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Trade in Services in 2019 and Services Supplied Through Affiliates in 2018

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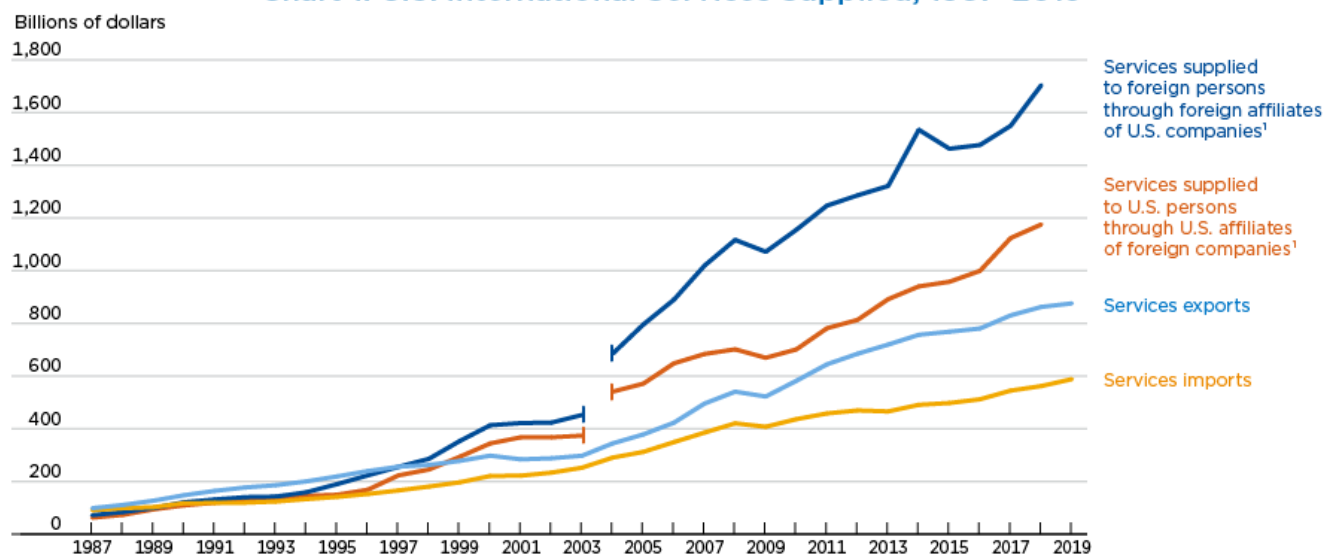
This article highlights statistics on [international services](#) that the Bureau of Economic Analysis (BEA) releases annually. These statistics cover both U.S. international trade in services and services supplied by majority-owned U.S. and foreign affiliates of multinational enterprises (MNEs). For the basics on how international services are supplied to foreign and U.S. persons, including diagrams with examples, see the [supplement to this article](#).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. The trade in services statistics in the [international services tables](#) provide more geographic, affiliation, and service-type detail than those in the ITAs, along with a supplementary classification into whether services can be delivered through digital means. This year, the trade in services portion of the international services statistics was released in stages in June and July, an acceleration of several months from previous years.

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 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 2018—the latest year for which statistics on services supplied through affiliates are available—were through affiliates (table A and chart 1).³

Chart 1. U.S. International Services Supplied, 1987–2019



1. Statistics are shown through 2018, 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-Bruner and Anne Flatness, "U.S. International Services," *Survey 89* (October 2009) for more information.

U.S. Bureau of Economic Analysis

Table A. U.S. International Services Supplied, 2017–2019

Year	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						
2017	2,380.2	830.4	1,549.9	1,668.7	544.8	1,123.8
2018	2,566.7	862.4	1,704.3	1,737.5	562.1	1,175.4
2019	n.a.	875.8	n.a.	n.a.	588.4	n.a.
Percent change from preceding year						
2017	5.4	6.4	4.9	10.4	6.4	12.5
2018	7.8	3.9	10.0	4.1	3.2	4.6
2019	n.a.	1.6	n.a.	n.a.	4.7	n.a.

n.a. Not available

In 2018, total services supplied by the United States to foreign persons through both trade and sales by foreign affiliates of U.S. companies was \$2.57 trillion, and total services supplied to the United States from foreign persons through both trade and sales by U.S. affiliates of foreign companies was \$1.74 trillion. The difference between total services supplied to foreign persons and supplied to U.S. persons was \$829.2 billion. Total services supplied to foreign persons increased \$186.5 billion, or 8 percent, in 2018 after increasing \$122.7 billion, or 5 percent, in 2017. Total services supplied to U.S. persons increased \$68.8 billion, or 4 percent, in 2018 after increasing \$157.4 billion, or 10 percent, in 2017.

In 2019, U.S. exports of services were \$875.8 billion, and U.S. imports of services were \$588.4 billion, resulting in a services trade surplus of \$287.5 billion. The United States accounted for 14 percent of the world's services exports and for 10 percent of the world's services imports in 2019.⁴ In comparison, in 2019, the United States accounted for 16 percent of world gross domestic product (GDP).⁵

Exports of services increased \$13.4 billion, or 2 percent, in 2019 after increasing \$32.0 billion, or 4 percent, in 2018. By major service type, the largest increase in exports in 2019 was in other business services, primarily professional and management consulting services. The U.S. share of worldwide exports was little changed in 2019.

Imports of services increased \$26.3 billion, or 5 percent, in 2019 after increasing \$17.2 billion, or 3 percent, in 2018. The largest increases in imports in 2019 were in travel (for all purposes including education) (henceforth “travel”), primarily personal travel, and in insurance services, mainly reinsurance services.⁶ The increase in travel abroad by U.S. residents continued the upward trend in this category that started in 2010 after the Great Recession, coinciding with expanding U.S. economic activity over this period. The U.S. share of worldwide services imports increased in 2019.

Services supplied to foreign persons through foreign affiliates of U.S. MNEs were \$1.70 trillion in 2018, an increase of \$154.4 billion, or 10 percent, from 2017. This increase reflected increases in every major industry category and was led by increases in other industries, particularly in transportation and warehousing.

Services supplied to U.S. persons through U.S. affiliates of foreign MNEs were \$1.18 trillion in 2018, an increase of \$51.6 billion, or 5 percent, from 2017. This increase reflected increases in every major industry category except manufacturing.

The remainder of this article includes a “Services Spotlight” highlighting updates introduced in 2020 to BEA U.S. trade in services statistics and discussions of U.S. trade in services in 2019, 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 2019, and services supplied through affiliates in 2018.

Data Availability

Trade in services statistics through 2019 and statistics on services supplied through affiliates through 2018 can 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 2020, BEA accelerated the availability of the trade in services component of its international services statistics; these trade in services statistics, which previously were typically released in October of each year, were released in June and July. For more information about BEA's efforts to provide more timely, accurate, consistent, and relevant statistics for data users, see the "[Services Spotlight](#)."

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 BEA 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 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 MNEs. All BEA 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 of 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. A methodology covering the 2017 benchmark survey of foreign direct investment in the United States will be published on BEA's website in November 2020.

Services Spotlight

2020 Annual Update of the International Transactions Accounts

In June 2020, BEA released the 2020 annual update of the ITAs.¹ The 2020 annual update included the adoption of new methodologies, data sources, and presentational changes for several accounts, most notably in trade in services, most of which affected statistics starting with the first quarter of 1999. The improvements to the trade in services statistics resulted from a multiyear effort by BEA to research and develop enhanced statistics and provide more timely, accurate, consistent, and relevant statistics for data users.

The improvements implemented for the trade in services statistics in the ITAs also affected the trade in services portion of the international services statistics. In addition, BEA made improvements to the trade in services statistics that affected detail published in the presentation of the international services statistics but not in the ITAs.² Key improvements in classifications, methodologies, and presentations that are reflected in the trade in services portion of BEA's international services statistics are highlighted below.

The following three new major service categories were introduced:

- Manufacturing services on physical inputs owned by others covers a specific form of contract manufacturing. Although this category was added to the presentation of services statistics, BEA does not yet provide values for this series. Instead, "n.a." (not available) is shown in the tables.³
- Construction covers the services provided to create, renovate, repair, or extend buildings, land improvements, and civil engineering constructions such as roads and bridges. Additionally, inputs purchased by foreign construction contractors for projects in the United States are included in construction exports, and inputs purchased abroad by U.S. construction contractors are included in construction imports. However, in practice, no data are available to estimate inputs purchased by foreign contractors for projects in the United States, so BEA does not provide values for this component of construction exports. Instead, n.a. is shown. Transactions in construction were previously recorded in the international services statistics in a construction subcategory under the major category "other business services."
- Personal, cultural, and recreational services consists of three categories. Within two of the three categories are subcategories shown in the international services statistics but not in the ITAs.
 - Audiovisual services covers production of audiovisual content, transactions in end-user rights to use audiovisual content, and outright sales and purchases of audiovisual originals. In the international services statistics, audiovisual services is further subdivided into audiovisual production services, rights to use audiovisual products (either movies and television programming or books and sound recordings), and sales and purchases of audiovisual originals (either movies and television programming or books and sound recordings).
 - Artistic-related services includes the services provided by performing artists, authors, composers, and other visual artists; set, costume, and lighting design; presentation and promotion of performing arts and other live entertainment events; and fees to artists and athletes for performances, sporting events, and similar events.
 - Other personal, cultural, and recreational services includes services such as education services delivered online, remotely provided telemedicine services, and services associated with museum and other cultural, sporting, gambling, and recreational activities, except those acquired by customers traveling outside their country of residence. In the international services statistics, other personal, cultural, and recreational services is further subdivided into health services, education services, and heritage and recreational services.

The following two new measures of implicitly priced financial services were introduced to address gaps in coverage:⁴

- Financial intermediation services indirectly measured (FISIM), which measures the implicit service component of deposit-taking and lending activity of banks.
- Market-making services, which are represented by margins on buying and selling financial securities.

Aside from the aforementioned reclassification of construction, the following several types of transactions were reclassified within services:

- Certain transactions previously included indistinguishably in other business services were reclassified to the new category of personal, cultural, and recreational services. These services are subclassified in audiovisual production services, in artistic-related services, and in health services, education services, and heritage and recreational services within other personal, cultural, and recreational services. Recently expanded transaction detail collected on BEA's surveys of selected services and intellectual property transactions has enabled these services to be distinguished from those remaining in other business services.
- Installation, alteration, and training services were reclassified from maintenance and repair services to other business services (in the "other business services n.i.e." (not included elsewhere) subcategory).
- Transactions in end-user rights to audiovisual content and outright sales or purchases of audiovisual originals were reclassified from charges for the use of intellectual property n.i.e. to audiovisual services in personal, cultural, and recreational services.
- Sales or purchases of ownership rights and licenses to use (excluding reproduction or distribution) computer software were reclassified from charges for the use of intellectual property n.i.e. to computer services.
- Sales or purchases of ownership rights for patents, processes, and trade secrets were reclassified from charges for the use of intellectual property n.i.e. to research and development (R&D) services, part of other business services.
- Sales and purchases of ownership rights related to franchises and trademarks were reclassified out of trade in services altogether and into the capital account in the ITAs because they represent transactions in nonproduced, nonfinancial assets rather than transactions in services.
- Sales and purchases that had been categorized as other intellectual property in charges for the use of intellectual property n.i.e. were reclassified. Within charges for the use of intellectual property n.i.e., transactions for rights to use and to reproduce and/or redistribute were reclassified to licenses for the use of outcomes of R&D. Transactions previously recorded as outright sales and purchases were reclassified; transfer fees paid by one sporting franchise to another for the transfer of a player were reclassified to the capital account in the ITAs and the remaining transactions were deemed not to be intellectual property transactions and were reclassified to other business services n.i.e.

