in 2018 after increasing \$40.5 billion, or 5 percent, in 2017. The largest increase in exports occurred in other business services, primarily professional and management consulting services. Although U.S. exports grew, the U.S. share of worldwide exports was estimated to fall slightly.

Imports of services increased \$23.4 billion, or 4 percent, in 2018 after increasing \$32.3 billion, or 6 percent, in 2017. The largest increases in imports occurred in “travel (for all purposes including education)” (henceforth “travel”), primarily other personal travel, and in other business services, primarily professional and management consulting services.⁶ The increase in travel abroad by U.S. residents and in imports of other business services continues the upward trend in these categories since 2009 after the Great Recession, coinciding with expanding U.S. economic activity over this period. The U.S. share of worldwide services imports was estimated to fall slightly in 2018.

In 2017, services supplied to foreign markets through foreign affiliates of U.S. MNEs were \$1.6 trillion, up \$81.4 billion, or 6 percent, from 2016, reflecting increases in several industries including finance and insurance; professional, scientific, and technical services; and real estate and rental and leasing.

In 2017, services supplied to the United States through U.S. affiliates of foreign MNEs were \$1.1 trillion, up \$83.3 billion, or 8 percent, from 2016, reflecting increases in services supplied by U.S. affiliates of foreign MNEs in various industries including other industries, particularly in transportation and warehousing and accommodation and food services, and in professional, scientific, and technical services.

The remainder of this article includes a “*Services Spotlight*” highlighting new information on services by mode of supply, discussions of U.S. trade in services in 2018, U.S. trade in information and communications technology (ICT) and potentially ICT-enabled services (presenting an alternate aggregation of part of the trade in services statistics) in 2018, services supplied through affiliates in 2017, and future enhancements to BEA's international services statistics.

Be on the look out for BEA's upcoming release of the Profile of Services Traders coming soon.

Data Availability

Detailed statistics for U.S. international services accompany this article in [tables 1.1–5.4](#). Trade in services statistics through 2018 and statistics on services supplied through affiliates through 2017 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.

For more resources, such as links to definitions and surveys, see the “[International Services](#)” product page on the BEA website.

Data Sources

The statistics in this article are largely based on data collected from surveys conducted by BEA. Statistics for some services trade categories 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. All of BEA's surveys of trade in services and a guide to the reporting requirements for the surveys are available on [BEA's website](#). For additional information on these surveys, on data 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 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 website. For the methodologies for these surveys, see [Foreign Direct Investment in the United States: Final Results From the 2012 Benchmark Survey](#) and [Worldwide Activities of U.S. Multinational Enterprises: Revised Results From the 2014 Benchmark Survey](#) on BEA's website.

Services Spotlight

Measuring Trade in Services by Mode of Supply: New Exploratory Estimates

This article highlights two broad ways in which international services can be supplied—through trade in services or through services supplied through affiliates. An alternative view, defined under the General Agreement on Trade in Services (GATS), identifies *four* modes of supply. As outlined below, the four modes of supply are defined based on the location of the service supplier and the consumer, considering their respective nationalities:

- **Cross-border supply.** The supplier provides a service to the consumer remotely, such as over the internet or phone.
- **Consumption abroad.** The consumer travels to the supplier's location to consume the service.
- **Presence of natural persons.** The supplier travels to the consumer's location to provide the service.
- **Commercial presence.** Service suppliers establish (or acquire) an affiliate, branch, or representative office in another territory through which the supplier provides their services.

Services transactions between residents and nonresidents, as captured in the U.S. ITAs, broadly cover the first three modes listed above. The last mode, commercial presence, roughly equates to the statistics on services provided by MNEs through their U.S. or foreign affiliates.¹

For a diagram illustrating these modes along with examples, see the [supplement to this article](#).

BEA has undertaken efforts to measure U.S. international services categorized by these four modes of supply. This mode of supply structure differs from BEA's ITAs, which focus on transactions between residents and nonresidents regardless of location or mode of supply. The modes of supply classification system and the ITA system were designed to serve two different purposes—the former as a basis for trade negotiations and the latter for balance of payments and national income accounting. The cross-border supply of services is closely related to trade in potentially ICT-enabled services discussed in detail later in this article.

Governments are especially interested in international services statistics by mode of supply because trade negotiators structure agreements around the modes of supply, which represent the paths businesses take to access foreign markets. Countries take on commitments under the GATS with respect to market access for different service sectors. Countries can frame their commitments with respect to the different modes.

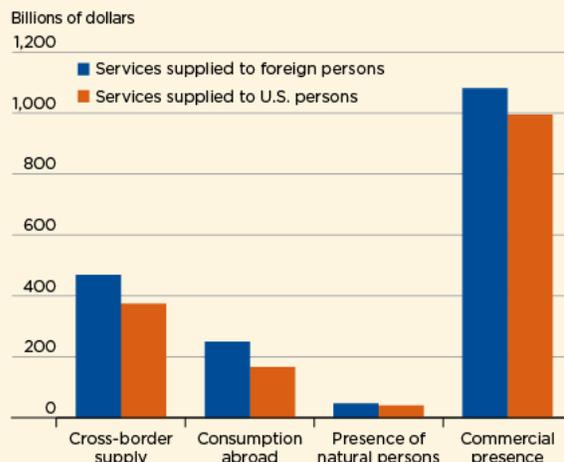
BEA has released three working papers that describe its efforts to develop international services statistics by mode of supply. The first paper covers initial exploratory estimates based on the “simplified approach” outlined in the *Manual on Statistics of International Trade in Services 2010*.^{2,3} The simplified approach allocates services across modes based on certain assumptions. The second paper covers steps taken to enhance these estimates that include using an innovative approach to collect information on services supplied remotely from companies on BEA's trade in services surveys. In this paper, BEA has updated its exploratory estimates by reallocating the trade in services statistics by mode using the newly collected survey data. The new survey-based estimates are more robust than the initial exploratory estimates because they are based on direct reporting from U.S. companies. In addition, the paper

uses a pioneering method to measure services supplied through affiliates (commercial presence) by service type by mapping BEA's industry-based foreign affiliate statistics to the categories used in its product-based trade statistics, and introduces a breakdown of "consumption abroad" that more closely corresponds with guidelines set out in the GATS.⁴ The third paper, which is a joint paper with the U.K. Office for National Statistics, describes the parallel efforts of the two countries to measure trade in services by modes of supply.⁵

A selection of estimates from the second research paper are presented below for 2016, the most recent year for which the source data necessary to construct statistics for all modes were available when the working paper was prepared.⁶ Chart I shows total services supplied to foreign persons and services supplied to U.S. persons by mode. Chart II provides additional detail by type of service.

The estimates based on the survey data are reasonably close to what they were under the simplified approach. One exception is exports of computer services, for which the survey data indicated a higher percentage of services supplied remotely. Another case in which estimates diverged is exports of education services, where the services supplied remotely by teachers and instructors was lower than previously estimated. The survey indicated that most of these services are supplied by the seller traveling to the country of the customer. Chart I shows that commercial presence is the predominant mode through which services are both supplied and received. Among the services with the most striking differences in how they are supplied compared with how they are received are computer services and financial services. A much higher share of computer services is supplied to foreign persons through commercial presence than is supplied to U.S. persons; the opposite is true for financial services.

