

Article

UK trade in services by industry, country and service type: 2016 to 2017

Breakdown of UK trade in services by industry, country and service type on a balance of payments basis using a new experimental dataset.

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1 . Main points

- This release accompanies a new trade dataset providing a breakdown of UK trade in services by industry, country and service type on a balance of payments basis.
- The top 10 largest exporting industries in 2017 made up 58.9% of total UK services exports and exported 61.3% of their services to non-EU countries, while the top 10 importing industries made up 38.7% of total UK services imports, with 55.7% of imports coming from the non-EU.
- The largest exporting industry of services in 2017 was the financial service activities, except insurance and pension funding industry, which exported £41.9 billion of services.
- The largest importing industry of services in 2017 was the computer programming, consultancy and related activities industry, which imported £11.4 billion of services.
- In 2017, the largest service type by industry export was financial services exported by the financial service activities, except insurance and pension funding industry, at £41.8 billion.
- In 2017, the largest service type by industry import was financial services imported by the activities auxiliary to financial services and insurance activities industry, at £6.9 billion.
- In 2017, the largest country by industry export was to the US by the financial service activities, except insurance and pension funding industry, at £10.6 billion.
- In 2017, the largest country by industry import was from the US by the activities auxiliary to financial services and insurance activities industry, at £3.1 billion.

2 . Introduction

We continue to deliver against an ambitious [trade development plan](#), providing more detail than ever before about the UK's trading relationships, using improved data sources and methods enabled by our new trade IT systems.

This release looks at trade in services by country, service type and, for the first time, industry, on a balance of payments (BoP) basis. The release is accompanied by a rich new dataset to help users explore which industries contribute most to the trade in services aggregates, which countries they trade with and which service types they trade.

By combining the International Trade in Services survey with the Annual Survey of Goods and Services and the Annual Purchases Survey, we have created an experimental dataset providing detail of UK trade in services exports and imports by partner country, industry and service type for 2016 and 2017, on an annual basis. Further detail on the methodology used to compile these [Experimental Statistics](#) can be found in Section 4.

3 . Important things to note about these statistics

Experimental Statistics

It is important to emphasise that the statistics included within this release are [experimental](#). The methodology used to compile the data are subject to future improvements. Further detail regarding the methodology used to compile the statistics can be found in Section 4.

Disclosure control

Data are subject to [disclosure control](#) meaning some data have been suppressed to protect confidentiality such that individual traders cannot be identified. For this reason, when we refer to rankings or contributions of exports or imports for a given year, this only considers data that have not been suppressed.

Data

Data within this release provide estimates of trade in services only; [trade in goods by industry, country and commodity](#) was published on 24 April 2019.

All data within this release are reported in current prices. Data within this release have been subject to rounding, therefore small rounding discrepancies may exist.

It is important to note that analyses presented in this article do not include data that have been suppressed to protect individual trader confidentiality. This means contributions to services by industry do not include any data that have been suppressed.

We are making data available to users via two datasets to minimise the amount of data we need to suppress. Publishing the data in this way reduces the number of dimensions in the data, meaning we are able to reduce the amount of data that is suppressed.

Firstly, we publish country by industry ([Standard Industrial Classification \(SIC\)](#) two-digit) by total service types for 67 countries and country regional groupings (that is, EU, non-EU and whole world) and secondly, country region by service type ([Extended Balance of Payments \(EBOPs\)](#) one-digit), by industry (SIC two-digit).

There are two files accompanying this release, one for exports and one for imports, each file contains both datasets. To view the dataset for country by industry, filter the dataset to service type "0 Total Services". This will provide estimates by country for each industry across all products. To view the dataset for region by industry and service type, filter the data to include all service types other than "0 Total Services".

Trade asymmetries

These data are our best estimates of bilateral UK trade flows, compiled following internationally agreed standards and using a wide range of robust data sources. However, in some cases alternative estimates of bilateral trade flows are available from the statistical agencies for those countries or through central databases such as [UN Comtrade](#). Differences between estimates are known as trade asymmetries and are a known aspect of international trade statistics, affecting bilateral estimates across the globe not just the UK.

We are heavily engaged in analysis of these asymmetries, developing strong bilateral relationships with other countries to understand, explain and potentially reduce them. We have produced a series of analyses showing [comparisons and the relative strengths of different estimates](#), which users may wish to reference to help them better understand the quality of our bilateral trade estimates.

