

Article

# Foreign direct investment in digital industries, UK trends and analysis: September 2020

Foreign direct investment (FDI) among companies in digital industries.

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# 1 . Main points

- Foreign direct investment (FDI) in digital industries accounted for 8.6% of the UK's total outward investment position and 10.4% of the total inward position in 2018.
- The value of the inward FDI position in digital industries increased in 2017 and 2018 while the outward position decreased, leading to a negative net investment position in digital industries in 2018.
- The telecommunications sub-industry usually accounted for the highest value of all digital sub-industries for both outward and inward FDI positions between 2014 and 2018; it accounted for 76.6% of the outward position and 49.0% of the inward position in 2018.
- In 2018, publishing sub-industries accounted for 33.4% of total digital outward earnings compared with 5.5% for the outward digital position; publishing accounted for 9.0% of digital inward earnings compared with 1.9% of the inward digital position.
- Computer services was the only digital sub-industry to have positive outward and inward FDI flows for every year between 2014 and 2018.

## 2 . Foreign direct investment in digital industries

Digital industries are those that either provide, supply or enable digital activity. These industries support innovation, technological development and growth in the economy. Digital industries are becoming more prominent in modern economies, consequently there is increasing interest in these statistics.

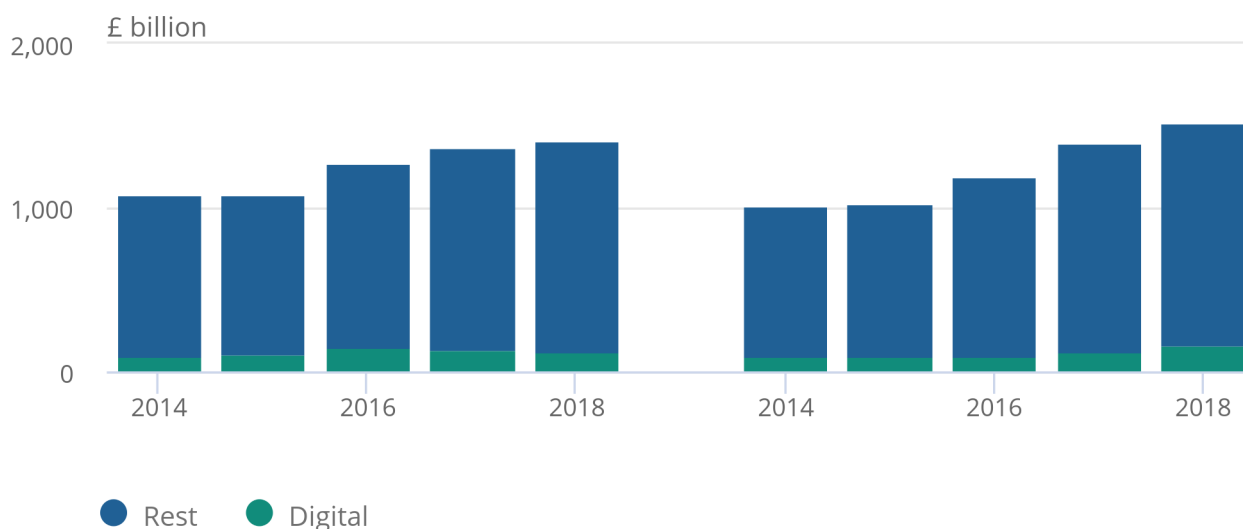
In 2018, the stock of foreign direct investment (FDI) that UK companies held in other countries in these industries (outward position) was £120.8 billion, compared with the UK's total outward FDI position of £1,408.7 billion, or 8.6% of the total. This was lower than the £158.0 billion stock controlled by foreign companies in the UK (inward position) in digital industries, compared with a total inward position of £1,520.6 billion, or 10.4% of the total. This means that one-tenth of all UK inward FDI was held in digital industries in 2018.