Chart I. U.S. International Services Supplied by Mode, 2016



U.S. Bureau of Economic Analysis

Chart II.A. International Services Supplied to Foreign Persons by Mode, 2016

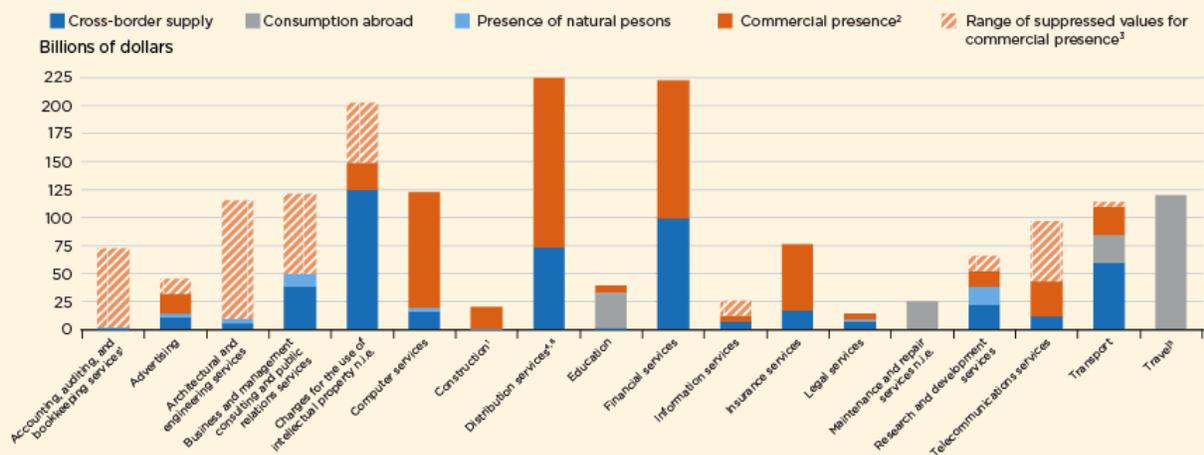
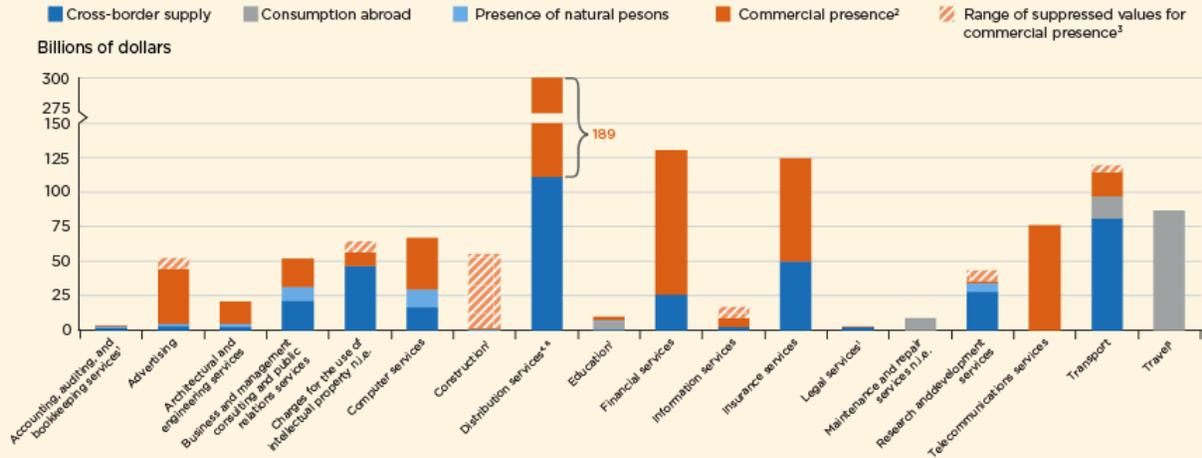


Chart II.B. International Services Supplied to U.S. Persons by Mode, 2016



1. For Chart II.A., there are transactions in cross-border supply for accounting services and presence of natural persons for construction. For Chart II.B, there are transactions in all four modes for education and legal services, in all but consumption abroad for accounting services, and in presence of natural persons for construction. The amounts for these transactions are relatively small and may not be clearly visible.
2. The total for commercial presence exceeds the sum of the components shown in this chart because some services are supplied by industries that do not directly correspond to any services type category BEA uses to classify trade in services. These services are not included in any of the components in this chart.
3. Several of the values representing services supplied through commercial presence are suppressed in BEA's published statistics to avoid disclosure of survey data reported by individual companies. Where the underlying statistics are suppressed, a range of values is presented, with the solid orange portion of the bar indicating the lower bound and the diagonally shaded orange portion of the bar indicating the range between the lower and upper bound. For a description of how the lower and upper bounds were calculated, see the box "Calculating Ranges for Suppressed Values" in this article.
4. Distribution services, which cover trade in retailing and wholesaling services, are not separately measured as part of trade in services in BEA's official ITA statistics, but are instead included indistinguishably in the value of trade in goods. To provide a more complete picture of the international services supplied by the United States, an estimate of distribution services is provided here. Distribution services are classified under cross-border supply based on international guidelines. For more information, including a description of the approach used to measure this service, see Michael Mann, "Measuring Trade in Services by Mode of Supply," Bureau of Economic Analysis (BEA) working paper WP2019-7 (Washington, DC: BEA, August 2019), https://www.bea.gov/system/files/papers/WP2019-7_1.pdf
5. The measure of travel shown in the chart differs from the measure used in the ITAs in that the former removes expenditures by health-related and education-related travelers, expenditures by border, seasonal, and other short-term workers, and an estimate of the goods commingled in the travel statistics to more closely conform with GATS.
6. For Chart II.A., the total for distribution services is \$225.3 billion. For Chart II.B, the total for distribution services is \$300.2 billion.

U.S. Bureau of Economic Analysis

BEA plans to collect more information on modes of supply in its trade in services surveys and to refine its estimates of services supplied through each mode before routinely publishing modes of supply statistics as part of its international economic accounts.

Also, BEA may use this new information to enhance its estimates of ICT-enabled services trade. Currently BEA estimates *potentially* ICT-enabled trade in services based on assumptions regarding which service types could be ICT-enabled. A clearer picture of which services are *actually* ICT-enabled might be provided by incorporating the survey information on services supplied remotely.

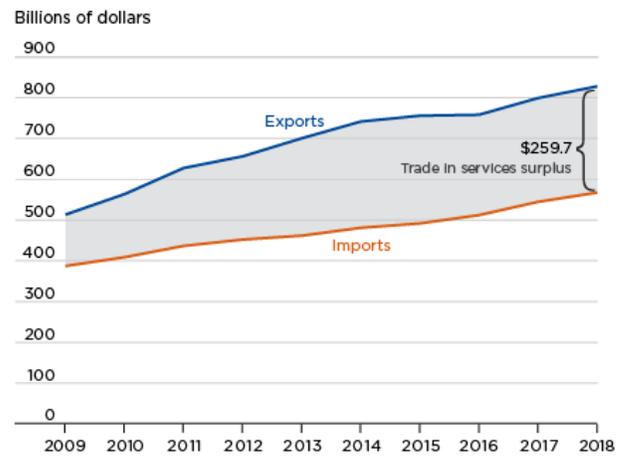
1. For services supplied through foreign affiliates, commercial presence transactions cover only services supplied to the host country, which is a subset of the transactions covered elsewhere in this article.
2. United Nations (2012), New York https://unstats.un.org/unsd/publication/Seriesm/seriesM_86Rev1e.pdf
3. Michael Mann, "Exploratory Estimates of U.S. International Services by Mode of Supply" BEA Working Paper, Washington, D.C., May 2017
4. Michael Mann, "Measuring Trade in Services by Mode of Supply" BEA Working Paper, Washington, D.C., August 2019
5. Michael Mann and Daniel Cheung, "Measuring Trade in Services by Mode of Supply: A Report on the Parallel Efforts by the U.S. Bureau of Economic Analysis and the U.K. Office for National Statistics," paper forthcoming. <https://ec.europa.eu/eurostat/publications/statistical-working-papers>
6. The values presented in this section for 2016 are not fully consistent with those presented elsewhere in the article, because the working paper upon which this description is based was prepared prior to the incorporation of revisions during the 2019 annual update of the ITAs and of revised survey data for BEA's activities of multinational enterprises statistics.

U.S. Trade in Services in 2018

Trade in services can be defined based on their characteristics as intangible economic outputs, or functionally, as arising from productive activities that change the condition of the consumer or that facilitate the exchange of products and financial assets. The statistics in this article are consistent with statistics published in table 3.1 of the ITAs.⁷

In 2018, U.S. exports of services were \$827.0 billion, and U.S. imports of services were \$567.3 billion, resulting in a services trade surplus of \$259.7 billion (chart 2). Historically, the United States has recorded a surplus on trade in services, as the value of exports has exceeded the value of imports. The surplus increased \$4.6 billion in 2018 after increasing \$8.3 billion in 2017. The increase in 2018 reflected a \$28.0 billion, or 4 percent, increase in exports of services and a \$23.4 billion, or 4 percent, increase in imports of services.

