

Statistical bulletin

# GDP first quarterly estimate, UK: July to September 2019

First quarterly estimate of gross domestic product (GDP), containing current and constant price data on the value of goods and services to indicate the economic performance of the UK.



Release date: 11 November 2019

Next release: 20 December 2019

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### 1. Main points

- UK gross domestic product (GDP) in volume terms was estimated to have increased by 0.3% in Quarter 3 (July to Sept) 2019.
- When compared with the same quarter a year ago, UK GDP increased by 1.0% in Quarter 3 2019; this is the slowest rate of quarter-on-year growth since Quarter 1 (Jan to Mar) 2010.
- The service and construction sectors provided positive contributions to GDP growth, while output in the production sector was flat in Quarter 3 2019.
- Private consumption, government consumption and net trade contributed positively to GDP growth, while gross capital formation (GCF) contributed negatively to growth in Quarter 3 2019.
- Nominal GDP increased by 0.5% in Quarter 3 2019, down from 0.7% in Quarter 2 (Apr to June) 2019.

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

Gross domestic product (GDP) growth is the main indicator of economic performance. There are three approaches used to measure GDP: the output approach, the expenditure approach and the income approach. Further information on all three approaches to measuring GDP can be found in <u>A Short Guide to the UK National Accounts (PDF, 317KB)</u>.

Data in chained volume measures within this bulletin have had the effect of price changes removed (in other words, the data are deflated). The exception to this is income data, which are only available in current prices.

### **International Financial Reporting Standards (IFRS16)**

In January 2019, a new reporting standard took effect for those businesses using the International Financial Reporting Standards (IFRS) accountancy framework. "IFRS16 Leases" brings the reporting of operating leases onto balance sheets. This has impacted how some businesses have reported on their fixed assets, mainly through our Quarterly Acquisition and Disposal of Capital Assets Survey (QCAS), used in the compilation of gross fixed capital formation (GFCF) and business investment.

While we recognise there is a change to the accounting standards for some businesses, there has been no change to national accounts standards on the treatment of leases. To assess the impact of IFRS16's introduction on GFCF and business investment estimates, we have contacted around 360 QCAS respondents with large movements in their data to ask them which accountancy framework they used and what, if any, impact IFRS16 had on their data for both Quarter 1 (Jan to Mar) 2019 and Quarter 2 (Apr to June) 2019 and if they use the IFRS framework. As a result, we made a downward adjustment of approximately £244 million to remove the quantified impact of its introduction in Quarter 1 2019 and a downward adjustment of £133 million in Quarter 2 2019 to better reflect underlying growth for GFCF and business investment.

The assets most affected by the introduction of IFRS16 in Quarter 1 2019 were ICT equipment and "other machinery and equipment". In our Quarter 2 2019 estimates, intellectual property products were the assets most affected. We have continued to monitor the impact of IFRS 16's introduction for our Quarter 3 (July to Sept) 2019 provisional estimates and will do so going forward. As a result, a downward adjustment of £185 million has been applied to reflect IFRS16's impact in the latest quarter, with intellectual property products and "other buildings and structures" being the assets most affected.

#### **Quarterly Stocks Inquiry temporary expansion**

To address users' concerns about the sample size of the Quarterly Stocks Inquiry and the potential impact on quality, we temporarily increased the sample size from 5,500 to 9,500 businesses for Quarter 2 and Quarter 3 2019, ahead of the UK's planned exit from the European Union on 31 October 2019. With EU exit now likely to be delayed until 31 January 2020, we have decided to extend this sample boost into Quarter 4 (Oct to Dec) 2019 and will assess whether to extend this further.

The inquiry is used in the compilation of the changes in inventories component within gross capital formation (GCF). Our early analyses have shown that the introduction of this increased sample has not caused any significant discontinuity in estimates of changes in inventories.

## 3. The UK economy grew by 0.3% in Quarter 3 2019, following volatility in the first half of the year

UK gross domestic product (GDP) increased by 0.3% in Quarter 3 (July to Sept) 2019 following a decline of 0.2% in the previous quarter. There was a range of external expectations for growth in Quarter 3 2019, including the <a href="National Institute of Economic and Social Research">National Institute of Economic and Social Research</a> forecasting growth of 0.5% and the <a href="Bank of England">Bank of England</a> <a href="November 2019">November 2019</a> inflation report predicting growth of 0.4% in Quarter 3 2019.

The underlying momentum in the UK economy shows some signs of slowing. Compared with Quarter 3 2018, the UK economy increased by 1.0%; this is the weakest figure since Quarter 1 (Jan to Mar) 2010 (Figure 1).

Figure 1: Real GDP increased by 0.3% in Quarter 3 2019, although underlying momentum does appear to be slowing

UK, Quarter 1 (Jan to Mar) 2008 to Quarter 3 (July to Sept) 2019

Figure 1: Real GDP increased by 0.3% in Quarter 3 2019, although underlying momentum does appear to be slowing



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Real GDP figures are volume estimates that are adjusted for the effects of inflation over time.

In line with the <u>National Accounts Revisions Policy</u>, no previous quarters are open for revision as part of this publication. However, there have been some revisions made to the monthly path of the output components of GDP. <u>GDP monthly estimate</u>, <u>UK: September 2019</u> provides further information on both the monthly movements and revisions to GDP.

Growth in nominal GDP has continued to slow, increasing by 0.5% in Quarter 3 2019, easing from the 0.7% recorded in the previous quarter. The implied GDP deflator represents the broadest measure of inflation in the domestic economy, reflecting changes in the price of all goods and services that make up GDP. This includes the price movements in private and government consumption, investment, and the relative price of exports and imports. It slowed notably in Quarter 3, increasing by 0.3%; this is an easing from the 1.0% recorded in the previous quarter. Compared with Quarter 3 2018, the implied GDP deflator increased by 2.0%. The easing in quarter-on-quarter and quarter-on-year growth in the implied GDP deflator has stemmed predominantly from a slowing in the gross capital formation (GCF) and household consumption implied deflators. Movements in the implied deflator are in line with quarterly movements in consumer price inflation, in which growth has also slowed in recent periods.

#### % growth1

	Cha	ined volume	measures		Curre	ent market prices	
	GDF	, Household expenditure	Gross fixed capital formation	GDP per head <sup>3</sup>	GDP	Compensation of employees	GDP implied deflator
Seasonally adjusted	t						
2017	1.9	2.3	1.6	1.3	3.8	4.3	1.9
2018	1.4	1.6	-0.1	8.0	3.3	4.3	1.9
Q1 2017	0.6	0.5	0.0	0.4	1.2	0.8	0.6
Q2 2017	0.3	0.3	1.4	0.1	0.4	1.6	0.2
Q3 2017	0.3	0.4	-0.4	0.2	0.4	1.1	0.1
Q4 2017	0.4	0.3	1.1	0.2	1.4	0.7	1.0
Q1 2018	0.1	0.5	-0.9	-0.1	0.5	1.1	0.5
Q2 2018	0.5	0.5	-0.4	0.4	0.9	0.9	0.3
Q3 2018	0.6	0.3	0.5	0.5	1.2	1.5	0.6
Q4 2018	0.3	0.2	-0.1	0.2	0.5	1.4	0.2
Q1 2019	0.6	0.3	0.9	0.4	1.2	0.3	0.6
Q2 2019	-0.2	0.4	-0.9	-0.4	0.7	1.5	1.0
Q3 2019	0.3	0.4	-0.2	0.2	0.5	0.9	0.3

Source: Office for National Statistics – GDP first quarterly estimate

#### Notes

- 1. Percentage change on previous period. Back to table
- 2. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec). Back to table
- 3. Population data are consistent with the 26 June 2019 published estimates. Back to table

# 4. There has been a pickup in services and construction growth in Quarter 3 2019, while growth in the production sector was flat

The output measure of gross domestic product (GDP) grew by 0.3% in Quarter 3 (July to Sept) 2019. This followed a period of increased volatility in the first half of the year relating to the UK's original planned exit date from the European Union, likely reflecting the effects of bringing forward activity in the first quarter of the year and the decline in car production owing to partial car plant shutdowns in April. This has been most evident in the quarterly movements in manufacturing output in Quarter 2 (Apr to June) 2019, which saw a fall of 2.8%.

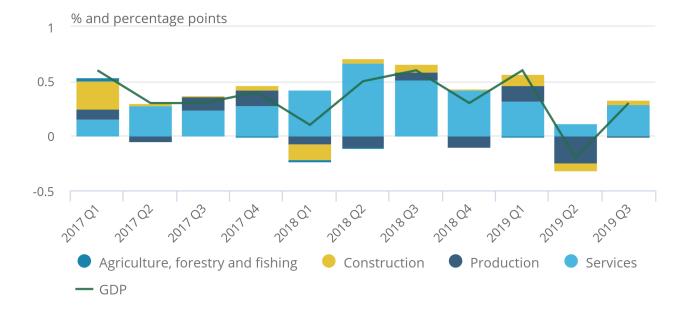
Manufacturing was flat in Quarter 3 2019, as was production. Services output increased by 0.4% in Quarter 3 2019, following the weakest quarterly figure in three years in the previous quarter. Construction output experienced a pickup following a weak Quarter 2, increasing by 0.6% (Figure 2).

## Figure 2: There has been a pickup in services and construction growth while growth in the production sector was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019

Figure 2: There has been a pickup in services and construction growth while growth in the production sector was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Chart shows contribution to real GDP quarter-on-quarter growth.
- 3. Components contributions may not sum to total because of rounding.

The service sector remained relatively subdued with an increase of 1.4% in the year to Quarter 3; this is the weakest growth rate since the Quarter 4 (Oct to Dec) 2017. The easing has also been reported in the <a href="Quarter 3">Quarter 3</a> 2019 Bank of England Agents' summary, which recorded how business services continued to grow at a modest rate, with weaker demand for transaction-related services partially offset by strong demand for IT services. The <a href="CBI Services Sector Survey">CBI Services Sector Survey</a> also reported how business optimism across the service sector fell sharply in the three months to August, attributing the decline to political uncertainty, which was reported as holding back investment and expansion plans.

Following a loss of momentum in the second half of 2018 and the first half of 2019, services output increased by 0.4% in Quarter 3 2019. This has been driven by growth in all four of the service sector groupings shown in Figure 3, with the most notable contribution to growth coming from "other services" sectors, which is comprised of 11 service sectors. This increase stemmed from a 0.7% increase in human health and social work activities alongside a 0.7% increase in financial and insurance activities, which grew following five consecutive quarters of decline, although users should note early estimates are reliant on a higher level of forecast content. These increases more than offset declines in industries such as accommodation and food services in Quarter 3 2019.

There has also been continued strength in the information and communication industry, which contributed positively to growth for the sixth consecutive quarter, increasing by 0.8% in Quarter 3 2019. This has partially reflected an increase in UK-based film and TV production, which has performed particularly strongly in Quarter 3 2019. There was also a pickup in professional, scientific and technical activities following two quarters of decline, increasing by 0.7% in Quarter 3 2019.

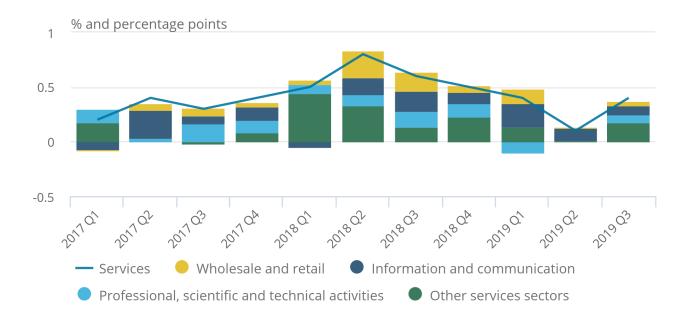
Wholesale, retail and motor trades increased by 0.3% in Quarter 3 2019, following an increase of 0.1% in Quarter 2 2019. The increase in Quarter 3 was partially a result of growth in the retail sector, with the latest official retail sales figures showing that retail sales grew 0.6% in Quarter 3 2019. However, there appears to be a divergence between the official figures and the non-official indicators of retail sales, with a variety of external indicators signalling a recent decline in retail activity. These include the British Retail Consortium (BRC), which reported a 1.3% decline in year-on-year sales in September 2019, and the CBI, which reported a decline in retail sales volumes for the fifth consecutive month, citing the tough retail conditions and the recent sterling depreciation as key factors.

Figure 3: There has been a pickup in service sector growth in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019

Figure 3: There has been a pickup in service sector growth in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Chart shows contribution to quarter-on-quarter service sector growth.
- 3. Components contributions may not sum to total because of rounding.

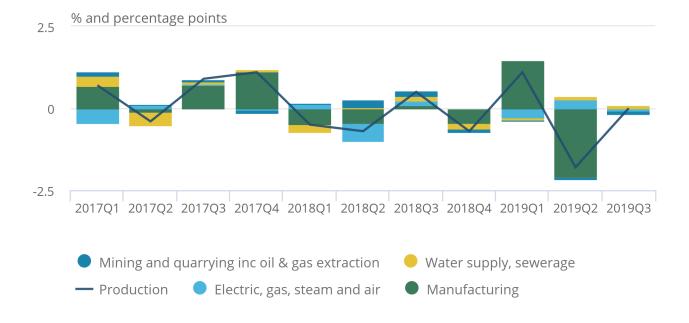
The volatility throughout the first half of 2019 has been particularly pronounced in the production industry. Following an increase of 1.1% in Quarter 1 (Jan to Mar) 2019, production output fell by 1.8% in Quarter 2 2019 (Figure 4). Production output was flat in Quarter 3. These trends reflected movements in the manufacturing industry, which experienced volatility in the first half of the year consistent with activity being brought forward ahead of the UK's original intended European Union departure date, followed by a slowdown in activity in Quarter 2 exacerbated by partial car plant shutdowns in April. The subdued performance of the manufacturing sector in the three months to September – in which output was flat – has also been recorded by the recent CBI Industrial Trends Survey, which also noted that stock levels were above adequate, as uncertainty and the ongoing global manufacturing slowdown continued to have an adverse effect on manufacturers. The British Chambers of Commerce also reported a deterioration in manufacturing activity, reporting how the "manufacturing sector continues to toil under the weight of diminishing cashflow, weakening global demand and disrupted supply chains."

#### Figure 4: Production output growth was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019

### Figure 4: Production output growth was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 to Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Chart shows contribution to quarter-on-quarter production growth.
- 3. Components contributions may not sum to total because of rounding.

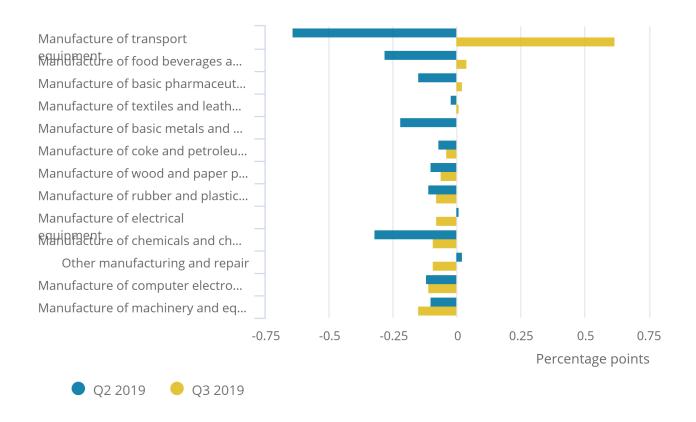
Manufacturing failed to grow in Quarter 3 2019, with falls in many industries almost solely offset by an increase in the manufacturing output of transport equipment (Figure 5). This recovery in car production follows a decline in Quarter 2, because of partial closures of various car manufacturing plants.

Figure 5: Widespread falls in the manufacturing industries have been offset by an increase in the manufacture of transport equipment in Quarter 3 2019

UK, Quarter 2 (April to June) 2019 and Quarter 3 (July to Sept) 2019

### Figure 5: Widespread falls in the manufacturing industries have been offset by an increase in the manufacture of transport equipment in Quarter 3 2019

UK, Quarter 2 (April to June) 2019 and Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q2 refers to Quarter 2 (Apr to June) and Q3 refers to Quarter 3 (July to Sept).
- 2. Chart shows contribution to quarter-on-quarter production growth.
- 3. Components contributions may not sum to total because of rounding.

Mining and quarrying output fell for the fourth consecutive quarter in Quarter 3 2019, decreasing by 1.7%. Following some volatility in the first half of 2019, electricity, gas, steam and air conditioning fell by 0.7% in Quarter 3. This was partially a result of higher than average temperatures in the UK in September. Water supply and sewerage production grew by 1.2% for the second consecutive quarter in Quarter 3 2019.

Construction output increased by 0.6% in Quarter 3 2019, following a 1.2% decline in Quarter 2. The quarterly increase was because of strength in new construction work, particularly in private new housing work and private commercial new work in the three months to September 2019. The <u>latest Bank of England Agents' summary of business conditions</u> also reported strength in residential construction, with the development of lower-priced properties remaining strong, supported by the Help to Buy schemes. There have also been some revisions to the monthly path of construction sector growth, implying slightly weaker activity in July and August than previously estimated.

## 5. Household consumption increases as the trade deficit narrows in Quarter 3 2019

The expenditure measure of gross domestic product (GDP) increased by 0.3% in Quarter 3 (Jul to Sept) 2019. Private consumption, government consumption and net trade contributed positively to growth while gross capital formation (GCF) subtracted from GDP growth in Quarter 3 2019.

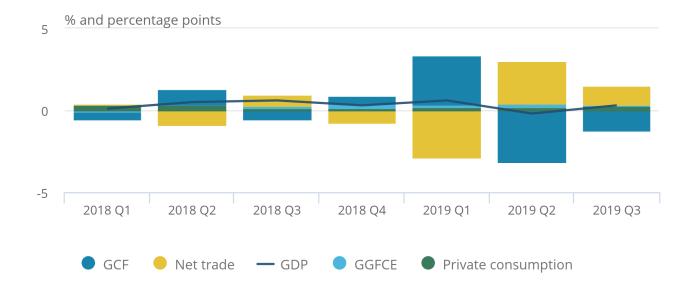
There were large swings in net trade and GCF in the first half of the year (Figure 6), reflecting movements of "unspecified goods" – which include non-monetary gold. The movements in GCF also reflect to a large extent the stockpiling and subsequent unwinding of stocks that took place in Quarter 1 (Jan to Mar) and Quarter 2 (Apr to June) 2019. While the pickup in GDP in Quarter 3 2019 was largely a result of net trade, this was unrelated to movements in unspecified goods.

