

Statistical bulletin

# Business investment in the UK: January to March 2018 provisional results

Estimates of short-term indicators of investment in non-financial assets; business investment and asset and sector breakdowns of total gross fixed capital formation.



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29 June 2018

## Notice

### 22 February 2018

A change was made in UK National Accounts: the Blue Book 2017 to correct the estimation of elements of purchased software, which were being double-counted from 2001 onwards along with discrepancies in the modelled data prior to 2001. During further quality assurance, we have identified that 2017 adjustment did not fully address the issue and an additional amendment to other machinery and equipment, and information and communication technology (ICT) equipment is required. Purchased software will be unaffected by this additional amendment. When implemented in the Blue Book 2018-consistent Quarterly National Accounts dataset, to be published 29 June 2018, it will increase the level of gross fixed capital formation (GFCF) across the period by around 1.5% per year in current prices. The average impact on quarter-on quarter GFCF current price growth is positive 0.01% and the average impact on quarter-on-quarter gross domestic product (GDP) current price growth is 0.00%. We do not yet know the definitive impact on the chained volume measures of GFCF or GDP growth rates, we expect them, though, to be similarly small.

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# 1 . Main points

- Gross fixed capital formation (GFCF), in volume terms, was estimated to have increased by 0.9% to £84.9 billion in Quarter 1 (Jan to Mar) 2018 from £84.1 billion in Quarter 4 (Oct to Dec) 2017.
- Business investment was estimated to have fallen by 0.2% to £46.1 billion between Quarter 4 2017 and Quarter 1 2018.
- Between Quarter 1 2017 and Quarter 1 2018, GFCF was estimated to have increased by 4.3% from £81.5 billion; business investment was estimated to have increased by 2.0% from £45.2 billion.
- The sectors that contributed to the 0.9% GFCF increase between Quarter 4 2017 and Quarter 1 2018 were private sector dwellings and general government.
- The assets that contributed to GFCF growth over the same period were dwellings, information and communication technology (ICT) equipment and other machinery and equipment, and intellectual property products.

# 2 . Upcoming changes

## Blue Book 2018

The next business investment release, to be published on 29 June 2018, will be our Blue Book 2018-consistent release.

Each year in the Blue Book-consistent publications of business investment we incorporate methodological and data changes that will impact on the business investment and gross fixed capital formation (GFCF) datasets. Regular annual changes include:

- seasonal adjustment reviews
- updating the reference year used in calculating chained volume measures
- updating annual benchmark data from the Annual Business Survey (ABS)
- annual supply use-balancing

Additionally, a change was made in UK National Accounts, The Blue Book 2017 to correct the estimation of elements of purchased software, which were being double-counted from 2001 onwards along with discrepancies in the modelled data prior to 2001. During further quality assurance, we have identified that 2017 adjustment did not fully address the issue and an additional amendment to information and communication technology (ICT) equipment and other machinery and equipment is required. Purchased software will be unaffected by this additional amendment.

When implemented in the Blue Book 2018-consistent quarterly national accounts dataset, to be published 29 June 2018, it will increase the level of gross fixed capital formation (GFCF) across the period by around 1.5% per year in current prices. The average impact on quarter-on quarter GFCF current price growth is positive 0.01% and the average impact on quarter-on-quarter gross domestic product (GDP) current price growth is 0.00%. We cannot isolate the definitive impact on the chained volume measures of GFCF or GDP growth rates; we expect them, though, to be similarly small.

We will also be making other changes to the GFCF and business investment datasets in June 2018, to include:

- improving the asset allocation of plant data between other machinery and equipment, hardware and telecoms
- updating the sector classification of housing associations, first done in Blue Book 2017, to include data from the devolved administrations

## Future of the business investment provisional estimate

Following a consultation process, the [response](#) to which was published on 19 October 2017, a new publication model for GDP will come into effect in August 2018. As part of this new model, publication of the first quarterly estimate of GDP for all three approaches – output, income and expenditure – will be brought forward. An article was published on 27 April 2018 explaining the [wider changes to the new GDP publication model](#) in more detail, covering all the products that will be produced under the new model and a clear schedule of publication dates from the date of implementation.