**Figure 1: The values of inward and outward FDI with digital industries were of a relatively similar magnitude between 2014 and 2018**

Foreign direct investment position of companies with digital industries compared with all other FDI companies, outward and inward, 2014 to 2018

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Foreign direct investment position of companies with digital industries compared with all other FDI companies, outward and inward, 2014 to 2018



Source: Office for National Statistics - Foreign Direct Investment Survey

Notes:

1. Directional statistics are used in this analysis.

The values of both inward and outward FDI in digital industries have been relatively stable since 2014. The inward FDI position in digital industries increased in 2018 to £158.0 billion, from £120.0 billion in 2017 and from £89.6 billion in 2016. This was in contrast to changes in the value of outward FDI in digital industries, which decreased from £147.0 billion in 2016 to £135.9 billion in 2017 and £120.8 billion in 2018. The UK had a negative net (outward less inward) FDI position in 2018 among digital industries, having been positive between 2014 and 2017. Despite the falling value of UK outward FDI in digital industries from 2016, the 2018 value was still higher than that recorded in 2015 (£113.1 billion) (Figure 1).

### 3 . Foreign direct investment by digital sub-industry

Digital industries include the manufacture of digital products as well as the supply of digital services. These can be grouped in to six sub-industries using the Foreign Direct Investment (FDI) Survey. More details on these sub-industries can be found in Section 6.

## FDI positions

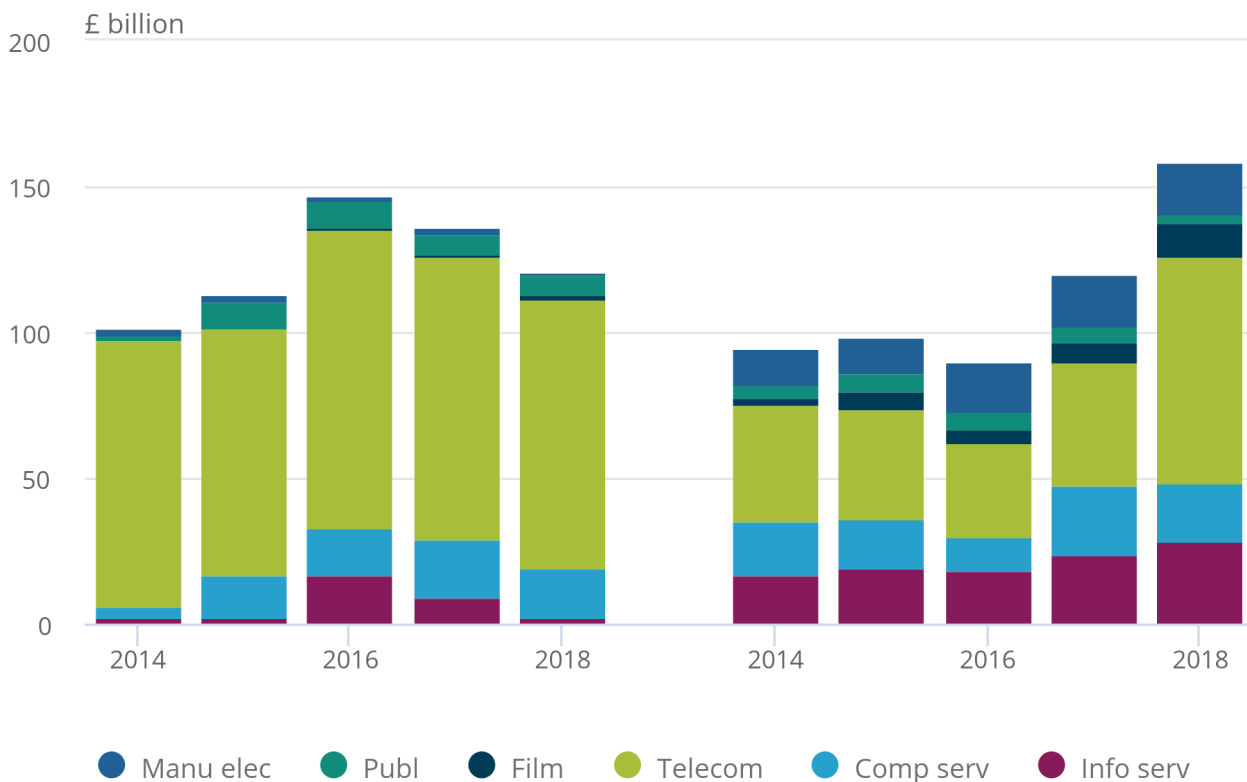
Telecommunications was the sub-industry with the highest value among the digital industries in 2018 for both inward and outward FDI. Outward FDI is very concentrated in that sub-industry, which accounted for £92.5 billion of the total £120.8 billion (or 76.6%) of the outward FDI position in digital industries in 2018. This was followed by computer services (£16.5 billion) and publishing (£6.6 billion). Furthermore, the relative outward positions of each digital sub-industry within the total digital industries position have generally remained consistent (Figure 2).