4 . Data and methodology

Data

The dataset for the trade in services analysis released alongside this article was compiled by combining data from the International Trade in Services (ITIS) survey, the International Passenger Survey (IPS) and other non-survey services sources, with information from the Inter-Departmental Business Register (IDBR), the Annual Survey of Goods and Services (ASGS) and the Annual Purchases Survey (APS). The data are consistent with the [UK trade in services by partner country](#) publication on 24 April 2019.

International Trade in Services

The ITIS surveys collect company-level microdata on exports and imports of services products. Office for National Statistics (ONS) ITIS data are compliant with the latest international standards, as outlined in the [Manual on Statistics of International Trade in Services 2010 \(PDF, 3.37MB\)](#) (MSITS 2010).

Breakdowns are available by product, industry and geographical region and products are classified using the [Extended Balance of Payments Services classification \(PDF, 48KB\)](#) (EBOPS 2010). ITIS consists of 52 products and 17 product groups. The ITIS survey is the main source of UK trade in services data, covering most industries but with several exceptions such as:

- travel
- transport
- banking and other financial institutions
- higher education
- charities
- most activities within the legal profession

The quarterly sample is made up of approximately 2,200 businesses and the annual sample is made up of approximately 15,500 businesses. The survey data from both the quarterly and annual results are combined to produce the [annual ITIS estimates](#) and are used as a main data source to compile total trade in services estimates.

More quality and methodology information on the ITIS data is available in the [ITIS Quality and Methodology Information \(QMI\)](#).

International Passenger Survey

The [International Passenger Survey \(IPS\)](#) is a continuous survey (conducted 362 days a year) at major ports of entry to, or exit from the UK. The collected data are weighted and the results feed into the Travel Account of UK Trade in Services.

Published estimates are based on face-to-face interviews with a random sample of passengers as they enter or leave the UK by the principal air, sea and tunnel routes. All interviews are conducted on a voluntary basis. The target number of interviews is 260,000 per year although over 300,000 interviews (representing about 0.2% of travellers) have been conducted annually since 2009 due to a change in design. Actions have been taken to come down to pre-2009 levels.

More quality and methodology information on the IPS is available in the [IPS QMI](#) and on the [IPS methodology page](#).

Non-ITIS services sources

The Chamber of Shipping (CoS) conducts surveys into its members' participation in foreign trade and data from the CoS are uplifted to account for UK sea transport companies who are not members using estimates for the gross tonnage of the UK fleet for different types of ship. Information on the financial services industries is supplied by the Bank of England, the Baltic Exchange, ITIS and other UK National Statistics (NS) surveys. Financial Services Authority, Lloyds of London and NS surveys supply insurance data.

Estimates of exports and imports of services are based on a large number of administrative sources including the Civil Aviation Authority (CAA), Ministry of Defence, Commercial Bar Association, Baltic Exchange, British Airport Authority (BAA), the National Air Transport Service (NATS), Gatwick Airport, Manchester Airport, Texaco, BP, ExxonMobil, Trinity Lighthouse Service, HM Immigration, Gambling Commission, Financial Services Authority and Royal Mail. These are annual and quarterly and accessed on a regular basis.

Inter-Departmental Business Register

The IDBR is a comprehensive record of UK businesses compiled and used by government for statistical purposes. The IDBR provides the main sampling frame for ONS business surveys and other government departments, covering over 2.6 million businesses in all sectors of the UK economy.

The primary data used to maintain the IDBR are provided by HM Revenue and Customs (HMRC) . All firms registered with HMRC for either Value Added Tax (VAT) or Pay As You Earn (PAYE) purposes are listed, excluding those without employees and with turnover below the VAT threshold.

The IDBR includes data on the structure of businesses, classifying "VAT units" and "PAYE units" from the HMRC registrations. "Local units" represent the individual sites on which the business operates whilst "reporting units" are usually made up of local units that undertake similar activities. The "VAT unit" contains all units within an enterprise group. Businesses are sampled for ITIS, the ASGS and APS at the "reporting unit" level.

Annual Survey of Goods and Services

The Annual Survey of Goods and Services (ASGS) was launched by the ONS in summer 2017 in response to one of the main recommendations from [Professor Sir Charles Bean's independent review of economic statistics](#). This recommendation was to provide more comprehensive and detailed statistics of the services industries for the UK, which were not captured by existing surveys.

The ASGS collects information on a business's turnover, broken down into the individual services and goods provided, as well as whether the turnover was generated from customers based inside the UK or customers based outside the UK.