Consequently, we have reviewed the feasibility of continuing publication of the business investment provisional release in its existing format and to the new publishing schedule and so will be introducing the following business investment publication model as of August 2018:

- the dedicated business investment provisional bulletin will no longer be produced
- provisional gross fixed capital formation (GFCF) and business investment high-level commentary will be included instead within the new GDP quarterly bulletin
- GDP publication tables will be expanded to include current price as well as chained volume versions of the current Table F: Gross fixed capital formation by sector and type of asset, which currently appears in the quarterly national accounts only and February GDP releases only
- all other current provisional business investment release material (the bulletin will no longer form part of this material) will be released approximately one week after the first quarterly estimate of GDP and will include:
  - GFCF asset by sector tables
  - business investment industry by asset breakdown
  - business investment real time database
  - business investment revisions triangle
  - ad hoc – split of intellectual property products
  - ad hoc – new dwellings and improvements to dwellings
  - ad hoc – information and communication technology
  - ad hoc – weapons
  - ad hoc – business investment historic dataset
  - ad hoc – business investment and general government excluding British Nuclear Fuels Ltd will continue to appear on the same day as the GDP release

As described in the consultation document the impact on GFCF data content by bringing forward publication will be limited, with a small reduction in data content linked to lower survey response rates (around 5 percentage points drop in data content).

There are no plans currently to change the format and content of the revised business investment release published alongside the quarterly national accounts, other than the normal evolution of a bulletin.

### 3 . Things you need to know about this release

The estimates in this release are short-term indicators of investment in non-financial assets in the UK, such as dwellings (residential buildings), transport equipment (planes, trains and automobiles), machinery (electrical equipment), buildings (non-residential buildings and roads) and intellectual property products (assets without physical properties – formerly known as intangibles). This release covers not only business investment, but asset and sector breakdowns of total gross fixed capital formation (GFCF), of which business investment is one component.

Business investment is net investment by private and public corporations. These include investments in transport, information and communication technology (ICT) equipment, other machinery and equipment, cultivated assets (such as livestock and vineyards), intellectual property products (IPP, which includes investment in software, research and development, artistic originals and mineral exploration), and other buildings and structures.

Business investment does not include investment by central or local government, investment in dwellings, or the costs associated with the transfer of non-produced assets (such as land). Business investment is not an internationally recognised concept and it should not be used to make international comparisons, however, GFCF is an internationally recognised standard and is therefore internationally comparable. Please see [A short guide to GFCF and business investment](#) for more detailed information, including asset and sector hierarchies.

All investment data referred to in this bulletin are estimates of seasonally adjusted chained volume measures. To see a time series of the data please use our [time series datasets](#).

As announced in the Quarter 3 (July to Sept) 2017 revised release, all revised releases will contain a short section of international comparison. The provisional release will not include this international section. For comprehensive comparisons of GFCF, please refer to [An international comparison of gross fixed capital formation](#) published November 2017 and [An analysis of investment expenditure in the UK and other Organisation for Economic Co-operation and Development nations](#) published in May 2018.

The [Business investment QMI](#) was updated in January 2018 and includes updated information on the quality and methodology used in the production of business investment statistics.

## 4 . GFCF and business investment main figures

**Table 1: Gross fixed capital formation and business investment headline figures by sector and by asset, UK, Quarter 1 (Jan to Mar) 2018, chained volume measure, seasonally adjusted**

		% change		£ million
		Most recent quarter on previous quarter	Most recent quarter on same quarter a year earlier	Most recent level
Gross fixed capital formation		0.9	4.3	84,919
Business investment		-0.2	2.0	46,097
General government		3.2	19.5	14,357
GFCF by sector	Public corporations' dwellings	-3.3	-1.3	1,960
	Public corporations' cost of ownership transfer on non-produced assets	-11.1	11.2	169
	Private sector dwellings	3.4	4.6	18,115
	Private sector cost of ownership transfer on non-produced assets	-1.6	-12.4	4,221
Transport equipment		-3.7	-11.5	5,667
GFCF by asset	ICT equipment and other machinery and equipment	3.0	10.3	14,141
	Dwellings	2.7	4.0	20,074
	Other buildings and structures and transfer costs	-0.6	1.9	28,439
	Intellectual property products	1.4	10.5	16,598

Source: Office for National Statistics

## 5 . Which sectors are contributing to growth in GFCF in Quarter 1 2018?

Between Quarter 4 (Oct to Dec) 2017 and Quarter 1 (Jan to Mar) 2018, gross fixed capital formation (GFCF) increased by 0.9%. On a sector basis, the largest positive contributions came from private sector dwellings, which contributed 0.7 percentage points and general government, which contributed 0.5 percentage points.