Figure 6: The pickup in GDP in Quarter 3 2019 was largely a result of net trade, though this was unrelated to movements in unspecified goods

UK, Quarter 1 (Jan to Mar) 2018 to Quarter 3 (July to Sept) 2019

# Figure 6: The pickup in GDP in Quarter 3 2019 was largely a result of net trade, though this was unrelated to movements in unspecified goods

UK, Quarter 1 (Jan to Mar) 2018 to Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept), and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Chart shows contribution to real GDP quarter-on-quarter growth.
- 3. Components contributions may not sum to total because of rounding. The statistical discrepancy is also not displayed.

Private consumption increased by 0.4% in Quarter 3 2019, broadly in line with its recent relatively subdued trend. The latest official figures show that retail sales grew at a moderate pace of 0.6% in Quarter 3 2019 compared with the previous quarter. Evidence from the latest Bank of England Agents' summary of business conditions notes the weakness in retail sales in Quarter 3 compared with a year ago, citing "base effects from strong sales a year ago when there was a boost from warm weather and the football World Cup". Meanwhile, the GfK Consumer Confidence Index improved two points to -12 in September 2019 with increases in all five measures underpinning the index.

The decline in GCF in Quarter 3 2019 broadly reflects a decrease in aligned change in inventories, which decreased for the second consecutive quarter as businesses appear to be continuing to run down stock levels. This follows the large increase in Quarter 1 2019, reflecting to a large extent the pronounced building up of stocks in the run-up to the UK's original exit date from the European Union at the end of March. This unwinding of stocks in Quarter 3 2019 is reflected in external survey evidence. For example, the <u>latest Bank of England Agents' summary of business conditions</u> states that the unwinding of stocks "contributed to weaker growth in manufacturing".

Alignment and balancing adjustments are typically applied to the inventories component to help balance the different approaches to GDP – more detail on these can be found in the Quality and methodology section of this publication. When these adjustments are removed, the underlying data show a substantial decrease of £4.6 billion in stocks being held by UK companies in Quarter 3 2019 (Table 2).

Table 2: Change in inventories, including and excluding balancing and alignment adjustments UK, Quarter 3 (July to Sept) 2019

Change in	Of which	Of which	Change in inventories
inventories	alianment	halancing	excluding alignment and balancing
inventories	angiment	balancing	and balancing

Current price -2574 -769 0 -1805 Chained volume measure -5309 -723 0 -4586

Source: Office for National Statistics

Notes

1. Data are in £ millions. Back to table

Gross fixed capital formation (GFCF) fell by 0.2% in Quarter 3 2019, while business investment was flat, continuing its recent subdued performance (Figure 7). These figures should be interpreted with some caution as early estimates of business investment can be prone to revision.

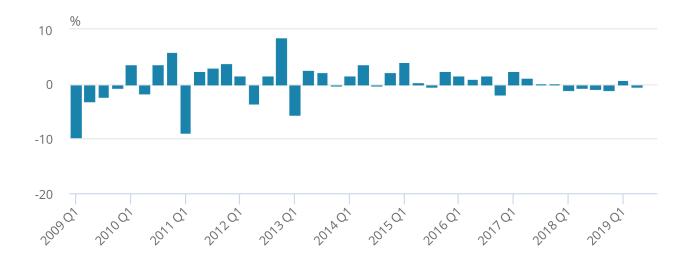
External evidence suggests that investment intentions remained weak in Quarter 3 2019. For example, the latest Bank of England Agents' Summary of business conditions reports that investment intentions remained at a nine-year low in the Quarter 3 2019. While members of the Bank of England Decision Maker Panel also reported that their recent investment growth has been subdued, businesses expected nominal investment growth to pick up a little to around 3.0% over the year to Quarter 1 2020.

Figure 7: Business investment was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019

### Figure 7: Business investment was flat in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. Business investment refers to quarter-on-quarter growth in volume estimates of business investment.

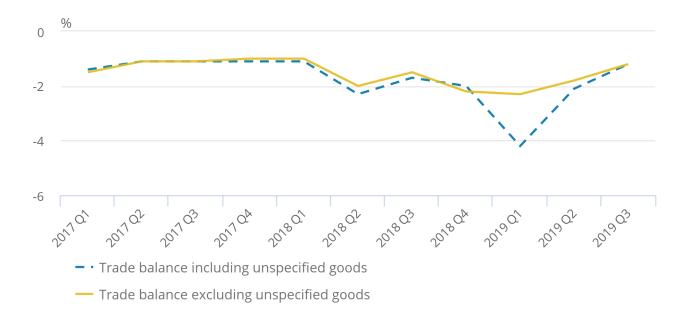
Trade imports and exports have been volatile in the first half of 2019, in part reflecting the effects of movements of "unspecified goods" – which include non-monetary gold – in the first two quarters of the year. In Quarter 3 2019, the UK trade deficit narrowed to 1.2% of nominal GDP (Figure 8).

Figure 8: The trade deficit narrowed to 1.2% of nominal GDP in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 and Quarter 3 (July to Sept) 2019

Figure 8: The trade deficit narrowed to 1.2% of nominal GDP in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 and Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
- 2. The trade deficit is calculated using current price estimates of GDP and net trade.

The narrowing of the trade deficit largely reflects strong export volume growth of 5.2% in Quarter 3 2019. Trade in goods exports grew 5.0%, reflecting increases in machinery and transport equipment and chemicals, while trade in services exports grew 5.3%; this was a result of "other business services". External evidence points to weaker export growth than shown in the official estimates. The <u>latest Bank of England Agents' summary of business conditions</u> states that manufacturing output and exports grew at their slowest rate in three years. Rising trade tensions were also a concern for exporters. The recent <u>British Chambers of Commerce Quarterly Economic Survey</u> reported weakness in manufacturing export orders.

Meanwhile, import volumes grew 0.8% in Quarter 3 2019, following volatility seen earlier in the year. Notable movements in the imports of "unspecified goods" – which include non-monetary gold – meant that there were large swings in imports in the first half of 2019. These "unspecified goods" have large and offsetting impacts to GCF and net trade. These movements do not affect headline GDP as they are recorded as equivalent offsetting impacts in the UK National Accounts, but they are reflected in the composition of GDP growth. More information on how non-monetary gold features in GDP is available. Growth in imports in Quarter 3 2019 reflected moderate growth in trade in goods, which grew 0.2% because of an increase in machinery and transport, as well as trade in services, which grew 2.3% following a sharp fall in Quarter 2 2019.

Government consumption increased by 0.3% in Quarter 3 2019, driven by higher spending in "healthcare and public administration". In Quarter 3, the available expenditure data is a quarter in arrears; therefore, the latest data reported are based on budgetary forecasts rather than actual spending. As government departments provide updated information, actual spend (outturn) data become available and revisions are made to estimates previously published.

### 6. Nominal GDP growth slowed to 0.5% in Quarter 3 2019

Growth in nominal gross domestic product (GDP) eased to 0.5% in Quarter 3 (Jul to Sept) 2019, following an increase of 0.7% in the previous quarter. The quarterly increase was a result of a 0.9% increase in compensation of employees. Wages and salaries grew by 0.9%, reflecting increases in public sector wages and salaries.

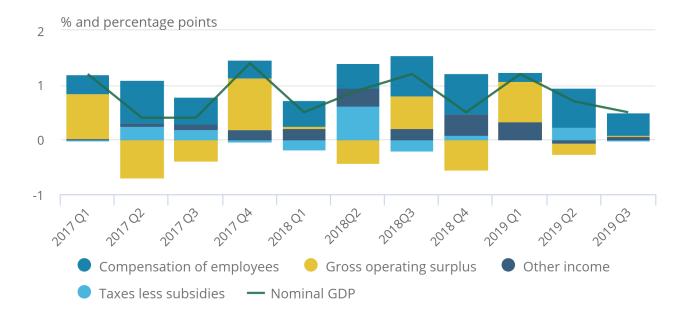
Gross operating surplus (GOS) of corporations increased by 0.1% and other income increased by 0.5%, reversing the decline in the previous quarter (Figure 9).

Figure 9: Nominal GDP growth slowed to 0.5% in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 and Quarter 3 (July to Sept) 2019

Figure 9: Nominal GDP growth slowed to 0.5% in Quarter 3 2019

UK, Quarter 1 (Jan to Mar) 2017 and Quarter 3 (July to Sept) 2019



Source: Office for National Statistics - GDP first quarterly estimate

#### Notes:

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- 2. Chart shows contribution to nominal GDP quarter-on-quarter growth.
- 3. Components contributions may not sum to total because of rounding.

### 7. Links to related statistics

#### Release content

All data in this bulletin are seasonally adjusted estimates. Non-seasonally adjusted data are available within the UK Economic Accounts. These data can be downloaded directly from the UK Economic Accounts dataset and on the UK Economic Accounts main aggregates dataset table. Data published in the UK Economic Accounts reflect data as published on 30 September 2019 and are consistent with the data in this release up to Quarter 2 (Apr to June) 2019.

A number of other economic indicators were published on 11 November 2019; these include:

- GDP monthly estimate, UK: September 2019
- data for gross fixed capital formation (GFCF) by sector and asset, revision triangles and a real-time database
- Index of Services
- Index of Production
- Construction output in Great Britain
- UK trade

### 8. Are there any upcoming changes?

In Blue Book 2019 we made changes to the measurement of mixed income, compiling our estimates at a more granular level to better reflect the different components of mixed income such as income from self-employment, rental and income earned which is not present in tax data because of evasion. This change particularly impacted years post 2016 (the last year for which most of our structural tax sources are available) as forecasts and indicators are now used at a lower level of detail. We plan to make further updates to these estimates in the December Quarterly National Accounts release (in line with the revisions policy) and as part of Blue Book 2020. An article outlining these further changes and their impacts will be published on 20 November.

### 9. Quality and methodology

The <u>Gross domestic product (GDP) Quality and Methodology Information (QMI)</u> report contains important information on:

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

The national accounts are drawn together using data from many different sources. This ensures that the national accounts are comprehensive and provide different perspectives on the economy, for example, sales by retailers and purchases by households.

### Important quality information

There are common pitfalls in interpreting data series; these include:

- expectations of accuracy and reliability in early estimates are often too high
- · revisions are an inevitable consequence of the trade-off between timeliness and accuracy
- early estimates are based on incomplete data

Very few statistical revisions arise as a result of "errors" in the popular sense of the word. All estimates, by definition, are subject to statistical "error".

Many different approaches can be used to summarise revisions; the "Accuracy and reliability" subsection in the <a href="QMI report">QMI report</a> analyses the mean average revision and the mean absolute revision for GDP estimates over data publication iterations.

#### Reaching the GDP balance

The different data content and quality of the three approaches – the output approach, the expenditure approach and the income approach – dictate the approach taken in balancing quarterly data. In the UK, there are more data available on output in the short term than in either of the other two approaches. However, to obtain the best estimate of GDP (the published figure), the estimates from all three approaches are balanced to produce an average, except in the latest two quarters where the output data takes the lead owing to its larger data content.

Information on the methods we use for <u>balancing the output</u>, <u>income and expenditure approaches to measuring GDP</u> is available.

Alignment adjustments, found in Table M of the GDP first quarterly estimate data tables in this release, have a target limit of plus or minus £2,000 million on any quarter. In periods where the data sources are particularly difficult to balance, larger alignment adjustments are sometimes needed. This has not been the case in Quarter 3 (July to Sept) 2019. To achieve a balanced GDP dataset through alignment, balancing adjustments are applied to the components of GDP where required. They are applied to the individual components where data content is particularly weak in a given quarter because of a higher level of forecast content. The balancing adjustments applied in this quarter are shown in Table 3; the resulting series should be considered accordingly.

Table 3: Balancing adjustments applied to the GDP first quarterly estimate dataset for Quarter 3 (July to September) 2019

GDP measurement approach and	02 2010
component adjustment applied to	Q3 2019

#### **Expenditure**

Trade in Services (imports)

Current prices -1350

Trade in Services (imports)

Chained volume measure -250

Source: Office for National Statistics

								2016 = 100
	Value indices at o	current prices	Cha	ined volume indi	ces		Implied deflators <sup>3</sup>	
	Gross domestic product at market prices	Gross value added at basic prices	Gross domestic product at market prices	Gross value added at basic prices	Market sector gross value added	Gross national expenditure	Gross domestic product at market prices	Gross value added at basic prices
2015 2016 2017 2018	YBEU 96.1 100.0 103.8 107.3	YBEX 96.1 100.0 103.9 107.3	YBEZ 98.1 100.0 101.9 103.3	CGCE 98.1 100.0 102.0 103.4	L48H 97.6 100.0 102.8 104.7	YBFV 98.1 100.0 102.2 104.2	YBGB 97.9 100.0 101.9 103.8	CGBV 98.0 100.0 101.8 103.8
Seasonally ad	justed							
2016 Q2 Q3 Q4	99.7 100.4 101.7	99.8 100.5 101.7	99.7 100.2 100.8	99.7 100.2 100.9	99.9 100.1 101.0	100.0 100.2 100.7	100.0 100.2 100.9	100.1 100.3 100.8
2017 Q1 Q2 Q3 Q4	102.9 103.3 103.8 105.2	103.0 103.5 103.7 105.3	101.4 101.7 102.0 102.4	101.5 101.8 102.1 102.5	102.2 102.5 103.0 103.7	102.0 101.8 102.1 102.9	101.5 101.6 101.7 102.7	101.4 101.7 101.6 102.7
2018 Q1 Q2 Q3 Q4	105.8 106.7 108.0 108.5	106.1 106.5 108.1 108.6	102.5 103.0 103.7 104.0	102.6 103.1 103.7 104.1	103.6 104.4 105.2 105.5	103.4 104.1 104.8 104.6	103.2 103.6 104.2 104.3	103.5 103.3 104.2 104.4
2019 Q1 Q2 Q3	109.8 110.6 111.2	110.0 110.8 111.4	104.6 104.4 104.7	104.7 104.4 104.7	106.0 105.6 106.6	104.7 106.0 106.6	105.0 106.0 106.3	105.1 106.1 106.3
Percentage ch	nange, latest year on բ	orevious year						
2015 2016 2017 2018	IHYM 3.0 4.1 3.8 3.3	KGL6 3.0 4.0 3.9 3.3	IHYP 2.4 1.9 1.9 1.4	KGM7 2.2 1.9 2.0 1.4	L489 2.7 2.5 2.8 1.8	KH7D 0.1 1.9 2.2 2.0	IHYS 0.6 2.1 1.9 1.9	KGM4 0.8 2.0 1.8 2.0
Percentage ch	nange, latest quarter o	on previous quar	ter					
2016 Q2 Q3 Q4	IHYN 1.6 0.6 1.3	KGL8 1.7 0.7 1.2	IHYQ 0.5 0.5 0.6	KGM9 0.5 0.5 0.7	1.0 0.2 0.9	KH7E 0.9 0.2 0.4	IHYT 1.0 0.2 0.7	KGM5 1.2 0.1 0.5
2017 Q1 Q2 Q3 Q4	1.2 0.4 0.4 1.4	1.2 0.5 0.2 1.5	0.6 0.3 0.3 0.4	0.6 0.3 0.3 0.4	1.1 0.3 0.5 0.7	1.3 -0.2 0.2 0.8	0.6 0.2 0.1 1.0	0.7 0.2 -0.1 1.2
2018 Q1 Q2 Q3 Q4	0.5 0.9 1.2 0.5	0.8 0.4 1.5 0.5	0.1 0.5 0.6 0.3	0.5 0.6 0.3	-0.1 0.8 0.7 0.3	0.5 0.6 0.7 –0.2	0.5 0.3 0.6 0.2	0.7 -0.2 0.9 0.1
2019 Q1 Q2 Q3	1.2 0.7 0.5	1.3 0.8 0.5	0.6 -0.2 0.3	0.6 -0.2 0.3	0.5 -0.4 0.4	0.1 1.3 0.5	0.6 1.0 0.3	0.7 1.0 0.2
Percentage ch	nange, latest quarter o	on corresponding	g quarter of previou	ıs year				
2016 Q2 Q3 Q4	IHYO 3.8 4.1 4.8	KGM2 3.7 4.1 4.8	IHYR 1.9 1.9 1.8	KGN3 1.8 2.0 2.0	L48D 2.2 2.5 3.5	KH7F 1.8 1.7 2.9	IHYU 1.9 2.1 3.0	KGM6 1.9 2.1 2.7
2017 Q1 Q2 Q3 Q4	4.8 3.6 3.4 3.5	5.0 3.7 3.2 3.6	2.2 1.9 1.8 1.6	2.3 2.1 1.9 1.6	3.2 2.6 2.9 2.7	2.9 1.8 1.8 2.2	2.5 1.6 1.6 1.8	2.6 1.6 1.3 2.0
2018 Q1 Q2 Q3 Q4	2.8 3.3 4.0 3.1	3.1 2.9 4.2 3.1	1.1 1.3 1.6 1.5	1.0 1.3 1.6 1.5	1.5 1.9 2.1 1.7	1.4 2.2 2.7 1.7	1.7 1.9 2.4 1.6	2.0 1.6 2.6 1.6

1.2 1.9 1.8

1.7 2.3 2.0

3.8 3.7 3.0

2019 Q1 Q2 Q3

3.6 4.0 3.0

<sup>1</sup> Estimates cannot be regarded as accurate to the last digit shown.
2 The growth rates are calculated from the £m series and due to the rounded nature of the index series the growth rates cannot be replicated.
3 Based on the sum of expenditure components of GDP at current prices and

in chained volume terms.

