

The Journal of the U.S. Bureau of Economic Analysis

Visual Essay

## **U.S. International Services**

Trade in Services in 2022 and Services Supplied Through Affiliates in 2021

By Shari A. Allen, David Stein, Kaitlin C. Johns, and Maryam Fatima | October 13, 2023

This article highlights statistics on international services that the U.S. 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). MNEs can serve foreign markets through trade, but they often provide services through their affiliates located in, or close to, the markets they serve because of the importance of physical proximity to customers in the delivery of certain types of services. 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.

### **Data Availability**

**Trade in services** statistics through 2022 and statistics on services supplied through affiliates through 2021 can be accessed through BEA's International Services Interactive Data Application. This application covers additional years of data and supplemental detail that are not available in the tables in this article.

In October 2023, services supplied through affiliates statistics in tables 1.1 and 4.1–5.4 were added to BEA's Data Application Programming Interface (API) within the "IntlServSTA" data set. Trade in services statistics in tables 1.1–2.3 and trade in information and communications technology (ICT) and potentially ICT-enabled services statistics in tables 3.1–3.3 are available in the API within the "IntlServTrade" data set.

For more resources, such as links to definitions and surveys, see the "International Services" product page on the BEA website.

Survey of Current Business October 13, 2023 Page 1 of 16

### **Key Terms**

**Trade in services** refers to U.S. 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 supplementary statistics on trade in information and communications technology and potentially ICT-enabled services.

ICT services refers to services that facilitate information processing and communication; ICT-enabled services refer to services delivered over ICT networks. It is not possible to precisely identify services trade that is ICT enabled, because BEA collects data on trade in services by type of service traded and not on the mode of delivery. 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. For a listing of the categories of services from BEA's published statistics that are classified as ICT and potentially ICT enabled, see the box "Updating Potentially ICT-Enabled Services for the 2020 Annual Update" in "U.S. International Services: Trade in Services in 2019 and Services Supplied Through Affiliates in 2018" in the October 2020 Survey of Current Business.

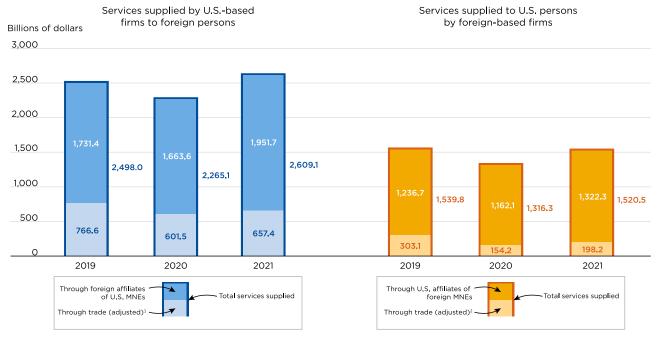
**Services supplied through affiliates** refers to services supplied by MNEs through the channel of direct investment. This set of statistics covers services supplied by majority-owned foreign affiliates of U.S. MNEs to foreign residents, both in the host country and in other foreign markets, and services supplied by majority-owned U.S. affiliates of foreign MNEs to U.S. residents. 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.

The following charts and tables present highlights of BEA's U.S. international services statistics for the most recent years for which statistics are available. The most recent published annual statistics for trade in services cover 2022, and the most recent published statistics for services supplied through affiliates cover 2021. The statistics on trade in services are presented by service type, by trading partner, and by affiliation. The statistics on services supplied through affiliates are presented by industry of affiliate, by country of affiliate or country of ultimate beneficial owner (UBO), and by destination.

Survey of Current Business October 13, 2023 Page 2 of 16

## **U.S. International Services Highlights**

Chart 1. U.S. International Services Supplied, 2019–2021



MNEs Multinational enterprises

U.S. Bureau of Economic Analysis

- In 2021, total services supplied by U.S.-based firms to foreign persons through both trade and sales by foreign affiliates of U.S. MNEs was \$2.61 trillion, and total services supplied to the United States by foreign-based firms through both trade and sales by U.S. affiliates of foreign MNEs was \$1.52 trillion.<sup>5</sup>
- In 2020, both types of international services were affected by the COVID–19 pandemic, though it is not possible with BEA's source data to say with precision how much of the decreases in these series were due to the pandemic and how much were due to other factors. In 2021, services supplied to foreign persons through foreign affiliates of U.S. MNEs and services supplied to U.S. persons through U.S. affiliates of foreign MNEs increased 17 percent and 14 percent, respectively, exceeding pre-pandemic levels and setting record highs for both series. Services supplied to foreign persons through trade and services supplied to U.S. persons through trade increased 9 percent and 29 percent, respectively. The more rapid growth in services supplied to U.S. persons through trade than to foreign persons is partly a consequence of the easing of travel restrictions on inbound travelers by many countries prior to the United States doing so.<sup>6</sup>