**Figure 2: FDI in telecommunications industries accounted for the highest values of inward and outward FDI stocks in digital industries**

Foreign direct investment positions of companies by digital sub-industry, outward and inward, 2014 to 2018

Figure 2: FDI in telecommunications industries accounted for the highest values of inward and outward FDI stocks in digital industries

Foreign direct investment positions of companies by digital sub-industry, outward and inward, 2014 to 2018



Source: Office for National Statistics - Foreign Direct Investment Survey

Notes:

1. Directional statistics are used in this analysis.
2. The sub-industries are manufacture of electronics and computers (Manu elec); publishing activities (Publ); film, TV, video, radio and music (Film); telecommunications (Telecom); computer services (Comp serv); and information services (Info serv).

The inward digital FDI positions were much less concentrated in telecommunications compared with outward positions. That sub-industry accounted for £77.4 billion (or 49.0%) of the total £158.0 billion inward FDI position in digital industries in 2018. The next highest positions were in information services (£28.1 billion) followed by computer services (£20.6 billion). The value of inward FDI in telecommunications industries increased notably in 2018 compared with 2016. The inward position among film, TV, radio, video and music companies was also much higher in 2018 compared with 2014 (and 2016). On the other hand, the inward FDI positions in publishing industries was lower in 2018 than 2016, whereas companies in the manufacturing of electronics and computers saw fairly stable values over those three years.

## **FDI earnings**

The total value of FDI earnings from digital industries were higher in 2018 than in 2014 for both outward and inward FDI. Despite increasing over this period, the UK had negative net earnings (outward less inward) from digital industries in 2018 due to the value of inward earnings exceeding that of outward earnings. Outward FDI earnings in digital industries accounted for 3.6% of total UK outward FDI earnings in 2018. That proportion was much lower compared with 2017 (6.0%) and 2016 (7.0%). For inward earnings, digital industries accounted for 9.2% of all inward FDI earnings in 2018, which was the highest it had been since 2015 (11.1%).