## **A2** Gross domestic product and gross value added<sup>1</sup>

£ million

		At current prices		Chai	ned volume measur	es (Reference year	2016)
	Gross domestic product at market prices	less Basic price adjustment <sup>2</sup>	Gross value added at basic prices	Gross domestic product at market prices	less Basic price adjustment <sup>2</sup>	Gross value added at basic prices	Gross value added excluding oil & gas <sup>3</sup>
2015 2016 2017 2018	YBHA 1 916 896 1 995 478 2 071 667 2 140 278	NTAP 207 571 217 344 224 764 231 670	ABML 1 709 325 1 778 134 1 846 903 1 908 608	ABMI 1 957 920 1 995 478 2 033 234 2 061 408	NTAO 213 742 217 344 219 805 223 389	ABMM 1 744 182 1 778 134 1 813 429 1 838 019	KLS2 1 736 086 1 769 730 1 804 895 1 828 879
Seasonally adju	usted						
2016 Q2 Q3 Q4	497 571 500 711 507 375	54 081 54 137 55 293	443 490 446 574 452 082	497 593 499 836 503 083	54 559 54 386 54 379	443 035 445 450 448 704	440 959 443 235 446 651
2017 Q1 Q2 Q3 Q4	513 458 515 534 517 788 524 887	55 757 55 579 56 732 56 696	457 701 459 955 461 056 468 191	505 983 507 255 508 982 511 014	54 682 54 823 55 022 55 278	451 301 452 432 453 960 455 736	449 181 450 296 451 784 453 634
2018 Q1 Q2 Q3 Q4	527 763 532 388 538 756 541 371	55 952 58 898 58 205 58 615	471 811 473 490 480 551 482 756	511 300 514 017 517 221 518 870	55 364 55 713 56 065 56 247	455 936 458 304 461 156 462 623	453 775 456 025 458 781 460 298
2019 Q1 Q2 Q3	547 884 551 898 554 929	58 941 59 277 59 750	488 943 492 621 495 179	521 873 520 735 522 247	56 564 56 448 56 632	465 309 464 287 465 615	463 026 462 013 463 396
Percentage cha	inge,latest year on previ	ous year					
2015 2016 2017 2018	IHYM 3.0 4.1 3.8 3.3		KGL6 3.0 4.0 3.9 3.3	IHYP 2.4 1.9 1.9 1.4		KGM7 2.2 1.9 2.0 1.4	KLH8 2.1 1.9 2.0 1.3
Percentage cha	inge, latest quarter on pi	evious quarter					
2016 Q2 Q3 Q4	IHYN 1.6 0.6 1.3		KGL8 1.7 0.7 1.2	IHYQ 0.5 0.5 0.6		KGM9 0.5 0.5 0.7	0.5 0.5 0.8
2017 Q1 Q2 Q3 Q4	1.2 0.4 0.4 1.4		1.2 0.5 0.2 1.5	0.6 0.3 0.3 0.4		0.6 0.3 0.3 0.4	0.6 0.2 0.3 0.4
2018 Q1 Q2 Q3 Q4	0.5 0.9 1.2 0.5		0.8 0.4 1.5 0.5	0.1 0.5 0.6 0.3		0.5 0.6 0.3	0.5 0.6 0.3
2019 Q1 Q2 Q3	1.2 0.7 0.5		1.3 0.8 0.5	0.6 -0.2 0.3		0.6 -0.2 0.3	0.6 -0.2 0.3
Percentage cha	inge, latest quarter on co	orresponding quar	ter of previous ye	ar			
2016 Q2 Q3 Q4	IHYO 3.8 4.1 4.8		KGM2 3.7 4.1 4.8	IHYR 1.9 1.9 1.8		KGN3 1.8 2.0 2.0	KLH9 1.8 2.0 2.0
2017 Q1 Q2 Q3 Q4	4.8 3.6 3.4 3.5		5.0 3.7 3.2 3.6	2.2 1.9 1.8 1.6		2.3 2.1 1.9 1.6	2.3 2.1 1.9 1.6
2018 Q1 Q2 Q3 Q4	2.8 3.3 4.0 3.1		3.1 2.9 4.2 3.1	1.1 1.3 1.6 1.5		1.0 1.3 1.6 1.5	1.0 1.3 1.5 1.5
2019 Q1 Q2 Q3	3.8 3.7 3.0		3.6 4.0 3.0	2.1 1.3 1.0		2.1 1.3 1.0	2.0 1.3 1.0

Estimates are given to the nearest £ million but cannot be regarded as accurate to this degree.
 Taxes on products less subsidies.
 Calculated by using gross value added at basic prices minus extraction of crude petroleum and natural gas.

## Gross value added at chained volume measures basic prices, by category of output 1,2

2016 = 100

									_					2016 = 100
			P	roduction						ice industrie	es			
	Agri- culture, forestry, and fishing	Mining & quarrying inc oil & gas extract	Manu- facturing	Electric, gas, steam & air	Water supply, sewerage	Total	Constr- uction	Distri- bution, hotels & restaura- nts	Transport storage and commu- nications	Business services and finance	Govern- ment and other services	Total	Gross value added <sup>4</sup>	Gross value added excluding oil & gas
2016 Weights <sup>3</sup>	7	6	102	15	13	136	61	133	108	339	217	796	1000	995
2015 2016 2017 2018	L2KL 105.9 100.0 105.7 101.5	L2KR 102.0 100.0 101.7 106.6	L2KX 99.8 100.0 102.2 102.6	L2MW 96.4 100.0 98.2 96.4	L2N2 93.3 100.0 102.0 100.2	98.9 100.0	L2N8 96.2 100.0 106.4 106.0	L2PZ 96.5 100.0 102.4 105.4	KI8M 97.3 100.0 103.6 106.9	KI8O 97.4 100.0 101.0 103.2	KI8Q 100.5 100.0 101.2 102.3	L2NC 98.0 100.0 101.7 103.8	CGCE 98.1 100.0 102.0 103.4	KLH7 98.1 100.0 102.0 103.3
Seasonally adju	sted													
2016 Q2 Q3 Q4	99.2 99.3 100.9	99.1 103.7 98.0	100.7 99.7 100.5	102.1 99.1 101.6	100.1 100.1 101.4	100.8 99.9 100.6	99.7 100.4 101.7	99.5 99.9 101.6	98.9 100.8 101.5	99.3 100.5 101.0	99.9 99.9 100.1	99.5 100.3 100.9	99.7 100.2 100.9	99.7 100.2 101.0
2017 Q1 Q2 Q3 Q4	105.6 105.7 106.3 105.3	100.9 101.9 103.3 100.6	101.5 101.3 102.3 103.8	97.4 98.4 98.7 98.5	104.5 100.3 101.3 101.9	101.3 100.9 101.8 102.9	106.0 106.2 106.4 107.2	101.8 102.3 102.7 102.9	101.8 103.4 104.0 105.1	100.8 100.6 101.1 101.6	101.0 101.5 101.2 101.1	101.1 101.5 101.8 102.2	101.5 101.8 102.1 102.5	101.5 101.8 102.1 102.5
2018 Q1 Q2 Q3 Q4	102.2 101.2 100.9 101.7	101.5 106.5 110.2 108.3	103.2 102.5 102.7 102.1	99.7 94.6 95.7 95.5	99.6 99.9 101.5 99.7	102.4 101.6 102.2 101.4	104.8 105.6 106.8 107.0	103.1 105.1 106.2 107.0	104.3 106.0 108.0 109.4	102.6 103.1 103.4 103.7	101.8 102.1 102.5 102.8	102.7 103.6 104.2 104.8	102.6 103.1 103.7 104.1	102.6 103.1 103.7 104.0
2019 Q1 Q2 Q3	100.2 99.8 99.6	107.3 106.2 104.4	104.1 101.2 101.2	92.8 95.4 94.7	99.2 100.4 101.6	102.5 100.7 100.7	108.7 107.4 108.1	107.9 107.9 108.1	111.1 111.8 112.4	103.4 103.4 103.8	103.4 103.6 104.0	105.2 105.3 105.7	104.7 104.4 104.7	104.7 104.4 104.7
Percentage char	nge, latest	year on pr	evious yea	ar										
2015 2016 2017 2018	L3BB 1.0 -5.5 5.7 -4.0	L3BH 5.1 -2.0 1.7 4.8	L3BN -0.1 0.2 2.2 0.4	L3DM 2.2 3.7 –1.8 –1.9	L3DQ 4.6 7.1 2.0 -1.8	L3BG 1.0 1.1 1.7 0.1	4.0 3.9 6.4 -0.4	L3GP 4.0 3.7 2.4 2.8	KI8L 3.7 2.8 3.6 3.2	KI8N 2.1 2.7 1.0 2.1	KI8P 0.7 -0.5 1.2 1.1	L3E2 2.2 2.0 1.7 2.1	KGM7 2.2 1.9 2.0 1.4	KLH8 2.1 1.9 2.0 1.3
Percentage char	nge, latest	quarter on	previous	quarter										
2016 Q2 Q3 Q4	-1.5 0.1 1.6	-0.1 4.6 -5.5	1.7 -1.0 0.8	5.1 -3.0 2.6	1.8 - 1.4	2.0 -0.9 0.7	1.6 0.7 1.3	0.5 0.3 1.8	0.2 1.9 0.7	0.2 1.1 0.6	-0.3 - 0.2	0.1 0.8 0.7	KGM9 0.5 0.5 0.7	0.5 0.5 0.8
2017 Q1 Q2 Q3 Q4	4.7 0.1 0.6 -1.0	3.0 1.0 1.3 –2.6	0.9 -0.1 0.9 1.5	-4.1 0.9 0.3 -0.2	3.0 -4.0 1.0 0.6	0.7 -0.4 0.9 1.1	4.2 0.3 0.1 0.7	0.2 0.5 0.4 0.2	0.2 1.6 0.6 1.0	-0.3 -0.2 0.5 0.5	0.9 0.5 -0.2 -0.2	0.2 0.4 0.3 0.4	0.6 0.3 0.3 0.4	0.6 0.2 0.3 0.4
2018 Q1 Q2 Q3 Q4	-3.0 -0.9 -0.3 0.8	0.8 5.0 3.4 –1.7	-0.7 -0.6 0.1 -0.6	1.2 -5.1 1.2 -0.2	-2.3 0.3 1.6 -1.7	-0.5 -0.7 0.5 -0.7	-2.2 0.7 1.2 0.2	0.2 1.9 1.1 0.7	-0.8 1.6 1.8 1.3	1.0 0.5 0.2 0.3	0.7 0.3 0.4 0.3	0.5 0.8 0.6 0.5	0.5 0.6 0.3	0.5 0.6 0.3
2019 Q1 Q2 Q3	-1.4 -0.4 -0.2	-0.9 -1.1 -1.7	2.0 -2.8 -	-2.8 2.8 -0.7	-0.6 1.2 1.2	1.1 -1.8 -	1.6 -1.2 0.6	0.9 - 0.1	1.5 0.6 0.6	-0.3 - 0.3	0.6 0.2 0.4	0.4 0.1 0.4	0.6 -0.2 0.3	0.6 -0.2 0.3
Percentage char	nge, latest	quarter on	correspo	nding qua	rter of prev	ious ye	ear							
2016 Q2 Q3 Q4	L3ZZ -7.0 -6.8 -3.5	L427 -6.8 1.0 -4.6	L42D 0.6 0.2 1.4	L44C 6.8 2.0 6.8	L44G 6.9 6.0 6.6	L426 1.4 1.0 2.1	L44M 3.4 5.0 4.8	L47F 3.4 3.1 3.9	KII2 1.6 3.1 3.5	KIH9 2.6 3.1 2.5	KIH8 -0.4 -0.9 -1.3	L44Q 1.8 2.0 1.8	KGN3 1.8 2.0 2.0	KLH9 1.8 2.0 2.0
2017 Q1 Q2 Q3 Q4	4.9 6.6 7.1 4.4	1.7 2.8 -0.4 2.7	2.4 0.6 2.6 3.3	0.3 -3.7 -0.4 -3.1	6.2 0.2 1.2 0.5	2.5 0.2 2.0 2.3	8.0 6.5 5.9 5.4	2.9 2.8 2.9 1.3	3.1 4.6 3.2 3.5	1.7 1.3 0.6 0.6	0.8 1.6 1.4 1.0	1.8 2.1 1.5 1.2	2.3 2.1 1.9 1.6	2.3 2.1 1.9 1.6
2018 Q1 Q2 Q3 Q4	-3.3 -4.3 -5.1 -3.5	0.5 4.5 6.7 7.6	1.7 1.2 0.4 –1.7	2.3 -3.8 -3.0 -3.0	-4.7 -0.4 0.2 -2.1	1.1 0.7 0.3 –1.5	-1.1 -0.6 0.4 -0.2	1.3 2.7 3.4 4.0	2.5 2.5 3.8 4.1	1.8 2.5 2.2 2.0	0.8 0.6 1.2 1.7	1.5 2.0 2.4 2.6	1.0 1.3 1.6 1.5	1.0 1.3 1.5 1.5
2019 Q1 Q2 Q3	-1.9 -1.4 -1.3	5.8 -0.3 -5.3	0.9 -1.3 -1.4	-6.9 0.9 -1.0	-0.4 0.5 0.1	0.2 -0.9 -1.4	3.7 1.8 1.2	4.7 2.7 1.7	6.5 5.4 4.1	0.8 0.3 0.4	1.6 1.4 1.5	2.4 1.7 1.4	2.1 1.3 1.0	2.0 1.3 1.0

<sup>1</sup> Estimates cannot be regarded as accurate to the last digit shown.

<sup>2</sup> Components of output are valued at basic prices, which excludes taxes and

includes subsidies on products.

3 Weights may not sum to the total due to rounding.

4 This is a balanced index of UK GVA taking into account data from the Income and Expenditure approaches. Thus it will not necessarily be the weighted sum of the industrial indices.

## ${f B2}$ Gross value added at chained volume measures basic prices, by category of output $^{1,2}$

	Service industries											
2016 Weights <sup>3</sup>	Wholesale and retail trade	Transport, storage and communicati- ons 108	Accommodation & food services	Financial and insurance activities 72	Real estate	Professional scientific admin & support	Public admin, defence, social security	Education 58	Health and social work	Other services <sup>4</sup>	Total services	
	L2NE	KI8M	L2NQ			L2OH		L2PA	L2PC		L2NC	
2015	95.9	97.3	98.5	96.3	98.0	97.3	102.0	100.8	98.4	102.3	98.0	
2016	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
2017	102.5	103.6	102.4	99.1	99.0	104.3	100.8	101.2	101.0	102.1	101.7	
2018	105.6	106.9	104.3	99.0	100.4	108.8	101.6	101.7	102.4	104.0	103.8	
Seasonally adjus	sted											
2016 Q2	99.5	98.9	99.7	98.4	99.7	99.4	99.9	99.8	99.8	100.1	99.5	
Q3	99.8	100.8	100.0	102.2	99.9	100.2	99.7	99.6	100.0	100.3	100.3	
Q4	101.8	101.5	100.7	101.0	100.6	101.5	99.9	100.1	100.3	99.7	100.9	
2017 Q1	101.7	101.8	102.2	99.9	99.3	102.9	100.4	101.5	101.0	101.0	101.1	
Q2	102.2	103.4	102.6	99.6	98.9	103.0	101.1	101.2	101.5	102.4	101.5	
Q3	102.8	104.0	102.5	98.9	98.8	104.9	100.7	101.2	101.1	102.6	101.8	
Q4	103.1	105.1	102.2	98.1	99.1	106.5	100.9	101.0	100.6	102.3	102.2	
2018 Q1	103.4	104.3	102.0	99.5	100.2	107.1	100.7	101.0	102.2	103.6	102.7	
Q2	105.3	106.0	104.2	99.3	100.4	108.2	101.2	101.5	102.0	104.6	103.6	
Q3	106.7	108.0	104.6	99.0	100.3	109.2	102.3	101.6	102.5	104.4	104.2	
Q4	107.1	109.4	106.3	98.1	100.5	110.5	102.2	102.7	103.1	103.3	104.8	
2019 Q1	108.3	111.1	106.7	96.6	100.7	110.3	103.4	103.6	103.5	102.9	105.2	
Q2	108.4	111.8	106.4	96.2	101.0	110.2	103.7	104.3	104.0	101.4	105.3	
Q3	108.7	112.4	105.8	96.9	101.1	110.6	103.6	104.8	104.7	102.0	105.7	
Percentage char	ige, latest yea	r on previous y	ear									
2015 2016 2017 2018	L3E4 3.9 4.2 2.5 3.1	KI8L 3.7 2.8 3.6 3.2	L3EG 4.4 1.5 2.4 1.9	L3EU -3.8 3.8 -0.9 -0.2	L3F2 2.8 2.0 -1.0 1.3	L3F7 4.9 2.8 4.3 4.2	L3FW -2.4 -1.9 0.8 0.8	L3FY 1.1 -0.8 1.2 0.5	L3G2 1.7 1.6 1.0 1.4	L3GT 2.3 –2.3 2.1 1.9	L3E2 2.2 2.0 1.7 2.1	
Percentage char	ige, latest qua	rter on previou	s quarter									
2016 Q2 Q3 Q4	0.6 0.3 2.0	0.2 1.9 0.7	0.1 0.3 0.6	3.9 -1.1	0.1 0.8	0.6 0.8 1.3	-0.7 -0.2 0.2	-0.8 -0.2 0.5	0.2 0.4	0.1 0.2 -0.6	0.1 0.8 0.7	
2017 Q1	-0.1	0.2	1.5	-1.1	-1.3	1.4	0.5	1.4	0.6	1.4	0.2	
Q2	0.5	1.6	0.4	-0.3	-0.4	0.1	0.7	-0.3	0.5	1.4	0.4	
Q3	0.5	0.6	-0.2	-0.7	-0.1	1.8	-0.4	-	-0.4	0.1	0.3	
Q4	0.3	1.0	-0.3	-0.8	0.3	1.5	0.2	-0.2	-0.4	–0.2	0.4	
2018 Q1	0.3	-0.8	-0.1	1.4	1.1	0.6	-0.2	-	1.5	1.2	0.5	
Q2	1.9	1.6	2.1	-0.2	0.2	1.1	0.5	0.5	-0.2	1.0	0.8	
Q3	1.3	1.8	0.4	-0.3	-0.1	0.9	1.1	0.1	0.5	-0.3	0.6	
Q4	0.4	1.3	1.6	-1.0	0.1	1.2	-0.1	1.1	0.6	-1.0	0.5	
2019 Q1	1.1	1.5	0.3	-1.5	0.2	-0.2	1.2	0.9	0.4	-0.4	0.4	
Q2	0.1	0.6	-0.3	-0.4	0.3	-0.1	0.3	0.7	0.5	-1.5	0.1	
Q3	0.3	0.6	-0.5	0.7	0.1	0.4	-	0.5	0.7	0.6	0.4	
Percentage char	ige, latest qua	rter on corresp	onding quarter	of the previ	ous year							
2016 Q2 Q3 Q4	L44S 3.8 3.6 5.0	KII2 1.6 3.1 3.5	L456 2.0 1.4 -0.1	L45K 3.9 9.5 3.4	L45Q 2.0 1.1 1.5	L45V 2.6 2.0 3.1	L46M -2.3 -1.8 -1.7	L46O -0.6 -1.6 -1.5	L46Q 1.5 0.7 0.7	L47J -1.6 -1.9 -4.6	L44Q 1.8 2.0 1.8	
2017 Q1	2.9	3.1	2.6	1.5	-0.4	4.1	-0.2	0.9	1.2	1.1	1.8	
Q2	2.7	4.6	2.9	1.3	-0.8	3.6	1.2	1.4	1.6	2.3	2.1	
Q3	3.0	3.2	2.4	–3.2	-1.1	4.7	1.0	1.6	1.1	2.3	1.5	
Q4	1.2	3.5	1.5	–2.9	-1.5	4.9	1.1	0.9	0.3	2.7	1.2	
2018 Q1	1.6	2.5	-0.2	-0.4	0.9	4.0	0.3	-0.4	1.2	2.5	1.5	
Q2	3.1	2.5	1.5	-0.3	1.5	5.1	0.1	0.3	0.5	2.2	2.0	
Q3	3.8	3.8	2.1	0.1	1.5	4.1	1.6	0.4	1.4	1.8	2.4	
Q4	3.9	4.1	4.0	-	1.3	3.8	1.2	1.7	2.4	0.9	2.6	
2019 Q1	4.7	6.5	4.5	-2.9	0.5	3.0	2.6	2.6	1.3	-0.7	2.4	
Q2	2.9	5.4	2.1	-3.1	0.5	1.8	2.5	2.7	2.0	-3.1	1.7	
Q3	1.9	4.1	1.2	-2.2	0.8	1.3	1.3	3.1	2.2	-2.3	1.4	