Chart 2. U.S. International Trade in Services Surplus, 2009–2018



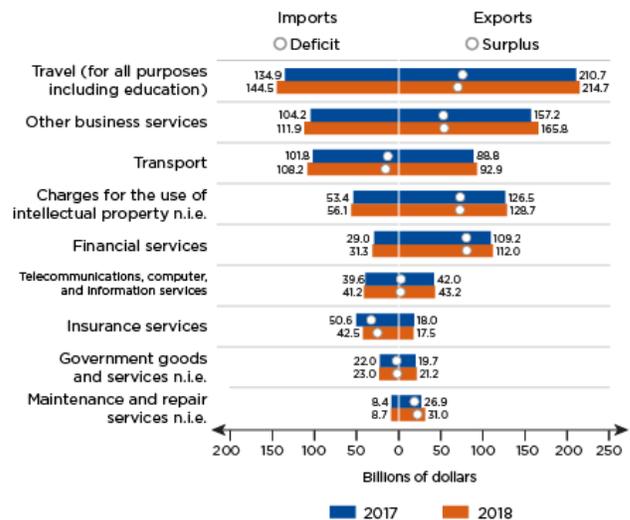
U.S. Bureau of Economic Analysis

The remainder of this section discusses trade in services in 2018 by service type, by trading partner, and by affiliation. [Tables that accompany this article](#) and others that are available on [BEA's website](#) provide additional detail broken out in these dimensions and as combinations of these dimensions.

Trade by service type

BEA classifies services trade transactions into nine major service-type categories. In 2018, travel accounted for the largest share of both exports and imports (table B). Six of the nine major service types recorded surpluses, while three recorded deficits (chart 3). Surpluses were largest in financial services, charges for the use of intellectual property, and travel.

Chart 3. Trade in Services by Type, 2017 and 2018



U.S. Bureau of Economic Analysis

Table B. U.S. Trade in Services by Type and Country, 2018

[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	826,980	30,968	92,852	214,680	17,466	112,015	128,748	43,196	165,821	21,235
Total for the top 10 countries¹	459,085	11,435	48,868	110,067	9,978	73,771	78,047	24,083	99,889	2,947
United Kingdom	74,064	2,687	8,224	12,889	3,132	16,993	10,886	4,683	14,111	459
Canada	64,057	1,338	8,017	18,164	1,828	7,236	8,538	4,313	14,215	409
China	57,140	1,863	5,328	32,068	335	4,171	8,467	945	3,532	430
Ireland	48,483	491	649	1,845	370	3,482	15,519	2,504	23,611	12
Japan	45,197	1,496	9,810	10,283	2,777	3,722	6,606	2,066	7,662	775
Switzerland	39,298	206	2,352	1,722	194	1,465	14,074	1,591	17,631	62
Germany	34,764	1,788	5,281	6,575	330	3,130	6,443	1,670	9,366	180
United Kingdom Islands, Caribbean ³	34,028	7	68	195	263	29,818	181	113	3,382	1
Mexico	33,804	778	4,202	17,884	421	1,566	3,895	1,508	3,120	430
Brazil	28,250	782	4,937	8,440	328	2,188	3,439	4,689	3,259	189
Other countries	367,895	19,533	43,983	104,613	7,488	38,243	50,702	19,113	65,932	18,288
Imports										
All countries	567,322	8,718	108,202	144,463	42,485	31,298	56,117	41,190	111,874	22,975
Total for the top 10 countries¹	303,429	(D)	46,119	58,249	34,310	18,301	39,607	30,952	60,141	(D)
United Kingdom	60,717	1,948	9,269	11,106	2,905	10,464	5,325	2,883	16,087	730
Canada	35,859	1,673	5,535	9,164	679	2,424	2,347	4,993	8,822	224
Japan	34,727	100	9,186	3,586	320	1,641	11,813	338	3,415	4,330
Germany	33,613	178	8,937	3,632	2,079	655	7,039	1,498	5,730	3,865
India	29,586	19	650	3,262	81	473	1,227	15,335	8,483	56
Mexico	25,799	238	3,370	17,375	7	400	917	948	2,408	135
Bermuda	24,046	(*)	1,193	392	21,856	228	1	193	175	9
Switzerland	21,533	(D)	2,328	1,340	3,435	623	5,236	639	6,354	(D)
Ireland	19,042	25	964	2,759	2,394	425	3,019	3,518	5,926	12
France	18,507	462	4,687	5,631	554	969	2,685	608	2,741	170

These three categories have been the largest contributors to the services surplus since 2006; 2018 was the second year in which the surplus on financial services, which was \$80.7 billion in 2018, was the largest. The surplus in financial services partly reflects the fact the United States is a major hub for global securities trading. In 2018, U.S. stock exchanges accounted for over half (55 percent) of the value of equities traded on all the world's exchanges.⁸ The surplus in charges for the use of intellectual property partly reflects the high level of research and development (R&D) performed in the United States. In 2015 (the most recent year for which statistics are available), the United States accounted for 26 percent of R&D performed worldwide.⁹

U.S. exports of services were \$827.0 billion in 2018. Of the nine major service types, the top four—travel (26 percent of the total), other business services (20 percent), charges for the use of intellectual property (16 percent), and financial services (14 percent)—accounted for three-fourths of total exports of services. U.S. imports of services were \$567.3 billion. The top four major service types—travel (25 percent of the total), other business services (20 percent), transport (19 percent), and charges for the use of intellectual property (10 percent)—accounted for nearly three-fourths of total imports of services.

In 2018, exports increased for all but one of the major service types, but four service types accounted for almost three-quarters of the aggregate increase: other business services, maintenance and repair, travel, and transport. Exports of insurance services decreased slightly.

- **Other business services.** Exports of other business services have increased every year since 2001. Exports increased \$8.6 billion, or 5 percent, to \$165.8 billion in 2018, led by an increase in professional and management consulting services, mainly business and management consulting and public relations services. Increases in exports to Canada and the United Kingdom combined accounted for more than half of the increase in other business services exports.
- **Maintenance and repair services.** Exports of maintenance and repair services increased \$4.1 billion, or 15 percent, to \$31.0 billion. Increases in exports to Taiwan and France combined accounted for more than a quarter of the increase in maintenance and repair services.
- **Travel.** Exports of travel services increased \$4.0 billion, or 2 percent, to \$214.7 billion, led by an increase in education-related travel. Increases in exports to India and Canada combined accounted for over half of the increase in total travel exports.
- **Transport.** Exports of transport services increased \$4.0 billion, or 5 percent, to \$92.9 billion. The increase partly reflected an increase in air transport services, led by air freight services. The increase in exports of air freight services reflects an increase in U.S. goods exports in 2018. Increases in exports to Canada and the United Kingdom together accounted for a third of the increase in total transport exports.

Imports increased in eight of the nine major service types. The largest increase was in travel, followed by other business services and transport. Insurance services decreased significantly.

- **Travel.** Imports of travel services increased \$9.6 billion, or 7 percent, to \$144.5 billion. The increase mostly reflected an increase in other personal travel. By country, the largest increases in travel were in imports from the United Kingdom, Italy, and Canada, which combined accounted for more than one-quarter of the increase.
- **Other business services.** Imports of other business services increased \$7.7 billion, or 7 percent, to \$111.9 billion. An increase in professional and management consulting

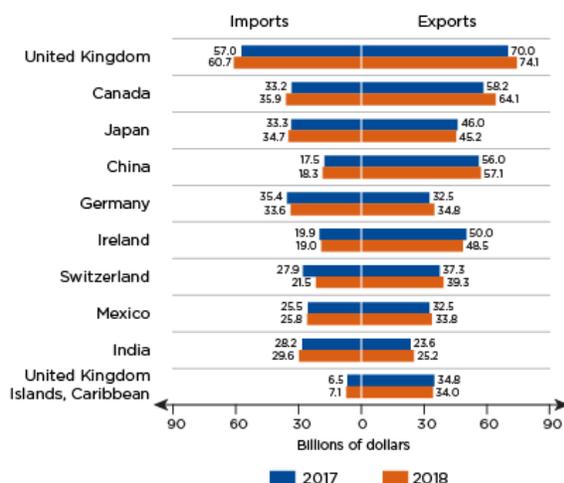
services, mainly business and management consulting and public relations services, accounted for most of the increase. Imports from the United Kingdom, Singapore, and India combined accounted for more than half of the increase in other business services.