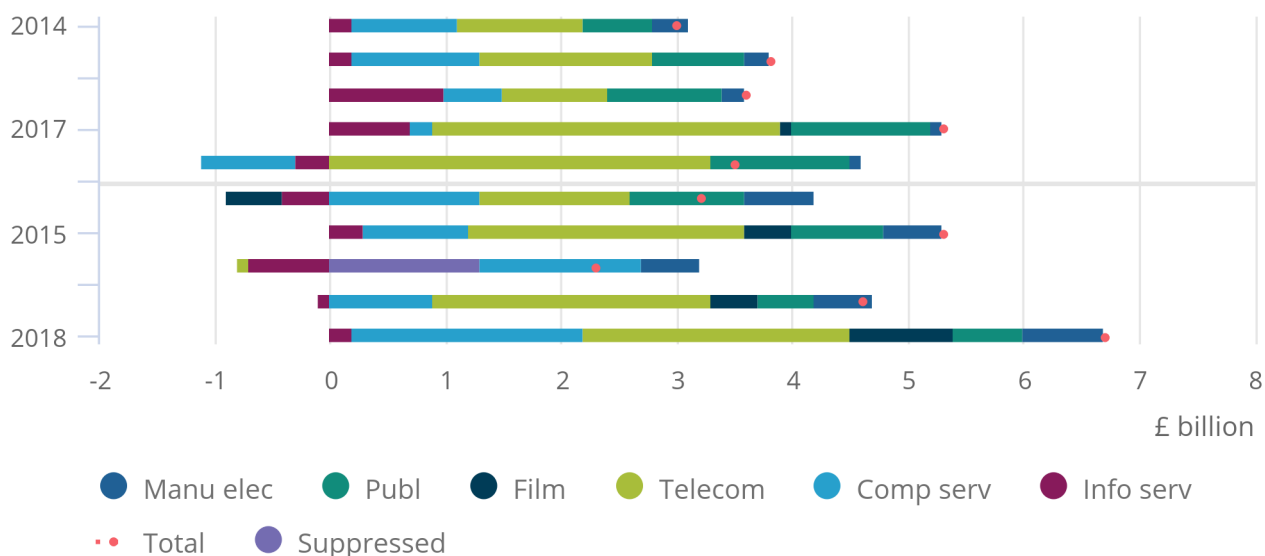
The earnings values across sub-industries in Figure 3 largely follow those for positions; for example, FDI earnings and positions among telecommunications companies usually had the highest values. The main exception was in 2016, when earnings for this sub-industry were slightly negative for inward FDI and the third-highest value for outward FDI.

**Figure 3: Telecommunications industries were usually a large contributor to total UK FDI earnings in digital industries**

Foreign direct investment earnings of companies by digital sub-industry, outward and inward, 2014 to 2018

Figure 3: Telecommunications industries were usually a large contributor to total UK FDI earnings in digital industries

Foreign direct investment earnings of companies by digital sub-industry, outward and inward, 2014 to 2018



Source: Office for National Statistics - Foreign Direct Investment Survey

Notes:

1. Directional statistics are used in this analysis.
2. .. denotes value suppressed to mitigate disclosure.
3. Components may not sum to totals due to rounding.
4. The sub-industries are manufacture of electronics and computers (Manu elec); publishing activities (Publ); film, TV, video, radio and music (Film); telecommunications (Telecom); computer services (Comp serv); and information services (Info serv).

Telecommunications accounted for £3.3 billion and publishing for a further £1.2 billion of the outward FDI earnings in digital industries in 2018. These were partly offset by negative earnings in computer services (£0.8 billion). On the other hand, all digital sub-industries reported positive inward FDI earnings in 2018, with those for telecommunications (£2.3 billion) and computer services (£2.0 billion) being more similar than the respective FDI position values.

By contrast, the relative values for FDI in publishing industries tended to be higher than its share in FDI positions in both directions. In 2018, these industries accounted for 33.4% of total outward digital earnings compared with 5.5% for the outward position; inward earnings were 9.0% compared with 1.9% for the inward digital position.

## FDI flows

FDI flows measure equity (share) transactions along with inter-company loans between different parts of corporate structures. This makes them a wider measure than earnings and debt transactions by also including changes in share holdings (equity), debt and reinvested earnings. Therefore, changes in these statistics can be heavily affected by one-off transactions.