Survey of Current Business October 13, 2023 Page 3 of 16

<sup>1.</sup> Adjusted services supplied by U.S.-based firms to foreign persons through trade is equal to U.S. exports less U.S. exports by majority-owned U.S. affiliates (MOUSAs) of foreign MNEs. U.S. exports by MOUSAs of foreign MNEs are included in total U.S. exports. However, they are excluded from total services supplied so that this total reflects services that are delivered by U.S.-based firms to foreign customers.

<sup>2.</sup> Adjusted services supplied to U.S. persons by foreign-based firms through trade is equal to U.S. imports less U.S. imports from majority-owned foreign affiliates (MOFAs) of U.S. MNEs. U.S. imports from MOFAs of U.S. MNEs are included in total U.S. imports. However, they are excluded from total services supplied so that this total reflects services that are delivered by foreign-based firms to U.S. customers.

## U.S. Trade in Services in 2022

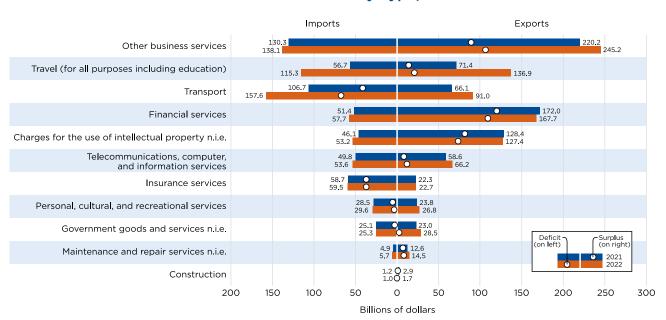
Billions of dollars 1,000 928,5 900 800 801.1 696,7 700 600 500 400 300 241.9 231.8 200 100 2013 2014 2015 2020 2016 2019 2021 2022 Exports - Imports Surplus

Chart 2. U.S. International Trade in Services, 2013-2022

U.S. Bureau of Economic Analysis

- In 2022, U.S. exports of services were \$928.5 billion, and U.S. imports of services were \$696.7 billion, resulting in a services trade surplus of \$231.8 billion.
- U.S. imports of services increased at a faster rate (25 percent) than U.S. exports of services (16 percent), resulting in a decrease in the services trade surplus of \$10.1 billion, or 4 percent.

Chart 3. Trade in Services by Type, 2021-2022



n.i.e. Not included elsewhere
U.S. Bureau of Economic Analysis

- In 2022, 8 of the 11 major service-type categories recorded surpluses, while the remaining 3 recorded deficits. The pattern of surpluses and deficits by major service type was stable from 2021 except for government goods and services, which recorded a surplus in 2022 after recording a deficit in 2021. Surpluses were largest in financial services and in other business services. The largest deficits were in transport and in insurance services.
- U.S. exports of services increased \$127.4 billion, and U.S. imports of services increased \$137.5 billion. For exports, increases in travel (for all purposes including education), in other business services, and in transport were the largest contributors to the aggregate increase. For imports, increases in travel and in transport were the largest contributors to the aggregate increase.
- Travel exports and imports continued to recover from the impact of the COVID-19 pandemic, increasing 92 percent and 103 percent, respectively. Despite these substantial increases, travel services remained below their 2019 levels in 2022, by \$62.1 billion for exports and by \$16.7 billion for imports.