- **Transport.** Imports of transport services increased \$6.4 billion, or 6 percent, to \$108.2 billion, mostly reflecting an increase in air transport services. The increase in air transport mainly reflected an increase in air passenger transport services. Imports from Germany, the United Kingdom, and the Republic of Korea combined accounted for more than one-quarter of the increase in transport services.
- **Insurance services.** Imports of insurance services decreased \$8.1 billion, or 16 percent, to \$42.5 billion, mainly reflecting a decrease in reinsurance services. In response to certain provisions of the 2017 Tax Cuts and Jobs Act, many U.S.-domiciled insurance companies terminated intracompany reinsurance agreements with foreign affiliates. Imports from Switzerland and Ireland combined accounted for nearly all of the decrease in insurance services.

Trade by partner country

The top 10 trading partners of the United States based on total trade (exports plus imports) for 2018 are shown in chart 4. The top 10 trading partners accounted for 55 percent of services exports and 50 percent of services imports. The United Kingdom remained the largest trading partner for services in 2018; it was both the largest market for U.S. exports and the largest source for U.S. imports (table B). The top categories of exports to the United Kingdom were financial services and other business services, mainly professional and management consulting services, while the top categories for imports were other business services, mainly professional and management consulting services, and travel. Canada was the second-largest trading partner; it was both the second-largest market for U.S. exports and the second-largest source for U.S. imports. For imports, it jumped ahead of Germany and Japan in 2018. The top categories of exports to Canada were travel and other business services, primarily professional and management consulting services, while the top import categories were travel and other business services, primarily professional and management consulting services and technical, trade-related, and other business services.

Chart 4. Trade in Services with Selected Countries, 2017 and 2018¹



1. The countries selected for this chart are the top 10 countries by total trade in services (exports plus imports) in 2018.

Exports to the top 10 trading partners (the countries shown in chart 4) accounted for \$15.0 billion, or 54 percent, of the \$28.0 billion increase in total services exports in 2018. Exports to Canada, the United Kingdom, and Germany increased the most. Among the notable increases in exports were the following:

- **Canada.** Exports to Canada increased \$5.8 billion, or 10 percent, to \$64.1 billion, primarily reflecting an increase of \$3.1 billion in other business services, primarily professional and management consulting services. The increase in professional and management consulting services reflects increases in advertising services and in business and management consulting and public relations services.
- **United Kingdom.** Exports to the United Kingdom increased \$4.1 billion, or 6 percent, to \$74.1 billion, primarily reflecting increases in other business services and in charges for the use of intellectual property. Other business services increased \$1.7 billion, mainly reflecting an increase in professional and management consulting services, primarily in business and management consulting and public relations services. Charges for the use of intellectual property increased \$0.9 billion, largely reflecting an increase in charges associated with computer software.
- **Germany.** Exports to Germany increased \$2.2 billion, or 7 percent, to \$34.8 billion, mainly reflecting an increase of \$1.0 billion in other business services, primarily professional and management consulting services. The increase in professional and management consulting services was largely due to an increase in business and management consulting and public relations services.
- **Hong Kong.** Exports to Hong Kong (not shown in chart 4) increased \$2.2 billion, or 21 percent, to \$12.8 billion, mainly reflecting an increase of \$1.6 billion in charges for the use of intellectual property. The increase in charges for the use of intellectual property primarily reflected an increase in charges associated with industrial processes.
- **Switzerland.** Exports to Switzerland increased \$2.0 billion, or 5 percent, to \$39.3 billion in 2018, largely reflecting a \$1.5 billion increase in charges for the use of intellectual property, which was more than accounted for by increases in charges associated with industrial processes and in charges associated with trademarks.

Imports from the top 10 trading partners accounted for \$1.9 billion, or 8 percent, of the \$23.4 billion increase in total services imports in 2018 (chart 4). While the increase in imports was widespread across many partner countries, imports from the United Kingdom, Canada, and Singapore (not shown in chart 4) increased the most. Among the notable changes in imports are the following:

- **United Kingdom.** Imports from the United Kingdom increased \$3.7 billion, or 6 percent, to \$60.7 billion, mainly reflecting increases in other business services and travel. Imports of other business services increased \$1.6 billion, mostly reflecting an increase in professional and management consulting services, primarily business and management consulting and public relations services. Imports of travel increased \$1.0 billion, largely reflecting increases in other business travel and other personal travel.
- **Canada.** Imports from Canada increased \$2.7 billion, or 8 percent, to \$35.9 billion, mainly reflecting increases of \$0.6 billion each in travel, in charges for the use of intellectual property, and in telecommunications, computer, and information services. The increase in imports of travel mostly reflected increases in other business travel and other personal travel. The increase in imports of charges for the use of intellectual property reflected increases in charges associated with audio-visual and related

products and charges associated with industrial processes. The increase in imports of telecommunications, computer, and information services mostly reflected an increase in computer services.

- **Switzerland.** Imports from Switzerland decreased \$6.3 billion, or 23 percent, to \$21.5 billion, mostly reflecting a \$5.1 billion decrease in insurance services, which was more than accounted for by a decrease in reinsurance services.

Trade by affiliation

U.S. services trade includes trade between unaffiliated parties and trade within MNEs (affiliated trade). Affiliated trade accounted for 30 percent of U.S. services exports and 29 percent of U.S. services imports in 2018 (table C). Unaffiliated services exports grew at nearly twice the rate of affiliated services exports in 2018. Unaffiliated services imports grew at more than twice the rate of affiliated services imports. U.S. parents' imports from their foreign affiliates increased, while U.S. affiliates' imports from their foreign groups declined. The decline in U.S. affiliates' imports from their foreign groups is the first since 2009. This is primarily due to a decline in U.S. affiliates' imports from their foreign groups of charges associated with intellectual property, primarily charges associated with industrial processes, and of other business services, primarily business and management consulting and public relations services and technical, trade-related and other business services.

Table C. Trade in Services by Affiliation Type, 2017–2018

	Millions of dollars		Percent change from preceding year	Percent of total trade in services
	2017	2018	2018	2018
Exports of services				
Total exports of services	798,957	826,980	3.5
Unaffiliated	553,505	576,471	4.1	69.7
Affiliated	245,452	250,510	2.1	30.3
U.S. parents' exports to their foreign affiliates	196,574	200,175	1.8	24.2
U.S. affiliates' exports to their foreign parent groups	48,878	50,335	3.0	6.1
Imports of services				
Total imports of services	543,880	567,322	4.3
Unaffiliated	381,847	402,226	5.3	70.9
Affiliated	162,034	165,096	1.9	29.1
U.S. parents' imports from their foreign affiliates	106,848	112,543	5.3	19.8
U.S. affiliates' imports from their foreign parent groups	55,185	52,553	-4.8	9.3

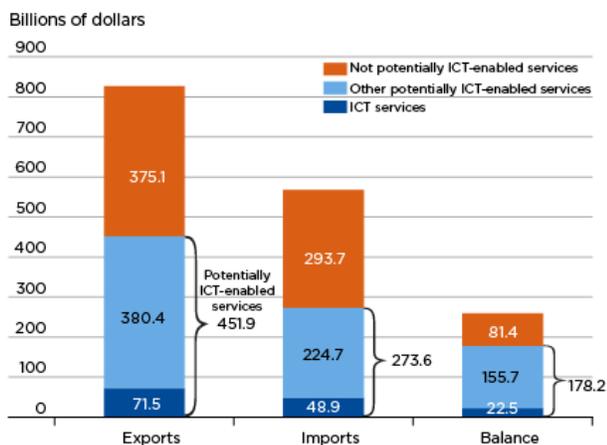
ICT Services and Potentially ICT-Enabled Services in 2018

BEA's statistics on trade in 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 facilitate information processing and communication; ICT-enabled services are services delivered over ICT networks.¹⁰ BEA's statistics on 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.

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.¹¹ BEA, therefore, measures a related but more broadly defined concept of *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. BEA's statistics on potentially ICT-enabled services are composed of BEA's published statistics on international trade in five major categories: insurance services; financial services; charges for the use of intellectual property; telecommunications, computer, and information services; and certain other services included in other business services. Potentially ICT-enabled services include ICT services.