Estimates cannot be regarded as accurate to the last digit shown.
 Components of output are valued at basic prices, which excludes taxes and includes subsidies on production.
 Weights may not sum to the total due to rounding.
 Comprising sections R, S and T of SIC(2007).

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		Natio	nal expen	diture on (	goods and	services at	market pr	ices							
	Final consu	mption exp	enditure		Gross	capital form	mation							Statisti-	
	House- holds	Non-prof- it instit- utions <sup>2</sup>	General govern- ment	fixed	Of which business investme- nt <sup>3</sup>	Change in a inven- tories <sup>4</sup>	alignment adjust-	Acquisit- ions less disposals of valuables <sup>5</sup>	Total	Total exports	Gross final expend- iture	less Total imports	Trade balance <sup>6</sup>	cal discre- pancy	Gross domestic product at market prices
2015 2016 2017 2018	ABJQ 1 189 246 1 252 934 1 300 305 1 354 729	46 117 46 560	NMRP 373 675 381 522 386 667 395 987	343 694		CAEX 9 213 3 580 4 727 4 328	DMUN - - - -	-47 : 1 245 :	2 027 800 2 096 584	530 049 2 567 499 2 629 085 2	ABMF 2 473 403 2 595 299 2 725 669 2 809 910	599 822 654 212	-32 323 -25 127	- 1 210	YBHA 1 916 896 1 995 478 2 071 667 2 140 278
Seasona	Ily adjusted														
2016 Q2 Q3 Q4	312 192 316 633 317 723	11 548 11 459 11 453	95 240 95 635 96 021	85 457 87 250 87 102	48 768 49 931 49 436	–22 819 2 651	-954 1 861 -1 984	-1 238 2 700 -1 884		139 552 141 260 152 847	642 729 655 756 665 913	155 046	-5 606 -13 786 -5 691	_ 1 _	497 571 500 711 507 375
2017 Q1 Q2 Q3 Q4	322 444 323 934 325 010 328 917	11 501 11 623 11 679 11 757	96 497 95 869 96 670 97 631	87 774 89 125 89 686 90 495	50 752 51 268 51 562 51 363	3 148 581 266 732	1 863 -1 967 -349 453	-373 321 420 877	521 453 523 731	153 417 157 655 159 024 158 989	674 408 679 108 682 755 689 398	163 473 164 956	-7 428 -5 818 -5 932 -5 949	-105 -101 -11 427	513 458 515 534 517 788 524 887
2018 Q1 Q2 Q3 Q4	334 235 337 796 340 578 342 120	11 789 11 838 11 866 11 875	98 150 98 172 99 029 100 636	89 897 90 630 91 251 91 405	51 498 51 393 50 950 50 875	-2 239 2 644 801 3 122	-2 600 1 841 -22 781	558 1 292 1 051 –816	542 372	157 707 156 623 162 306 165 594	706 882	168 667 171 207	-5 786 -12 044 -8 901 -10 998	1 159 2 060 3 081 4 027	527 763 532 388 538 756 541 371
2019 Q1 Q2 Q3	343 697 346 240 348 740	11 938	102 216 104 441 106 018	93 702 92 898 93 344	51 888 52 049 52 546	5 021 2 367 –2 574	-1 766 2 131 -769	9 979 1 170 –438	559 054	166 780 156 886 165 698	733 293 715 940 722 783	168 280	-22 749 -11 394 -6 410		547 884 551 898 554 929
Percenta	ige change,	latest year	r on previ	ious year											
2015 2016 2017 2018	KGY7 2.9 5.4 3.8 4.2	KGZ8 4.0 -1.1 1.0 1.7	KH2C 1.2 2.1 1.3 2.4	KG6O 6.5 5.9 3.9 1.7	KG6N 9.6 6.8 4.6 –0.1				KGX3 2.9 4.3 3.4 3.4	-0.1 7.1 10.9	KGV7 2.3 4.9 5.0 3.1	KH3H - 7.8 9.1 3.9			IHYM 3.0 4.1 3.8 3.3
Percenta	ige change,	latest qua	rter on pi	revious q	uarter										
2016 Q2 Q3 Q4	KGY8 1.9 1.4 0.3	KGZ9 -0.9 -0.8 -0.1	KH2D 0.6 0.4 0.4	KG6W 1.9 2.1 –0.2	KG6V 1.9 2.4 –1.0				KGX4 1.2 2.2 –0.3	4.3 1.2	KGV8 1.9 2.0 1.5	KH3I 2.9 6.8 2.3			IHYN 1.6 0.6 1.3
2017 Q1 Q2 Q3 Q4	1.5 0.5 0.3 1.2	0.4 1.1 0.5 0.7	0.5 -0.7 0.8 1.0	0.8 1.5 0.6 0.9	2.7 1.0 0.6 -0.4				1.5 0.1 0.4 1.3	2.8 0.9	1.3 0.7 0.5 1.0	1.5 1.6 0.9			1.2 0.4 0.4 1.4
2018 Q1 Q2 Q3 Q4	1.6 1.1 0.8 0.5	0.3 0.4 0.2 0.1	0.5 - 0.9 1.6	-0.7 0.8 0.7 0.2	0.3 -0.2 -0.9 -0.1				0.4 1.9 0.4 0.7	-0.7 3.6	0.1 1.3 1.1 1.0	-0.9 3.2 1.5 3.1			0.5 0.9 1.2 0.5
2019 Q1 Q2 Q3		0.2 0.3 0.5	1.6 2.2 1.5	2.5 -0.9 0.5	2.0 0.3 1.0				3.3 -1.3 -0.4	-5.9	2.7 -2.4 1.0	7.3 -11.2 2.3			1.2 0.7 0.5
Percenta	ige change,	-		-		er of previ	ous year								
2016 Q2 Q3 Q4	KGY9 5.5 5.8 5.2	KH22 -0.9 -2.2 -2.2	KH2E 2.3 1.3 2.7	KG76 5.1 8.2 5.7	KG75 6.7 9.5 5.1				KGX5 4.2 5.4 4.8	3.3 9.2	KGV9 4.0 6.2 6.8	KH3J 4.6 13.8 13.7			IHYO 3.8 4.1 4.8
2017 Q1 Q2 Q3 Q4	5.2 3.8 2.6 3.5	-1.3 0.6 1.9 2.7	2.0 0.7 1.1 1.7	4.6 4.3 2.8 3.9	6.1 5.1 3.3 3.9				4.8 3.6 1.8 3.4	12.6	6.9 5.7 4.1 3.5	14.0 12.6 6.4 4.0			4.8 3.6 3.4 3.5
2018 Q1 Q2 Q3 Q4	3.7 4.3 4.8 4.0	2.5 1.8 1.6 1.0	1.7 2.4 2.4 3.1	2.4 1.7 1.7 1.0	1.5 0.2 -1.2 -1.0				2.2 4.0 4.0 3.4	-0.7 2.1	2.3 2.9 3.5 3.6				2.8 3.3 4.0 3.1
2019 Q1 Q2 Q3	2.8 2.5 2.4	0.9 0.8 1.1	4.1 6.4 7.1	4.2 2.5 2.3	0.8 1.3 3.1				6.4 3.1 2.3	0.2	6.3 2.4 2.2				3.8 3.7 3.0

<sup>1</sup> Estimates are given to the nearest  $\mathfrak L$  million, but cannot be regarded as accurate to this degree.

<sup>5</sup> Acquisitions less disposals of valuables can be a volatile series due to the inclusion of non-monetary gold, but any volatility is likely to be GDP neutral as

<sup>2</sup> Non-profit institutions serving households.
3 A further breakdown of business investment can be found in the 'Business investment in the UK' bulletin.
4 Quarterly alignment adjustment included in this series.

\*\*Control of investing gold, but any voicinity is likely to be GBI flexible as this is offset in UK trade figures.

Trade balance is calculated by using exports of goods and services minus imports of goods and services.

### Gross domestic product by category of expenditure: chained volume measures<sup>1</sup>

Reference year 2016, £ million

													Reference	year 20	16, £ Million
			•	diture on (		services at		rices							
	House-holds	Non-prof-	General govern-	fixed	Of which	Change in a inventories <sup>4</sup>	Of which alignment adjust-	Acquisit- ions less disposals of valuables <sup>5</sup>	Total	Total exports		less Total imports	Trade balance <sup>6</sup>	pancy	Gross domestic product at market prices
2015 2016 2017 2018	ABJR 1 206 496 1 252 934 1 281 722 1 302 397	46 117 46 042	382 508	343 690	201 708	CAFU 16 067 3 580 -8 974 -4 841	DMUM -1 1 -	-48 1 149	2 027 800 2 051 749	552 388 2 567 499 2 602 123 2	ABMG 2 532 610 2 595 299 2 653 872 2 676 751	599 822 620 838	-32 323 -18 715	1 200	ABMI 1 957 920 1 995 478 2 033 234 2 061 408
Seasona	lly adjusted														
2016 Q2 Q3 Q4	312 091 315 828 317 381	11 543 11 429 11 387	95 290 95 386 95 477	85 673 86 818 86 301	48 954 49 745 48 801	-398 3 154 -113	-961 1 852 -1 972	-1 509 2 989 -1 326	513 262	142 154 138 543 147 009	645 294 651 896 656 565	152 072	-5 534 -13 529 -6 484	_ 1 _	497 593 499 836 503 083
2017 Q1 Q2 Q3 Q4	318 897 319 788 321 032 322 005	11 466 11 519 11 489 11 568	95 419 95 460 95 724 95 905	86 336 87 551 87 218 88 201	49 910 50 490 50 603 50 705	-577 -2 232 -2 784 -3 381	1 833 -1 937 -342 446	-636 42 519 1 224	512 127 513 197	147 656 151 190 152 771 150 506	658 561 663 317 665 968 666 026	155 962 156 975	-4 818 -4 772 -4 204 -4 921		505 983 507 255 508 982 511 014
2018 Q1 Q2 Q3 Q4	323 731 325 480 326 303 326 883	11 652 11 554 11 586 11 595	95 677 95 646 96 040 97 592	87 364 86 984 87 396 87 311	50 188 49 882 49 463 48 956	-4 062 549 -2 358 1 030	-2 516 1 781 -17 752	387 882 833 –225	521 095 519 800	149 438 145 600 150 590 151 295	664 186 666 695 670 390 675 480	154 667 156 127	-4 571 -9 067 -5 537 -9 174		511 300 514 017 517 221 518 870
2019 Q1 Q2 Q3	327 866 329 036 330 321	11 585 11 452 11 508	98 387 99 449 99 745	88 073 87 238 87 044	49 362 49 174 49 151	5 530 -705 -5 309	-1 679 2 012 -723	9 799 720 –754	527 190	153 660 143 541 150 938	694 902 670 731 673 493	153 994	-10 453		521 873 520 735 522 247
Percenta	ge change,	latest yea	r on prev	ious year											
2015 2016 2017 2018	KGZ5 2.9 3.8 2.3 1.6	KH26 4.1 -1.5 -0.2 0.7	KH2I 1.8 1.0 0.3 0.6	KG7N 3.7 3.6 1.6 –0.1	KG7M 7.2 4.3 2.9 –1.6				KGX9 2.9 2.4 1.2 1.4	3.8 2.7 6.1	KGW5 3.1 2.5 2.3 0.9	KH3N 5.4 4.4 3.5 0.7			IHYP 2.4 1.9 1.9 1.4
Percenta	ge change,	latest qua	rter on p	revious q	uarter										
2016 Q2 Q3 Q4	KGZ6 1.4 1.2 0.5	KH27 -1.8 -1.0 -0.4	KH2J -0.1 0.1 0.1	KG7Q 0.9 1.3 –0.6	KG7P 1.0 1.6 –1.9				KGY2 0.3 2.0 –0.7	1.7 –2.5	KGW6 0.6 1.0 0.7	KH3O 0.8 3.0 0.9			IHYQ 0.5 0.5 0.6
2017 Q1 Q2 Q3 Q4	0.5 0.3 0.4 0.3	0.7 0.5 -0.3 0.7	-0.1 - 0.3 0.2	1.4 -0.4 1.1	2.3 1.2 0.2 0.2				0.2 0.2 0.2 0.5	2.4 1.0	0.3 0.7 0.4	-0.7 2.3 0.6 -1.0			0.6 0.3 0.3 0.4
2018 Q1 Q2 Q3 Q4	0.5 0.5 0.3 0.2	0.7 -0.8 0.3 0.1	-0.2 - 0.4 1.6	-0.9 -0.4 0.5 -0.1	-1.0 -0.6 -0.8 -1.0				-0.1 1.2 -0.2 0.8	-2.6 3.4	-0.3 0.4 0.6 0.8	-0.9 0.4 0.9 2.8			0.1 0.5 0.6 0.3
2019 Q1 Q2 Q3	0.3 0.4 0.4	-0.1 -1.1 0.5	0.8 1.1 0.3	-0.9	0.8 -0.4 -				3.3 -2.6 -0.9	-6.6	2.9 -3.5 0.4	10.3 -13.0 0.8			0.6 -0.2 0.3
Percenta	ge change,	latest qua	rter on co	orrespond	ding quart	er of previ	ous year								
2016 Q2 Q3 Q4	KGZ7 3.6 3.8 4.7	KH28 -2.0 -2.6 -3.4	KH2K 0.8 0.2 0.5	KG7T 3.1 5.7 3.4	KG7S 4.5 6.7 2.1				KGY3 2.3 3.7 1.8	2.5 1.1	KGW7 2.3 3.1 2.6	KH3P 3.9 7.3 5.2			IHYR 1.9 1.9 1.8
2017 Q1 Q2 Q3 Q4	3.7 2.5 1.6 1.5	-2.5 -0.2 0.5 1.6	0.4	1.7 2.2 0.5 2.2	3.0 3.1 1.7 3.9				1.8 1.8 - 1.2	6.4 10.3	2.7 2.8 2.2 1.4	4.0 5.6 3.2 1.3			2.2 1.9 1.8 1.6
2018 Q1 Q2 Q3 Q4	1.5 1.8 1.6 1.5	1.6 0.3 0.8 0.2	0.2 0.3	1.2 -0.6 0.2 -1.0	0.6 -1.2 -2.3 -3.4				0.8 1.8 1.3 1.7	−3.7 −1.4	0.9 0.5 0.7 1.4	1.0 -0.8 -0.5 3.2			1.1 1.3 1.6 1.5
2019 Q1 Q2 Q3	1.3 1.1 1.2	-0.6 -0.9 -0.7	2.8 4.0 3.9	0.8 0.3 -0.4	-1.6 -1.4 -0.6				5.1 1.2 0.5	-1.4	4.6 0.6 0.5	14.9 -0.4 -0.6			2.1 1.3 1.0

curate to this degree.

<sup>2</sup> Non-profit institutions serving households.

<sup>1</sup> Estimates are given to the nearest £ million but cannot be regarded as ac- 5 Acquisitions less disposals of valuables can be a volatile series due to the inclusion of non-monetary gold, but any volatility is likely to be GDP neutral as this is offset in UK trade figures.

<sup>3</sup> A further breakdown of business investment can be found in the 'Business investment in the UK' bulletin.
4 Quarterly alignment adjustment included in this series.
6 Trade balance is calculated by using exports of goods and services minus imports of goods and services.