Several presentational changes were made—some related to new services types and reclassifications and some related to expanded transaction detail collected on BEA's surveys of selected services and intellectual property transactions. Table I compares the previous and new presentations of [international services table 2.1](#). Among the notable presentational changes in table 2.1 and in other trade in services tables in the international services statistics are the following:

- Financial services are divided into (1) explicitly charged and other financial services and (2) FISIM. Subcategories within explicitly charged and other financial services are similar to previous financial services categories but provide additional detail in some cases. The newly produced estimates for market-making services are included in a subcategory with brokerage services.
- New category names in charges for the use of intellectual property n.i.e. reflect the types of transactions that remain in this major category after the reclassifications discussed above. Transactions from the previous subcategory of industrial processes that remain in charges for the use of intellectual property are included in the new subcategory of licenses for the use of outcomes of R&D.
- In telecommunications, computer, and information services, additional detail is provided for two subcategories. Computer services is divided into computer software, including end-user licenses and customization; cloud computing and data storage services; and other computer services. Information services is divided into news agency services and database and other information services.
- The primary breakdown of other business services continues to include (1) R&D services, (2) professional and management consulting services, and (3) technical, trade-related and other business services. However, breakdowns within each of these subcategories have been considerably modified, partly to show more service detail and partly reflecting the reclassifications discussed above.
 - R&D services is divided into (1) work undertaken on a systematic basis to increase the stock of knowledge and (2) other R&D services. The former is further subdivided into (1) provision of customized and noncustomized R&D services and (2) sale of proprietary rights arising from R&D.
 - In professional and management consulting services, market research and public opinion polling services and trade exhibition and sales convention services are now shown separately under advertising and related services.
 - In technical, trade-related, and other business services:
 - Scientific and other technical services are newly broken out (within the category architectural, engineering, scientific, and other technical services).
 - Industrial engineering services are no longer broken out separately but are included indistinguishably in engineering services.

- A new category—waste treatment and de-pollution, agricultural, and mining services—is presented, for which subcategory detail is provided.
- Goods exports related to projects abroad undertaken by firms performing architectural, engineering, and mining services are no longer removed from gross revenues in calculating exports of these services. Additionally, the foreign expenditures of such firms are no longer included in imports of architectural, engineering, and mining services.
- For statistics on travel services, tables showing geographic estimates ([international services tables 2.2 and 2.3](#)) now include each travel subcategory; the additional detail is available starting with statistics for 1999. Personal travel includes (1) education-related travel, (2) health-related travel, and (3) other personal travel; business travel includes (4) expenditures by border, seasonal, and short-term workers and (5) other business travel. Previously, geographic estimates were only published for (1) and the combination of (3) and (5).
- For statistics on financial services, tables showing geographic detail now include each financial services subcategory beginning with statistics for 2006. Previously, geographic estimates were only published for the financial services total.

The incorporation of new methodologies and data sources or survey data has improved estimates of trade in the following several types of services:⁵

- For statistics on air passenger transport services, estimates of average fares are now based on ticket-level data from the U.S. Department of Transportation Origin and Destination Survey for exports and from the Airlines Reporting Corporation for imports; these data sources also provide detailed information on passengers' travel patterns, allowing highly granular estimation of average fares. Passenger counts incorporate improved data from U.S. Customs and Border Protection.
- For statistics on sea freight and sea port transport services, new source data from IHS Markit on vessels that transport goods to and from the United States are used.
- For statistics on air freight transport exports and air port transport exports and imports, estimates reflect better coverage on BEA surveys of U.S. and foreign airlines along with backcasting methods.
- For statistics on other business and other personal travel, estimates reflect refined counts of travelers using more detailed information on classes of admission as well as refined calculations of average expenditures. Traveler counts now exclude travelers traveling for health and education purposes to avoid double counting. An improved allocation method is used for the separately published subcomponents other business travel and other personal travel. For trade with Canada, data from Statistics Canada are now used as the basis for allocation of other business and other personal travel.
- For statistics on education-related travel, estimates of average expenditures for exports and imports and the number of students for exports now use data from the Student and Exchange Visitor Information System. Estimates of the number of students for imports now use data from various sources that include directly enrolled post-secondary students. The statistics also reflect other methodological refinements.
- For statistics on health-related travel, estimates now use data from the Survey of International Air Travelers about the incidence and expenditures of travelers traveling for health purposes.
- For statistics on expenditures by border, seasonal, and other short-term workers, the subestimate of expenditures of short-term workers in the United States now includes an expanded set of visas for expenditures by foreign professionals.
- For statistics on several service types, BEA incorporated the results of its 2017 Benchmark Survey of Selected Services and Intellectual Property Transactions with Foreign Persons (BE-120).⁶ New information collected on the benchmark survey and subsequent quarterly surveys was used to introduce several of the enhancements detailed above.
- For statistics on services types based on BEA surveys of selected services and intellectual property, financial services, and insurance services, improved methods were adopted for estimating nonsurveyed and nonreported transactions.

The presentational and methodological improvements to the trade in services statistics also resulted in changes in the composition of potentially ICT-enabled services. For a description of these changes, see [“Updating Potentially ICT-Enabled Services for the 2020 Annual Update.”](#)

Table I. New Presentation of U.S. Trade in Services, International Services Table 2.1

Previous structure of table 2.1	New structure of table 2.1
Exports of services	Exports of services
Maintenance and repair services n.i.e.	Manufacturing services on physical inputs owned by others ¹
Transport	Maintenance and repair services n.i.e.
Sea transport	Transport
Freight	Sea transport
Port	Freight
Air transport	Port
Passenger	Air transport
Freight	Passenger
Port	Freight
Other modes of transport	Port
Postal services	Other modes of transport
Road and other transport	Postal services
Travel (for all purposes including education)	Road and other transport
Business	Travel (for all purposes including education)
Expenditures by border, seasonal, and other short-term workers	Business
Other business travel	Expenditures by border, seasonal, and other short-term workers
Personal	Other business travel
Health related	Personal
Education related	Health related
Other personal travel	Education related
	Other personal travel
	Construction
	Construction abroad
	Foreign contractors' expenditures in the United States
Insurance services	Insurance services
Direct insurance	Direct insurance
Reinsurance	Reinsurance
Auxiliary insurance services	Auxiliary insurance services
Financial services	Financial services
Securities brokerage, underwriting, and related services	Explicitly charged and other financial services
	Brokerage and market-making services
	Underwriting and private placement services
	Credit card and other credit-related services
	Financial management services
Financial management, financial advisory, and custody services	Financial advisory and custody services
	Securities lending, electronic funds transfer, and other services
Credit card and other credit-related services	Financial intermediation services indirectly measured
Securities lending, electronic funds transfer, and other services	Charges for the use of intellectual property n.i.e.
Charges for the use of intellectual property n.i.e. ²	By type of intellectual property:
Industrial processes	Franchises and trademarks licensing fees
Computer software	Trademarks
Trademarks	Franchise fees
Franchise fees	Licenses for the use of outcomes of research and development
Audio-visual and related products	Licenses to reproduce and/or distribute computer software
Movies and television programming	Licenses to reproduce and/or distribute audiovisual products
Books and sound recordings	Movies and television programming
Broadcasting and recording of live events	Books and sound recordings
Other intellectual property ³	Broadcasting and recording of live events
	By affiliation:
	Unaffiliated
	Affiliated
	U.S. parents' exports to their foreign affiliates
	U.S. affiliates' exports to their foreign parent groups
Telecommunications, computer, and information services	Telecommunications, computer, and information services
Telecommunications services	Telecommunications services
Computer services	Computer services
	Computer software, including end-user licenses and customization
	Cloud computing and data storage services
	Other computer services
Information services	Information services
	News agency services
	Database and other information services
Other business services	Other business services
Research and development services	Research and development services
	Work undertaken on a systematic basis to increase the stock of knowledge
	Provision of customized and non-customized research and development services
	Sale of proprietary rights arising from research and development
	Other research and development services
Professional and management consulting services	Professional and management consulting services

Previous structure of table 2.1	New structure of table 2.1
	Legal, accounting, management consulting, and public relations services
Legal services	Legal services
Accounting, auditing, and bookkeeping services	Accounting, auditing, bookkeeping, and tax consulting services
Business and management consulting and public relations services	Business and management consulting and public relations services
Advertising	Advertising and related services
	Advertising services
	Market research and public opinion polling services
	Trade exhibition and sales convention services
Technical, trade-related, and other business services	Technical, trade-related, and other business services
Architectural and engineering services	Architectural, engineering, scientific, and other technical services
Architecture and engineering abroad	Architectural services
	Engineering services
Foreign contractors' expenditures in the United States	
Construction ⁴	
Construction abroad	
Foreign contractors' expenditures in the United States	
Industrial engineering	
	Scientific and other technical services
	Waste treatment and de-pollution, agricultural, and mining services
	Waste treatment and de-pollution services
	Services incidental to agriculture, forestry, and fishing
	Services incidental to mining, and oil and gas extraction
Mining	
Mining abroad	
Foreign contractors' expenditures in the United States	
Operating leasing services	Operating leasing services
Trade-related services	Trade-related services
Sports and performing arts ⁵	
Training services ⁶	
Other business services n.i.e.	Other business services n.i.e.
	Personal, cultural, and recreational services
	Audiovisual services
	Audiovisual production services
	Rights to use audiovisual products
	Movies and television programming
	Books and sound recordings
	Audiovisual originals
	Movies and television programming
	Books and sound recordings
	Artistic-related services
	Other personal, cultural, and recreational services
	Health services
	Education services
	Heritage and recreational services
Government goods and services n.i.e.	Government goods and services n.i.e.
Imports of services	Imports of services
Maintenance and repair services n.i.e.	Manufacturing services on physical inputs owned by others ¹
Transport	Maintenance and repair services n.i.e.
Sea transport	Transport
Freight	Sea transport
Port	Freight
Air transport	Port
Passenger	Air transport
Freight	Passenger
Port	Freight
Other modes of transport	Port
Postal services	Other modes of transport
Road and other transport	Postal services
Travel (for all purposes including education)	Road and other transport
Business	Travel (for all purposes including education)
Expenditures by border, seasonal, and other short-term workers	Business
Other business travel	Expenditures by border, seasonal, and other short-term workers
Personal	Other business travel
Health related	Personal
Education related	Health related
Other personal travel	Education related
	Other personal travel
	Construction
	Construction in the United States
	U.S. contractors' expenditures abroad
Insurance services	Insurance services
Direct insurance	Direct insurance
Reinsurance	Reinsurance
Auxiliary insurance services	Auxiliary insurance services
Financial services	Financial services