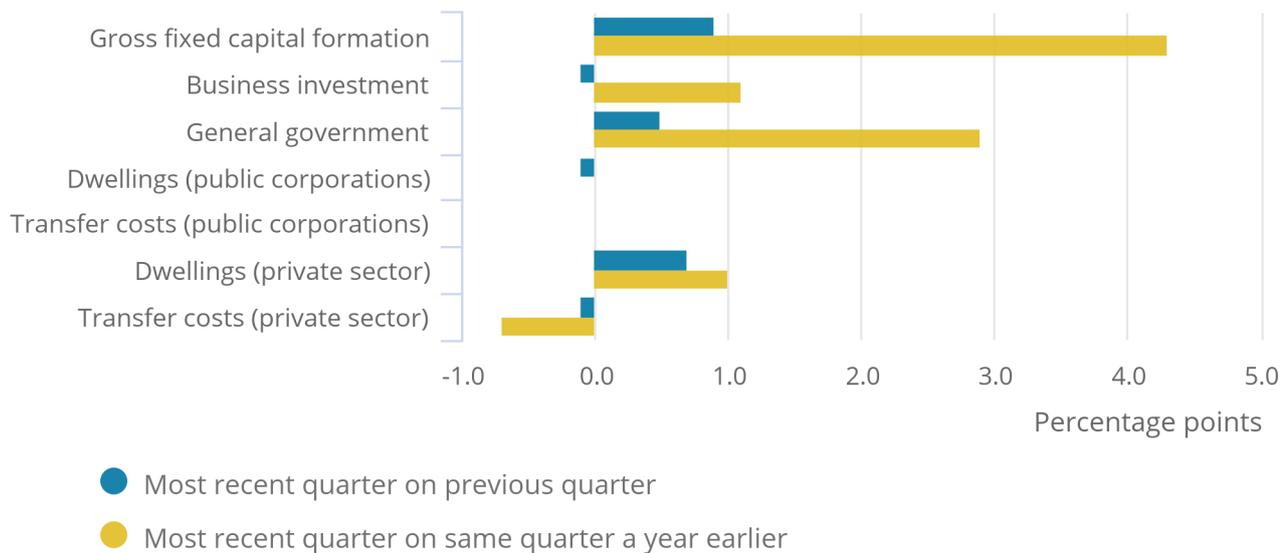
Negative contributions came from business investment, public corporations' dwellings and private sector transfer costs, which each contributed negative 0.1 percentage points. Public corporations' transfer costs contribution was 0.0 percentage points (Figure 1).

**Figure 1: Contributions to growth in gross fixed capital formation by sector for Quarter 1 (Jan to Mar) 2018, chained volume measure, seasonally adjusted**

Reference year: 2015 Coverage: UK

Figure 1: Contributions to growth in gross fixed capital formation by sector for Quarter 1 (Jan to Mar) 2018, chained volume measure, seasonally adjusted

Reference year: 2015 Coverage: UK



Source: Office for National Statistics

Notes:

1. The data in this chart covers Quarter 1 (Jan to Mar) 2018.

Between Quarter 1 2017 and Quarter 1 2018, GFCF increased by 4.3% with general government’s 2.9 percentage points contribution being the largest positive contribution. Private sector transfer costs was the only sector to have contributed negatively, when rounded to one decimal place, contributing negative 0.7 percentage points.

## 6 . Which assets are contributing to growth in GFCF in Quarter 1 2018?

On an asset basis, the largest contributors to the 0.9% increase in gross fixed capital formation (GFCF) between Quarter 4 (Oct to Dec) 2017 and Quarter 1 (Jan to Mar) 2018 were dwellings, which contributed 0.6 percentage points, information and communication technology (ICT) equipment and other machinery and equipment, which contributed 0.5 percentage points and intellectual property products (IPP), which contributed 0.3 percentage points (Figure 2).

These increases were offset slightly by negative contributions from transport equipment, and other buildings and structures and transfer costs, which contributed negative 0.3 and 0.2 percentage points respectively.