### Gross domestic product by category of income: current prices<sup>1</sup>

£ million

										£ million
	Wages and Salaries	Employers  Employers  social  contributions	oyees Total	Gross operating surplus of corporations <sup>2,3</sup>	Of which alignment adjustment	Other income <sup>4</sup>	Gross value added at factor cost	Taxes on products & production less subsidies	Statistical discrepancy (income)	Gross domestic product at market prices
2015 2016 2017 2018	DTWL 774 210 802 669 833 103 872 904	DTWP 155 220 165 055 176 047 180 073	DTWM 929 430 967 724 1 009 150 1 052 977	CGBZ 412 076 427 649 444 553 448 668	DMUQ - - - -	CGBX 341 071 356 317 364 779 383 577	CGCB 1 682 577 1 751 690 1 818 482 1 885 222	CMVL 234 319 243 788 252 976 259 702	GIXQ - - 209 -4 646	YBHA 1 916 896 1 995 478 2 071 667 2 140 278
Seasonally	adjusted									
2016 Q2 Q3 Q4	200 189 202 242 202 879	41 176 41 990 42 728	241 365 244 232 245 607	105 893 106 225 109 629	-799 -1 791 1 827	89 411 89 364 90 341	436 669 439 821 445 577	60 902 60 890 61 798	- - -	497 571 500 711 507 375
2017 Q1 Q2 Q3 Q4	203 787 207 471 209 600 212 245	43 667 44 043 44 657 43 680	247 454 251 514 254 257 255 925	113 754 110 122 107 954 112 723	126 -241 44 71	90 479 90 747 91 300 92 253	451 687 452 383 453 511 460 901	61 738 63 087 64 175 63 976	33 64 102 10	513 458 515 534 517 788 524 887
2018 Q1 Q2 Q3 Q4	215 461 216 665 219 158 221 620	43 164 44 261 45 649 46 999	258 625 260 926 264 807 268 619	112 889 110 749 113 932 111 098	1 220 -1 155 1 838 -1 903	93 499 95 240 96 362 98 476	465 013 466 915 475 101 478 193	62 929 66 135 65 118 65 520	-179 -662 -1 463 -2 342	527 763 532 388 538 756 541 371
2019 Q1 Q2 Q3	222 453 224 790 226 751	47 074 48 858 49 321	269 527 273 648 276 072	115 053 113 983 114 104	-101 1 552 424	100 315 99 961 100 414	484 895 487 592 490 590	65 536 66 855 66 711	-2 547 -2 549 -2 372	547 884 551 898 554 929
Percentage	e change, late:	st year on prev	ious year							
2015 2016 2017 2018	CWNH 3.2 3.7 3.8 4.8	CWNE 0.7 6.3 6.7 2.3	KGI3 2.7 4.1 4.3 4.3	KH4V 1.4 3.8 4.0 0.9		KH6T 5.5 4.5 2.4 5.2	KH6N 3.0 4.1 3.8 3.7	KH65 2.9 4.0 3.8 2.7		IHYM 3.0 4.1 3.8 3.3
Percentage	e change, late:	st quarter on p	revious qua	ırter						
2016 Q2 Q3 Q4	CWNI 1.4 1.0 0.3	CWNF 5.1 2.0 1.8	KGI4 2.0 1.2 0.6	KH4W - 0.3 3.2		KH6U 2.5 -0.1 1.1	KH6O 1.6 0.7 1.3	KH66 1.2 - 1.5		IHYN 1.6 0.6 1.3
2017 Q1 Q2 Q3 Q4	0.4 1.8 1.0 1.3	2.2 0.9 1.4 –2.2	0.8 1.6 1.1 0.7	3.8 -3.2 -2.0 4.4		0.2 0.3 0.6 1.0	1.4 0.2 0.2 1.6	-0.1 2.2 1.7 -0.3		1.2 0.4 0.4 1.4
2018 Q1 Q2 Q3 Q4	1.5 0.6 1.2 1.1	-1.2 2.5 3.1 3.0	1.1 0.9 1.5 1.4	0.1 -1.9 2.9 -2.5		1.4 1.9 1.2 2.2	0.9 0.4 1.8 0.7	-1.6 5.1 -1.5 0.6		0.5 0.9 1.2 0.5
2019 Q1 Q2 Q3	0.4 1.1 0.9	0.2 3.8 0.9	0.3 1.5 0.9	3.6 -0.9 0.1		1.9 -0.4 0.5	1.4 0.6 0.6	2.0 -0.2		1.2 0.7 0.5
Percentage	e change, late:	st quarter on c	orrespondir	ng quarter of pre	vious year					
2016 Q2 Q3 Q4	CWNJ 3.9 4.5 4.3	CWNG 6.2 9.0 8.4	KGI5 4.3 5.2 5.0	KH4X 1.3 2.9 5.0		KH6V 5.4 3.2 4.6	KH6P 3.8 4.2 4.9	KH67 3.8 2.7 4.1		IHYO 3.8 4.1 4.8
2017 Q1 Q2 Q3 Q4	3.3 3.6 3.6 4.6	11.5 7.0 6.4 2.2	4.6 4.2 4.1 4.2	7.4 4.0 1.6 2.8		3.8 1.5 2.2 2.1	5.1 3.6 3.1 3.4	2.6 3.6 5.4 3.5		4.8 3.6 3.4 3.5
2018 Q1 Q2 Q3 Q4	5.7 4.4 4.6 4.4	-1.2 0.5 2.2 7.6	4.5 3.7 4.1 5.0	-0.8 0.6 5.5 -1.4		3.3 5.0 5.5 6.7	3.0 3.2 4.8 3.8	1.9 4.8 1.5 2.4		2.8 3.3 4.0 3.1
2019 Q1 Q2 Q3	3.2 3.8 3.5	9.1 10.4 8.0	4.2 4.9 4.3	1.9 2.9 0.2		7.3 5.0 4.2	4.3 4.4 3.3	4.1 1.1 2.4		3.8 3.7 3.0

<sup>1</sup> Estimates are given to the nearest £ million but cannot be regarded as accurate to this degree.
2 Quarterly alignment adjustment included in this series.
3 Includes the operating surplus of financial corporations, private non-financial corporations and public corporations.
4 Includes mixed income and the operating surplus of the non-corporate sector.

## Gross fixed capital formation by sector and type of asset Current prices

 $\mathfrak{L} \text{ million}$ 

			Analy	sis by secto	r					Analysis by	asset		
			Public cor	porations <sup>2</sup>	Private	Sector							
	Business investment <sup>1</sup> g	General overnment	Dwellings <sup>4</sup>	Costs of transfer of ownership of non-produ- ced assets	Dwellings <sup>4</sup>	Costs of transfer of ownership of non-produ- ced assets	Total	Transport equipment	ICT equipment and other machinery and equipment <sup>3</sup>		buildings and	Property	Total
2015 2016 2017 2018	NPEK 183 576 195 973 204 945 204 716	RPZG 51 158 52 418 55 290 57 566	L62R 8 130 8 362 8 464 4 622	686 725 773	L62T 58 083 60 904 69 191 77 510	22 990 25 316 18 417	NPQS 324 623 343 694 357 080 363 183	20 202 24 623 22 064	TLPW 51 960 56 102 66 328 64 026	66 214 69 319 77 655	115 921 120 018 117 290	70 324 73 630 73 743	NPQS 324 623 343 694 357 080 363 183
Seasonal	lly adjusted												
2016 Q2 Q3 Q4	48 768 49 931 49 436	13 225 13 679 13 375	2 113 2 086 2 135	169	15 015 15 312 15 633	6 074	85 457 87 250 87 102	5 945 7 068 5 395	14 150 14 089 14 086	17 401	29 840 30 255 31 326	18 394 18 437 18 527	87 250
2017 Q1 Q2 Q3 Q4	50 752 51 268 51 562 51 363	13 429 13 910 13 790 14 161	2 187 2 285 2 195 1 797	218 196	16 591 16 850 17 317 18 433	4 626	87 774 89 125 89 686 90 495	5 852 5 696	16 102 16 985 16 356 16 885	19 135 19 512		18 257	89 125
2018 Q1 Q2 Q3 Q4	51 498 51 393 50 950 50 875	13 799 13 952 14 829 14 986	1 224 1 188 1 098 1 112	206 191	18 654 19 404 19 696 19 756	4 487 4 487	89 897 90 630 91 251 91 405	5 112 4 535 3 967 4 110	16 170 16 058 15 956 15 842	20 592 20 795	29 390 30 402	19 510 20 055 20 131 19 903	90 630 91 251
2019 Q1 Q2 Q3	51 888 52 049 52 546	15 986 15 100 14 778	1 146 1 129 1 114	197	20 019 19 970 20 183	4 453		4 884	15 480 13 344 14 474	21 101	33 392	20 177	
Percenta	ge change, late	est year on	previous y	ear									
2015 2016 2017 2018	KG6N 9.6 6.8 4.6 –0.1	KH7N 0.5 2.5 5.5 4.1	L64E -2.0 2.9 1.2 -45.4	4.7 5.7 6.6	L64K 6.5 4.9 13.6 12.0	0.8 10.1 –27.3	KG6O 6.5 5.9 3.9 1.7	20.8 21.9 –10.4	KG6S 1.8 8.0 18.2 –3.5	5.4 4.7 12.0	10.2 3.5 –2.3	2.0 4.7	6.5 5.9 3.9
Percenta	ge change, late	est quarter	on previou	s quarter									
2016 Q2 Q3 Q4	KG6V 1.9 2.4 –1.0	KH7P 8.9 3.4 –2.2	L64F 4.2 –1.3 2.3	41.7 –23.5	L64L 0.5 2.0 2.1	-9.8	KG6W 1.9 2.1 –0.2	-4.3 18.9	KG72 2.7 –0.4 –	0.6	4.3	0.7 0.2	1.9
2017 Q1 Q2 Q3 Q4	2.7 1.0 0.6 -0.4	0.4 3.6 -0.9 2.7	2.4 4.5 –3.9 –18.1	29.8	6.1 1.6 2.8 6.4	-1.1 0.7	0.8 1.5 0.6 0.9	6.0 -2.7	14.3 5.5 –3.7 3.2	1.9 2.0	-6.6 -1.3 2.5 -0.4	0.8 1.3	1.5
2018 Q1 Q2 Q3 Q4	0.3 -0.2 -0.9 -0.1	-2.6 1.1 6.3 1.1	-31.9 -2.9 -7.6 1.3	17.0 -7.3	1.2 4.0 1.5 0.3	-1.3 -	-0.7 0.8 0.7 0.2	-11.3 -12.5	-4.2 -0.7 -0.6 -0.7	3.6 1.0	3.4	2.8 0.4	-0.7 0.8 0.7 0.2
2019 Q1 Q2 Q3	2.0 0.3 1.0	6.7 -5.5 -2.1	3.1 -1.5 -1.3	11.3	1.3 -0.2 1.1	-0.7	2.5 -0.9 0.5	26.0	-2.3 -13.8 8.5	-0.3	1.6	-0.6	-0.9
Percenta	ge change, late	est quarter	on corresp	onding qua	rter of prev	ious year							
2016 Q2 Q3 Q4	KG75 6.7 9.5 5.1	KH7R 2.1 11.1 9.0	L64G 9.7 3.3 7.9	47.3 -4.0	L64M 1.1 4.3 5.8	6.6 3.0	KG76 5.1 8.2 5.7	32.8 79.8	KG7A 11.3 9.5 2.8	2.1 4.2	1.2 2.5	3.0 4.3	
2017 Q1 Q2 Q3 Q4	6.1 5.1 3.3 3.9	10.6 5.2 0.8 5.9	8.1 5.2	-1.4 16.0	11.0 12.2 13.1 17.9	-24.9 -23.8	4.6 4.3 2.8 3.9	−1.6 −19.4	16.9 20.0 16.1 19.9	11.7 12.1	−3.2 −2.1	-0.7 0.4	4.3
2018 Q1 Q2 Q3 Q4	1.5 0.2 -1.2 -1.0	2.8 0.3 7.5 5.8	-50.0	-5.5 -2.6	12.4 15.2 13.7 7.2	-2.3 -3.0	2.4 1.7 1.7 1.0	-30.4	0.4 -5.5 -2.4 -6.2	7.6 6.6	1.7 2.6	8.8	2.4 1.7 1.7
2019 Q1 Q2 Q3	0.8 1.3 3.1	15.8 8.2 –0.3	-5.0	-4.4		-1.3 -0.8 1.0	4.2 2.5 2.3	-24.2 7.7 20.6	-16.9	2.5	12.5 13.6 6.6	0.6	2.5

Not including expenditure on dwellings, land and existing buildings and costs associated with the transfer of ownership of non-produced assets.
 Remaining investment by public non-financial corporations included within business investment.

<sup>3</sup> Includes cultivated biological resources (AN.115) and weapons (AN.114).

Includes new dwellings and improvements to dwellings.
 Including costs associated with the transfer of ownership of buildings, dwellings and non-produced assets.

## **F2** Gross fixed capital formation by sector and type of asset Chained volume measures

Reference year 2016, £ million

			Analy	sis by secto	r					Analysis by	asset		
			Public cor	porations <sup>2</sup>	Private	Sector							
	Business investment <sup>1</sup>	General government	Dwellings <sup>4</sup>	Costs of transfer of ownership of non-produ- ced assets	Dwellings <sup>4</sup>	Costs of transfer of ownership of non-produ- ced assets	Total	Transport equipment	ICT equipment and other machinery and equipment <sup>3</sup>		buildings and	Property	Total
2015 2016 2017 2018	NPEL 187 908 195 973 201 708 198 489	DLWF 51 220 52 418 54 433 55 568	L634 8 260 8 362 8 250 4 370	694 726 768	L636 59 020 60 903 65 719 72 188	24 480 25 312 18 428	NPQT 331 615 343 690 349 306 349 055	20 137 24 623 22 332	DLWO 53 966 56 102 63 289 61 585	67 280 69 318 73 969	118 409 120 017 115 956	71 920 73 629 73 760	NPQT 331 615 343 690 349 306 349 055
Seasonal	lly adjusted												
2016 Q2 Q3 Q4	48 954 49 745 48 801	13 258 13 617 13 308	2 097 2 048 2 162	169	15 058 15 227 15 513	6 012	85 673 86 818 86 301	5 930 6 961 5 547	14 264 14 097 13 522	17 284	29 918 30 010 31 088	18 443	86 818
2017 Q1 Q2 Q3 Q4	49 910 50 490 50 603 50 705	13 264 13 949 13 517 13 703	2 150 2 217 2 140 1 743	218 193	16 110 16 025 16 205 17 379	4 652 4 560	86 336 87 551 87 218 88 201	5 650 5 950 5 732 5 000	15 365 16 483 15 723 15 718	18 242 18 345	28 922	18 496	87 551 87 218
2018 Q1 Q2 Q3 Q4	50 188 49 882 49 463 48 956	13 382 13 400 14 235 14 551	1 145 1 128 1 038 1 059	201 185	17 982 18 053 18 028 18 125	4 320 4 447	87 364 86 984 87 396 87 311	4 816 4 194 3 661 3 903	15 312 15 180 15 524 15 569	19 181 19 067	28 610 28 484 29 013 28 963		87 396
2019 Q1 Q2 Q3	49 362 49 174 49 151	14 747 14 220 13 970	1 041 1 057 1 028	170 188 183	18 323 18 247 18 303	4 352	87 238	3 624 4 716 4 230	14 983 12 730 13 921		30 615	19 871	87 238
Percenta	ge change, late	est year on	previous y	ear									
2015 2016 2017 2018	KG7M 7.2 4.3 2.9 –1.6	KH92 -4.5 2.3 3.8 2.1	L64T -4.4 1.2 -1.3 -47.0	3.4 4.6 5.8	L654 3.0 3.2 7.9 9.8	0.5 3.4 –27.2	KG7N 3.7 3.6 1.6 –0.1	19.5 22.3	KH96 -1.1 4.0 12.8 -2.7	2.0 3.0 6.7	1.4 -3.4	1.8 2.4 0.2	KG7N 3.7 3.6 1.6 –0.1
Percenta	ge change, lat	est quarter	on previou	s quarter									
2016 Q2 Q3 Q4	KG7P 1.0 1.6 –1.9	KH9C 8.4 2.7 –2.3	L64U 2.0 –2.3 5.6	40.8 -23.5	L655 -0.3 1.1 1.9	−11.4 −1.2	KG7Q 0.9 1.3 –0.6	-4.1 17.4	KH9G 0.3 –1.2 –4.1	-0.1	KH9H 3.2 0.3 3.6	0.5 0.2	KG7Q 0.9 1.3 –0.6
2017 Q1 Q2 Q3 Q4	2.3 1.2 0.2 0.2	-0.3 5.2 -3.1 1.4	-0.6 3.1 -3.5 -18.6	29.0 –11.5	3.8 -0.5 1.1 7.2	−1.7 −2.0	1.4 -0.4 1.1	5.3	13.6 7.3 –4.6	-0.1	-1.5 1.2	1.4 1.1	- 1.4 -0.4 1.1
2018 Q1 Q2 Q3 Q4	-1.0 -0.6 -0.8 -1.0	-2.3 0.1 6.2 2.2		17.5 –8.0	3.5 0.4 –0.1 0.5	-3.9 2.9	-0.9 -0.4 0.5 -0.1	-12.9	-2.6 -0.9 2.3 0.3	0.3 -0.6	1.9	2.3 0.9	
2019 Q1 Q2 Q3	0.8 -0.4 -	1.3 -3.6 -1.8	1.5	10.6	1.1 -0.4 0.3	-1.8	0.9 -0.9 -0.2	30.1	-3.8 -15.0 9.4	-0.3	2.2	-1.3	-0.9
Percenta	ge change, lat	est quarter	on corresp	onding qua	rter of prev	ious year							
2016 Q2 Q3 Q4	KG7S 4.5 6.7 2.1	KH9M 3.0 11.4 10.0		45.4 -5.1	L656 -0.3 2.6 3.7	−1.2 −3.5	KG7T 3.1 5.7 3.4	31.0 76.0	KH9Q 8.6 5.9 –5.4	0.8 2.4	-0.7	0.7 1.7	KG7T 3.1 5.7 3.4
2017 Q1 Q2 Q3 Q4	3.0 3.1 1.7 3.9	8.4 5.2 -0.7 3.0	5.7 4.5	-1.4 14.2	6.7 6.4 6.4 12.0	-23.6 -24.2	1.7 2.2 0.5 2.2	0.3 -17.7	8.1 15.6 11.5 16.2	6.3 6.1		-0.6 0.3	2.2 0.5
2018 Q1 Q2 Q3 Q4	0.6 -1.2 -2.3 -3.4	0.9 -3.9 5.3 6.2	-49.1 -51.5	−7.8 −4.1	11.6 12.7 11.2 4.3	−7.1 −2.5	1.2 -0.6 0.2 -1.0	-29.5 -36.1	-0.3 -7.9 -1.3 -0.9	3.9	-0.3 0.3	9.0 8.8	1.2 -0.6 0.2
2019 Q1 Q2 Q3	-1.6 -1.4 -0.6	10.2 6.1 –1.9	-6.3	-6.5	1.9 1.1 1.5	0.7	0.8 0.3 -0.4	12.4	-2.1 -16.1 -10.3	0.7	7.5	-0.4	0.3

Not including expenditure on dwellings, land and existing buildings and costs associated with the transfer of ownership of non-produced assets.
 Remaining investment by public non-financial corporations included within business investment.