Previous structure of table 2.1	New structure of table 2.1
Securities brokerage, underwriting, and related services	Explicitly charged and other financial services Brokerage and market-making services Underwriting and private placement services Credit card and other credit-related services
Financial management, financial advisory, and custody services	Financial management services Financial advisory and custody services
Credit card and other credit-related services Securities lending, electronic funds transfer, and other services	Securities lending, electronic funds transfer, and other services
Charges for the use of intellectual property n.i.e. ²	Financial intermediation services indirectly measured Charges for the use of intellectual property n.i.e. By type of intellectual property: Franchises and trademarks licensing fees Trademarks Franchise fees Licenses for the use of outcomes of research and development Licenses to reproduce and/or distribute computer software Licenses to reproduce and/or distribute audiovisual products Movies and television programming Books and sound recordings Broadcasting and recording of live events
Industrial processes Computer software Trademarks Franchise fees Audio-visual and related products Movies and television programming Books and sound recordings Broadcasting and recording of live events Other intellectual property ³	By affiliation: Unaffiliated Affiliated U.S. parents' imports from their foreign affiliates U.S. affiliates' imports from their foreign parent groups
Telecommunications, computer, and information services Telecommunications services Computer services	Telecommunications, computer, and information services Telecommunications services Computer services Computer software, including end-user licenses and customization Cloud computing and data storage services Other computer services
Information services	Information services News agency services Database and other information services
Other business services Research and development services	Other business services Research and development services Work undertaken on a systematic basis to increase the stock of knowledge Provision of customized and non-customized research and development services Sale of proprietary rights arising from research and development Other research and development services
Professional and management consulting services	Professional and management consulting services Legal, accounting, management consulting, and public relations services
Legal services Accounting, auditing, and bookkeeping services Business and management consulting and public relations services	Legal services Accounting, auditing, bookkeeping, and tax consulting services Business and management consulting and public relations services
Advertising	Advertising and related services Advertising services Market research and public opinion polling services Trade exhibition and sales convention services
Technical, trade-related, and other business services Architectural and engineering services Architecture and engineering in the United States U.S. contractors' expenditures abroad Construction ⁴ Construction in the United States U.S. contractors' expenditures abroad Industrial engineering	Technical, trade-related, and other business services Architectural, engineering, scientific, and other technical services Architectural services Engineering services Scientific and other technical services Waste treatment and de-pollution, agricultural, and mining services Waste treatment and de-pollution services Services incidental to agriculture, forestry, and fishing Services incidental to mining, and oil and gas extraction
Mining Mining in the United States U.S. contractors' expenditures abroad Operating leasing services Trade-related services Sports and performing arts ⁵ Training services ⁶ Other business services n.i.e.	Operating leasing services Trade-related services Other business services n.i.e. Personal, cultural, and recreational services Audiovisual services Audiovisual production services

Previous structure of table 2.1	New structure of table 2.1
	Rights to use audiovisual products
	Movies and television programming
	Books and sound recordings
	Audiovisual originals
	Movies and television programming
	Books and sound recordings
	Artistic-related services
	Other personal, cultural, and recreational services
	Health services
	Education services
	Heritage and recreational services
Government goods and services n.i.e.	Government goods and services n.i.e.
Balance on services	Balance on services
Memoranda:	Addenda:
Exports of services by affiliation:	Exports of services by affiliation:
Unaffiliated	Unaffiliated
Affiliated	Affiliated
U.S. parents' exports to their foreign affiliates	U.S. parents' exports to their foreign affiliates
U.S. affiliates' exports to their foreign parent groups	U.S. affiliates' exports to their foreign parent groups
Imports of services by affiliation:	Imports of services by affiliation:
Unaffiliated	Unaffiliated
Affiliated	Affiliated
U.S. parents' imports from their foreign affiliates	U.S. parents' imports from their foreign affiliates
U.S. affiliates' imports from their foreign parent groups	U.S. affiliates' imports from their foreign parent groups
	Supplemental detail on insurance transactions: ⁷
	Premiums received
	Direct insurance
	Reinsurance
	Losses paid
	Direct insurance
	Reinsurance
	Premiums paid
	Direct insurance
	Reinsurance
	Losses recovered
	Direct insurance
	Reinsurance

n.i.e. Not included elsewhere

1. Manufacturing services on physical inputs owned by others in the United States is a new major service category, but BEA does not currently provide values for this series. Therefore, "n.a." is shown in the tables.
2. For more details on the location of certain transactions of charges for the use of intellectual property in the new structure, see the description in this article or Chart 1 of Rudy Telles Jr., Nicholas Martinez, and Theodore Peck, "[Annual Update of the U.S. International Transactions Accounts](#)," *Survey 100* (July 2020).
3. Transactions for the rights to use and rights to reproduce and distribute other intellectual property have been recorded in licenses for the use of outcomes of research and development. Outright sales and purchases were reclassified to other business services n.i.e. or to the capital account in the ITAs.
4. Construction is a new major service category.
5. Statistics for sports and performing arts have been recorded as artistic-related services under personal, cultural, and recreational services.
6. Statistics for training services have been recorded as education services under personal, cultural, and recreational services.
7. Supplemental detail on insurance transactions is now published in international services [table 2.1](#).

1. In July 2020, BEA published an article detailing the major improvements introduced in the annual update; see Rudy Telles Jr., Nicholas Martinez, and Theodore Peck, “[Annual Update of the U.S. International Transactions Accounts](#),” *Survey* 100 (July 2020).
2. BEA also accelerated the release of the trade in services part of the international services statistics; see “[Data Availability](#)” in this article.
3. See “[Future Enhancements to the International Services Statistics](#)” in this article for more information on the research BEA is conducting to develop these estimates.
4. See Rudy Telles Jr., Nicholas Martinez, and Theodore Peck, “[Annual Update of the U.S. International Transactions Accounts](#),” *Survey* 100 (July 2020) for more information on the types of transactions covered by these new categories and on the methodologies used to produce their estimates.
5. See Rudy Telles Jr., Nicholas Martinez, and Theodore Peck, “[Annual Update of the U.S. International Transactions Accounts](#),” *Survey* 100 (July 2020) for more information on these improvements.
6. Service types covered include part of maintenance and repair services n.i.e.; construction; part of insurance services; part of financial services; charges for the use of intellectual property n.i.e.; telecommunications, computer, and information services; other business services; and personal, cultural, and recreational services.

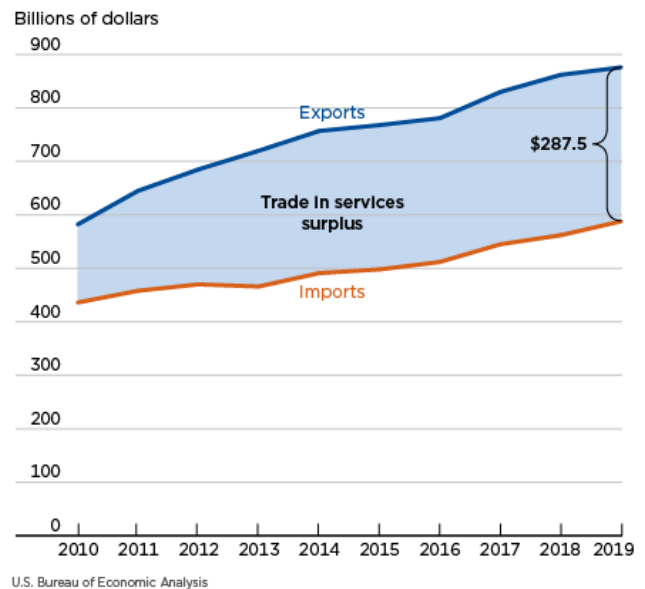
U.S. Trade in Services in 2019

Trade in services statistics are measures of transactions between U.S. residents and nonresidents arising from productive activities that change the condition of the consumer or that facilitate the exchange of products and financial assets. The trade in services statistics in this article are consistent with trade in services statistics published in [table 3.1](#) of the ITAs.

In 2019, U.S. exports of services were \$875.8 billion, and U.S. imports of services were \$588.4 billion, resulting in a services trade surplus of \$287.5 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 decreased \$12.9 billion in 2019 after increasing \$14.8 billion in 2018. The decrease in 2019 reflected a \$13.4 billion, or 2 percent, increase in exports of services and a \$26.3 billion, or 5 percent, increase in imports of services.

The remainder of this section discusses trade in services in 2019 by service type, by trading partner, and by affiliation.

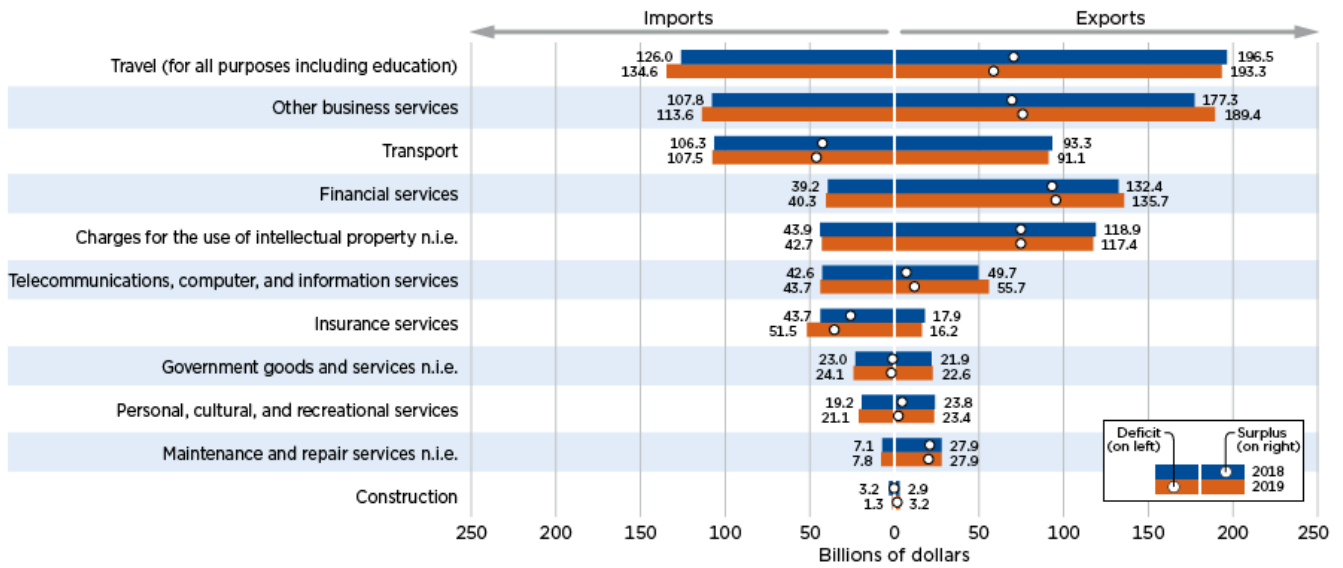
Chart 2. U.S. International Trade in Services Surplus, 2010–2019



Trade by service type

BEA classifies services trade transactions into 11 major service-type categories.⁷ See the “[Services Spotlight](#)” in this article for more information. In 2019, travel accounted for the largest share of both exports and imports (table B). Eight of the major service types recorded surpluses, while three recorded deficits (chart 3).