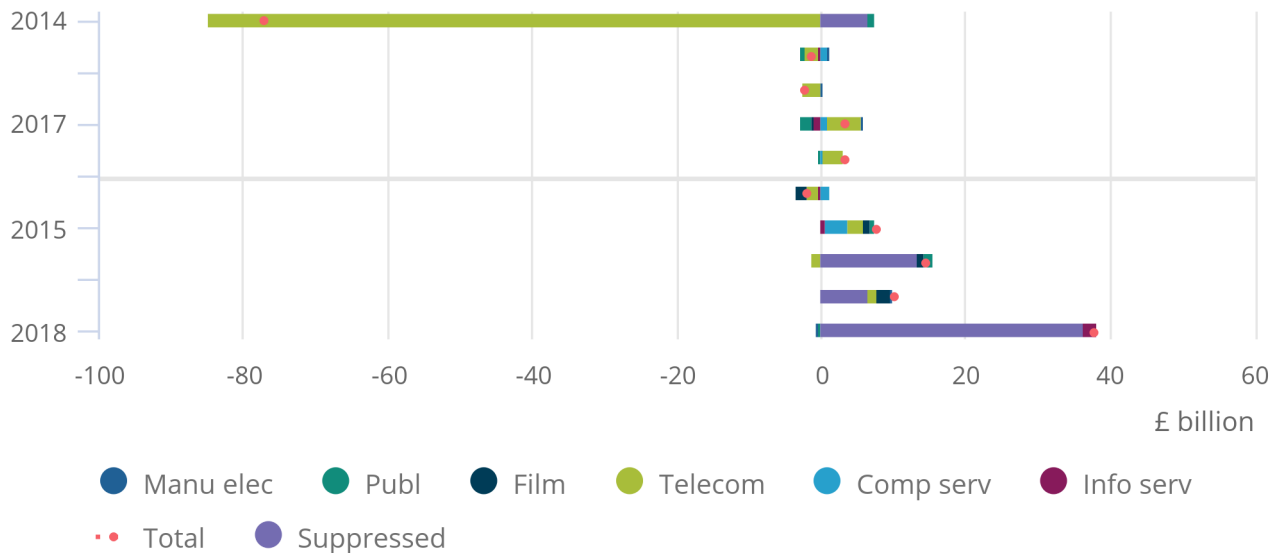
For digital outward FDI flows, telecommunications companies had the highest absolute value in every year (Figure 4); these flows were negative in 2014, 2015 and 2016 and then positive for 2017 and 2018. Computer services and manufacturing of electronics and computers were the only sub-industries to have positive outward FDI flows in all five years, albeit by £0.1 billion in some cases.

**Figure 4: Inward FDI flows with digital industries were much higher than the outward FDI flows between 2014 and 2018**

Foreign direct investment flows of companies by digital sub-industry, outward and inward, 2014 to 2018

Figure 4. Inward FDI flows with digital industries were much higher than the outward FDI flows between 2014 and 2018

Foreign direct investment flows of companies by digital sub-industry, outward and inward, 2014 to 2018



Source: Office for National Statistics - Foreign Direct Investment Survey

Notes:

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3. Components may not sum to totals due to rounding.
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Compared with outward flows, inward FDI flows with telecommunications companies had the highest absolute value in 2018 only. The highest inward flow values were for computer services in 2014, 2015 and 2016, and information services in 2017. As with outward flows, those for computer services were positive in all five years.

Microdata analysis for inward FDI flows show that the same computer services companies usually have the highest values for FDI flows in each year. In addition, the suppressed value for FDI flows in that sub-industry in 2016 partly reflects the merger of Visa Europe with Visa Incorporated. Meanwhile, the suppressed inward FDI flow value for telecommunications in 2018 includes Comcast Incorporated's acquisition of Sky PLC, and the large negative outward FDI flow value for telecommunications in 2014 reflects Vodafone's sale of Verizon Wireless.



## 4 . Foreign direct investment data

### [Foreign direct investment involving UK companies: inward](#)

Dataset | Released 6 February 2020

Annual statistics on the investment of foreign companies into the UK, including for investment flows, positions and earnings.

### [Foreign direct investment involving UK companies: outward](#)

Dataset | Released 6 February 2020

Annual statistics on the investment of UK companies abroad, including for investment flows, positions and earnings.