<sup>3</sup> Includes cultivated biological resources (AN.115) and weapons (AN.114)

Includes new dwellings and improvements to dwellings.
 Including costs associated with the transfer of ownership of buildings, dwellings and non-produced assets.

## Exports and imports of goods and services Current market prices

£ million Balance **Exports** Imports Total1 Goods Services Total Total Goods Services Goods Services IKBB IKBH BOKH 244 089 269 577 530 049 567 499 152 850 167 721 -117 697 -134 179 -135 895 -142 379 -26 458 -32 323 -25 127 -37 729 285 960 297 922 337 466 2015 403 657 432 101 556 507 91 239 2016 599 822 101 856 473 361 487 190 654 212 2017 291 619 629 085 180 851 110 768 Seasonally adjusted 40 547 42 724 65 444 139 552 104 611 145 158 -30 503 24 897 -5 606 112 322 113 736 67 690 72 094 155 046 158 538 24 966 27 292 -13 786 141 260 -38752Q4 152 847 -5 691 71 279 72 791 74 467 153 417 157 655 159 024 26 595 27 499 28 783 2017 Q1 44 684 160 845 -7 428 -33 317 -34 715 84 864 84 557 118 181 119 272 163 473 164 956 -5 818 -5 932 Q2 45 292 85 907 164 938 Q4 73 082 158 989 119 747 45 191 -3384027 891 -59492018 Q1 84 800 72 907 157 707 117 567 45 926 163 493 -32 767 26 981 -5 786 72 811 74 485 77 216 -32 767 -36 761 -35 496 -37 355 24 717 26 595 120 573 83 812 156 623 48 094 168 667 -12 044 Q3 Q4 123 317 125 733 -8 901 87 821 162 306 47 890 171 207 50 859 76 710 71 456 166 780 156 886 51 384 48 722 189 529 168 280 -48 075 -34 128 -22 749 -11 394 2019 Q1 90 070 138 145 119 558 25 326 22 734 Ω2 85 430 122 901 -6 410 Percentage change, latest year on previous year KG9K KH35 KH2O KG9L KH3W КНЗН 2015 6.5 9.7 7.8 -2.1 4.2 2.3 10.4 -0.1 7.1 -2.3 7.0 2016 2017 7.8 13.3 9.5 8.2 2.0 9.1 3.9 10.9 6.6 Percentage change, latest quarter on previous quarter KH36 KH2P KG9P кнзх KH3I 2016 Q2 6.6 -0.7 4.3 1.2 3.1 7.4 2.3 5.4 2.9 6.8 Q4 9.8 6.5 8.2 1.3 4.9 2.3 -0.3 2017 Q1 1.7 2.1 1.5 \_1 1 0.4 3.3 –0.4 2.1 2.3 –1.9 2.8 Q2 0.9 0.9 Q3 0.9 -0.8 -0.7 3.6 2.0 2018 Q1 -1.3 -0.2 -1.8 1.6 -0.9 -0.1 2.3 3.7 2.6 2.3 2.0 Q2 -1.2 4.8 3.2 1.5 0.6  $\Omega$ 4 6.2 3.1 9.9 -13.5 2019 Q1 1.9 -5.2 -0.70.7 1.0 -5.2 1.0 7.3 –11.2 -5.9 5.6 2.3 Percentage change, latest quarter on corresponding quarter of previous year KG9S KH37 KH2Q KG9T KH3Y KH3J 7.7 14.5 13.5 4.6 13.8 13.7 2016 Q2 -0.3 4.8 14.7 3.3 6.1 Q3 Q4 12.4 14.4 14.4 14.1 13.5 18.2 14.5 10.8 11.2 14.5 13.0 6.2 2017 Q1 12.7 11.7 14.0 12.6  $\Omega$ 2 13.0 14.9 10.0 6.4 Q4 6.4 1.4 4.0 5.3 0.9 4.0 2018 Q1 3.2 2.3 2.8 1.2 2.8 1.6 -1.2 3.9 2.9 -0.7 2.1 4.2 6.2 4.8 3.2 3.8 7.1 Q2 Q3 2.0 5.7 Q4 5.0 12.5 6.2 1.9 5.2 –1.9 5.8 0.2 17.5 -0.8 11.9 1.3 15.9 -0.2 2019 Q1 Q2

2.8

0.5

<sup>1</sup> Trade balance is calculated by using exports of goods and services minus imports of goods and services

## **H2** Exports and imports of goods and services Chained volume measures

Reference year 2016, £ million

		Exports			Imports		Balance
	Goods	Services	Total	Goods	Services	Total	Total <sup>1</sup>
2015 2016 2017 2018	BQKQ 301 409 297 922 316 737 311 914	IKBE 251 247 269 577 285 386 285 009	IKBK 552 388 567 499 602 123 596 923	BQKO 412 975 432 101 444 634 443 329	IKBF 161 631 167 721 176 204 181 943	IKBL 574 575 599 822 620 838 625 272	IKBM -22 187 -32 323 -18 715 -28 349
Seasonally adjusted							
2016 Q2 Q3 Q4	75 454 72 200 76 097	66 720 66 322 70 876	142 154 138 543 147 009	106 382 110 408 109 733	41 324 41 641 43 747	147 688 152 072 153 493	-5 534 -13 529 -6 484
2017 Q1 Q2 Q3 Q4	76 982 80 051 79 982 79 722	70 674 71 139 72 789 70 784	147 656 151 190 152 771 150 506	109 435 111 732 112 254 111 213	43 039 44 230 44 721 44 214	152 474 155 962 156 975 155 427	-4 818 -4 772 -4 204 -4 921
2018 Q1 Q2 Q3 Q4	79 303 75 607 78 832 78 172	70 135 69 993 71 758 73 123	149 438 145 600 150 590 151 295	109 777 110 248 110 944 112 360	44 232 44 419 45 183 48 109	154 009 154 667 156 127 160 469	-4 571 -9 067 -5 537 -9 174
2019 Q1 Q2 Q3	81 177 75 723 79 515	72 483 67 818 71 423	153 660 143 541 150 938	128 221 108 378 108 602	48 732 45 616 46 647	176 953 153 994 155 249	-23 293 -10 453 -4 311
Percentage change, la	atest year on previous y	ear					
2015 2016 2017 2018	KG9X 5.4 -1.2 6.3 -1.5	KH3B 1.8 7.3 5.9 -0.1	KH2U 3.8 2.7 6.1 –0.9	KG9W 4.1 4.6 2.9 -0.3	KH44 9.1 3.8 5.1 3.3	KH3N 5.4 4.4 3.5 0.7	
Percentage change, la	atest quarter on previou	s quarter					
2016 Q2 Q3 Q4	KGA2 1.7 -4.3 5.4	KH3C 1.6 -0.6 6.9	KH2V 1.7 –2.5 6.1	KG9Z 0.8 3.8 –0.6	KH45 0.8 0.8 5.1	KH3O 0.8 3.0 0.9	
2017 Q1 Q2 Q3 Q4	1.2 4.0 -0.1 -0.3	-0.3 0.7 2.3 -2.8	0.4 2.4 1.0 -1.5	-0.3 2.1 0.5 -0.9	-1.6 2.8 1.1 -1.1	-0.7 2.3 0.6 -1.0	
2018 Q1 Q2 Q3 Q4	-0.5 -4.7 4.3 -0.8	-0.9 -0.2 2.5 1.9	-0.7 -2.6 3.4 0.5	-1.3 0.4 0.6 1.3	0.4 1.7 6.5	-0.9 0.4 0.9 2.8	
2019 Q1 Q2 Q3	3.8 -6.7 5.0	-0.9 -6.4 5.3	1.6 -6.6 5.2	14.1 -15.5 0.2	1.3 -6.4 2.3	10.3 -13.0 0.8	
Percentage change, la	atest quarter on corresp	onding quarter of	previous year				
2016 Q2 Q3 Q4	KGA5 -2.0 -4.2 1.4	KH3D 8.3 7.5 9.8	KH2W 2.5 1.1 5.3	KGA4 4.8 9.0 4.9	KH46 1.6 2.9 6.1	KH3P 3.9 7.3 5.2	
2017 Q1 Q2 Q3 Q4	3.8 6.1 10.8 4.8	7.6 6.6 9.8 -0.1	5.6 6.4 10.3 2.4	3.7 5.0 1.7 1.3	5.0 7.0 7.4 1.1	4.0 5.6 3.2 1.3	
2018 Q1 Q2 Q3 Q4	3.0 -5.6 -1.4 -1.9	-0.8 -1.6 -1.4 3.3	1.2 -3.7 -1.4 0.5	0.3 -1.3 -1.2 1.0	2.8 0.4 1.0 8.8	1.0 -0.8 -0.5 3.2	
2019 Q1 Q2 Q3	2.4 0.2 0.9	3.3 -3.1 -0.5	2.8 -1.4 0.2	16.8 -1.7 -2.1	10.2 2.7 3.2	14.9 -0.4 -0.6	

<sup>1</sup> Trade balance is calculated by using exports of goods and services minus imports of goods and services

### Gross value added at basic prices: individual measures

		£ millio	n		Index numbers (2016 = 100) <sup>3</sup>						
	Expenditure- based	At current	t prices		Value indices at cu	rrent prices	Chaine	ed volume indic	es		
	estimate at chained volume measures	Expenditure- based estimate	Income- based estimate	Residual error <sup>1</sup>	Expenditure- based estimate	Income- based estimate	Expenditure- based estimate	Income- based estimate <sup>2</sup>	Output- based estimate		
2015	CAGR 1 744 182	CAGQ 1 709 325	CAGS 1 709 325	DJDS	IHYA 96.1	IHYB 96.1	IHYC 98.1	IHYD 98.1	YBFR 98.1		
2016	1 778 133	1 778 133	1 778 134	-1	100.0	100.0	100.0	100.0	100.0		
2017	1 813 229	1 846 693	1 846 694	-1	103.9	103.9	102.0	102.0	102.0		
2018	1 828 090	1 898 281	1 913 254	–14 973	106.8	107.6	102.8	103.6	103.7		
Seasonally	adjusted										
2016 Q2	443 035	443 490	443 490	_	99.8	99.8	99.7	99.7	99.7		
Q3 Q4	445 449 448 704	446 573 452 082	446 574 452 082	–1 –	100.5 101.7	100.5 101.7	100.2 100.9	100.2 100.9	100.2 100.9		
2017 Q1	451 405	457 806	457 668	138	103.0	103.0	101.5	101.5	101.5		
Q2	452 532	460 056	459 891	165	103.5	103.5	101.8	101.8	101.8		
Q3 Q4	453 971 455 321	461 067 467 764	460 954 468 181	113 –417	103.7 105.2	103.7 105.3	102.1 102.4	102.1 102.5	102.1 102.6		
2018 Q1	454 813	470 652	471 990	-1 338	105.9	106.2	102.3	102.6	102.8		
Q2	456 315	471 430	474 152	-2 722	106.1	106.7	102.7	103.2	103.4		
Q3	458 198 458 764	477 470	482 014	-4 544 c 260	107.4	108.4	103.1	104.1	104.1		
Q4	458 764	478 729	485 098	-6 369	107.7	109.1	103.2	104.6	104.4		
2019 Q1	461 385	484 823	491 490 495 170	-6 667	109.1	110.6	103.8	105.2	105.0		
Q2 Q3	460 289 461 612	488 383 490 925	495 170 497 551	-6 787 -6 626	109.9 110.4	111.4 111.9	103.5 103.8	105.0 105.2	104.8 105.1		
Percentage	change, latest year	on previous yea	r								
	KH4D	KH47	KH68		KH47	KH68	KH4D	KH6E	GDPQ		
2015	2.2	3.0	3.0		3.0	3.0	2.2	2.2	2.2		
2016	1.9	4.0	4.0		4.0	4.0	1.9	1.9	1.9		
2017 2018	2.0 0.8	3.9 2.8	3.9 3.6		3.9 2.8	3.9 3.6	2.0 0.8	2.0 1.6	2.0 1.6		
Percentage	change, latest quar	ter on previous o	quarter								
	KH4F	KH49	KH6A		KH49	KH6A	KH4F	KH6G			
2016 Q2	0.5	1.7	1.7		1.7	1.7	0.5	0.5	0.5		
Q3 Q4	0.5 0.7	0.7 1.2	0.7 1.2		0.7 1.2	0.7 1.2	0.5 0.7	0.5 0.7	0.5 0.7		
2017 Q1 Q2	0.6 0.2	1.3 0.5	1.2 0.5		1.3 0.5	1.2 0.5	0.6 0.2	0.6 0.2	0.6 0.3		
Q3	0.2	0.5	0.5		0.3	0.3	0.2	0.2	0.3		
Q4	0.3	1.5	1.6		1.5	1.6	0.3	0.4	0.5		
2018 Q1	-0.1	0.6	0.8		0.6	0.8	-0.1	0.1	0.2		
Q2 Q3	0.3 0.4	0.2 1.3	0.5 1.7		0.2 1.3	0.5 1.7	0.3 0.4	0.6 0.8	0.6 0.7		
Q4	0.1	0.3	0.6		0.3	0.6	0.1	0.5	0.3		
2019 Q1	0.6	1.3	1.3		1.3	1.3	0.6	0.6	0.6		
Q2 Q3	-0.2 0.3	0.7 0.5	0.7 0.5		0.7 0.5	0.7 0.5	-0.2 0.3	-0.2 0.2	-0.2 0.3		
	change, latest quar			of previous ve		0.0	0.0	0.2	0.0		
	KH4H	KH4B	KH6C	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	KH4B	KH6C	KH4H	KH6I	GDPR		
2016 Q2	1.8	3.7	3.7		3.7	3.7	1.8	1.8	1.8		
Q3	2.0	4.1	4.1		4.1	4.1	2.0	2.0	2.0		
Q4	2.0	4.8	4.8		4.8	4.8	2.0	2.0	2.0		
	2.4 2.1	5.0	5.0		5.0	5.0	2.4	2.3	2.3		
2017 Q1	21	3.7 3.2	3.7 3.2		3.7 3.2	3.7 3.2	2.1 1.9	2.1 1.9	2.1 1.9		
2017 Q1 Q2			3.6		3.5	3.6	1.5	1.6	1.7		
2017 Q1	1.9 1.5	3.5	0.0								
2017 Q1 Q2 Q3 Q4 2018 Q1	1.9 1.5 0.8	2.8	3.1		2.8	3.1	0.8	1.1	1.3		
2017 Q1 Q2 Q3 Q4 2018 Q1 Q2	1.9 1.5 0.8 0.8	2.8 2.5	3.1 3.1		2.5	3.1	8.0	1.5	1.6		
2017 Q1 Q2 Q3 Q4 2018 Q1	1.9 1.5 0.8	2.8	3.1								
2017 Q1 Q2 Q3 Q4 2018 Q1 Q2 Q3 Q4	1.9 1.5 0.8 0.8 0.9 0.8	2.8 2.5 3.6 2.3	3.1 3.1 4.6 3.6		2.5 3.6 2.3	3.1 4.6 3.6	0.8 0.9 0.8	1.5 1.9 2.0	1.6 1.9 1.8		
2017 Q1 Q2 Q3 Q4 2018 Q1 Q2 Q3	1.9 1.5 0.8 0.8 0.9	2.8 2.5 3.6	3.1 3.1 4.6		2.5 3.6	3.1 4.6	0.8 0.9	1.5 1.9	1.6 1.9		

<sup>1</sup> The residual error is, by convention, the amount by which the expenditure -based approach to measuring GDP exceeds the income-based estimate. It is also the sum of two components: the statistical discrepancy (expenditure) with sign reversed, and the statistical discrepancy (income) with natural sign.

<sup>2</sup> Income data deflated by the implied GDP deflator, based on expenditure data. 3 The growth rates of index numbers are calculated using unrounded data.