Chart 3. Trade in Services by Type, 2018-2019



Note. Manufacturing services on physical inputs owned by others has been excluded as BEA does not yet provide values for this series.
 U.S. Bureau of Economic Analysis

Table B. U.S. Trade in Services by Type and Country, 2019

[Millions of dollars]

Country	Total services	Maintenance and repair services n.i.e.	Transport	Travel (for all purposes including education) ²	Construction	Insurance services	Financial services	Charges for the use of intellectual property n.i.e.	Telecommunications, computer, and information services	Other business services	Personal, cultural, and recreational services	Government goods and services n.i.e.
Exports												
All countries	875,825	27,868	91,092	193,315	3,189	16,238	135,698	117,401	55,657	189,441	23,372	22,555
Total for the top 10 countries¹	490,940	10,021	44,495	99,690	(D)	9,842	87,646	74,666	31,243	115,834	(D)	3,405
United Kingdom	78,329	2,361	7,770	12,151	(D)	2,641	18,859	6,260	5,326	16,792	5,530	(D)
Canada	67,748	1,073	8,373	16,909	241	1,817	8,470	7,478	5,983	15,186	1,741	477
Ireland	57,544	517	564	1,437	(*)	306	4,689	17,814	3,428	28,649	123	17
China	56,537	1,405	5,546	29,047	52	223	4,781	8,144	1,524	4,087	1,229	500
Japan	50,052	1,233	8,485	8,794	(D)	3,407	4,951	6,866	4,008	10,107	1,044	(D)
Switzerland	46,838	217	2,245	1,772	7	222	1,706	17,188	3,019	19,964	438	63
United Kingdom Islands, Caribbean ³	39,765	(*)	209	263	(D)	220	34,593	333	262	3,839	(D)	2
Germany	36,637	1,723	5,382	5,773	(D)	306	3,459	5,191	2,254	10,801	1,371	(D)
Mexico	32,928	821	3,189	15,286	35	469	3,195	3,326	2,068	3,355	721	462
Brazil	24,562	670	2,730	8,258	(*)	232	2,945	2,068	3,372	3,055	1,030	203
Other countries	384,885	17,847	46,597	93,625	(D)	6,396	48,052	42,735	24,414	73,607	(D)	19,149
Imports												
All countries	588,359	7,823	107,458	134,594	1,327	51,547	40,350	42,733	43,720	113,584	21,140	24,083
Total for the top 10 countries¹	328,257	(D)	48,075	56,088	579	43,331	22,208	(D)	33,796	64,237	9,162	10,350
United Kingdom	62,345	2,184	8,135	9,062	38	3,639	12,309	4,262	3,284	15,333	3,342	758
Canada	38,550	1,725	5,851	9,244	421	777	2,967	2,020	4,883	8,514	1,824	325
Japan	35,825	138	9,499	3,619	9	395	2,102	9,702	532	3,815	1,317	4,696
Germany	34,918	(D)	8,282	3,314	8	2,669	870	7,030	841	7,230	570	(D)
Mexico	29,813	235	4,850	18,947	52	19	481	806	860	2,864	562	136
India	29,738	36	405	2,633	41	88	511	1,235	15,569	8,868	306	44
Bermuda	28,372	(*)	175	387	2	27,081	198	(D)	185	316	2	(D)
Switzerland	25,042	17	3,512	1,254	2	6,101	738	5,330	726	6,773	398	192
Ireland	23,215	29	1,097	2,249	3	1,894	534	2,322	6,587	8,047	441	13
France	20,440	424	6,270	5,380	2	669	1,498	2,763	329	2,478	399	228
Other countries	260,102	(D)	59,383	78,506	749	8,216	18,141	(D)	9,924	49,347	11,978	13,733

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

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 2019.

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.

Note. Manufacturing services on physical inputs owned by others has been excluded as BEA does not yet provide values for this series.

Surpluses were largest in financial services, in other business services, and in charges for the use of intellectual property; 2019 was the third consecutive year in which the surplus in financial services, \$95.3 billion in 2019, was the largest. The surplus in financial services partly reflects the fact that the United States is a major hub for global securities trading. In 2019, U.S. stock exchanges accounted for 45 percent of the value of equities traded on all the world's exchanges.⁸ In 2019, the surplus in other business services overtook those in travel and in charges for the use of intellectual property as the second largest surplus; previously, other business services had not ranked among the top three contributors to the services surplus since 2009. The surplus in charges for the use of intellectual property partly reflects the high level of R&D performed in the United States. In 2017 (the most recent year for which statistics are available), the United States accounted for 25 percent of R&D performed worldwide.⁹

U.S. exports of services were \$875.8 billion in 2019. The top four major service types—travel (22 percent of the total), other business services (22 percent), financial services (15 percent), and charges for the use of intellectual property (13 percent)—accounted for nearly three-fourths of total exports of services. U.S. imports of services were \$588.4 billion. The top three major service types—travel (23 percent of the total), other business services (19 percent), and transport (18 percent)—accounted for three-fifths of total imports of services.

Exports increased for five of the major service types and decreased for the other six in 2019. The largest increase was in other business services and the largest decrease was in travel.

- **Other business services.** Exports of other business services have increased every year since 2000. Exports increased \$12.2 billion, or 7 percent, to \$189.4 billion, led by an increase in professional and management consulting services, mainly business and management consulting and public relations services. Increases in exports to Ireland, South Korea, and Switzerland together accounted for nearly three-fifths of the increase in total other business services exports.
- **Telecommunications, computer, and information services.** Exports of telecommunications, computer, and information services increased \$6.0 billion, or 12 percent, to \$55.7 billion. The increase was almost entirely accounted for by an increase in computer services. Geographically, the increase in total telecommunications, computer, and information services exports was widespread.
- **Financial services.** Exports of financial services increased \$3.3 billion, or 2 percent, to \$135.7 billion. The increase largely reflected an increase in credit card and other credit-related services. Increases in exports to Spain and to the United Kingdom Islands, Caribbean together accounted for over half of the increase in total financial services exports.
- **Travel.** Exports of travel services decreased \$3.1 billion, or 2 percent, to \$193.3 billion, led by a decrease in other personal travel.¹⁰ Decreases in exports to Canada, Brazil, and Mexico together accounted for most of the decrease in total travel exports.

Imports increased in nine of the major service types in 2019. The largest increase was in travel, followed by insurance services and other business services; these three categories accounted for 84 percent of the \$26.3 billion increase in imports.

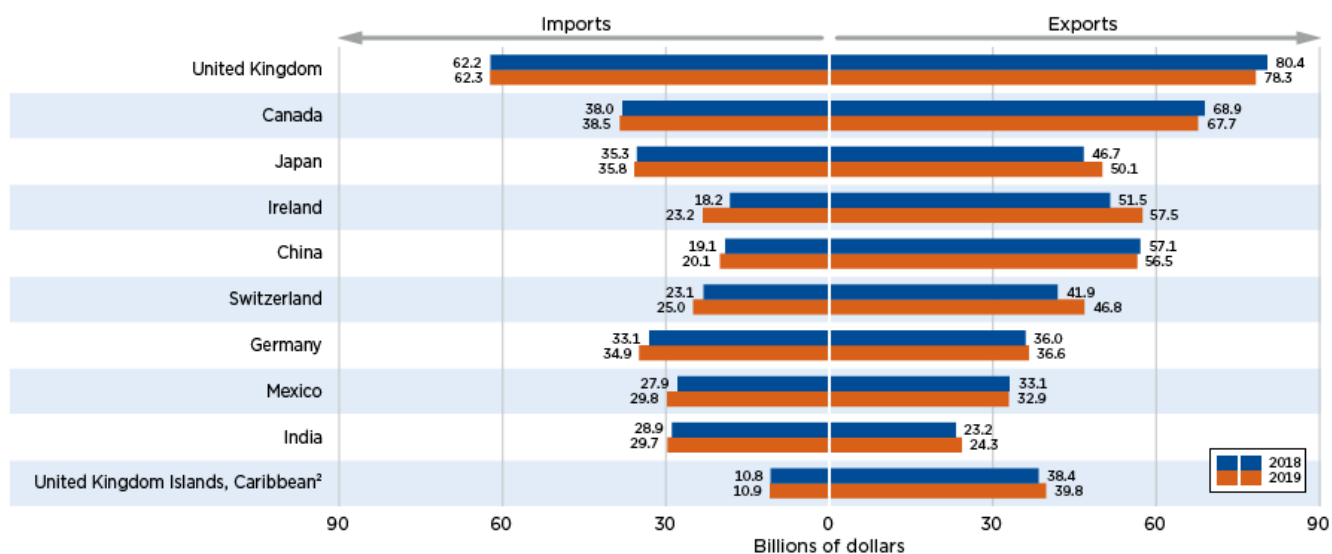
- **Travel.** Imports of travel services increased \$8.6 billion, or 7 percent, to \$134.6 billion. The increase reflected an increase in other personal travel. Geographically, the increase in imports of total travel services was widespread.

- **Insurance services.** Imports of insurance services increased \$7.8 billion, or 18 percent, to \$51.5 billion, mainly reflecting an increase in reinsurance services. Imports from Bermuda accounted for nearly two-thirds of the increase in total insurance imports.
- **Other business services.** Imports of other business services increased \$5.7 billion, or 5 percent, to \$113.6 billion. The increase in other business services was led by an increase in technical, trade-related, and other business services. Imports from Ireland, China, and Germany together accounted for most of the increase in total other business services imports.

Trade by partner country

The top 10 trading partners of the United States based on total trade (exports plus imports) for 2019 are shown in chart 4. The top 10 trading partners accounted for 56 percent of services exports and 53 percent of services imports. The United Kingdom remained the largest trading partner for services in 2019; 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 (led by securities lending, electronic funds transfer, and other services) and other business services (mainly professional and management consulting services). The top categories for imports were other business services (mainly professional and management consulting services) and financial services (led by financial management services). 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 the third year in a row. The top export and import categories for Canada were travel, primarily other personal travel, and other business services, primarily professional and management consulting services.