## 5 . Glossary

### Foreign direct investment (FDI)

Foreign direct investment (FDI) is cross-border investment made with the objective of establishing a lasting interest in the host economy. FDI is also defined by control relationships, where the direct investor (parent company) controls at least 10% of the voting power (ordinary shares) of the direct investment enterprise. These relationships can be measured in two directions:

- outward: the direct investments of UK-resident companies in other countries
- inward: the direct investments in the UK from non-resident companies

### Position

The FDI position is the value of the stock of investment held at a point in time. These statistics are presented as the stock of FDI controlled by UK-resident companies abroad (outward) or the stock of FDI in the UK controlled by foreign companies. FDI positions are net values for the investments held by the direct investor (parent company) minus reverse investment by direct investment enterprises.

### Earnings

Earnings can be thought of as the profits generated from the stock of FDI over a period of time. FDI earnings are net values measuring the profits and interest generated by the direct investor (parent company) from their affiliates minus interest generated by affiliates from their parent companies.

### Flows

Flows measure the cross-border movement of funds within multi-national enterprises. FDI flows include changes in shareholdings (equity), debt and reinvested earnings associated with the stock of FDI. These are net values showing investments minus disinvestments.

## Directional measurement principle

The directional measurement principle presents FDI statistics based on the direction of influence of the direct investor (parent company). These statistics are of most use when considering the direction of influence for UK-based companies and therefore in data linking FDI to other sources of information. Directional FDI statistics are distinct from asset and liability statistics used in the [Balance of Payments \(Pink Book\)](#).

## 6 . Data sources and quality

The main source of information for UK foreign direct investment (FDI) statistics is the Annual FDI Survey; separate surveys are used to collect data on inward and outward FDI. This is combined with data from the Bank of England for all monetary financial institutions - such as banks - and other sources for property and public corporations in FDI. Survey responses are used to estimate or impute FDI values for every company in the UK's inward and outward FDI populations. The statistics in this bulletin are compiled using the directional measurement principle (see the [Glossary](#) for further information).

### Quality

More quality and methodology information on strengths, limitations, appropriate uses, and how statistics were calculated is available in the [Foreign direct investment Quality and Methodology Information \(QMI\) report](#).

### Defining digital industries

Digital industries are those that either provide, supply or enable digital activity. There are different definitions of what constitutes a digital industry, which are also not necessarily the same as the digital economy. Our definition of digital industries from the Foreign Direct Investment (FDI) Survey is given in Table 1.

Table 1: Details of the FDI Survey industries for each digital sub-industry

| Digital sub-industry                     | FDI Survey industry   |
|--|---|
| Manufacture of electronics and computers | Manufacture of electronic components and boards   |
|  | Manufacture of computers and peripheral equipment   |
|  | Manufacture of communication equipment  |
|  | Manufacture of consumer electronics   |
|  | Manufacture of magnetic and optical media   |
| Publishing                               | Publishing activities (books, newspapers, periodicals, directories, software)   |
| Film, TV, video, radio and music         | Motion picture, video and TV production, sound recording and publishing activities  |
|  | Programming and broadcasting activities of radio and TV (over air or via satellite, cable or internet)                              |
| Telecommunications                       | Telecommunications activities (wired, wireless, satellite and other telecommunications activities)                                  |
| Computer services                        | Computer programming, consultancy and related activities (games, software development, programming, computer facilities management) |
| Information services.                    | Information services activities (data processing and hosting, web portals, news agencies, other information activities)             |

Source: Office for National Statistics - Foreign Direct Investment Survey

This is consistent with other Office for National Statistics (ONS) and the Department for Digital, Culture, Media and Sport (DCMS) definitions of digital industries. The DCMS definitions of the Digital Sector industries includes the following sub-industries for which we cannot produce specific statistics from the FDI Survey:

- Wholesale of computers and electronics
- Repair of computers and communication equipment

## 7 . Related links

[Foreign direct investment involving UK companies: 2018](#)

Statistical bulletin | Released 3 December 2019

Investment of UK companies abroad (outward) and foreign companies into the UK (inward), including investment flows, positions and earnings, by country, component and industry.