**Figure 2: Contributions to growth in gross fixed capital formation by asset for Quarter 1 (Jan to Mar) 2018, chained volume measure, seasonally adjusted**

Reference year: 2015 Coverage: UK

Figure 2: Contributions to growth in gross fixed capital formation by asset for Quarter 1 (Jan to Mar) 2018, chained volume measure, seasonally adjusted

Reference year: 2015 Coverage: UK



Source: Office for National Statistics

Notes:

1. The data in this chart covers Quarter 1 (Jan to Mar) 2018.

Between Quarter 1 2017 and Quarter 1 2018, the largest contributions to the 4.3% GFCF increase came from IPP, which contributed 1.9 percentage points and ICT equipment and other machinery and equipment, which contributed 1.6 percentage points. Transport equipment was the only asset to have contributed negatively, contributing negative 0.9 percentage points, marking its third successive negative contribution to quarter on same quarter a year ago GFCF growth.

## 7 . How has GFCF performed over a longer period?

Gross fixed capital formation (GFCF) is now 12.7% above the pre-economic downturn peak of Quarter 1 (Jan to Mar) 2008 and 37.2% above the level seen at the trough of the financial crisis in Quarter 2 (Apr to June) 2009.

GFCF has grown positively quarter-on-quarter for the last 10 quarters, having last fallen in Quarter 3 (July to Sept) 2015 (Figure 3). Since Quarter 1 2016, quarter-on-quarter growth for GFCF has averaged 1.0%, with the largest increase being 2.0% and the smallest 0.5%.

**Figure 3: Quarterly levels and quarter-on-quarter growth of gross fixed capital formation, chained volume measure, seasonally adjusted. Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018**

Reference year: 2015 Coverage: UK

Figure 3: Quarterly levels and quarter-on-quarter growth of gross fixed capital formation, chained volume measure, seasonally adjusted. Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018

Reference year: 2015 Coverage: UK



Source: Office for National Statistics

Notes:

1. Q1 equals Quarter 1 (January to March), Q2 equals Quarter 2 (April to June), Q3 equals Quarter 3 (July to September), Q4 equals Quarter 4 (October to December).
2. The data in this chart covers Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018.

## 8 . What other information can tell us more about GFCF?

Developments in the housing market can be an important indicator of investment and wider activity in the economy. Construction fell by 2.7% in the three months to December 2017 and contracted in the month-on-month series by 2.3% in March 2018 (see [Construction output in Great Britain: March 2018](#) for more information). Falls in private housing contrast with the private sector dwellings series for GFCF, which increased in Quarter 1 (Jan to Mar) 2018. This contrast, however, is due largely to conceptual differences and timing of recording, more information about which can be found in the article [Conceptual differences between an aggregate of construction output measures and the GFCF dwellings measure](#) published June 2013. When Quarter 1 2018 is open for revision in the June 2018 revised business investment release, actual data will replace some forecast data and may continue to be revised as new data becomes available.