In 2018, U.S. exports of ICT services were \$71.5 billion, and U.S. imports of ICT services were \$48.9 billion, resulting in an ICT services trade surplus of \$22.5 billion (chart 5). The surplus decreased \$0.5 billion from 2017, as imports of ICT services increased \$1.9 billion, and exports of ICT services increased \$1.3 billion. U.S. exports of potentially ICT-enabled services were \$451.9 billion, and U.S. imports of potentially ICT-enabled services were \$273.6 billion, resulting in a potentially ICT-enabled services trade surplus of \$178.2 billion. The surplus increased \$7.3 billion from 2017, as exports of potentially ICT-enabled services increased \$12.9 billion, and imports of potentially ICT-enabled services increased \$5.6 billion. Potentially ICT-enabled services accounted for 55 percent of total services exports and 48 percent of imports in 2018. Both shares decreased slightly from their 2017 values of 55 and 49 percent, respectively. The remainder of this section discusses trade in potentially ICT-enabled services in 2018 by service type, by trading partner, and by affiliation. [Tables that accompany this article](#) and that are available on BEA's website provide additional detail on trade in ICT and potentially ICT-enabled services.

Chart 5. ICT and Potentially ICT-Enabled Services in Total Trade in Services, 2018



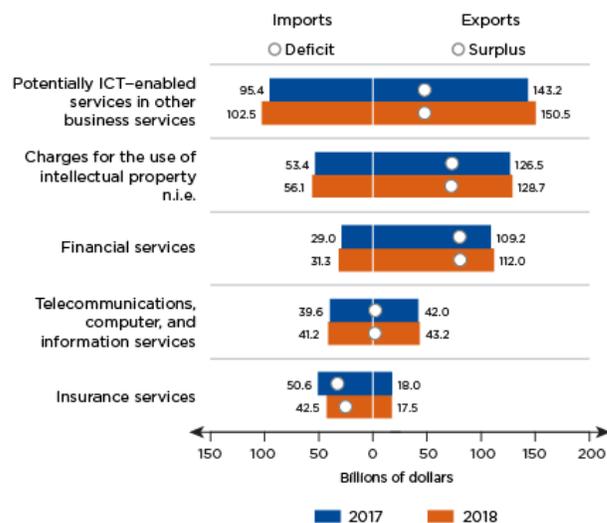
U.S. Bureau of Economic Analysis

Trade by service type

In 2018, potentially ICT-enabled services in other business services, primarily professional and management consulting services and research and development services, accounted for the largest share of exports (33 percent) and imports (37 percent) (chart 6). Exports in four of the major categories exceeded imports, with the largest surplus occurring in financial services. The combined surpluses in these four categories more than offset a deficit in insurance services.

Exports and imports increased in four of the five major categories in 2018; exports and imports of insurance services decreased. The largest increases for exports were in potentially ICT-enabled services in other business services, which increased \$7.2 billion to \$150.5 billion, and in financial services, which increased \$2.8 billion to \$112.0 billion. The largest increases for imports were in potentially ICT-enabled services in other business services, which increased \$7.1 billion to \$102.5 billion, and in charges for the use of intellectual property, which increased \$2.7 billion to \$56.1 billion. These increases more than offset a substantial drop in insurance services imports, which decreased \$8.1 billion to \$42.5 billion.

Chart 6. Trade in Potentially ICT-Enabled Services by Type, 2017 and 2018



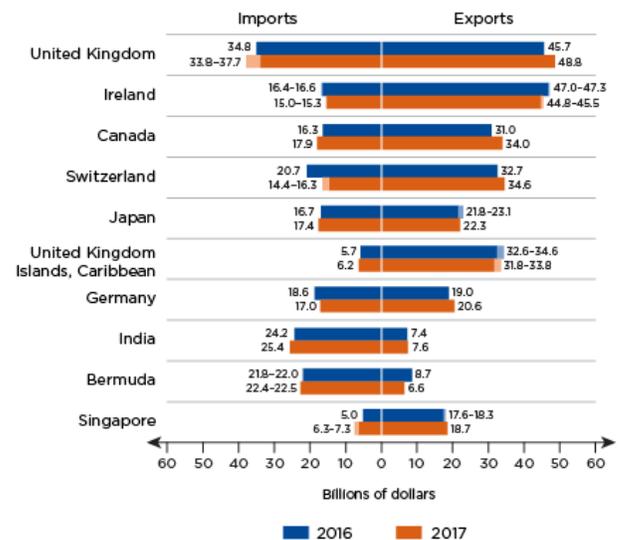
U.S. Bureau of Economic Analysis

Trade by partner country

Exports and imports in potentially ICT-enabled services for the top 10 trading-partner countries by total trade (exports plus imports) are shown in chart 7.

In 2018, the United Kingdom was the top trading partner in potentially ICT-enabled services. Exports to the United Kingdom were \$48.8 billion, led by exports of financial services and potentially ICT-enabled services in other business services, and imports from the United Kingdom were between \$33.8 and \$37.7 billion (see “[Calculating Ranges for Suppressed Values](#)”),¹² led by potentially ICT-enabled services in other business services. The United Kingdom took over as the top recipient country for exports of potentially ICT-enabled services in 2018, replacing Ireland, which held the top spot in 2017; the United Kingdom was also the top source of imports. India was the second largest source of imports of potentially ICT-enabled services in 2018; more than half of its imports were in computer services.

Chart 7. Trade in Potentially ICT-Enabled Services with Selected Countries, 2017 and 2018¹



1. The countries selected for this chart are the top 10 countries by total trade in potentially ICT-enabled services (exports plus imports) in 2018.

Note. When the statistics for one or more components of potentially ICT-enabled services are suppressed, a range of possible values is given. For more information on how the lower and upper bounds of the range were calculated, see the box “[Calculating Ranges for Suppressed Values](#)” in this section. Countries for which a range is presented are ranked using their lower bounds.

U.S. Bureau of Economic Analysis

The largest increases in 2018 in potentially ICT-enabled services exports were in exports to the United Kingdom and Canada. Exports to the United Kingdom increased \$3.2 billion, or 7 percent, to \$48.8 billion, and exports to Canada increased \$3.0 billion, or 10 percent, to \$34.0 billion; the largest increases for both countries were in potentially ICT-enabled services in other business services, mostly professional and management consulting services. The largest increase in 2018 in potentially ICT-enabled services imports was in imports from Canada, which increased \$1.6 billion, or 10 percent, to \$17.9 billion. The increase in imports from Canada, combined with increases in imports from other countries, particularly countries in Asia and Pacific, exceeded a large decrease in imports from Switzerland of between \$4.4 and \$6.3 billion, or 21 to 30 percent, to between \$14.4 and \$16.3 billion.

Calculating Ranges for Suppressed Values

Values for services supplied via commercial presence presented in the *Services Spotlight* and for ICT and potentially ICT-enabled services exports, imports, or trade balance presented in the section “[ICT Services and Potentially ICT-Enabled Services in 2018](#)” may be suppressed when certain components are suppressed. In most cases, the components that are suppressed are relatively small parts of the total. For values where one or more components are suppressed, an upper bound and lower bound are provided that establish a range of possible values. The lower bound is equal to the sum of all unsuppressed categories included in the suppressed total. The upper bound is calculated as the sum of the unsuppressed categories and higher level aggregates that include the suppressed components less any other unsuppressed components of that higher level aggregate that are not included in the suppressed value.

Trade by affiliation

Affiliated trade accounted for 54 percent of exports of potentially ICT-enabled services and for 58 percent of imports of potentially ICT-enabled services in 2018 (table D). These shares are much higher than the affiliated shares of total services exports and imports, highlighting the importance of providing services over ICT networks for intrafirm trade. Unaffiliated exports of potentially ICT-enabled services increased 4 percent in 2018, and affiliated exports increased 2 percent. Unaffiliated imports of potentially ICT-enabled services and affiliated services imports both increased 2 percent; the latter reflects a 5 percent increase in imports by U.S. parents from their foreign affiliates and a 4 percent decrease in imports by U.S. affiliates from their foreign parent groups.