Turnover consists of sales to any individual, business entity or other parts of an organisation. The ASGS has a sample size of approximately 40,000, and measures service products using the [Classification of Products by Activity version 2.1](#) (CPA).

The CPA is the classification of products (goods and services) at the level of the European Union (EU). Product classifications are designed to categorise products that have common characteristics. They provide the basis for collecting and calculating statistics on the production, distributive trade, consumption, international trade and transport of such products.

The ASGS measures UK services industries only and therefore does not collect data from the production and construction industries (sections A, B, C and F of the [Standard Industrial Classification \(SIC\)](#)). It covers a large element of the service economy, excluding notable industries such as public administration.

More information on the ASGS is available within the [Development of the Annual Survey of Goods and Services](#) article.

Annual Purchases Survey

The Annual Purchases Survey (APS) provides detail on the energy, services, goods and materials used up or transformed in the production process and running of UK businesses, otherwise referred to as intermediate consumption. The APS specifically excludes capital investment (including fixed assets), staff costs, goods and services bought for resale without further processing.

The original Purchases Survey ran from the 1950s to 2006 (with the final reference period being 2004); it was reintroduced from the 2015 reference period. The APS has a sample size of approximately 31,000, which is taken from the IDBR, and measures service products using the [Classification of Products by Activity version 2.1](#) (CPA). The APS covers a large element of the economy, with some notable exceptions such as public administration.

More information on the APS is available within the [APS QMI](#).

Methodology

International Trade in Services

The majority of data come from the International Trade in Services (ITIS) survey, the largest source of UK trade in services data. ITIS covers approximately 58% of services exports and 45% of services imports, and excludes industries in travel, transport, banking and other financial institutions, higher education, charities and most activities within the legal profession.

For industries that ITIS measures, a direct industry breakdown can be found using responding businesses' industrial classifications. All businesses sampled to complete the ITIS survey, are sampled from the Inter-Departmental Business Register (IDBR), which contains records of each business's standard industrial classification (SIC). ITIS service type by country data are then broken down into industries using this business-level SIC information and are therefore considered robust.

Non-ITIS

Estimates derived from the International Passenger Survey (IPS) are used to help measure exports and imports of travel services. It is not possible to allocate individuals undertaking personal travel to an industry – therefore estimates of trade in personal travel services are reported under “no industry”. It is possible to allocate business travel to an industry based on the industry the business travellers are employed within. However, due to the pace of development it has not been possible to undertake this mapping – therefore estimates of trade in business travel services are currently reported under “unknown industry”.

For the remaining non-ITIS data sources, an industry breakdown is not available, and is therefore estimated based on assumptions made using two alternative data sources; the Annual Survey of Goods and Services (ASGS) and the Annual Purchases Survey (APS).

The [ASGS](#) was launched in 2017, and measures service industry turnover broken down by the individual services provided to customers both inside and outside the UK. Data are collected on a [Classification of Products by Activity \(CPA\)](#) basis, which have been converted to their equivalent Extended Balance of Payments (EBOP) classification, using the Eurostat correspondence tables [EBOPs 2010 – CPA 2008 \(ZIP, 335KB\)](#).

An industry by service type mapper is created by using the SIC information for the businesses sampled to complete the ASGS, with the industry by service type data for customers outside the UK assumed to represent exports. This mapper is then applied to existing EBOPs, where ITIS data are not available, to split it down into industries.

The [APS](#) was launched in 2016 and measures each industry's intermediate consumption, that is, goods or services used up in the production process. No breakdown is available between products purchased either abroad or domestically, therefore total purchases are assumed to represent imports. Similar to the ASGS, data are also collected on a [Classification of Products by Activity \(CPA\)](#) basis, which have been converted to their equivalent EBOP classification, using the Eurostat correspondence tables [EBOPs 2010 – CPA 2008 \(ZIP, 335KB\)](#). An industry by service type mapper is created by using the SIC information for the businesses sampled to complete the APS.

Please note that no country breakdowns are available from the ASGS and APS, therefore the breakdown of countries within each industry is assumed to be the same. Caution must therefore be taken when interpreting lower-level country by industry by service type detail where the non-ITIS data sources are used.

5 . The top 10 exporting industries exported more to non-EU than EU countries in 2017

Figure 1 shows the top 10 UK services-exporting industries in 2017 disaggregated by EU and non-EU regions.