## 9 . Which assets are contributing to the fall in business investment in Quarter 1 2018?

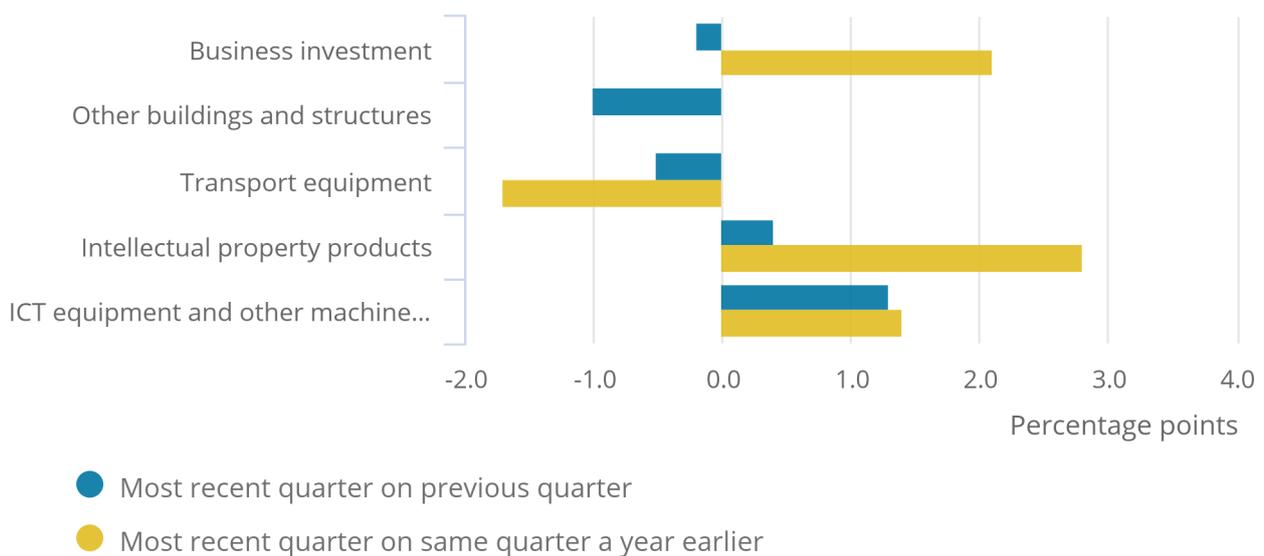
Business investment fell by 0.2% between Quarter 4 (Oct to Dec) 2017 and Quarter 1 (Jan to Mar) 2018, the first fall since Quarter 4 2016 when it fell by 0.1%. Falls in other buildings and structures, and transport were the reason for the decrease in the latest quarter. These falls were partially offset by positive growth from information and communication technology (ICT) equipment and other machinery and equipment, and intellectual property products (Figure 4).

**Figure 4: Contributions to growth in business investment by asset for Quarter 1 (Jan to Mar) 2018**

Reference year: 2015 Coverage: UK

Figure 4: Contributions to growth in business investment by asset for Quarter 1 (Jan to Mar) 2018

Reference year: 2015 Coverage: UK



Source: Office for National Statistics

Notes:

1. The data in this chart covers Quarter 1 (Jan to Mar) 2018.
2. Series may not sum due to rounding.

## 10 . How has business investment performed over a longer period?

The 0.2% fall in business investment in Quarter 1 (Jan to Mar) 2018 follows consecutive quarter-on-quarter increases throughout 2017, business investment having last fallen in Quarter 4 (Oct to Dec) 2016, though the size of the increases tailed off between Quarter 2 (Apr to June) and Quarter 4 2017. Business investment's average quarter-on-quarter growth, for each year between 2014 and 2017, has been steady at between 0.5% and 0.7%.

Levels of business investment have, with two small exceptions in Quarters 1 and 4 2016, increased relatively steadily since Quarter 3 (July to Sept) 2015, increasing by 4.4% between that quarter and Quarter 1 2018 (Figure 5).

**Figure 5: Quarterly levels and quarter-on-quarter growth of business investment, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018**

Reference year: 2015 Coverage: UK

Figure 5: Quarterly levels and quarter-on-quarter growth of business investment, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018

Reference year: 2015 Coverage: UK



Source: Office for National Statistics

Notes:

1. Q1 equals Quarter 1 (January to March), Q2 equals Quarter 2 (April to June), Q3 equals Quarter 3 (July to September), Q4 equals Quarter 4 (October to December).
2. The data in this chart covers Quarter 1 (Jan to Mar) 2008 to Quarter 1 2018.

## 11 . Business investment in the wider economy

The Bank of England, in its most recent [Agents' summary of business conditions](#) (PDF, 478KB), stated that investment intentions had “remained modest, reflecting continued uncertainty around Brexit”, however, it is noted that business services and manufacturing had positive investment intentions with some investing in “expanding capacity for exports, as well as in automation to counter rising labour costs”. Consumer service investment intentions, in contrast, “remained weak”.

The Bank of England also noted that the boost in net trade over the past 18 months should positively impact on business investment as exporters and those in the supply chain encouraged to invest as a result. The Bank’s survey source concluded that “the drag on investment growth from Brexit uncertainty appeared to diminish” in the second half of 2017. For a more comprehensive analysis around Brexit and business investment, please see page 11 of the Bank of England’s latest [inflation report](#).

Another important factor to consider when looking at business investment is the availability or supply of credit. Although the increase in Bank Rate in November 2017 pushed up the cost of borrowing, the cost of borrowing to firms remains low. The Bank of England’s [Credit Conditions survey](#), however, reported demand for lending across firms of all sizes was unchanged in the first quarter of 2018.