United Kingdom 73.5

Canada 44.6

Ireland 21.1
22.4

Switzerland 34.1

Germany 43.0

Japan 40.8

Mexico 38.3

Exports

Exports

68.3
82.0

48.8
57.1
71.3

48.8
55.6

36.6
38.3

31.1
37.7

Chart 4. Trade in Services With Selected Countries, 2021-20221

30

o

Billions of dollars

30

2021 2022

90

60

60

China

India

90

Caribbean<sup>2</sup>

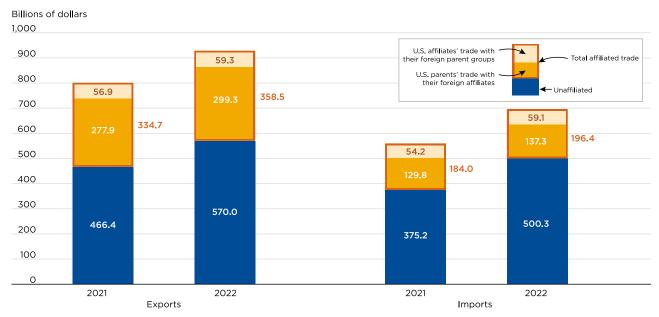
United Kingdom Islands,

- In 2022, the United Kingdom remained the largest trading partner of the United States based on total trade (exports plus imports) in services; it was the largest source for U.S. imports and the second-largest market for U.S. exports, after Ireland.
- The increases in exports (\$127.4 billion) and imports (\$137.5 billion) were both widespread geographically. For exports, the largest increases were in exports to Canada and the United Kingdom. For imports, the largest increases were in imports from the United Kingdom, Mexico, Japan, and Germany.

<sup>1.</sup> The countries selected for this chart are the top 10 U.S. trading partners by total trade in services (exports plus imports) in 2022. Together, they accounted for 57 percent of U.S. exports and 53 percent of U.S. imports.

<sup>2.</sup> United Kingdom Islands, Caribbean comprises the British Virgin Islands, the Cayman Islands, Montserrat, and the Turks and Caicos Islands. U.S. Bureau of Economic Analysis

Chart 5. Trade in Services by Affiliation Type, 2021–2022

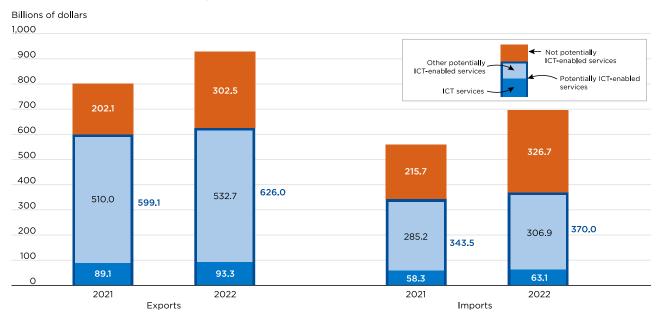


U.S. Bureau of Economic Analysis

- U.S. services trade includes trade between unaffiliated parties and trade within MNEs (affiliated trade). Affiliated trade accounted for 39 percent of U.S. services exports and 28 percent of U.S. services imports in 2022.
- Unaffiliated services exports grew more rapidly than affiliated services exports, mostly reflecting a
  relatively strong increase in exports of travel services, which are classified only as unaffiliated.
  Similarly, unaffiliated services imports grew much more rapidly than affiliated services imports, mostly
  reflecting relatively strong increases in imports of travel services and of transport services, which are
  both classified only as unaffiliated.

# Information and Communications Technology (ICT) Services and Potentially ICT-Enabled Services in 2022

### Chart 6. ICT and Potentially ICT-Enabled Services in Total Trade in Services, 2021-2022

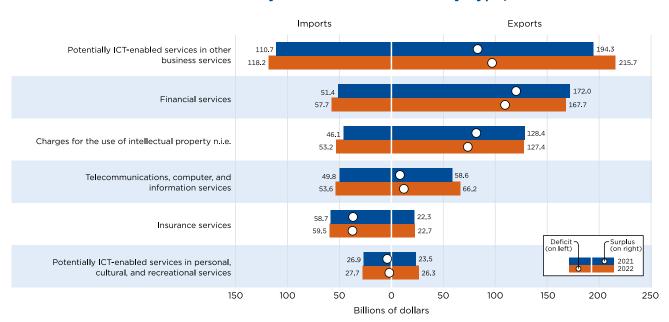


ICT Information and communications technology
U.S. Bureau of Economic Analysis

- In 2022, U.S exports of ICT services were \$93.3 billion, while U.S. imports of ICT services were \$63.1 billion, resulting in a trade in ICT services surplus of \$30.2 billion.<sup>8</sup>
- In 2022, U.S. exports of potentially ICT-enabled services were \$626.0 billion, while U.S. imports of potentially ICT-enabled services were \$370.0 billion, resulting in a trade in potentially ICT-enabled services surplus of \$256.0 billion.
- U.S. exports of potentially ICT-enabled services increased 4 percent in 2022 and U.S. imports of potentially ICT-enabled services increased 8 percent, but there was little change in the potentially ICT-enabled services surplus.