Chart 4. Trade in Services with Selected Countries, 2018-2019¹



1. The countries selected for this chart are the top 10 countries by total trade in services (exports plus imports) in 2019.

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

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Increases in exports to the top 10 trading partners (the countries shown in chart 4) accounted for \$13.7 billion, or 102 percent, of the \$13.4 billion increase in total services exports in 2019. Exports to Ireland and Switzerland increased the most. Among the notable increases in exports were the following:

- **Ireland.** Exports to Ireland increased \$6.0 billion, or 12 percent, to \$57.5 billion, largely reflecting an increase of \$4.0 billion in other business services. The increase in other business services was more than accounted for by an increase in professional and management consulting services, led by an increase in business and management consulting and public relations services.
- **Switzerland.** Exports to Switzerland increased \$5.0 billion, or 12 percent, to \$46.8 billion, largely reflecting a \$2.9 billion increase in charges for the use of intellectual property, mainly charges associated with licenses for the use of outcomes of R&D.

Increases in imports from the top 10 trading partners accounted for \$13.8 billion, or 53 percent, of the \$26.3 billion increase in total services imports in 2019 (chart 4). Imports from Ireland, Bermuda (not shown in chart 4), and Switzerland increased the most. Among the notable increases in imports were the following:

- **Ireland.** Imports from Ireland increased \$5.1 billion, or 28 percent, to \$23.2 billion, largely reflecting a \$3.2 billion increase in telecommunications, computer, and information services, mainly computer services.
- **Bermuda.** Imports from Bermuda increased \$5.0 billion, or 22 percent, to \$28.4 billion, reflecting an increase of \$4.9 billion in insurance services, mostly reinsurance services.
- **Switzerland.** Imports from Switzerland increased \$1.9 billion, or 8 percent, to \$25.0 billion after decreasing \$6.5 billion in 2018. The increase was more than accounted for by an increase in insurance services, mostly reinsurance services.

Trade by affiliation

U.S. services trade includes trade between unaffiliated parties and trade within MNEs (affiliated trade). Affiliated trade accounted for 32 percent of U.S. services exports and 29 percent of U.S. services imports in 2019 (table C). Affiliated services exports grew more rapidly than unaffiliated services exports in 2019. In contrast, unaffiliated services imports grew much more rapidly than affiliated services imports.

Table C. Trade in Services by Affiliation Type, 2018–2019

Affiliation type	Billions of dollars		Percent change from preceding year	Percent of total trade in services
	2018	2019	2019	2019
Exports of services				
Total exports of services	862.4	875.8	1.6	.....
Unaffiliated	593.3	595.0	0.3	67.9
Affiliated	269.1	280.8	4.4	32.1
U.S. parents' exports to their foreign affiliates	215.1	224.2	4.3	25.6
U.S. affiliates' exports to their foreign parent groups	54.1	56.6	4.7	6.5
Imports of services				
Total imports of services	562.1	588.4	4.7	.....
Unaffiliated	393.1	418.8	6.5	71.2
Affiliated	169.0	169.6	0.4	28.8
U.S. parents' imports from their foreign affiliates	116.0	116.6	0.5	19.8
U.S. affiliates' imports from their foreign parent groups	53.0	53.0	0.1	9.0

..... Not applicable

ICT Services and Potentially ICT-Enabled Services in 2019

BEA 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 facilitate information processing and communication; ICT-enabled services are services delivered over ICT networks. 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 licenses to reproduce and/or distribute 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 includes services that *can* predominantly be delivered remotely over ICT networks, without identifying the services that *are* delivered over ICT networks. See "[Updating Potentially ICT-Enabled Services for the 2020 Annual Update](#)" for a description of the service types included in ICT and potentially ICT-enabled services as well as changes BEA adopted to its definition of potentially ICT-enabled services in June 2020, beginning with statistics for 1999.

Updating Potentially ICT-Enabled Services for the 2020 Annual Update

In June 2020, BEA adopted presentational and methodological improvements to its trade in services statistics as part of its annual update that led to changes in the composition of potentially ICT-enabled services (for more information on the improvements to the trade in services statistics, see the "[Services Spotlight](#)" in this article). BEA statistics on potentially ICT-enabled services are an alternative aggregation, based on international guidelines, of certain trade in services categories that appear in BEA's standard tables.¹ Beginning with statistics for 1999, BEA utilized the expanded detail introduced in its trade in services standard tables to update the set of service categories classified as potentially ICT enabled. Other presentational and methodological improvements to BEA trade in services statistics introduced during the 2020 update also impacted the composition of potentially ICT-enabled services. Table I summarizes the updates to the composition of potentially ICT-enabled services and their direction of change.

Table I. Updates to the Composition of Potentially ICT-Enabled Services and Their Direction of Change

Update introduced	Direction of revision
Updates to the definition of potentially ICT-enabled services	Unknown¹
Reclassification of waste treatment and de-pollution services; services incidental to agriculture, forestry, and fishing; and other business services n.i.e. to potentially ICT-enabled services	Decrease
Reclassification of trade-related services to potentially ICT-enabled services	Increase
Other updates	Unknown¹
Introduction of financial intermediary services indirectly measured (FISIM)	Increase
Introduction of market-making services	Increase
Reclassification of transactions in intellectual property	Decrease
Sales and purchases of ownership rights related to franchises and trademarks are no longer treated as trade in services ²	Decrease
Reclassifications to categories within trade in services	No revision

n.i.e. Not included elsewhere

1. It is not possible to precisely identify the net revisions to trade in potentially ICT-enabled services due to changes introduced during the 2020 annual update because the value of certain transactions that were reclassified or introduced are not separately identified in BEA's statistics or are suppressed to avoid the disclosure of data of individual companies. However, based on the ranges of feasible values for the not-separately-identifiable components for 2006–2019, exports of potentially ICT-enabled services were revised up for all years except 2008, 2012, and 2017, when the direction of the impact is unclear. Imports of potentially ICT-enabled services were revised up for 2006; the direction of the impact is unclear in other years.
2. Sales and purchases of ownership rights related to franchises and trademarks were reclassified to the capital account in the ITAs.

In updating the set of service categories classified as potentially ICT enabled, BEA excluded certain service categories—waste treatment and de-pollution services; services incidental to agriculture, forestry, and fishing; and other business services n.i.e.—that are not considered to be potentially ICT enabled, but that had previously been included because they were not separately identified in BEA statistics and were classified in categories that predominantly included potentially ICT-enabled services. Trade-related services were reclassified as potentially ICT enabled because, as collected on BEA's trade-in-services surveys, they are primarily provided over ICT networks.

Statistics on potentially ICT-enabled services are now composed of BEA's published statistics on international trade in six major service types: insurance services; financial services; charges for the use of intellectual property; telecommunications, computer, and information services; certain other services included in other business services (research and development services; professional and management consulting services; architectural, engineering, scientific, and other technical services; and trade-related services), and certain other services included in personal, cultural, and recreational services (audiovisual services and other personal, cultural, and recreational services).² Potentially ICT-enabled services include ICT services.

Statistics on ICT services were unaffected by the presentational improvements introduced during the 2020 annual update.³

1. For a detailed description of how BEA initially developed its definitions of ICT and potentially ICT-enabled services and how ICT and potentially ICT-enabled statistics were previously 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).
2. Personal, cultural, and recreational services is a major service type first published with the 2020 annual update. Part of this new service type comes from services previously classified in other service types; such services were previously included in potentially ICT-enabled services.
3. Although no change was made in terms of which service categories are classified as ICT services, the presentational changes did include a reclassification of sales and purchases of ownership rights and licenses to use computer software (excluding reproduction or distribution) from charges for the use of intellectual property associated with computer software to computer services in order to more fully comply with international guidelines. However, because both of these categories are included in ICT services, the reclassification had no net effect on the composition of ICT services.

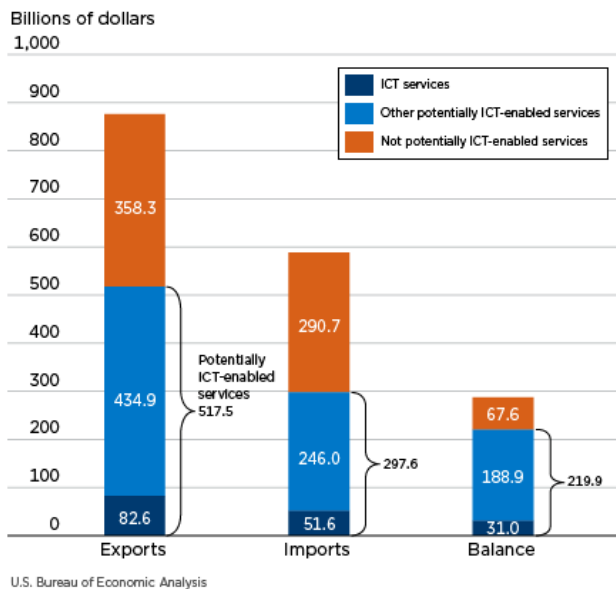
Trade in ICT Services and Potentially ICT-Enabled Services in 2019

In 2019, U.S. exports of ICT services were \$82.6 billion, and U.S. imports of ICT services were \$51.6 billion, resulting in an ICT services trade surplus of \$31.0 billion (chart 5). The surplus increased \$2.5 billion from 2018, as exports of ICT services increased \$2.9 billion, and imports of ICT services increased \$0.4 billion.

U.S. exports of potentially ICT-enabled services were \$517.5 billion, and U.S. imports of potentially ICT-enabled services were \$297.6 billion, resulting in a potentially ICT-enabled services trade surplus of \$219.9 billion. The surplus increased \$3.1 billion from 2018, as exports increased \$17.7 billion, and imports increased \$14.6 billion. Potentially ICT-enabled services accounted for 59 percent of total services exports and 51 percent of imports in 2019. Both shares increased slightly from their 2018 values of 58 and 50 percent, respectively. The

remainder of this section discusses trade in potentially ICT-enabled services in 2019 by service type, by trading partner, and by affiliation. [Tables 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, 2019