The top 10 industries contributed 58.9% of total UK services exports in 2017. The largest services-exporting industries exported more to non-EU countries than EU countries in 2017, with 61.3% of the top 10 exporting industries exports going to non-EU countries. All top 10 industries saw larger exports of services to non-EU countries than EU countries.

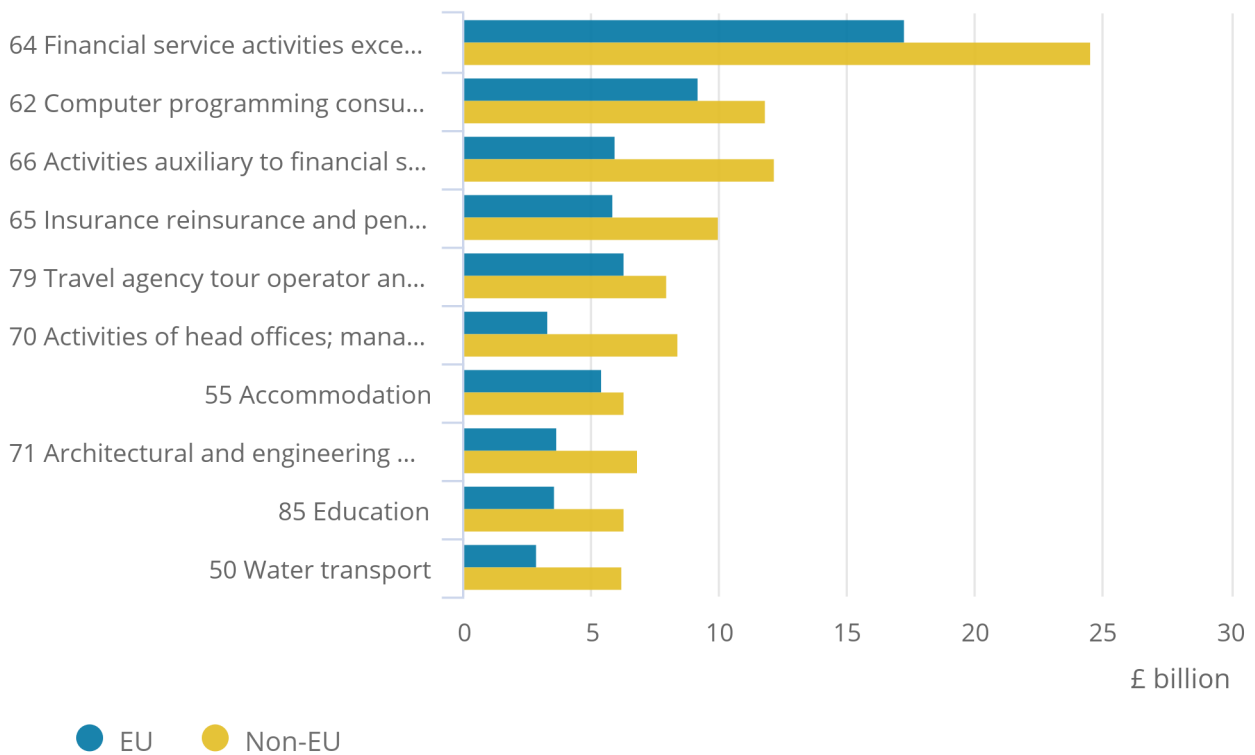
The largest services-exporting industry in 2017 was financial service activities, except insurance and pension funding (industry 64), which exported £41.9 billion of services; this represented 15.0% of total exports of services in 2017. Of the £41.9 billion of services exported, 41.3% went to EU countries, whilst 58.7% went to non-EU countries. The second-largest industry was computer programming, consultancy and related activities (industry 62), which made up 7.5% of total exports of services in 2017.

Figure 1: The largest services exporting industry in 2017 was financial service activities, except insurance and pension funding, which exported £41.9 billion

Top 10 services exporting industries split by EU and non-EU, 2017

Figure 1: The largest services exporting industry in 2017 was financial service activities, except insurance and pension funding, which exported £41.9 billion

Top 10 services exporting industries split by EU and non-EU, 2017



Source: Office for National Statistics - UK trade in services

Table 1 shows the largest service type by industry exports in 2017.

In 2017, the largest service type by industry export was financial services exported by the financial service activities, except insurance and pension funding industry (industry 64), at £41.8 billion. This represented 15.0% of total UK exports. This was followed by exports of insurance and pension services by the insurance, reinsurance and pension funding, except compulsory social security industry (industry 65), at £15.8 billion.