Survey of Current Business October 13, 2023 Page 8 of 16

Chart 7. Trade in Potentially ICT-Enabled Services by Type, 2021-2022



ICT Information and communications technology n.i.e. Not included elsewhere

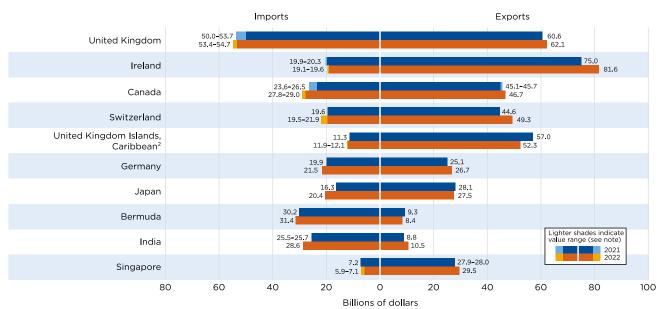
U.S. Bureau of Economic Analysis

- In 2022, four of the six major categories of potentially ICT-enabled services recorded surpluses, with the largest surpluses occurring in financial services and in potentially ICT-enabled services in other business services.
- Exports of potentially ICT-enabled services increased \$26.9 billion, largely reflecting an increase in exports of potentially ICT-enabled services in other business services.
- Imports of potentially ICT-enabled services increased \$26.5 billion, reflecting increases in all six major categories, led by an increase in imports of potentially ICT-enabled services in other business services.

### **Calculating Ranges for Suppressed Values**

For some countries and affiliation categories, values for potentially ICT-enabled services exports, imports, or trade balance were suppressed to avoid the disclosure of data of individual companies. These statistics may be suppressed when certain components are suppressed, although 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, a lower bound and upper bound are used to establish a range of feasible values to facilitate the discussion of potentially ICT-enabled services trade. The lower bound is equal to the sum of all unsuppressed categories included in potentially ICT-enabled services. The upper bound is calculated as the sum of the unsuppressed categories included in potentially ICT-enabled services plus the parent category of the suppressed components less any unsuppressed subcategories of that parent not considered potentially ICT enabled. The lower bounds of these ranges are used to rank the countries in chart 8. 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 8.

Chart 8. Trade in Potentially ICT-Enabled Services With Selected Countries, 2021-20221



ICT Information and communications technology

Note. 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 article.

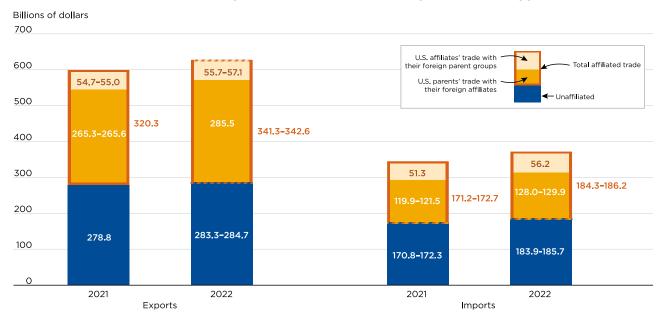
U.S. Bureau of Economic Analysis

- In 2022, the United Kingdom was the United States' top trading partner in, and top source of imports of, potentially ICT-enabled services. <sup>9</sup> The United Kingdom was also the second-largest recipient country for U.S. exports of potentially ICT-enabled services after Ireland.
- The increases in exports of potentially ICT-enabled services (\$26.9 billion) and imports of potentially ICT-enabled services (\$26.5 billion) were both widespread geographically. For exports of potentially ICT-enabled services, the largest increases were in exports to Ireland and to Switzerland. Among the source countries accounting for the largest increases in imports of potentially ICT-enabled services were Japan and India. <sup>10</sup>

<sup>1.</sup> The countries selected for this chart are the top 10 U.S. trading partners by total trade in potentially ICT-enabled services (exports plus imports) in 2022. Together, they accounted for 63 percent of U.S. exports of potentially ICT-enabled services and between 65 and 67 percent of U.S. imports of potentially ICT-enabled services.

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

Chart 9. Trade in Potentially ICT-Enabled Services by Affiliation Type, 2021-2022



ICT Information and communications technology

Note. 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 used in its place. For more information on how the lower and upper bounds were calculated, see the box "Calculating Ranges for Suppressed Values" in this article.