## Alignment adjustments <sup>1</sup>

	Chang	es in inventories	
	At current prices	Chained volume measures (Reference year 2016)	Gross operating surplus of non-financial corporations at current prices
Seasonally adjusted			
, <b>, ,</b>	DMUN	DMUM	DMUQ
2016 Q2	<b>-954</b>	<b>-961</b>	-799
Q3	1 861	1 852	-1 791
Q4	-1 984	-1 972	1 827
2017 Q1	1 863	1 833	126
Q2	-1 967	-1 937	-241
Q3	-349	-342	44
Q4	453	446	71
2018 Q1	-2 600	-2 516	1 220
Q2	1 841	1 781	-1 155
Q3	-22	–17	1 838
Q4	781	752	-1 903
2019 Q1	-1 766	-1 679	-101
Q2	2 131	2 012	1 552
Q3	- <del>769</del>	-723	424

<sup>1</sup> Estimates are given to the nearest  ${\mathfrak L}$  million but cannot be regarded as accurate to this degree

						$\mathfrak{L}$ millions except deflator index which is 2018/2019 = 100							
			Current pric	es		Chained	d Volume Meas	ures (reference ye	ear 2016)				
	Gross domestic product at market prices	Gross domestic product at market prices non seasonally adjusted	Gross value added at basic prices	General government final consumption expenditure	General government gross fixed capital formation	Gross domestic product at market prices	Gross value added at basic prices	General government final consumption expenditure	General government gross fixed capital formation	Implied GDF deflator at market prices <sup>3 4</sup>			
2015/16 2016/17 2017/18 2018/19	YBHA 1 934 489 2 019 115 2 085 972 2 160 399	BKTL 1 934 600 2 019 484 2 086 378 2 162 822	ABML 1 723 821 1 799 847 1 861 013 1 925 740	NMRP 375 641 383 393 388 320 400 053	RPZG 49 666 53 708 55 660 59 753	ABMI 1 967 966 2 006 495 2 038 551 2 071 981	ABMM 1 752 769 1 788 490 1 818 064 1 847 392	NMRY 380 173 381 572 382 766 387 665	DLWF 49 428 53 447 54 551 56 933	L8GG 94.2774 96.5095 98.1390 100.0000			
Seasonally	adjusted												
2016 Q2	497 571	496 920	443 490	95 240	13 225	497 593	443 035	95 290	13 258	95.9056			
Q3	500 711	495 160	446 574	95 635	13 679	499 836	445 450	95 386	13 617	96.0777			
Q4	507 375	511 554	452 082	96 021	13 375	503 083	448 704	95 477	13 308	96.7281			
2017 Q1	513 458	515 850	457 701	96 497	13 429	505 983	451 301	95 419	13 264	97.3267			
Q2	515 534	512 093	459 955	95 869	13 910	507 255	452 432	95 460	13 949	97.4752			
Q3	517 788	513 359	461 056	96 670	13 790	508 982	453 960	95 724	13 517	97.5692			
Q4	524 887	530 365	468 191	97 631	14 161	511 014	455 736	95 905	13 703	98.5136			
2018 Q1	527 763	530 561	471 811	98 150	13 799	511 300	455 936	95 677	13 382	98.9980			
Q2	532 388	528 445	473 490	98 172	13 952	514 017	458 304	95 646	13 400	99.3377			
Q3	538 756	533 442	480 551	99 029	14 829	517 221	461 156	96 040	14 235	99.9032			
Q4	541 371	547 830	482 756	100 636	14 986	518 870	462 623	97 592	14 551	100.0690			
2019 Q1	547 884	553 105	488 943	102 216	15 986	521 873	465 309	98 387	14 747	100.6902			
Q2	551 898	544 189	492 621	104 441	15 100	520 735	464 287	99 449	14 220	101.6495			
Q3	554 929	550 288	495 179	106 018	14 778	522 247	465 615	99 745	13 970	101.9118			
Percentage	change, lates	t financial ye	ar on previou	s financial year									
2015/16	3.2	3.4	3.1	1.5	-2.5	2.3	2.1	2.2	-6.5	0.9			
2016/17	4.4	4.4	4.4	2.1	8.1	2.0	2.0	0.4	8.1	2.4			
2017/18	3.3	3.3	3.4	1.3	3.6	1.6	1.7	0.3	2.1	1.7			
2018/19	3.6	3.7	3.5	3.0	7.4	1.6	1.6	1.3	4.4	1.9			
Percentage	change, lates	t quarter on p	revious quar	ter									
2016 Q2 Q3 Q4	IHYN 1.6 0.6 1.3	A8L9 1.0 -0.4 3.3	KGL8 1.7 0.7 1.2	KH2D 0.6 0.4 0.4	KH7P 8.9 3.4 –2.2	IHYQ 0.5 0.5 0.6	KGM9 0.5 0.5 0.7	KH2J -0.1 0.1 0.1	KH9C 8.4 2.7 -2.3	L8GH 1.0 0.2 0.7			
2017 Q1	1.2	0.8	1.2	0.5	0.4	0.6	0.6	-0.1	-0.3	0.6			
Q2	0.4	-0.7	0.5	-0.7	3.6	0.3	0.3	-	5.2	0.2			
Q3	0.4	0.2	0.2	0.8	-0.9	0.3	0.3	0.3	-3.1	0.1			
Q4	1.4	3.3	1.5	1.0	2.7	0.4	0.4	0.2	1.4	1.0			
2018 Q1	0.5	-	0.8	0.5	-2.6	0.1	-	-0.2	-2.3	0.5			
Q2	0.9	-0.4	0.4	-	1.1	0.5	0.5	-	0.1	0.3			
Q3	1.2	0.9	1.5	0.9	6.3	0.6	0.6	0.4	6.2	0.6			
Q4	0.5	2.7	0.5	1.6	1.1	0.3	0.3	1.6	2.2	0.2			
2019 Q1	1.2	1.0	1.3	1.6	6.7	0.6	0.6	0.8	1.3	0.6			
Q2	0.7	-1.6	0.8	2.2	-5.5	-0.2	-0.2	1.1	-3.6	1.0			
Q3	0.5	1.1	0.5	1.5	-2.1	0.3	0.3	0.3	-1.8	0.3			
Percentage	change, lates	t quarter on o	corresponding	g quarter of pre	vious year								
2016 Q2 Q3 Q4	IHYO 3.8 4.1 4.8	A8LA 4.7 3.9 4.1	KGM2 3.7 4.1 4.8	KH2E 2.3 1.3 2.7	KH7R 2.1 11.1 9.0	IHYR 1.9 1.9 1.8	KGN3 1.8 2.0 2.0	KH2K 0.8 0.2 0.5	KH9M 3.0 11.4 10.0	L8GI 1.9 2.1 3.0			
2017 Q1	4.8	4.9	5.0	2.0	10.6	2.2	2.3	0.1	8.4	2.5			
Q2	3.6	3.1	3.7	0.7	5.2	1.9	2.1	0.2	5.2	1.6			
Q3	3.4	3.7	3.2	1.1	0.8	1.8	1.9	0.4	-0.7	1.6			
Q4	3.5	3.7	3.6	1.7	5.9	1.6	1.6	0.4	3.0	1.8			
2018 Q1	2.8	2.9	3.1	1.7	2.8	1.1	1.0	0.3	0.9	1.7			
Q2	3.3	3.2	2.9	2.4	0.3	1.3	1.3	0.2	-3.9	1.9			
Q3	4.0	3.9	4.2	2.4	7.5	1.6	1.6	0.3	5.3	2.4			
Q4	3.1	3.3	3.1	3.1	5.8	1.5	1.5	1.8	6.2	1.6			
2019 Q1	3.8	4.2	3.6	4.1	15.8	2.1	2.1	2.8	10.2	1.7			
Q2	3.7	3.0	4.0	6.4	8.2	1.3	1.3	4.0	6.1	2.3			
Q3	3.0	3.2	3.0	7.1	–0.3	1.0	1.0	3.9	–1.9	2.0			

<sup>1</sup> Financial year £ millions estimates are the sum of the 4 quarters which make up that financial year.
2 All data are seasonally adjusted unless otherwise specified.
3 Implied deflator is expressed in terms of 2018/2019 = 100 for presentational purposes, whereas in table A1 it is expressed as 2016 = 100.

<sup>4</sup> Implied deflator is displayed with 4 decimal places to replace a GDP deflator in index form series previously calculated by HM Treasury. Data are only considered accurate to 1 decimal place.

## Selected implied deflators<sup>1</sup>

			2010 = 100
		Implied deflators <sup>2</sup>	
	Gross national expenditure	Gross domestic product at market prices <sup>3</sup>	Gross value added at basic prices
2015 2016 2017 2018	MNE2 94.1654 95.9458 98.0452 100.0000	MNF2 94.2980 96.3135 98.1363 100.0000	MNX5 94.3777 96.2997 98.0797 100.0000
Seasonally adjusted			
2016 Q2 Q3 Q4	95.9531 96.1803 96.5950	96.3130 96.4859 97.1390	96.4025 96.5466 97.0286
2017 Q1 Q2 Q3 Q4	97.8438 97.6969 97.9191 98.7208	97.7402 97.8893 97.9837 98.9321	97.6693 97.9049 97.8090 98.9355
2018 Q1 Q2 Q3 Q4	99.2381 99.8674 100.5230 100.3715	99.4186 99.7597 100.3276 100.4941	99.6568 99.4947 100.3539 100.4947
2019 Q1 Q2 Q3	100.4296 101.7489 102.2899	101.1179 102.0814 102.3448	101.1951 102.1807 102.4184
Percentage change, latest year on previous ye	ear		
2015 2016 2017 2018	MNE3 0.1 1.9 2.2 2.0	MNF3 0.6 2.1 1.9 1.9	MNX6 0.8 2.0 1.8 2.0
Percentage change, latest quarter on previous	s quarter		
2016 Q2 Q3 Q4	MNE4 0.9 0.2 0.4	MNF4 1.0 0.2 0.7	MNX7 1.2 0.1 0.5
2017 Q1 Q2 Q3 Q4	1.3 -0.2 0.2 0.8	0.6 0.2 0.1 1.0	0.7 0.2 -0.1 1.2
2018 Q1 Q2 Q3 Q4	0.5 0.6 0.7 -0.2	0.5 0.3 0.6 0.2	0.7 -0.2 0.9 0.1
2019 Q1 Q2 Q3	0.1 1.3 0.5	0.6 1.0 0.3	0.7 1.0 0.2
Percentage change, latest quarter on corresp			
2016 Q2 Q3 Q4	MNE5 1.8 1.7 2.9	MNF5 1.9 2.1 3.0	MNX8 1.9 2.1 2.7
2017 Q1 Q2 Q3 Q4	2.9 1.8 1.8 2.2	2.5 1.6 1.6 1.8	2.6 1.6 1.3 2.0
2018 Q1 Q2 Q3 Q4	1.4 2.2 2.7 1.7	1.7 1.9 2.4 1.6	2.0 1.6 2.6 1.6
2019 Q1 Q2 Q3	1.2 1.9 1.8	1.7 2.3 2.0	1.5 2.7 2.1

Implied deflator is expressed in terms of 2018 = 100, whereas in table A1 it is expressed as 2016 = 100.
 Data are only considered accurate to 1 decimal place.
 Implied deflator is displayed with 4 decimal places to replace a GDP deflator in index form series previously calculated by HM Treasury.



	UK resident population	Curren	t Prices	Chained volume measure	es (Reference year 2016)
	mid-year estimates (persons thousands) <sup>2</sup>	Gross domestic product at market prices <sup>3</sup>	Gross domestic product per head	Gross domestic product at market prices <sup>3</sup>	Gross domestic product per head
2015 2016 2017 2018	EBAQ 65 110 65 648 66 040 66 436	YBHA 1 916 896 1 995 478 2 071 667 2 140 278	IHXT 29 441 30 397 31 370 32 216	ABMI 1 957 920 1 995 478 2 033 234 2 061 408	IHXW 30 071 30 397 30 788 31 028
Seasonally ad	ljusted				
2016 Q2	65 648	497 571	7 579	497 593	7 580
Q3	65 746	500 711	7 616	499 836	7 603
Q4	65 844	507 375	7 706	503 083	7 641
2017 Q1	65 942	513 458	7 787	505 983	7 673
Q2	66 040	515 534	7 806	507 255	7 681
Q3	66 139	517 788	7 829	508 982	7 696
Q4	66 238	524 887	7 924	511 014	7 715
2018 Q1	66 337	527 763	7 956	511 300	7 708
Q2	66 436	532 388	8 014	514 017	7 737
Q3	66 535	538 756	8 096	517 221	7 773
Q4	66 634	541 371	8 122	518 870	7 785
2019 Q1	66 734	547 884	8 207	521 873	7 817
Q2	66 833	551 898	8 254	520 735	7 788
Q3	66 924	554 929	8 292	522 247	7 804
Percentage ch	nange, latest year on previou	-			
2015 2016 2017 2018		IHYM 3.0 4.1 3.8 3.3	N3Y3 2.1 3.2 3.2 2.7	IHYP 2.4 1.9 1.9 1.4	N3Y6 1.6 1.1 1.3 0.8
Percentage ch	hange, latest quarter on prev	ious quarter			
2016 Q2 Q3 Q4		IHYN 1.6 0.6 1.3	N3Y4 1.4 0.5 1.2	IHYQ 0.5 0.5 0.6	N3Y7 0.3 0.3 0.5
2017 Q1		1.2	1.1	0.6	0.4
Q2		0.4	0.2	0.3	0.1
Q3		0.4	0.3	0.3	0.2
Q4		1.4	1.2	0.4	0.2
2018 Q1		0.5	0.4	0.1	-0.1
Q2		0.9	0.7	0.5	0.4
Q3		1.2	1.0	0.6	0.5
Q4		0.5	0.3	0.3	0.2
2019 Q1		1.2	1.0	0.6	0.4
Q2		0.7	0.6	-0.2	-0.4
Q3		0.5	0.5	0.3	0.2
Percentage ch	hange, latest quarter on corr	esponding quarter of previo	ous year		
2016 Q2 Q3 Q4		IHYO 3.8 4.1 4.8	N3Y5 2.9 3.3 4.1	IHYR 1.9 1.9 1.8	N3Y8 1.1 1.1 1.1
2017 Q1		4.8	4.1	2.2	1.6
Q2		3.6	3.0	1.9	1.3
Q3		3.4	2.8	1.8	1.2
Q4		3.5	2.8	1.6	1.0
2018 Q1		2.8	2.2	1.1	0.5
Q2		3.3	2.7	1.3	0.7
Q3		4.0	3.4	1.6	1.0
Q4		3.1	2.5	1.5	0.9
2019 Q1		3.8	3.2	2.1	1.4
Q2		3.7	3.0	1.3	0.7
Q3		3.0	2.4	1.0	0.4

<sup>1</sup> This data uses the latest population estimates with the exception of the latest year where populations projections are used. The quarterly data in this table does not sum to annuals (excluding GDP at market prices)

2 The UK resident population mid-year estimates used in this publication are published on 26 June 2019

3 GDP is presented in £ million; also published in table A2

## Annex A - Growth and contributions to growth - output components of GDP<sup>1,2</sup>

	Season	ally adjuste	d data								Reference	e year 2016
	Agri- culture, forestry, and fishing	Total Production	Mining & quarrying inc oil & gas extract	Manu- facturing	Electric, gas, steam & air	Water supply, sewerage	Constr uction	Total Services	Distri- bution, hotels & restaurants	Transport storage and commu- nications	Business services and finance	Govern- ment and other services
Percentage	change, late	st year on pr	evious year									
Growth 2016 2017 2018	L3BB -5.5 5.7 -4.0	L3BG 1.1 1.7 0.1	L3BH -2.0 1.7 4.8	L3BN 0.2 2.2 0.4	L3DM 3.7 -1.8 -1.9	L3DQ 7.1 2.0 –1.8	L3DW 3.9 6.4 -0.4	L3E2 2.0 1.7 2.1	L3GP 3.7 2.4 2.8	KI8L 2.8 3.6 3.2	KI8N 2.7 1.0 2.1	KI8P -0.5 1.2 1.1
Contributio	ns to growth											
2016 2017 2018	ZZ3V -0.04 0.04 -0.03	ZZ3W 0.16 0.24 0.02	ZZ3Y -0.02 0.01 0.04	ZZ3X 0.02 0.23 0.04	ZZ3Z 0.06 -0.03 -0.03	ZZ42 0.09 0.03 -0.02	ZZ43 0.24 0.39 -0.02	ZZ44 1.58 1.32 1.70	ZZ45 0.49 0.32 0.38	ZZ46 0.29 0.39 0.36	ZZ47 0.90 0.35 0.72	ZZ48 -0.10 0.26 0.24
Percentage	change, late	st quarter or	n previous qu	uarter								
Growth												
2017 Q1 Q2 Q3 Q4	L3BB 4.7 0.1 0.6 –1.0	L3BG 0.7 -0.4 0.9 1.1	L3BH 3.0 1.0 1.3 –2.6	L3BN 0.9 -0.1 0.9 1.5	L3DM -4.1 0.9 0.3 -0.2	L3DQ 3.0 -4.0 1.0 0.6	L3DW 4.2 0.3 0.1 0.7	L3E2 0.2 0.4 0.3 0.4	L3GP 0.2 0.5 0.4 0.2	KI8L 0.2 1.6 0.6 1.0	KI8N -0.3 -0.2 0.5 0.5	KI8P 0.9 0.5 -0.2 -0.2
2018 Q1 Q2 Q3 Q4	-3.0 -0.9 -0.3 0.8	-0.5 -0.7 0.5 -0.7	0.8 5.0 3.4 -1.7	-0.7 -0.6 0.1 -0.6	1.2 -5.1 1.2 -0.2	-2.3 0.3 1.6 -1.7	-2.2 0.7 1.2 0.2	0.5 0.8 0.6 0.5	0.2 1.9 1.1 0.7	-0.8 1.6 1.8 1.3	1.0 0.5 0.2 0.3	0.7 0.3 0.4 0.3
2019 Q1 Q2 Q3	-1.4 -0.4 -0.2	1.1 -1.8 -	-0.9 -1.1 -1.7	2.0 -2.8 -	-2.8 2.8 -0.7	-0.6 1.2 1.2	1.6 -1.2 0.6	0.4 0.1 0.4	0.9 - 0.1	1.5 0.6 0.6	-0.3 - 0.3	0.6 0.2 0.4
Contributio	ns to growth											
2017 Q1 Q2 Q3 Q4	ZZ2F 0.03 - - -0.01	ZZ2G 0.09 -0.05 0.12 0.14	ZZ2I 0.02 0.01 0.01 -0.02	ZZ2H 0.10 -0.01 0.10 0.16	ZZ2J -0.06 0.01 -	ZZ2K 0.04 -0.05 0.01 0.01	ZZ2L 0.26 0.02 0.01 0.05	ZZ2M 0.16 0.28 0.24 0.28	ZZ2N 0.03 0.06 0.05 0.02	ZZ2O 0.03 0.18 0.06 0.12	ZZ2P -0.09 -0.06 0.17 0.18	ZZ2Q 0.20 0.10 -0.05 -0.04
2018 Q1 Q2 Q3 Q4	-0.02 -0.01 - 0.01	-0.07 -0.10 0.07 -0.10	0.01 0.04 0.03 -0.01	-0.07 -0.06 0.01 -0.06	0.02 -0.07 0.02 -	-0.03 - 0.02 -0.02	-0.14 0.04 0.07 0.01	0.42 0.67 0.52 0.42	0.03 0.25 0.15 0.09	-0.08 0.18 0.21 0.15	0.32 0.16 0.08 0.11	0.15 0.08 0.08 0.07
2019 Q1 Q2 Q3	-0.01 - -	0.15 -0.24 -0.01	-0.01 -0.01 -0.02	0.19 -0.28 -	-0.04 0.04 -0.01	-0.01 0.02 0.01	0.10 -0.07 0.04	0.32 0.12 0.29	0.12 - 0.02	0.17 0.07 0.06	-0.10 - 0.11	0.12 0.04 0.10
	change, late	st quarter or	correspond	ling quarte	r of previou	ıs year						
Growth 2017 Q1 Q2 Q3	L3ZZ 4.9 6.6 7.1	L426 2.5 0.2 2.0	L427 1.7 2.8 -0.4	L42D 2.4 0.6 2.6	L44C 0.3 -3.7 -0.4	L44G 6.2 0.2 1.2	L44M 8.0 6.5 5.9	L44Q 1.8 2.1 1.5	L47F 2.9 2.8 2.9	KII2 3.1 4.6 3.2 3.5	KIH9 1.7 1.3 0.6	KIH8 0.8 1.6 1.4
Q4 2018 Q1 Q2 Q3 Q4	4.4 -3.3 -4.3 -5.1 -3.5	2.3 1.1 0.7 0.3 -1.5	2.7 0.5 4.5 6.7 7.6	3.3 1.7 1.2 0.4 -1.7	-3.1 2.3 -3.8 -3.0 -3.0	0.5 -4.7 -0.4 0.2 -2.1	5.4 -1.1 -0.6 0.4 -0.2	1.2 1.5 2.0 2.4 2.6	1.3 1.3 2.7 3.4 4.0	2.5 2.5 3.8 4.1	0.6 1.8 2.5 2.2 2.0	1.0 0.8 0.6 1.2 1.7
2019 Q1 Q2 Q3	-1.9 -1.4 -1.3	0.2 -0.9 -1.4	5.8 -0.3 -5.3	0.9 -1.3 -1.4	-6.9 0.9 -1.0	-0.4 0.5 0.1	3.7 1.8 1.2	2.4 1.7 1.4	4.7 2.7 1.7	6.5 5.4 4.1	0.8 0.3 0.4	1.6 1.4 1.5
Contributio	ns to growth											
2017 Q1 Q2 Q3 Q4	ZZ36 0.03 0.04 0.05 0.03	ZZ37 0.35 0.02 0.27 0.31	ZZ39 0.01 0.02 - 0.02	ZZ38 0.25 0.06 0.26 0.33	ZZ3A 0.06 -0.01 -0.05	ZZ3B 0.08 - 0.02 0.01	ZZ3C 0.48 0.40 0.36 0.33	ZZ3D 1.45 1.63 1.23 0.97	ZZ3E 0.38 0.37 0.38 0.17	ZZ3F 0.33 0.49 0.35 0.38	ZZ3G 0.56 0.43 0.21 0.20	ZZ3H 0.17 0.35 0.30 0.22
2018 Q1 Q2 Q3 Q4	-0.02 -0.03 -0.04 -0.03	0.14 0.09 0.04 -0.20	0.03 0.05 0.06	0.17 0.12 0.04 –0.17	0.03 -0.05 -0.04 -0.04	-0.06 -0.01 - -0.03	-0.07 -0.04 0.02 -0.01	1.23 1.62 1.90 2.03	0.17 0.36 0.46 0.53	0.27 0.28 0.42 0.45	0.62 0.84 0.75 0.68	0.17 0.14 0.27 0.37