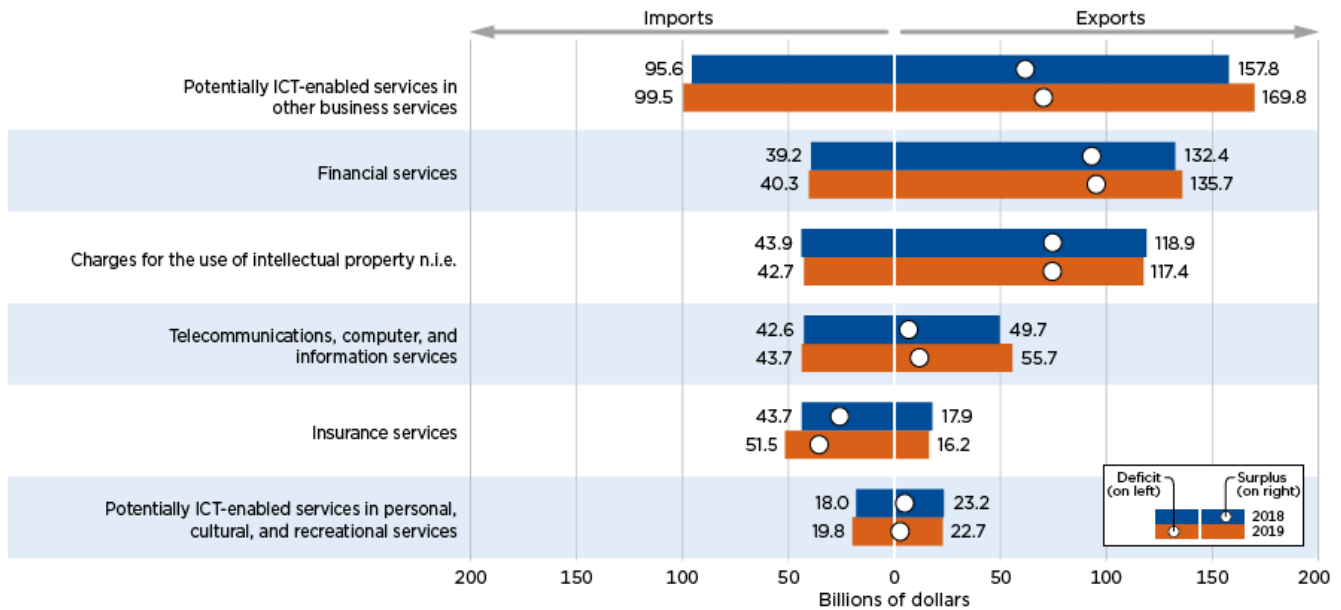


Potentially ICT-enabled trade by service type

In 2019, potentially ICT-enabled services in other business services, primarily professional and management consulting services and research and development services, accounted for the largest shares of exports (33 percent) and imports (33 percent) (chart 6). Exports in five of the six major categories exceeded imports, with the largest surplus occurring in financial services. The combined surpluses in these five categories more than offset a deficit in insurance services.

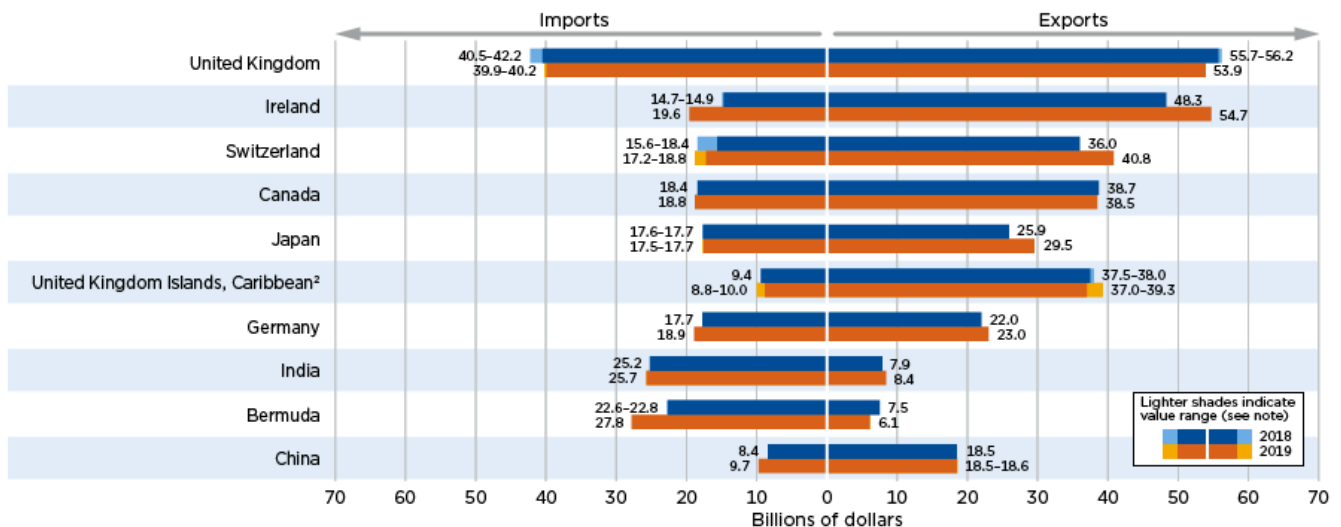
Exports increased in three of the six major categories in 2019. The largest increases for exports were in potentially ICT-enabled services in other business services, primarily professional and management consulting services, and in telecommunications, computer, and information services. Imports increased in five of the six major categories in 2019. The largest increases for imports were in insurance services and in potentially ICT-enabled services in other business services, led by an increase in professional and management consulting services.

Chart 6. Trade in Potentially ICT-Enabled Services by Type, 2018–2019



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Chart 7. Trade in Potentially ICT-Enabled Services with Selected Countries, 2018–2019¹



1. The countries selected for this chart are the top 10 countries by total trade in potentially ICT-enabled services (exports plus imports) in 2019.

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

Notes. When the value for potentially ICT-enabled services is suppressed, a range of possible values is used in its place. 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 potentially ICT-enabled services are suppressed are ranked using their lower bounds.

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Potentially ICT-enabled trade by partner country

Exports and imports in potentially ICT-enabled services for the top 10 trading-partner countries by total 2019 trade (exports plus imports) are shown in chart 7.

In 2019, the United Kingdom was the United States’ top trading partner in potentially ICT-enabled services. Exports to the United Kingdom were \$53.9 billion, led by exports of financial services and potentially ICT-enabled services in other business services. Imports from the United Kingdom were between \$39.9 and \$40.2 billion (see “Calculating Ranges for Suppressed Values”),

led by potentially ICT-enabled services in other business services and financial services. In 2019, Ireland overtook the United Kingdom as the top recipient country for exports, reflecting a significant increase in exports of potentially ICT-enabled services in other business services, particularly in professional and management consulting services. The United Kingdom was the top source of imports in 2019, followed by Bermuda; the vast majority of imports from Bermuda were in insurance services.

The largest increases in 2019 in exports were in exports to Ireland and to Switzerland; for Ireland, the largest increase was in potentially ICT-enabled services in other business services, mostly in professional and management consulting services. The largest increases in 2019 in imports were in imports from Bermuda and Ireland; almost all of the increase for Bermuda was in insurance services, particularly reinsurance services.

Calculating Ranges for Suppressed Values

For some countries and affiliation categories, 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 United Kingdom Islands, Caribbean; Bermuda; and China in 2019 and for the United Kingdom and United Kingdom Islands, Caribbean in 2018. Values for potentially ICT-enabled services imports were suppressed for the United Kingdom; Switzerland; Japan; United Kingdom Islands, Caribbean; India; and Bermuda in 2019 and for the United Kingdom, Ireland, Switzerland, Japan, India, and Bermuda in 2018. In addition, potentially ICT-enabled services exports by U.S. parents to their foreign affiliates and by U.S. affiliates to their foreign parent groups were suppressed in 2018, and potentially ICT-enabled services imports for all affiliation categories were suppressed in 2018 and 2019. For these statistics, ranges of feasible values are presented in chart 7 and table D to facilitate the discussion of potentially ICT-enabled services exports, imports, and trade balances; the lower bounds of these ranges are used to rank the countries in chart 7. For some statistics, the lower and upper bounds of these ranges of feasible values round to the same value in \$100 million units, and so point values appear instead of a range in chart 7.

Values for potentially ICT-enabled services exports, imports, or trade balance 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 in which one or more components are suppressed, an upper bound and lower bound are used to establish a range of possible values. The lower bound is equal to the sum of all unsuppressed categories included in potentially ICT-enabled services. The upper bound is equal to the sum of the unsuppressed categories and higher-level aggregates that include the suppressed components, less any other unsuppressed components of the higher-level aggregate that are not included in potentially ICT-enabled services.

Potentially ICT-enabled trade by affiliation

Affiliated trade accounted for 52 percent of exports and between 53 and 54 percent of imports of potentially ICT-enabled services in 2019 (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. Affiliated exports increased 5 percent in 2019, and unaffiliated exports increased 2 percent. Precise changes cannot be calculated for either unaffiliated or affiliated imports, because import levels were suppressed in both 2018 and 2019. However, feasible growth rates range between 8 and 13 percent for unaffiliated imports and between -1 percent and 3 percent for affiliated imports.

Table D. Trade in Potentially ICT-Enabled Services by Affiliation Type, 2018–2019¹

Affiliation type	Billions of dollars				Percent change from preceding year		Percent of total trade in potentially ICT-enabled services	
	2018		2019		2019		2019	
	Point value or lower bound	Upper bound	Point value or lower bound	Upper bound	Point value or lower bound	Upper bound	Point value or lower bound	Upper bound
Exports of potentially ICT-enabled services								
Total exports of potentially ICT-enabled services	499.8	.....	517.5	.....	3.5	.....	.....	.....
Unaffiliated	240.2	.....	245.9	.....	2.4	.....	47.5	.....
Affiliated	259.6	.....	271.6	.....	4.6	.....	52.5	.....
U.S. parents' exports to their foreign affiliates	208.2	208.4	217.4	.....	4.3	4.4	42.0	.....
U.S. affiliates' exports to their foreign parent groups	51.2	51.4	54.2	.....	5.3	5.7	10.5	.....
Imports of potentially ICT-enabled services								
Total imports of potentially ICT-enabled services	283.1	.....	297.6	.....	5.1	.....	.....	.....
Unaffiliated	123.8	128.1	138.3	139.7	7.9	12.9	46.5	46.9
Affiliated	155.0	159.3	157.8	159.3	-0.9	2.8	53.0	53.5
U.S. parents' imports from their foreign affiliates	104.5	108.9	106.9	108.6	-1.8	3.9	35.9	36.5
U.S. affiliates' imports from their foreign parent groups	50.3	50.4	50.6	50.9	0.4	1.2	17.0	17.1

..... Not applicable

ICT Information and communications technology

1. For affiliation types where the value of potentially ICT-enabled services is published, a point value is given. For affiliation types where the value of potentially ICT-enabled services is suppressed to avoid the disclosure of data of individual companies, a range of possible values is given in the lower bound and upper bound columns. For more information on how the lower and upper bounds were calculated, see "[Calculating Ranges for Suppressed Values.](#)"

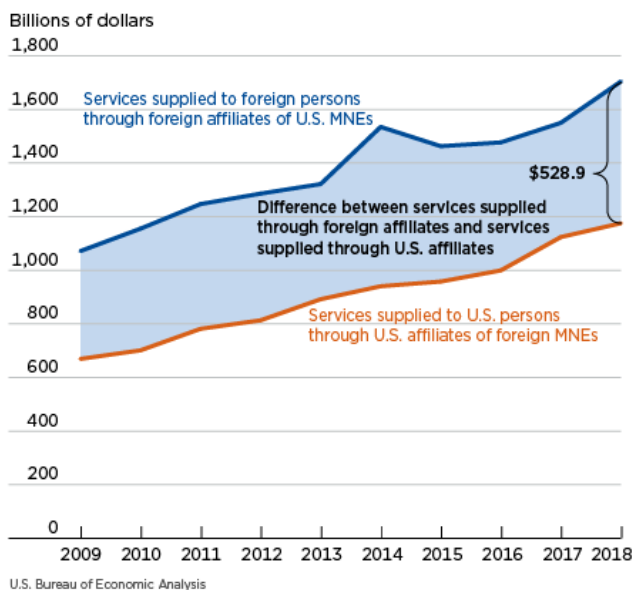
Services Supplied Through Affiliates

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. While the statistics on

trade in services discussed above are presented by service type, by trading partner, and by affiliation, statistics on services supplied through affiliates are presented by industry of the foreign affiliate, by country of affiliate or country of ultimate beneficial owner (UBO), and by destination.¹²

In 2018, the latest year for which statistics are available, services supplied by U.S. MNEs to foreign markets through their foreign affiliates increased \$154.5 billion, or 10 percent, to \$1.70 trillion (chart 8). Services supplied by foreign MNEs to the U.S. market through their U.S. affiliates increased \$51.6 billion, or 5 percent, to \$1.18 trillion. The difference between international services supplied through affiliates to foreign markets and the services supplied to the U.S. market was \$528.9 billion in 2018, compared with \$426.0 billion in 2017.