Table 1: In 2017, the largest service type by industry export was financial services by the financial service activities, except insurance and pension funding industry, at £41.8 billion
Largest service type by industry exports, 2017

Rank	Service type	Industry	2017 £ billion	% of total UK exports
1	Financial	64 Financial service activities, except insurance and pension funding	41.8	15.0
2	Insurance and pension	65 Insurance, reinsurance and pension funding, except compulsory social security	15.8	5.7
3	Travel	79 Travel agency, tour operator and other reservation service and related activities	14.3	5.1
4	Financial	66 Activities auxiliary to financial services and insurance activities	12.1	4.3
5	Travel	55 Accommodation	10.2	3.6
6	Other business services	71 Architectural and engineering activities; technical testing and analysis	9.2	3.3
7	Telecommunication services	62 Computer programming, consultancy and related activities	8.4	3.0
8	Other business services	62 Computer programming, consultancy and related activities	8.3	3.0
9	Other business services	69 Legal and accounting activities	8.0	2.9
10	Transportation	51 Air transport	7.8	2.8

Source: Office for National Statistics - UK trade in services

Table 2 shows the largest country by industry exports in 2017.

In 2017, the largest country by industry export was to the US by the financial service activities, except insurance and pension funding industry (industry 64), at £10.6 billion. This represented 3.8% of total UK exports. This was followed by exports to the US by the activities auxiliary to financial services and insurance activities industry (industry 66), at £6.2 billion.

The US appears the most frequently in the top 10 country by industry exports. As shown in the [UK trade in services by partner country experimental data](#), the US is the UK's largest export partner, with many UK industries exporting to the US.

Table 2: In 2017, the largest country by industry export was to the US by the financial service activities, except insurance and pension funding industry, at £10.6 billion
Largest country by industry exports, 2017

Rank	Country	Industry	2017 £ billion	% of total UK exports
1	United States	64 Financial service activities, except insurance and pension funding	10.6	3.8
2	United States	66 Activities auxiliary to financial services and insurance activities	6.2	2.2
3	United States	62 Computer programming, consultancy and related activities	5.9	2.1
4	Netherlands	64 Financial service activities, except insurance and pension funding	3.8	1.3
5	United States	70 Activities of head offices; management consultancy activities	3.7	1.3
6	France	64 Financial service activities, except insurance and pension funding	3.4	1.2
7	United States	65 Insurance, reinsurance and pension funding, except compulsory social security	3.0	1.1
8	Germany	64 Financial service activities, except insurance and pension funding	2.9	1.0
9	United States	72 Scientific research and development	2.8	1.0
10	United States	50 Water transport	2.5	0.9

Notes

1. United States including Puerto Rico. [Back to table](#)

Exporting industries, 2016 to 2017

Figure 2 shows the change in value of services exports for an industry between 2016 and 2017.

The largest increase in total services exports between 2016 and 2017 was within the computer programming, consultancy and related activities industry, which increased by £4.5 billion; £1.5 billion of this growth came from increased exports to the EU, while £3.0 billion came from increased exports to non-EU countries. The US contributed £2.0 billion to the increase in this industry's services exports.

The insurance, reinsurance and pension funding, except compulsory social security industry saw the largest increase in services exports to EU countries. This industry's exports dropped by £0.6 billion; exports to the EU increased by £1.7 billion, while exports to non-EU countries decreased by £2.3 billion between 2016 and 2017. The increase in exports to EU countries within this industry were due largely to an increase in exports of £0.6 billion to Germany.

The industry with the largest decrease in services exports between 2016 and 2017 was telecommunications; exports fell by £0.9 billion due largely to a £0.5 billion fall in exports to non-EU countries.

Hover over the data points in Figure 2 to see how the change in total industry services exports between 2016 and 2017 was split between EU and non-EU countries. Data points in the top right quadrant show industries that experienced an increase in services exports with both EU and non-EU regions between 2016 and 2017, while those in the bottom left show industries that decreased with EU and non-EU countries. The top left quadrant includes industries that experienced an increase in exports to EU countries but a decrease in exports to non-EU countries. The bottom right quadrant shows industries that increased exports to non-EU countries while exports to EU countries fell.