U.S. Bureau of Economic Analysis

- Affiliated trade accounted for 55 percent of exports and 50 percent of imports of potentially ICT-enabled services in 2022. These shares are much higher than the affiliated shares of total services exports (39 percent) and imports (28 percent).
- Potentially ICT-enabled trade between affiliated parties accounted for 95 to 96 percent of total affiliated exports and 94 to 95 percent of total affiliated imports. These shares are much higher than the potentially ICT-enabled shares of total exports (67 percent) and imports (53 percent), highlighting the importance of providing services over ICT networks for intrafirm trade.

## **Services Supplied Through Affiliates in 2021**

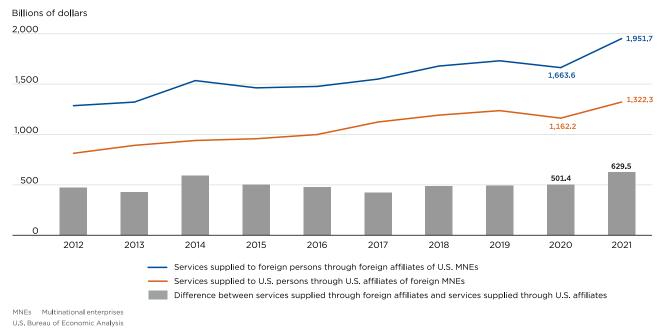
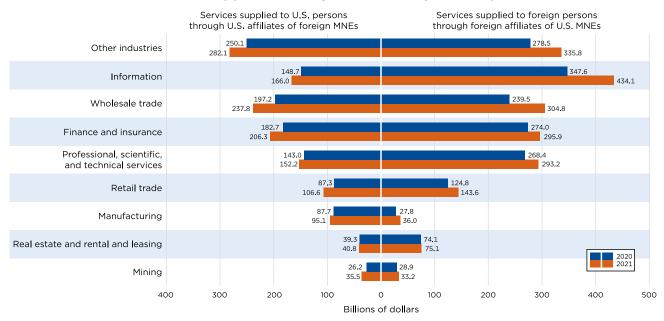


Chart 10. Services Supplied Through Affiliates, 2012–2021

- In 2021, services supplied by U.S. MNEs to foreign markets through their foreign affiliates were \$1.95 trillion, while services supplied by foreign MNEs to the U.S. market through their U.S. affiliates were \$1.32 trillion.
- Services supplied to foreign persons through foreign affiliates of U.S. MNEs increased by 17 percent, and services supplied to U.S. persons through U.S. affiliates of foreign MNEs increased by 14 percent. With these increases, services supplied levels roughly continued the trends seen prior to the COVID-19 pandemic. The bounce backs in services supplied through affiliates in 2021 are proportionately larger than bounce backs seen in other BEA-published statistics on the activities of U.S. affiliates of foreign MNEs, such as employment and property, plant, and equipment expenditures of affiliates.
- U.S. MNEs supplied \$629.5 billion more services to foreign persons through their foreign affiliates than foreign MNEs supplied to U.S. persons through their U.S. affiliates.

Survey of Current Business October 13, 2023 Page 12 of 16

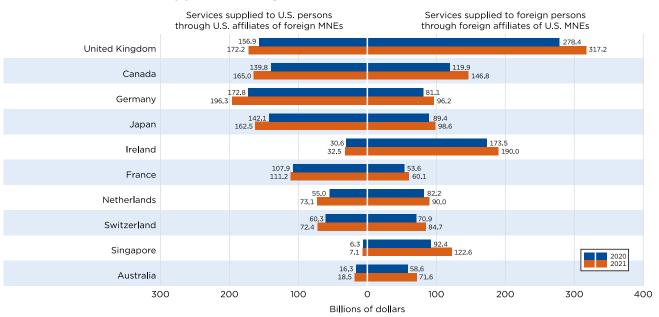
Chart 11. Services Supplied Through Affiliates by Industry, 2020-2021



MNEs Multinational enterprises
U.S. Bureau of Economic Analysis

- In 2021, services supplied to foreign persons by foreign affiliates of U.S. MNEs increased in each of the nine major industry categories. The largest industry contributions (by industry of affiliate) to the \$288.1 billion aggregate increase were in information, in wholesale trade, and in other industries.
- Services supplied to U.S. persons through U.S. affiliates of foreign MNEs increased in each of the nine major industry categories. The largest major industry contributions to the \$160.1 billion aggregate increase were in wholesale trade, in other industries, and in finance and insurance.