-0.11 0.01 -0.01

0.01

0.05

-0.05

2019 Q1 Q2 Q3

1.94 1.38 1.15

<sup>1</sup> Estimates are accurate to 1 decimal place and contributions are available from 1997. Output data are available from 1990 in table B1.

<sup>2</sup> Contribution are to output gross value added and therefore may not sum to the percentage change in average GDP. More information on the difference be-tween the 3 measures can be found in the Short Guide to National Accounts

## AB Annex B - Growth and contributions to growth - expenditure components of GDP<sup>1,2</sup> Chained Volume Measures

Seasonally adjusted data

Reference year 2016

	Seasonally adju	isted data						Referen	ce year 2016
	Final co	onsumption expen	diture						
	House- holds	Non-prof- it instit- utions <sup>3</sup>	General govern- ment	Gross capital formation	Gross fixed capital formation	Business investme- nt	Total exports	less Total imports	Net trade
Percentage cha	ange, latest year o	n previous year							
Growth									
2016 2017 2018	KGZ5 3.8 2.3 1.6	KH26 -1.5 -0.2 0.7	KH2I 1.0 0.3 0.6	ZZ6H -0.6 -1.7 1.4	KG7N 3.6 1.6 –0.1	KG7M 4.3 2.9 –1.6	KH2U 2.7 6.1 -0.9	KH3N 4.4 3.5 0.7	
Contributions t	o growth								
2016 2017 2018	ZZ6M 2.39 1.44 1.01	ZZ6N -0.04 - 0.02	ZZ6O 0.19 0.05 0.12	ZZ6P -0.10 -0.29 0.24	ZZ6Q 0.62 0.28 -0.01	ZZ6R 0.41 0.29 -0.16	ZZ6S 0.76 1.74 -0.26	ZZ6T 1.28 1.05 0.23	ZZ6U -0.52 0.68 -0.49
Percentage cha	ange, latest quarte	r on previous qu	arter						
Growth									
2017 Q1 Q2 Q3 Q4	KGZ6 0.5 0.3 0.4 0.3	KH27 0.7 0.5 –0.3 0.7	KH2J -0.1 - 0.3 0.2	ZZ5H 2.1 0.3 -0.5 1.3	KG7Q - 1.4 -0.4 1.1	KG7P 2.3 1.2 0.2 0.2	KH2V 0.4 2.4 1.0 -1.5	KH3O -0.7 2.3 0.6 -1.0	
2018 Q1 Q2 Q3 Q4	0.5 0.5 0.3 0.2	0.7 -0.8 0.3 0.1	-0.2 - 0.4 1.6	-2.7 5.6 -2.9 2.6	-0.9 -0.4 0.5 -0.1	-1.0 -0.6 -0.8 -1.0	-0.7 -2.6 3.4 0.5	-0.9 0.4 0.9 2.8	
2019 Q1 Q2 Q3	0.3 0.4 0.4	-0.1 -1.1 0.5	0.8 1.1 0.3	17.4 -15.6 -7.2	0.9 -0.9 -0.2	0.8 -0.4 -	1.6 -6.6 5.2	10.3 -13.0 0.8	
Contributions t	o growth								
2017 Q1 Q2 Q3 Q4	ZZ5M -0.08 0.18 0.25 0.19	ZZ5N 0.02 0.01 -0.01 0.02	ZZ5O -0.01 0.01 0.05 0.04	ZZ5P 0.35 0.05 -0.08 0.21	ZZ5Q 0.01 0.24 -0.07 0.19	ZZ5R 0.22 0.11 0.02 0.02	ZZ5S 0.13 0.70 0.31 -0.45	ZZ5T -0.20 0.69 0.20 -0.30	ZZ5U 0.33 0.01 0.11 -0.14
2018 Q1 Q2 Q3 Q4	0.34 0.34 0.16 0.11	0.02 -0.02 0.01 -	-0.04 -0.01 0.08 0.30	-0.48 0.96 -0.52 0.45	-0.16 -0.07 0.08 -0.02	-0.10 -0.06 -0.08 -0.10	-0.21 -0.77 1.00 0.14	-0.29 0.13 0.29 0.87	0.07 -0.90 0.70 -0.73
2019 Q1 Q2 Q3	0.19 0.22 0.25	-0.03 0.01	0.15 0.20 0.06	3.03 -3.18 -1.24	0.15 -0.16 -0.04	0.08 -0.04 -	0.47 -2.01 1.47	3.33 -4.61 0.25	-2.86 2.60 1.22
Percentage cha Growth	ange, latest quarte	r on correspondi	ng quarter of p	orevious year					
2017 Q1 Q2 Q3 Q4	KGZ7 3.7 2.5 1.6 1.5	KH28 -2.5 -0.2 0.5 1.6	KH2K 0.1 0.2 0.4 0.4	ZZ5Y -2.2 0.9 -7.9 3.2	KG7T 1.7 2.2 0.5 2.2	KG7S 3.0 3.1 1.7 3.9	KH2W 5.6 6.4 10.3 2.4	KH3P 4.0 5.6 3.2 1.3	
2018 Q1 Q2 Q3 Q4	1.5 1.8 1.6 1.5	1.6 0.3 0.8 0.2	0.3 0.2 0.3 1.8	-1.7 3.6 1.1 2.4	1.2 -0.6 0.2 -1.0	0.6 -1.2 -2.3 -3.4	1.2 -3.7 -1.4 0.5	1.0 -0.8 -0.5 3.2	
2019 Q1 Q2 Q3	1.3 1.1 1.2	-0.6 -0.9 -0.7	2.8 4.0 3.9	23.6 -1.3 -5.7	0.8 0.3 -0.4	-1.6 -1.4 -0.6	2.8 -1.4 0.2	14.9 -0.4 -0.6	
Contributions t	o growth								
2017 Q1 Q2 Q3 Q4	ZZ65 2.28 1.63 1.34 0.54	ZZ66 -0.06 - 0.01 0.04	ZZ67 0.01 0.03 0.07 0.09	ZZ68 -0.38 0.15 -1.46 0.53	ZZ69 0.29 0.38 0.08 0.38	ZZ6A 0.29 0.31 0.17 0.38	ZZ6B 1.59 1.82 2.85 0.70	ZZ6C 1.19 1.66 0.98 0.38	ZZ6D 0.40 0.15 1.87 0.31
2018 Q1 Q2 Q3 Q4	0.95 1.12 1.03 0.95	0.04 0.01 0.02 0.01	0.05 0.04 0.06 0.33	-0.30 0.63 0.19 0.42	0.20 -0.11 0.04 -0.17	0.05 -0.12 -0.22 -0.34	0.36 -1.13 -0.44 0.16	0.31 -0.26 -0.17 1.02	0.05 -0.87 -0.27 -0.86
2019 Q1 Q2 Q3	0.81 0.69 0.78	-0.01 -0.02 -0.01	0.53 0.73 0.71	3.97 -0.23 -0.97	0.14 0.05 -0.07	-0.16 -0.14 -0.06	0.86 -0.42 0.07	4.70 -0.14 -0.18	-3.84 -0.28 0.25

<sup>1</sup> Estimates are accurate to 1 decimal place and contributions are available from 1997. Expenditure data are available from 1948 annually and 1955 quarterly in table C2

2 This table does not include contribution from the statistical discrepancy

and components may not sum to the percentage change in average GDP. Chained volume measure data for this component are available in table C2

<sup>3</sup> Non-profit institutions serving households

## Annex C - Growth and contributions to growth - income components of GDP<sup>1,2</sup> Current Prices

Seasonally adjusted data

	Compen-	Gross operating		Taxes on products
	sation of employees	surplus of corporations <sup>3</sup>	Other income <sup>4</sup>	& production less subsidies
Percentage change, latest year on	previous year			
Growth				
2016	KGI3 4.1	KH4V 3.8	KH6T 4.5	KH65 4.0
2017 2018	4.3 4.3	4.0 0.9	2.4 5.2	3.8 2.7
Contributions to growth				
2016	ZZ7H 2.00	ZZ7I 0.81	ZZ7J 0.80	ZZ7K 0.49
2017 2018	2.07 2.11	0.84 0.20	0.42 0.90	0.46 0.32
Percentage change, latest quarter	on previous quarter			
Growth				
2017 Q1	KGI4 0.8	KH4W 3.8	KH6U 0.2	KH66 -0.1
Q2 Q3	1.6 1.1	-3.2 -2.0	0.3 0.6	2.2 1.7
Q4 2018 Q1	0.7 1.1	4.4 0.1	1.0 1.4	-0.3 -1.6
Q2 Q3	0.9 1.5	-1.9 2.9	1.9 1.2	5.1 -1.5
Q4 2019 Q1	1.4 0.3	-2.5 3.6	2.2 1.9	0.6
Q2 Q3	1.5 0.9	-0.9 0.1	-0.4 0.5	2.0 -0.2
Contributions to growth				
2017 Q1	ZZ6Z 0.36	ZZ72 0.81	ZZ73 0.03	ZZ74 -0.01
Q2 Q3	0.78 0.49	-0.70 -0.38	0.05 0.10	0.26 0.19
Q4 2018 Q1	0.33 0.47	0.94 0.03	0.19 0.22	-0.04 -0.18
Q2 Q3	0.47 0.45 0.73	-0.42 0.60	0.22 0.34 0.21	-0.16 0.62 -0.19
Q4	0.73	-0.54	0.40	0.08
2019 Q1 Q2 Q3	0.17 0.72 0.40	0.73 -0.19 0.02	0.34 -0.06 0.07	0.23 -0.02
Percentage change, latest quarter			0.07	0.02
Growth	KGI5	KH4X	KH6V	KH67
2017 Q1 Q2 Q3 Q4	4.6 4.2	7.4 4.0	3.8 1.5 2.2	2.6 3.6 5.4 3.5
Q3 Q4	4.1 4.2	1.6 2.8	2.2 2.1	5.4 3.5
2018 Q1 Q2	4.5 3.7	-0.8 0.6	3.3 5.0	1.9 4.8
Q3 Q4	4.1 5.0	5.5 -1.4	5.5 6.7	1.9 4.8 1.5 2.4
2019 Q1 Q2	4.2 4.9	1.9	7.3 5.0	4.1 1.1
Q3	4.3	2.9 0.2	4.2	2.4
Contributions to growth				
2017 Q1	ZZ79 2.22 2.03	ZZ7A 1.59	ZZ7B 0.67	ZZ7C 0.31
Q2 Q3 Q4	2.03 2.00 2.06	0.85 0.34 0.62	0.27 0.39 0.38	0.44 0.65 0.44
2018 Q1	2.19	-0.17	0.59	0.23 0.60
Q2 Q3	1.84 2.01 2.39	0.12 1.14 –0.31	0.88 0.97 1.17	0.18
Q4 2019 Q1	2.06	0.41	1.17 1.29	0.29
2019 Q1 Q2 Q3	2.41 2.09	0.61 0.03	0.90 0.75	0.14 0.30

<sup>1</sup> Estimates are accurate to 1 decimal place and contributions are available

from 1997. Income data are available from 1948 annually and 1955 quarterly in table D.

2 This table does not include the contribution from the statistical discrepancy and components may not sum to the percentage change in average GDP. Current price data for this component are available in table D

<sup>3</sup> Includes the operating surplus of financial corporations, private non-financial corporations and public corporations

<sup>4</sup> Includes mixed income and the operating surplus of the non-corporate sector

## Annex D - Implied GDP deflator growths- Expenditure components of GDP<sup>1</sup> Seasonally adjusted data

Reference year 2016

	Final	consumption expendi	ture				
	House- holds	Non-prof- it instit- utions <sup>2</sup>	General govern- ment	Gross capital formation	Gross fixed capital formation	Total exports	less Total imports
Percentage change, lates	st year on previou	ıs year					
2016 2017 2018	ZZ93 1.5 1.4 2.5	ZZ94 0.4 1.1 1.0	ZZ95 1.1 1.1 1.8	ZZ96 4.6 6.3 0.4	ZZ97 2.2 2.2 1.8	ZZ98 4.2 4.5 3.0	ZZ99 3.2 5.4 3.2
Percentage change, lates	st quarter on prev	vious quarter					
2017 Q1 Q2 Q3 Q4	ZZ8N 1.0 0.2 -0.1 0.9	ZZ8O -0.3 0.6 0.7	ZZ8P 0.6 -0.7 0.6 0.8	ZZ8Q 0.9 -0.9 0.9 0.6	ZZ8R 0.7 0.1 1.0 -0.2	ZZ8S -0.1 0.4 -0.2 1.5	ZZ8T 2.1 -0.6 0.3 1.0
2018 Q1 Q2 Q3 Q4	1.1 0.5 0.6 0.3	-0.5 1.3 - -	0.8 0.1 0.5	-1.5 1.5 1.4 -1.9	0.3 1.3 0.2 0.3	-0.1 1.9 0.2 1.6	2.7 0.6 0.4
2019 Q1 Q2 Q3	0.2 0.4 0.3	0.3 1.5 -	0.7 1.1 1.2	-1.2 5.1 0.9	1.6 0.1 0.7	-0.8 0.7 0.4	-2.7 2.0 1.4
Percentage change, lates	st quarter on corr	esponding quarter of	of previous year				
2017 Q1 Q2 Q3 Q4	ZZ8U 1.5 1.3 0.9 2.0	ZZ8V 1.2 0.9 1.4 1.0	ZZ8W 1.9 0.5 0.7 1.2	ZZ8X 9.7 6.0 8.1 1.6	ZZ8Y 2.9 2.1 2.3 1.7	ZZ8Z 8.5 6.2 2.1 1.6	ZZ92 9.6 6.6 3.1 2.7
2018 Q1 Q2 Q3 Q4	2.1 2.5 3.1 2.5	0.9 1.5 0.8 0.8	1.4 2.2 2.1 1.3	-0.9 1.4 1.9 -0.6	1.2 2.4 1.5 2.0	1.6 3.2 3.5 3.6	0.6 4.0 4.4 3.7
2019 Q1 Q2 Q3	1.5 1.4 1.2	1.5 1.7 1.8	1.3 2.3 3.1	-0.3 3.3 2.9	3.4 2.2 2.7	2.8 1.6 1.9	0.9 0.2 1.1

Estimates accurate to 1 decimal place and are available from 1997. Current price and chained volume measure data are available from 1948 annually and 1955 quarterly in tables C1 and C2 respectively.
 Non-profit institutions serving households