Figure 2: More industries increased their exports to EU countries than non-EU countries between 2016 and 2017

Change in exports by industry, EU compared with non-EU between 2016 and 2017

6 . The top 10 importing industries imported more from EU than from non-EU countries in 2017

Figure 3 shows the top 10 UK services-importing industries in 2017 disaggregated by EU and non-EU regions. Note that imports of travel services have not been allocated to an industry so are not included within this analysis (see Section 4). These data are available in the accompanying [datasets](#).

The top 10 industries contributed 38.7% of total UK services imports in 2017. The largest services-importing industries imported more from non-EU countries than EU countries in 2017, with 55.7% of the top 10 importing industries' imports coming from the EU.

The largest services-importing industry in 2017 was the computer programming, consultancy and related activities industry (industry 62), which imported £11.4 billion of services making up 6.9% of total imports of services in 2017. Of the £11.4 billion imported, 59.7% came from non-EU countries.

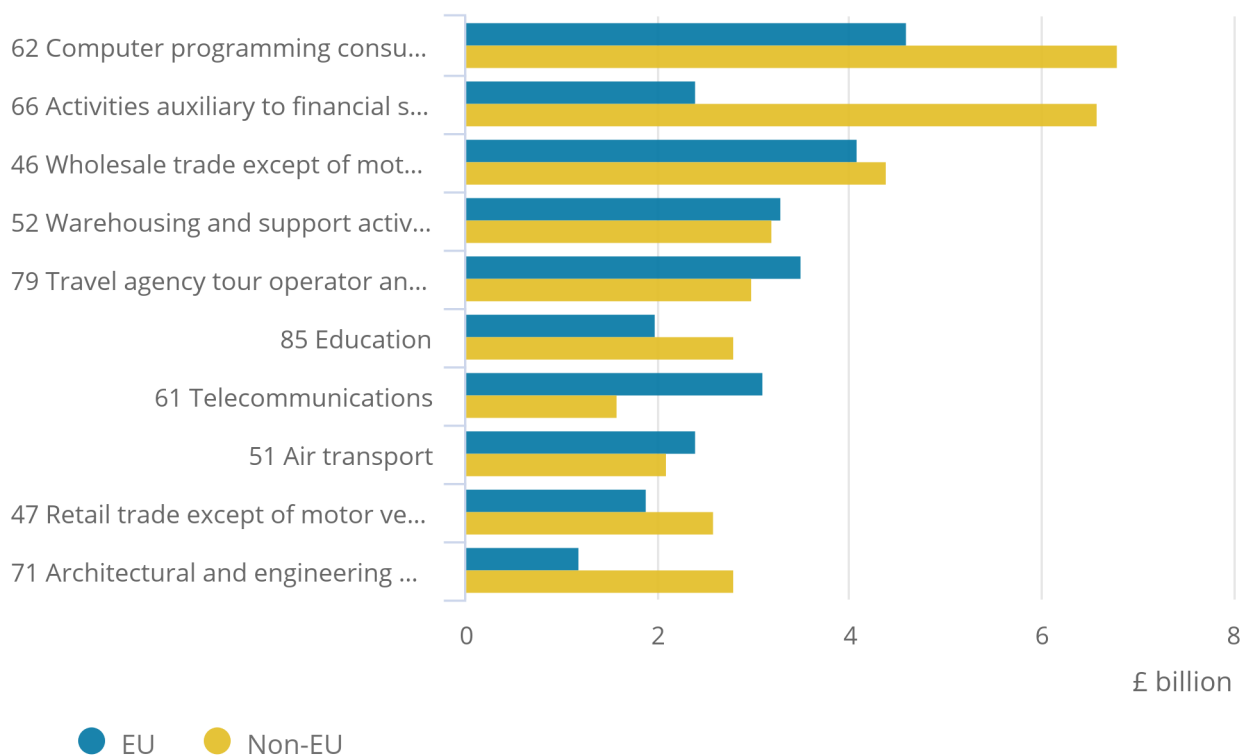
The second-largest industry was the activities auxiliary to financial services and insurance activities industry (industry 66), which made up 5.4% of total imports of services in 2017.

Figure 3: The largest services importing industry in 2017 was the computer programming, consultancy and related activities industry, which imported £11.4 billion

Top 10 services importing industries split by EU and non-EU, 2017

Figure 3: The largest services importing industry in 2017 was the computer programming, consultancy and related activities industry, which imported £11.4 billion

Top 10 services importing industries split by EU and non-EU, 2017



Source: Office for National Statistics - UK trade in services

Table 3 shows the largest service type by industry imports in 2017.