Table D. Trade in Potentially ICT-Enabled Services by Affiliation Type, 2017–2018

	Millions of dollars		Percent change from preceding year	Percent of total trade in potentially ICT-enabled services
	2017	2018	2018	2018
Exports of potentially ICT-enabled services				
Total exports of potentially ICT-enabled services	438,992	451,884	2.9
Unaffiliated	200,264	208,303	4.0	46.1
Affiliated	238,728	243,581	2.0	53.9
U.S. parents' exports to their foreign affiliates	191,702	195,511	2.0	43.3
U.S. affiliates' exports to their foreign parent groups	47,026	48,070	2.2	10.6
Imports of potentially ICT-enabled services				
Total imports of potentially ICT-enabled services	268,045	273,637	2.1
Unaffiliated	113,848	115,839	1.7	42.3
Affiliated	154,197	157,798	2.3	57.7
U.S. parents' imports from their foreign affiliates	102,191	107,788	5.5	39.4
U.S. affiliates' imports from their foreign parent groups	52,006	50,010	-3.8	18.3

ICT

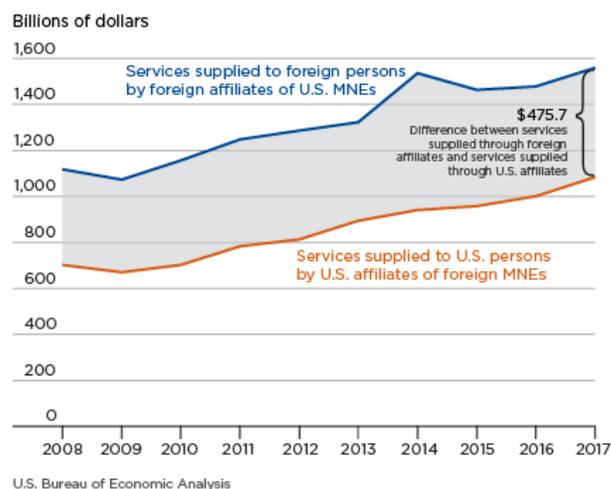
Information and communications technology

Services Supplied Through Affiliates in 2017

U.S. international services delivered via the channel of direct investment consist of (1) services supplied to foreign residents by foreign affiliates of U.S. MNEs and (2) services supplied to U.S. residents by U.S. affiliates of foreign MNEs. The statistics in this article are consistent with services supplied statistics published in BEA's statistics on the activities of multinational enterprises ("AMNE statistics"), except that the AMNE statistics primarily focus on services supplied to all customers regardless of the residency of the customer.

In 2017, the latest year for which statistics are available, services supplied by U.S. MNEs to foreign markets through their affiliates increased \$81.4 billion, or 6 percent, to \$1.6 trillion (chart 8). Services supplied by foreign MNEs to the U.S. market through their U.S. affiliates increased \$83.3 billion, or 8 percent, to \$1.1 trillion. The difference between international services supplied through affiliates to foreign markets and the services supplied to the U.S. market was \$475.7 billion in 2017, compared with \$477.6 billion in 2016.

Chart 8. Services Supplied Through Affiliates, 2008–2017



The remainder of this section discusses services supplied through affiliates in 2017 by industry of affiliate, by country of affiliate or country of ultimate beneficial owner (UBO), and by destination.¹³ Tables that accompany this article and that are available on BEA's website provide additional detail on services provided by affiliates of MNEs, along with detail cross classified by country and industry.

Services supplied through affiliates by industry

In the international services statistics, BEA classifies services supplied through affiliates into nine major industry categories (table E). In 2017, the broad category other industries (primarily transportation and warehousing; administration, support, and waste management; and accommodation and food services) accounted for the largest share (19 percent) of the services supplied by U.S. MNEs to foreign markets through their foreign affiliates. Four other industries—professional, scientific, and technical services; information; finance and insurance; and wholesale trade—accounted for a significant share of the total. Together, these five industry categories accounted for 83 percent of services supplied by U.S. MNEs through foreign affiliates.

Table E. 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), 2017

[Millions of dollars]

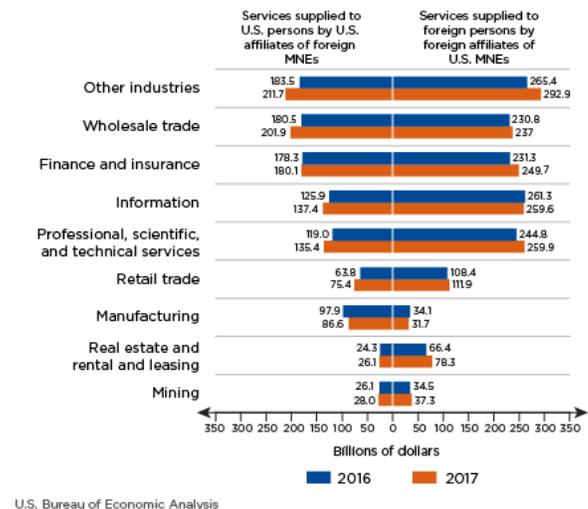
	All industries	Mining	Manufacturing	Wholesale trade	Retail trade	Information	Finance and insurance	Real estate and rental and leasing	Professional, scientific, and technical services	Other Industries
Services supplied to foreign persons by U.S. MNEs through their majority-owned foreign affiliates by country of the foreign affiliate										
All countries	1,558,359	37,300	31,725	237,003	111,889	259,624	249,745	78,342	259,853	292,878
Total for the top 10 countries	1,005,558	13,175	23,241	165,964	76,165	185,073	141,931	56,823	163,770	179,417
United Kingdom	247,226	5,655	6,588	20,207	23,094	39,002	62,952	7,245	40,245	42,238
Ireland	142,114	(D)	(D)	7,229	261	68,405	9,871	18,228	28,863	(D)
Canada	122,147	4,090	2,241	18,965	24,898	9,105	11,225	4,288	15,329	32,006
Singapore	82,634	675	(D)	26,939	2,661	13,722	14,708	(D)	9,207	(D)
Switzerland	81,219	(D)	377	28,323	4,188	6,390	1,927	(D)	18,174	(D)
Netherlands	76,797	1,394	4,036	13,347	1,844	17,175	7,425	3,068	9,108	19,401
Japan	74,614	0	281	13,809	4,975	9,953	21,500	1,088	14,031	8,978
Germany	71,603	721	2,614	13,092	6,825	12,247	5,232	2,349	12,468	16,055
China	54,874	324	1,819	15,584	5,203	2,990	2,357	1,418	7,158	18,021
France	52,330	113	2,166	8,468	2,216	6,084	4,734	2,061	9,188	17,300
Other countries	552,801	24,125	8,484	71,040	35,724	74,551	107,814	21,519	96,082	113,461
Services supplied to U.S. persons by foreign MNEs through their majority-owned U.S. affiliates by country of the UBO										
All countries	1,082,632	27,981	86,635	201,898	75,443	137,387	180,065	26,118	135,382	211,724
Total for the top 10 countries	883,680	17,949	78,736	157,499	66,319	118,952	156,765	19,407	108,552	159,500
Japan	165,121	(D)	16,559	64,266	7,248	(D)	25,787	1,937	5,195	(D)
United Kingdom	152,627	(D)	10,773	9,437	11,419	25,179	20,680	6,894	19,363	(D)
Germany	147,510	(D)	27,871	16,322	9,267	(D)	16,050	1,574	9,211	(D)
Canada	126,167	1,199	1,944	16,758	19,963	8,465	34,940	6,914	11,264	24,720
France	99,427	(D)	4,626	9,134	703	1,788	18,475	(D)	39,519	(D)
Netherlands	66,216	(D)	5,778	7,868	16,894	(D)	(D)	1,227	2,365	(D)
Switzerland	48,368	(D)	7,878	3,713	707	(D)	17,174	724	577	(D)
Ireland	28,191	(D)	2,546	1,815	(D)	208	(D)	17	20,585	(D)
Bermuda	26,169	(D)	413	6,290	(D)	606	8,659	57	91	(D)
Korea, Republic of	23,885	(D)	348	21,896	(D)	203	279	(D)	382	(D)
Other countries	198,952	10,032	7,899	44,399	9,124	18,435	23,300	6,711	26,830	52,224

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

In 2017, increases in seven of the nine major industry categories contributed to the \$81.4 billion aggregate increase in services supplied by U.S. MNEs to foreign residents through foreign affiliates. The largest increase was for affiliates in other industries and in finance and insurance (chart 9). Among the notable changes in services supplied through foreign affiliates were the following:

- **Other industries** increased \$27.5 billion to \$292.9 billion. There were large increases in administration, support, and waste management and in transportation and warehousing.
- **Finance and insurance** increased \$18.4 billion to \$249.7 billion. Almost all of the increase was in nondepository finance.
- **Professional, scientific, and technical services**¹⁴ increased \$15.1 billion to \$259.9 billion. About two-thirds of the increase was in European affiliates.
- **Real estate and rental and leasing** increased \$11.9 billion to \$78.3 billion. Most of the increase was in rental and leasing.
- **Wholesale trade**¹⁵ increased \$6.2 billion to \$237.0 billion. The increase was mainly in other wholesale trade, which includes wholesale trade in machinery, equipment, and supplies, and in other goods, particularly in the distribution of nondurable goods. These increases were partly offset by decreases in motor vehicles and petroleum wholesaling.
- **Retail trade** increased \$3.5 billion to \$111.9 billion. The increase was largest for nonstore retailers, such as online merchants, and for affiliates in other retail trade, which includes motor vehicle and parts dealers and gasoline stations.
- **Mining** increased \$2.8 billion to \$37.3 billion. The increase was primarily in mining industries other than oil and gas extraction.
- **Manufacturing** decreased \$2.3 billion to \$31.7 billion, mostly reflecting decreases among machinery and transportation equipment affiliates. The decrease was partly accounted for by decreases in services supplied by affiliates in Europe, especially France.