Chart 8. Services Supplied Through Affiliates, 2009–2018



The remainder of this section discusses services supplied through affiliates in 2018. [Tables available on BEA's website](#) provide additional detail on services supplied through affiliates of MNEs, along with detail cross classified by country and industry.

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), 2018

[Millions of dollars]

Country	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	1,704,310	39,101	35,325	256,879	121,674	289,629	262,716	82,426	277,637	338,924
Total for the top 10 countries¹	1,105,607	14,427	24,794	179,861	83,087	208,187	154,085	61,740	174,275	205,151
United Kingdom	267,260	4,954	6,276	22,823	27,271	38,268	65,338	7,790	45,455	49,084
Ireland	164,896	(D)	(D)	8,299	282	84,259	12,763	18,387	31,630	(D)
Canada	132,657	5,784	2,891	20,100	26,244	9,454	13,546	5,050	14,087	35,499
Singapore	88,120	(D)	(D)	27,090	3,052	15,327	17,206	(D)	8,397	12,237
Netherlands	87,353	1,546	3,835	15,126	2,217	19,667	9,633	3,286	9,790	22,254
Switzerland	86,384	92	370	31,490	4,784	5,728	2,066	(D)	18,728	(D)
Germany	84,014	827	2,866	16,834	6,256	13,517	5,760	2,541	14,959	20,455
Japan	77,411	0	266	15,155	4,619	11,378	20,254	1,183	14,715	9,840
China	59,614	426	1,981	13,502	5,793	3,599	3,455	2,290	6,595	21,971
France	57,899	109	3,046	9,441	2,567	6,989	4,063	1,865	9,919	19,901
Other countries	598,703	24,674	10,531	77,018	38,586	81,441	108,632	20,686	103,361	133,773
Services supplied to U.S. persons by foreign MNEs through their majority-owned U.S. affiliates by country of the UBO										
All countries	1,175,440	42,636	92,758	218,604	79,775	145,993	190,890	33,884	141,329	229,570
Total for the top 10 countries²	939,786	10,310	83,852	160,765	72,086	124,725	161,732	25,253	114,456	186,606
Japan	173,170	(D)	19,733	64,204	(D)	(D)	25,312	2,512	7,811	(D)
United Kingdom	161,022	(D)	10,844	10,623	13,234	26,136	19,783	8,539	(D)	(D)
Germany	151,281	(D)	28,037	12,900	10,077	(D)	17,613	2,114	10,443	(D)
Canada	133,261	1,326	4,228	15,594	18,883	8,928	31,569	(D)	11,544	(D)
France	106,039	(D)	2,837	9,951	(D)	(D)	22,744	(D)	39,699	(D)
Switzerland	61,019	(D)	7,839	3,859	1,111	(D)	16,899	829	996	(D)
Netherlands	55,501	(D)	5,053	9,365	16,811	(D)	(D)	2,382	(D)	(D)
South Korea	35,855	(D)	537	30,957	(D)	(D)	221	68	724	(D)
United States	33,899	0	170	1,467	2,098	1,583	(D)	65	3,574	(D)
Ireland	28,739	(D)	4,575	1,846	6	214	(D)	23	(D)	(D)
Other countries	235,654	32,326	8,906	57,839	7,690	21,267	29,158	8,631	26,873	42,964

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

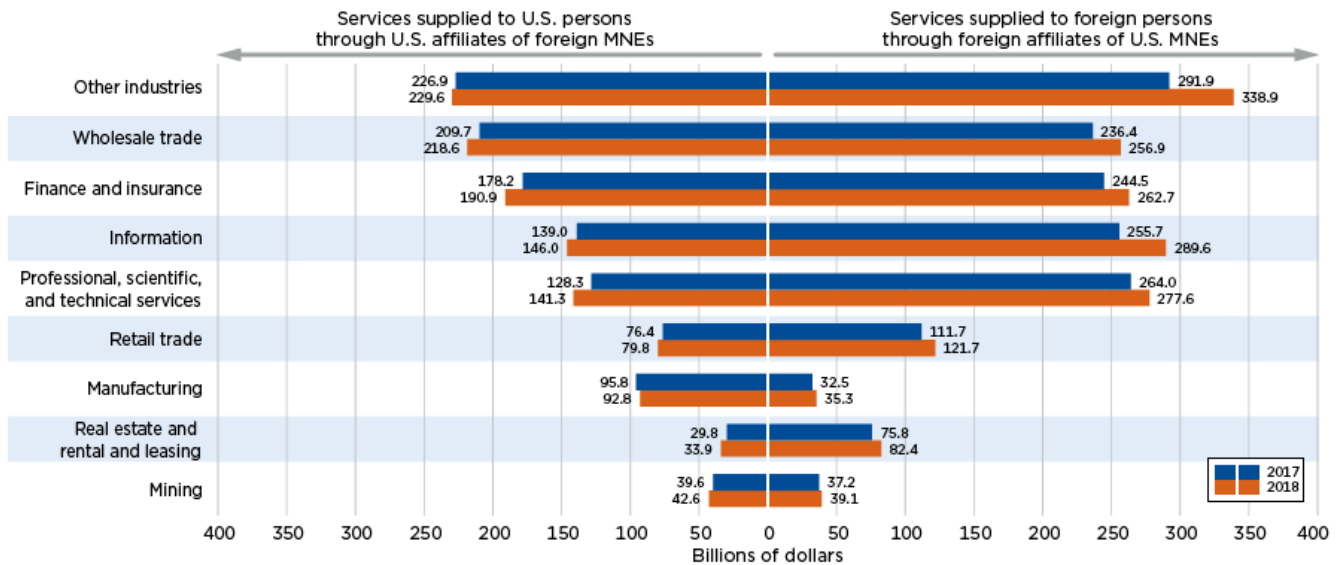
MNEs Multinational enterprises

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.

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 2018, the broad category other industries (primarily transportation and warehousing; administration, support, and waste management; and accommodation and food services) accounted for the largest share (20 percent) of the services supplied by U.S. MNEs to foreign markets through their foreign affiliates. Four additional industries—information; professional, scientific, and technical services; finance and insurance; and wholesale trade—each also accounted for over 15 percent of the total. The remaining four major industry categories each accounted for less than 8 percent.

Chart 9. Services Supplied Through Affiliates by Industry, 2017–2018



U.S. Bureau of Economic Analysis

In 2018, services supplied to foreign persons by foreign affiliates of U.S. MNEs increased in all nine industry categories (chart 9). The largest contribution to the \$154.5 billion aggregate increase was from affiliates in other industries, which accounted for 30 percent of the aggregate increase. Among the notable changes by industry were the following:

- **Other industries.** Services supplied through foreign affiliates in other industries increased \$47.0 billion to \$338.9 billion. Affiliates in transportation and warehousing accounted for nearly two-fifths of the increase in other industries, but increases were widespread across subindustries.
- **Information.** Services supplied through affiliates in information increased \$33.9 billion to \$289.6 billion. An increase in services supplied through European affiliates in other information services accounted for over half of the increase.

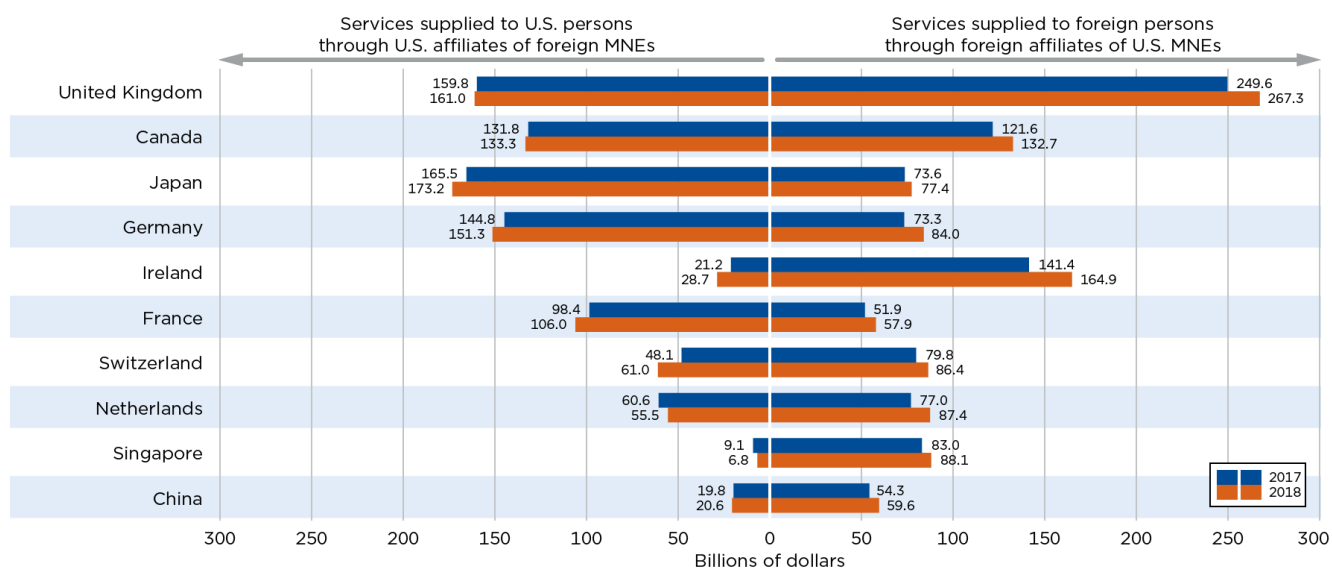
In 2018, services supplied to U.S. persons through U.S. affiliates of foreign MNEs increased in all of the major industry categories except manufacturing (chart 9). The largest industry contribution to the \$51.6 billion aggregate increase was in professional, scientific, and technical services. Among the notable changes by industry were the following:

- **Professional, scientific, and technical services.** Services supplied through affiliates in professional, scientific, and technical services increased \$13.1 billion to \$141.3 billion, reflecting increases in all subindustries except architectural, engineering, and related services. An increase in services supplied through European affiliates in management, scientific, and technical consulting services accounted for more than half of the increase.
- **Finance and insurance.** Services supplied through affiliates in finance and insurance increased \$12.7 billion to \$190.9 billion. The increase was more than accounted for by an increase in services supplied through affiliates that are insurance carriers or involved in related activities. The increase in services supplied through affiliates in insurance was partly offset by a decrease among affiliates in finance.