In 2017, the largest service type by industry import was financial services by the activities auxiliary to financial services and insurance activities industry (industry 66), at £6.9 billion. This represented 4.2% of total UK imports. This was followed by imports of transportation by the travel agency, tour operator and other reservation service and related activities industry (industry 79), at £6.5 billion.

Table 3: In 2017, the largest service type by industry import was financial services by the activities auxiliary to financial services and insurance activities industry, at £6.9 billion
Largest service type by industry imports, 2017

Rank	Service type	Industry	2017 £ billion	% of total UK imports
1	Financial	66 Activities auxiliary to financial services and insurance activities	6.9	4.2
2	Transportation	79 Travel agency, tour operator and other reservation service and related activities	6.5	3.9
3	Transportation	52 Warehousing and support activities for transportation	5.4	3.3
4	Other business services	62 Computer programming, consultancy and related activities	5.3	3.2
5	Government	85 Education	4.7	2.9
6	Transportation	51 Air transport	4.4	2.7
7	Telecommunication services	61 Telecommunications	4.3	2.6
8	Telecommunication services	62 Computer programming, consultancy and related activities	3.7	2.2
9	Other business services	78 Employment activities	3.4	2.1
10	Other business services	46 Wholesale trade, except of motor vehicles and motorcycles	3.2	1.9

Source: Office for National Statistics - UK trade in services

Table 4 shows the largest country by industry imports in 2017.

In 2017, the largest country by industry import was from the US by the activities auxiliary to financial services and insurance activities industry (industry 66), at £3.1 billion. This represented 1.8% of total UK imports. This was followed by imports from the US by the computer programming, consultancy and related activities industry (industry 62), at £2.5 billion.

Table 4: In 2017, the largest country by industry import was from the US by the activities auxiliary to financial services and insurance activities industry, at £3.1 billion
Largest country by industry imports, 2017

Rank	Country	Industry	2017 £ billion	% of total UK imports
1	United States	66 Activities auxiliary to financial services and insurance activities	3.1	1.8
2	United States	62 Computer programming, consultancy and related activities	2.5	1.5
3	United States	46 Wholesale trade, except of motor vehicles and motorcycles	1.8	1.1
4	Japan	66 Activities auxiliary to financial services and insurance activities	1.6	1.0
5	United States	72 Scientific research and development	1.4	0.8
6	Ireland	62 Computer programming, consultancy and related activities	1.4	0.8
7	United States	47 Retail trade, except of motor vehicles and motorcycles	1.3	0.8
8	United States	59 Motion picture, video and television programme production, sound recording and music publishing activities	1.2	0.7
9	Luxembourg	61 Telecommunications	1.1	0.6
10	Spain	79 Travel agency, tour operator and other reservation service and related activities	1.0	0.6

Notes

1. United States including Puerto Rico. [Back to table](#)

Importing industries, 2016 to 2017

Figure 4 shows the change in value of services imports for an industry between 2016 and 2017. The largest increase in services imports between 2016 and 2017 was within the computer programming, consultancy and related activities industry, which increased by £1.9 billion; £1.2 billion of this growth came from increased imports from non-EU countries. India contributed £0.4 billion to the increase in this industry's services imports.

The industry that experienced the largest decrease in imports between 2016 and 2017 was the rental and leasing activities industry, decreasing by £0.3 billion.

Hover over the data points in Figure 4 to see how the change in total industry imports between 2016 and 2017 was split between EU and non-EU. Data points in the top right quadrant show industries that experienced an increase in services imports with both EU and non-EU regions between 2016 and 2017, while those in the bottom left show industries that decreased with EU and non-EU countries. The top left quadrant includes industries that experienced an increase in imports from EU countries but a decrease in imports from non-EU countries. The bottom right quadrant shows industries that increased imports from non-EU countries while imports from EU countries fell.

Figure 4: More industries increased their imports from EU countries than non-EU countries between 2016 and 2017

7 . Explore the new trade in services data with our interactive tool

We have produced some interactive tools to help explore the data.

Data are provided in as much detail as possible without disclosing the details of any individual companies, however, this means some figures have been suppressed to protect confidentiality. The interactive will show no data available if the data are zero, suppressed or unavailable at this level of detail. Select a country by hovering over it or using the drop-down menu.

Figure 5: UK trade in services with the rest of the world, exports and imports, 2017

[Download the data](#)