Chart 9. Services Supplied Through Affiliates by Industry, 2016 and 2017



In 2017, increases in eight of the nine major industry categories contributed to the \$83.3 billion aggregate increase in services supplied by foreign MNEs to U.S. residents through their U.S. affiliates. The largest increase was in other industries (chart 9). The only major industry to decrease was manufacturing. Among the notable changes in services supplied through foreign affiliates were the following:

- **Other industries** increased \$28.2 billion to \$211.7 billion. The largest increases were in transportation and warehousing and in accommodation and food services.
- **Wholesale trade** increased \$21.4 billion to \$201.9 billion, reflecting large increases in petroleum and petroleum products and in professional and commercial equipment and supplies.
- **Professional, scientific, and technical services** increased \$16.4 billion to \$135.4 billion. More than half of the increase was in architectural, engineering, and related services. Services supplied also increased substantially in computer systems design and related services.

- **Retail trade** increased \$11.6 billion to \$75.4 billion. Most of the increase was in food and beverage stores.
- **Information** increased \$11.5 billion to \$137.4 billion. More than 40 percent of the increase was in telecommunications.
- **Manufacturing** decreased \$11.2 billion to \$86.6 billion, reflecting decreases in wood products, transportation equipment, and machinery.

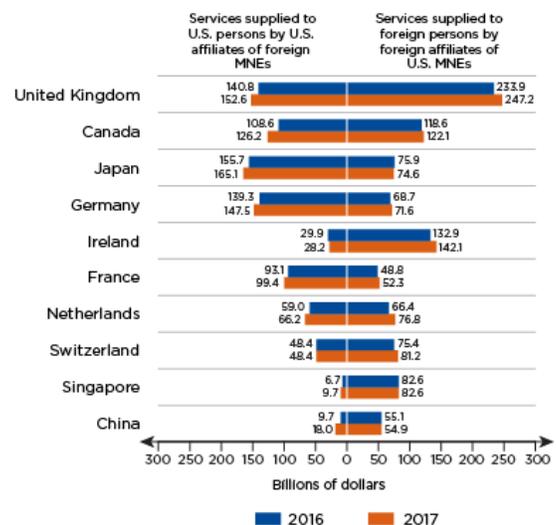
Services supplied through affiliates by country

In 2017, the top country for services supplied to foreign markets by foreign affiliates of U.S. MNEs was the United Kingdom, followed by Ireland and Canada (table E). For services supplied to the U.S. market through U.S. affiliates, the top UBO country was Japan, followed by the United Kingdom and Germany.

Increases in several of these countries and in other countries not shown in the chart contributed to the \$81.4 billion increase in services supplied to foreign markets by foreign affiliates (chart 10). The largest increase was for services supplied by affiliates in the United Kingdom. Among the notable 2017 increases in services supplied by foreign affiliates are the following:

- **United Kingdom.** Services supplied by affiliates in the United Kingdom increased \$13.3 billion to \$247.2 billion. Most of the increase was accounted for by finance and insurance, other industries, and information.
- **Netherlands.** Services supplied by affiliates in the Netherlands increased \$10.4 billion to \$76.8 billion. More than half of the increase was in information and in finance and insurance.
- **Ireland.** Services supplied by Irish affiliates increased \$9.2 billion to \$142.1 billion. Increases in services supplied by affiliates in real estate and rental and leasing and in professional, scientific, and technical services together more than offset a large decrease in information.
- **Switzerland.** Services supplied by Swiss affiliates increased \$5.8 billion to \$81.2 billion. The largest increase was in wholesale trade, particularly for distributors of nondurable goods.
- **Luxembourg.** Services supplied by affiliates in Luxembourg (not shown in chart 10) increased \$5.5 billion to \$29.9 billion. About half of the increase was in finance and insurance.
- **India.** Services supplied by affiliates in India (not shown in chart 10) increased \$4.6 billion to \$32.1 billion. About half of the increase was in professional, technical, and

Chart 10. Services Supplied Through Affiliates for Selected Countries, 2016 and 2017¹



1. The countries selected for this chart are the top 10 countries as measured by the sum of services supplied by foreign affiliates to foreign markets and by U.S. affiliates to the U.S. market in 2017.

U.S. Bureau of Economic Analysis

scientific services.

Increases in several countries listed in chart 10 contributed substantially to the \$83.3 billion aggregate increase in services supplied by foreign MNEs through their U.S. affiliates; the largest increase was for Canadian-owned U.S. affiliates. Among the notable changes in services supplied by U.S. affiliates were the following:

- **Canada.** Services supplied by U.S. affiliates of Canadian MNEs increased \$17.6 billion to \$126.2 billion. Increases by affiliates in wholesale trade, retail trade, and other industries were partly offset by a decrease in services supplied by manufacturing affiliates.
- **United Kingdom.** Services supplied by U.S. affiliates of British MNEs increased \$11.8 billion to \$152.6 billion. Increases in several industries contributed, including increases in other industries (such as transportation and warehousing); professional, scientific, and technical services; finance and insurance; and information.
- **Japan.** Services supplied by U.S. affiliates of Japanese MNEs increased \$9.4 billion to \$165.1 billion, reflecting increases in wholesale trade, finance and insurance, and manufacturing.
- **China.** Services supplied by U.S. affiliates of Chinese MNEs increased \$8.3 billion to \$18.0 billion, due in part to a large increase in wholesale trade.
- **Germany.** Services supplied by U.S. affiliates of German MNEs increased \$8.3 billion to \$147.5 billion. The largest increases were in other industries and information.
- **Netherlands.** Services supplied by U.S. affiliates of Dutch MNEs increased \$7.2 billion to \$66.2 billion, reflecting increases in information and in finance and insurance.
- **Ireland.** Services supplied by U.S. affiliates of Irish MNEs decreased \$1.7 billion to \$28.2 billion. The decrease reflected a decrease in manufacturing partly offset by increases in other industries.

Services supplied through affiliates by destination

Foreign affiliates supply services to both foreign markets and to the U.S. market.¹⁶ Services supplied to foreign markets, which include the host country markets and other foreign markets, accounted for 88 percent of the \$1.8 trillion in services supplied by foreign affiliates worldwide in 2017 (table F). Services supplied to the U.S. market, which are not included in the international services supplied statistics featured in this article, accounted for the remaining 12 percent. In 2017, 65 percent of services supplied worldwide through affiliates were in the affiliates' host country, while other foreign markets accounted for 23 percent.

U.S. affiliates supply services to both the U.S. market and to foreign markets (which are mostly classified as U.S. exports of services); however, transactions in the U.S. market account for the vast majority of the services supplied worldwide by U.S. affiliates. In 2017, transactions in the U.S. market accounted for 89 percent of the \$1.2 trillion in services supplied worldwide by U.S. affiliates. Services supplied to foreign markets, which are not included in the services supplied through affiliates statistics featured in this article, accounted for the remaining 11 percent.