Chart 12. Services Supplied Through Affiliates for Selected Countries, 2020–2021<sup>1</sup>

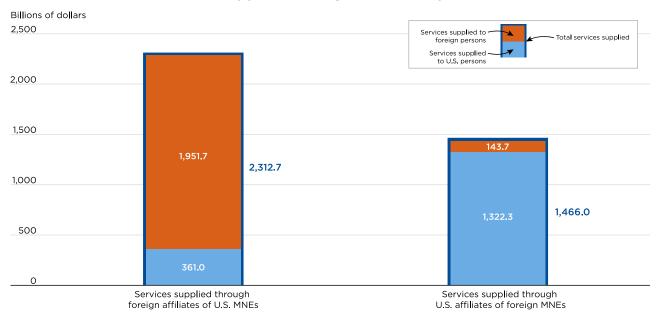


MNEs Multinational enterprises

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 2021. U.S. Bureau of Economic Analysis

- In 2021, the top countries for services supplied to foreign persons through foreign affiliates of U.S. MNEs (by country of affiliate) were the United Kingdom, Ireland, Canada, and Singapore.
- The top countries for services supplied to U.S. persons through U.S. affiliates of foreign MNEs (by country of UBO) were Germany, the United Kingdom, Canada, and Japan.
- In 2021, the \$288.1 billion increase in services supplied to foreign persons through foreign affiliates was widespread geographically. The largest increases were for services supplied through affiliates in the United Kingdom, Singapore, and Canada.
- In terms of country of UBO of the U.S. affiliates selling the services, the \$160.1 billion increase in services supplied to U.S. persons was accounted for by several countries.

Chart 13. Services Supplied Through Affiliates by Destination, 2021



MNEs Multinational enterprises U.S. Bureau of Economic Analysis

- Foreign affiliates supply services to both foreign markets and the U.S. market. <sup>11</sup> Services supplied to foreign persons, the focus of the services supplied through foreign affiliates statistics presented in this article, accounted for 84 percent of the services supplied worldwide through foreign affiliates in 2021; the remainder were supplied to U.S. persons.
- U.S. affiliates supply services to both the U.S. market and to foreign markets. <sup>12</sup> 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 2021; the remainder were supplied to foreign markets.

#### **Footnotes**

- 1. The trade in services component of the international services statistics is released in July, and the services supplied through affiliates component is released in October of each year.
- 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. For more information, see "Definition of International Services" on BEA's website.
- 4. The UBO of a U.S. affiliate is that person or entity that ultimately owns or controls the U.S. affiliate and therefore ultimately derives the benefits and assumes the risks from ownership or control. For more information, see the definition of UBO on BEA's website.
- 5. Beginning with statistics released in October 2022, BEA refined its concept of total international services supplied so the statistics better reflect services supplied to foreign persons by U.S.-based firms and services supplied to the United States by foreign-based firms. For more information, see the box "Refinements to the Calculation of Total International Services Supplied" in "U.S. International Services: Trade in Services in 2021 and Services Supplied Through Affiliates in 2020" in the October 2022 Survey of Current Business.
- 6. U.S. restrictions on foreign travel were eased on November 8, 2021. For more information, see President Biden's "A Proclamation on Advancing the Safe Resumption of Global Travel During the COVID-19 Pandemic."
- 7. "Travel (for all purposes including education)," the name used in the trade in services statistics to encompass a broadly defined travel 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.
- 8. BEA statistics on trade in ICT and potentially ICT-enabled services complement BEA's standard presentation of international trade in services statistics by providing insight into the extent to which ICT may be used to facilitate trade in services. For more information, see the box "Key Terms" in this article.
- 9. See the box "Calculating Ranges for Suppressed Values" in this article.
- 10. Using the estimate ranges in chart 8, the increase in imports from Canada and the potential increase in imports from the United Kingdom may each be larger or smaller than those from Japan and/or India. However, the actual changes from Canada and the United Kingdom are not compared with those from other countries to avoid the disclosure of data of individual companies.
- 11. 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. Services supplied through foreign affiliates to the U.S. market are used to adjust U.S. imports in chart 1 and in international services table 1.1 to compute services supplied to U.S. persons by foreign-based firms.
- 12. 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. Services supplied through U.S. affiliates to foreign markets are used to adjust U.S. exports in chart 1 and in international services table 1.1 to compute services supplied by U.S.-based firms to foreign persons.



Subscribe to the *SCB* 

The Survey of Current Business is published by the U.S. Bureau of Economic Analysis. Guidelines for citing BEA information.

Survey of Current Business

bea.gov/scb scb@bea.gov

Survey of Current Business October 13, 2023 Page 16 of 16