Services supplied through affiliates by country

In 2018, as in 2017, the top countries for services supplied to foreign persons by U.S. MNEs through their foreign affiliates—ranked by country of the foreign affiliate—were the United Kingdom, Ireland, and Canada (table E). In both years, the top countries for services supplied to U.S. persons by foreign MNEs through their U.S. affiliates—ranked by the country of UBO of the affiliate—were Japan, the United Kingdom, and Germany.

Chart 10. Services Supplied Through Affiliates for Selected Countries, 2017–2018¹



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 2018. U.S. Bureau of Economic Analysis

Contributions to the \$154.5 billion increase in 2018 in services supplied to foreign persons through foreign affiliates were widespread geographically (chart 10).

The largest increase was for services supplied through affiliates in Ireland. Among the notable 2018 increases were the following:

- **Ireland.** Services supplied through Irish affiliates increased \$23.5 billion to \$164.9 billion. Much of the increase was from affiliates in information services. Services supplied through affiliates in professional, scientific, and technical services and through affiliates in finance and insurance also increased substantially.
- **United Kingdom.** Services supplied through affiliates in the United Kingdom increased \$17.7 billion to \$267.3 billion. The increase was spread across several major industry categories, including other industries; retail trade; professional, scientific, and technical services; finance and insurance; and wholesale trade.

In 2018, increases by U.S. affiliates with UBOs in several countries contributed to the aggregate increase of \$51.6 billion in services supplied to U.S. persons through U.S. affiliates of foreign MNEs. Notable changes included the following:

- **Japan.** Services supplied through affiliates with Japanese UBOs increased \$7.7 billion, partly reflecting an increase in services supplied by affiliates in wholesale trade.

- **France.** Services supplied through affiliates with French UBOs increased \$7.7 billion; the largest increase for French affiliates was in finance and insurance.

Services supplied through affiliates by destination

Foreign affiliates supply services to both foreign markets and the U.S. market.¹³ Services supplied to foreign persons, the focus of the services supplied through foreign affiliates statistics presented in this article, accounted for 88 percent of the services supplied worldwide through foreign affiliates in 2018; the remainder were supplied to U.S. persons (table F). Most of the services supplied to foreign persons were supplied to the affiliates' host country, the vast majority of which were supplied to unaffiliated persons. In contrast, for services supplied to other foreign countries, more than half were supplied to unaffiliated persons. Most of the services supplied to U.S. persons were supplied to U.S. parents.¹⁴

U.S. affiliates supply services both to the U.S. market and to foreign markets.¹⁵ Services supplied to U.S. persons, the focus of the services supplied through U.S. affiliates statistics presented in this article, accounted for 90 percent of the services supplied worldwide by U.S. affiliates in 2018; the remainder were supplied to foreign markets. In 2017, most of the services supplied to U.S. persons were supplied to unaffiliated persons. For services supplied to foreign persons, just over two-thirds were supplied to unaffiliated persons.¹⁶

Table F. Services Supplied Through Affiliates by Destination, 2017–2018

Destination	Billions of dollars		Percent change from preceding year	Percent of total services supplied
	2017	2018	2018	2018
Services supplied by U.S. MNEs through their majority-owned foreign affiliates				
Total services supplied	1,756.9	1,940.3	10.4	.....
Services supplied to U.S. persons	207.1	236.0	14.0	12.2
To U.S. parents ¹	175.5	201.6	14.9	10.4
To unaffiliated persons	31.5	34.4	9.0	1.8
Services supplied to foreign persons	1,549.9	1,704.3	10.0	87.8
To the host country ²	1,143.0	1,258.5	10.1	64.9
To other foreign affiliates ³	82.2	93.4	13.7	4.8
To unaffiliated persons	1,060.8	1,165.1	9.8	60.0
To other foreign countries	406.9	445.8	9.6	23.0
To other foreign affiliates ³	191.7	190.5	-0.6	9.8
To unaffiliated persons	215.1	255.3	18.7	13.2
Services supplied by foreign MNEs through their majority-owned U.S. affiliates				
Total services supplied	1,247.1	1,299.2	4.2	.....
Services supplied to U.S. persons	1,123.8	1,175.4	4.6	90.5
To other U.S. affiliates ⁴	233.8	n.a.	n.a.	n.a.
To unaffiliated persons	890.1	n.a.	n.a.	n.a.
Services supplied to foreign persons	123.2	123.8	0.4	9.5
To the foreign parent group ⁵	39.3	n.a.	n.a.	n.a.
To foreign affiliates ⁶	1.1	n.a.	n.a.	n.a.
To unaffiliated persons	82.9	n.a.	n.a.	n.a.

..... Not applicable

n.a. Not available

MNEs Multinational Enterprises

1. Services supplied to U.S. parents includes only services supplied to the U.S. parent or parents of the supplying foreign affiliate. Services supplied to U.S. parents not affiliated with the supplying foreign affiliate are included in the row for unaffiliated persons.
2. Services supplied to the host country include services supplied by an affiliate to persons in the country where the affiliate is located.
3. Services supplied to other foreign affiliates includes only services supplied to foreign affiliates of the supplying foreign affiliate's U.S. parent or parents. Services supplied to foreign affiliates of U.S. parents not affiliated with the supplying foreign affiliate are included in the row for unaffiliated persons.
4. Services supplied to other U.S. affiliates include only services supplied to U.S. affiliates owned by the same foreign parent group as the supplying U.S. affiliate. Services supplied to U.S. affiliates not owned by the same foreign parent group as the supplying U.S. affiliate are included in the row for unaffiliated U.S. persons.
5. Services supplied to the foreign parent group include only services supplied to the foreign parent group of the supplying U.S. affiliate. Services supplied to members of foreign parent groups that do not own the supplying U.S. affiliate are not included.
6. Services supplied to foreign affiliates include only services supplied to foreign affiliates owned by the supplying U.S. affiliate. Services supplied to foreign affiliates that are not owned by the supplying U.S. affiliate are not included.

Future Enhancements to the International Services Statistics

BEA continues its efforts to enhance its international services statistics.¹ For a summary of the improvements introduced in 2020, see the “[Services Spotlight](#)” in this article. Specific improvements and research planned for the coming years include the following:

- Improving the estimation of trade in travel services by updating the methodology and source data for expenditures by border, seasonal, and other short-term workers and for expenditures by travelers on cruises.
- Incorporating the results from the 2018 BE-140 Benchmark Survey of Insurance Transactions by U.S. Insurance Companies with Foreign Persons and the 2019 BE-180 Benchmark Survey of Financial Services Transactions Between U.S. Financial Services Providers and Foreign Persons.

BEA also continues to explore further expansion of the statistics, including the following:

- Researching methodologies for developing estimates of manufacturing services on physical inputs owned by others, including exploring the feasibility of using U.S. customs records to estimate imports of manufacturing services by firms operating in the United States.
- Expanding the affiliation detail presented in its annual statistics by introducing bilateral statistics on total exports and imports by affiliation.
- Conducting research to further develop statistics that present alternative aggregations of international services in the areas of mode of supply, characteristics of firms, and digital trade.²

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 or the annual update of the U.S. international accounts *Survey* articles.

2. Exploratory estimates of trade in modes of supply are available in Michael Mann, “[Measuring Trade in Services by Mode of Supply](#)” BEA Working Paper, Washington, D.C., August 2019. Statistics on trade in services by major industry and by firm type are available in [international services tables](#) 6.1 and 6.2. Statistics on trade in potentially-ICT enabled services, which measures a related but more broadly defined concept to digitally delivered trade are discussed earlier in this article and are available in [international services tables](#) 3.1–3.3.

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1. More information on the definitions, coverage, and methodology of trade in services and services supplied through affiliates is available on the BEA [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 July 2020).
 5. [World Bank World Development Indicators](#) (series: “GDP, PPP (current international \$)”).
 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. In the 2020 annual update of the ITAs, manufacturing services on physical inputs owned by others was added to the presentation of services statistics as a 12th major service category, but BEA does not yet provide values for this series. Instead, n.a. is shown in the tables. BEA will replace the n.a. in this new major category with values when it is able to produce a reliable and comprehensive estimate of manufacturing services on physical inputs owned by others. See “[Future Enhancements to the International Services Statistics](#)” in this article for more information on the research BEA is conducting toward developing these estimates.
 8. Based on data from the World Federation of Exchanges Annual Statistics Guide 2019.
 9. “Science and Engineering Indicators 2020: The State of U.S. Science and Engineering” (Alexandria, VA: National Science Foundation, 2020 (NSB-2020-1)).
 10. Other personal travel includes any personal travel undertaken for purposes other than health or education.
 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. The UBO of a U.S. affiliate is that person or entity, proceeding up a chain of majority-ownership (where the entity above owns more than 50 percent of the entity below), beginning with and including the foreign parent of the U.S. affiliate, 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 and assumes the risks from ownership or control.
 13. Services supplied through foreign affiliates to the U.S. market are mostly classified as U.S. imports of services. However, data from BEA 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 through foreign affiliates to U.S. persons, distributive services in wholesale and retail trade are generally not included as U.S. imports of services.
 14. [International services tables](#) 4.2 and 4.3 present the destination by affiliation breakdown for services supplied to foreign persons; BEA AMNE statistics additionally include the affiliation breakdown for services supplied to the United States.
 15. Services supplied through U.S. affiliates to foreign markets are mostly classified as U.S. exports of services. However, data from BEA direct investment surveys on these services supplied are not used to estimate U.S. exports of services; data on these services are collected along with data on other U.S. services exports in BEA's services trade collection program. Of the services supplied through U.S. affiliates to foreign persons, distributive services in wholesale and retail trade are generally not included as U.S. exports of services.
 16. Information on the destination of services sales by affiliation is not collected annually, but was collected on BEA's 2017 Benchmark Survey of Foreign Direct Investment in the United States; statistics featuring the affiliation breakdown for services supplied to U.S. persons and services supplied to foreign persons will be available by country and industry in BEA's forthcoming release of the 2017 AMNE statistics. BEA has in the past collected the affiliation breakdown for services sold to foreign persons, most recently on the 2007 Benchmark Survey of Foreign Direct Investment in the United States, but has never before collected the affiliation breakdown for services sold to U.S. persons.

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