Table F. Services Supplied Through Affiliates by Destination, 2016–2017

	Billions of dollars		Percent change from the preceding year	Percent of total services supplied
	2016	2017	2017	2017
Services supplied by U.S. MNEs through their majority-owned foreign affiliates				
Total services supplied	1,682.9	1,765.5	4.9
Services supplied to U.S. persons	205.9	207.2	0.6	11.7
Services supplied to foreign persons	1,477.0	1,558.4	5.5	88.3
To the host country	1,092.6	1,153.8	5.6	65.4
To other foreign countries	384.3	404.6	5.3	22.9
Services supplied by foreign MNEs through their majority-owned U.S. affiliates				
Total services supplied	1,103.9	1,209.8	9.6
Services supplied to U.S. persons	999.4	1,082.6	8.3	89.5
Services supplied to foreign persons	104.5	127.2	21.7	10.5

MNE Multinational enterprises

Future Enhancements to the International Services Statistics

The Bureau of Economic Analysis (BEA) continues its efforts to enhance its international economic account statistics.¹ Specific improvements to the international services statistics planned for 2020 that will enhance estimation and further align BEA's statistics with international statistical guidelines include:²

- Improving the classification of intellectual property transactions and introducing a personal, cultural, and recreational services category—updates that are facilitated by the collection of additional service-type detail on the 2017 Benchmark Survey of Selected Services and Intellectual Property with Foreign Persons (BE-120) and on its related quarterly survey (BE-125)
- Introducing measures of implicitly priced financial services, including financial intermediation services indirectly measured (FISIM) in the banking sector and spread margins earned by brokers or dealers acting as market makers in securities markets
- Improving the estimation of trade in travel services by updating the methodology and source data for each component of travel (for all purposes including education):
 - Business travel
 - Expenditures by border, seasonal, and other short-term workers
 - Other business travel
 - Personal travel
 - Health-related travel
 - Education-related travel
 - Other personal travel
- Improving the estimation of transport services, by improving the estimation methodology and incorporating new source data for air passenger transport, improving the estimation methodology for air freight and port transport services, and incorporating new source data for sea transport services

In addition, BEA will further expand the detail it provides in its trade in services statistics starting in 2020 by:³

- Accelerating the release of geographical detail by publishing its most detailed annual statistics by country and affiliation and by type of services in June, rather than October, of each year and by expanding quarterly bilateral statistics in the U.S. ITAs to include total exports, imports, and the balance on trade in services for all the countries areas included in the annual tables
- Expanding the type of service detail for existing categories, including research and development, intellectual property, and computer services in its most detailed annual tables

BEA continues to explore further expansion of the statistics and improvements in estimation, beyond those planned for 2020, including:

- Researching methodologies for measuring manufacturing services on physical inputs owned by others
- Expanding the affiliation detail presented in its annual statistics by introducing bilateral statistics on total exports and imports by affiliation

- Continuing to develop statistics that present international services in different ways, such as by industry of the transactor or by the mode that services are supplied and received by the United States⁴

1. See the “[Catalog of Major Revisions to the U.S. International Accounts, 1976–2008](#)” on BEA’s website. For changes implemented since 2008, see the appendixes on improvements in each annual *Survey* article in this series, which typically appear in each October issue of the *Survey*, or the annual update of the U.S. international accounts *Survey* articles, which typically appear each July.
2. For a discussion of certain improvements identified in this section, see “[Improving the International Services Statistics](#)” in Alexis N. Grimm and Charu S. Krishnan, “U.S. International Services,” *Survey* 94 (October 2014).
3. [Prototype tables](#) reflecting the changes described in this section are available on [BEA’s website](#).
4. For more information on how international services are supplied to foreign and U.S. persons, see the [supplement to this article](#). For a discussion of BEA’s work toward developing international services statistics by mode of supply, see the *Services Spotlight* in this article.

Acknowledgments

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

Estimates of trade in services were prepared under the guidance of Jeffrey Bogen, Edward Dozier, Molly Garber, and Christopher Stein. Travel and air passenger transport estimates were prepared by Laura Brokenbaugh, Edward Dozier, Alexis Grimm, and Yiran Xin. Transport estimates were prepared by Elye Bliss, Edward Dozier, C. Omar Kebbeh, and Steven Muno. Estimates for services other than travel and transport were prepared by Ami Adjoh-Baliki, Pamela Aiken, Shari Allen, Suhail Ally, Damon Battaglia, Jeffrey Bogen, Faith Brannam, Kiesha Brown, Jamela DesVignes, Michael Flinch, Andre Garber, Brian Goddard, Nazre Jamil, Hope Jones, C. Omar Kebbeh, Eddie Lee Key, Sean Lynch, Steven Muno, Michelle Murillo, Ted Peck, Alyssa Reinland, Makia Riley, Mark Samuel, John Sondheimer, David Stein, and Rodolfo Telles.

The processing of the survey data used to prepare the estimates of services supplied through majority-owned affiliates was conducted by the following members of the Direct Investment Division, under the guidance of Kirsten Brew, Mark Goddard, and Ricardo Limes: Richard Adkins, Catherine Ama, George Bogachevsky, Gregory Brace, Ariel Canela, Polly Cheung, Stephen Corsiglia, James Crim, Laura Downey, Maryam Fatima, Kenneth Grier, Marvin Helfman, Kiara Hughes, Peterson Kimani, James Lashley, Andrew Makoge, Demetria McCormick, Marcia Miller, Yetunde Olayinka, Christina Peele, Terri Perdue, Amanda Petersen, Michelle Proctor, Kevin Reagan, Terri Riley, Ann Robinson, Larisa Rondon, Roberto Ruiz, Myriam Rullan, Aqeel Sahibzada, Howard Trumbo, Daniel Wakjira, and Helen Yiu. Christopher Steiner performed additional calculations to prepare the statistics on services supplied through affiliates.

The information in the international services tables was compiled by Danielle Clavon, Alexis Grimm, Benjamin Kavanaugh, and Mitchell Shabani. Computer support was provided by Carole Henry, Barbara Hubbard, Aneesh Kapoor, Neeta Kapoor, Fritz Mayhew, Christopher Morski, and Gary Sowers.

1. More information on the definitions, coverage, and methodology of trade in services and services supplied through affiliates is available on the Bureau of Economic Analysis [website](#).
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.
3. The statistics on trade in services and services supplied through affiliates are not directly comparable, because of differences in coverage and classification. For example, wholesale and retail trade distributive services are included in services supplied through affiliates but not in trade in services statistics. 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 website.
4. World Trade Organization, United Nations Conference on Trade and Development, and International Trade Centre Annual Trade in Services Dataset (last updated May 2019).
5. World Bank World Development Indicators (series: GDP, PPP, current international dollars)
6. “Travel (for all purposes including education)” is the name used in the trade in services statistics to encompass a broadly defined travel category. This category includes business travel and personal travel. Business travel includes expenditures by border, seasonal, and other short-term workers and other business travel. Personal travel includes health-related travel, education-related travel, and other personal travel. Note that airfares or other expenditures associated with transporting travelers between the United States and foreign countries are not classified in travel; these expenditures are included in transport services.
7. The statistics in this article supersede those presented in Shari A. Allen, Alexis N. Grimm, and Christopher P. Steiner, “[U.S. International Services: Trade in Services in 2017 and Services Supplied Through Affiliates in 2016](#),” *Survey of Current Business* 98 (October 2018). Revisions of trade in services statistics for 2016–2018 were published in June 2019 and are already reflected in the ITAs and monthly trade statistics on [BEA’s website](#).
8. Based on data from the World Federation of Exchanges.
9. National Science Board, Science and Engineering Indicators 2018 (Alexandria, VA: National Science Foundation, 2018 (NSB–2018–1)).
10. 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* 96 (May 2016).
11. 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).
12. For some countries, exports and imports of potentially ICT-enabled services were suppressed to avoid the disclosure of data of individual companies. Of the top 10 trading partners, the values for potentially ICT-enabled services exports were suppressed for Ireland and U.K. Islands, Caribbean in 2018 and for Ireland; Japan; U.K. Islands, Caribbean; and Singapore in 2017. Values for potentially ICT-enabled services imports were suppressed for the United Kingdom, Ireland, Switzerland, Bermuda, and Singapore in 2018 and Ireland and Bermuda in 2017. For these countries, ranges of feasible values are presented to facilitate the discussion of potentially ICT-enabled services exports and imports for the countries, and the lower bounds of these ranges are used to rank the countries.
13. 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.
14. Professional, scientific, and technical services includes architectural, engineering, and related services; computer systems design and related services; management, scientific, and technical consulting; and other industries.
15. Wholesale trade includes motor vehicles and other motor vehicle parts and supplies; professional and commercial equipment and supplies; electrical and electronic goods; petroleum and petroleum products; drugs and druggists’ sundries; and other wholesale trade.
16. Services supplied by foreign affiliates to the U.S. market are mostly classified as U.S. imports of services. However, data from BEA’s direct investment surveys on these services supplied are not used to estimate U.S. imports of services; data on these services are collected along with data on other U.S. services imports in BEA’s services trade collection program. Of the services supplied by foreign affiliates to the U.S. market, distributive services in wholesale and retail trade are generally not included as U.S. imports of services.