## 12 . Revisions to GFCF and business investment

In line with [National Accounts Revisions Policy](#) there are no revisions to earlier quarters in this release.

## 13 . Links to related statistics

International business investment comparisons are not available on a like-for-like basis, as the compilation of European statistics on business investment differs from the data provided within this release. However, European estimates of business investment provided by Eurostat, the European statistical office, can be found on the [Eurostat website](#).

Business investment in the UK accounts for over half of total gross fixed capital formation (GFCF).

The [GSS Business Statistics – interactive user guide](#) is an interactive tool to help you find what business and economic statistics are available and choose the right data for your needs.

We publish the following statistical releases, which provide complementary information on UK business and economic performance:

- [Profitability of UK companies](#) – quarterly data on capital employed by private non-financial corporations (PNFCs); contains annual, net and gross rates of return (expressed as percentages) on capital used by PNFCs
- [Quarterly national accounts](#) – includes UK data on GFCF and changes in inventories
- [UK Economic Accounts](#) – quarterly detailed estimates of national product, income and expenditure, UK Sector Accounts and UK Balance of Payments, including data on GFCF
- [UK National Accounts: the Blue Book](#) – annual publication of the UK National Accounts, including data on GFCF
- [Retail sales](#) – monthly estimate of UK retail sales
- [UK manufacturers' sales by product \(PRODCOM\)](#) – annual output by manufacturers
- [Labour market statistics](#) – monthly data on employment, unemployment, economic inactivity, claimant count, average earnings, labour productivity, vacancies and labour disputes
- [Business demography](#) – annual statistics on UK business births, deaths and survival

## 14 . Quality and methodology

The [Business investment Quality and Methodology Information \(QMI\) report](#) contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users
- how the output was created
- the quality of the output including the accuracy of the data

The changes signposted in this bulletin have not yet been reflected in either the [Quarterly Acquisitions and Disposals of Capital Assets Survey QMI](#) or the [Business investment QMI](#), but changes will be incorporated into revised QMIs in the future. We recently updated the Business investment QMI on 30 January 2018.

In February 2017, we introduced an improved gross fixed capital formation (GFCF) estimation system, which incorporated methodological changes including improved deflation and seasonal adjustment. A data impact assessment of the new GFCF system for the periods Quarter 1 (Jan to Mar) 2016 to Quarter 3 (July to Sept) 2016 can be found in an accompanying article: [Gross fixed capital formation \(GFCF\) new system deployment and data impact assessment](#). Further information on the methods changes introduced in the new GFCF estimation system can be found in the article [Changes to the Gross Fixed Capital Formation methodology and processing](#).

### Adjustments

Large capital expenditure tends to be reported later in the data collection period than smaller capital expenditure. This means that larger expenditures are often included in the revised (month 3) results, but are not reported in time for the provisional (month 2) results, leading to a tendency towards upward revisions in the later estimates for business investment and gross fixed capital formation (GFCF). Following investigation of the impact of this effect, from Quarter 3 (July to Sept) 2013, in the provisional estimate a bias adjustment is introduced to business investment and its components. The bias adjustment for this provisional release is £1.1 billion.

## Survey response rates

Table 2 presents the provisional (month 2) and revised (month 3) response rates for the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS). The estimates in this release are based on the Quarter 1 (Jan to Mar) 2018 provisional survey results.

**Table 2: UK response rates for quarterly acquisitions and disposals of capital assets survey for Quarter 4 (Oct to Dec) 2015 to Quarter 1 (Jan to Mar) 2018**

At month 2 (provisional)		At month 3 (revised)	
Period	Survey response rates /%	Period	Survey response rates /%
2015 Q4	68.6	2015 Q4	89.8
2016 Q1	69.2	2016 Q1	89.4
Q2	71.4	Q2	89.1
Q3	72.8	Q3	83.5
Q4	68.5	Q4	84.5
2017 Q1	68.2	2017 Q1	82.8
Q2	70.8	Q2	89.6
Q3	69.7	Q3	88.1
Q4	69.6	Q4	83.6
2018 Q1	68.1	2018 Q1	

Source: Office for National Statistics

Notes:

1. Q1 is Quarter 1 (Jan to Mar).
2. Q2 is Quarter 2 (Apr to June).
3. Q3 is Quarter 3 (July to Sept).
4. Q4 is Quarter 4 (Oct to Dec).