

Statistical bulletin

# Economic activity and social change in the UK, real-time indicators: 15 September 2022

Early experimental data and analysis on economic activity and social change in the UK. These real-time indicators are created using rapid response surveys, novel data sources and experimental methods.

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## Correction

### 15 September 2022 15:00

On 15 September 2022 an error was detected in first paragraph of section 4. Business and workforce. The number of total online job advertisements in the "legal" category fell by 8% from the previous week, as opposed to 11% which was originally quoted in the bulletin. This error has now been corrected and no other data was affected.

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# 1 . Main points

- Consumer behaviour indicators showed decreased activity in the latest week, with falls in UK credit and debit purchases (by 2 percentage points) and UK seated diners (by 16 percentage points); meanwhile, “workplace visits” increased by 14% (Bank of England CHAPS data, OpenTable, Google Mobility). [Section 3](#).
- In the week ending 4 September 2022, estimated quantity of automotive fuel demand per average transaction was 90% of the equivalent week of 2021; over the last month estimated quantity of automotive fuel demand per transaction has gradually increased, coinciding with the fall in average fuel prices (compilation of sources including aggregated anonymised card spending data, Department for Business, Energy and Industrial Strategy, Office for National Statistics calculations). [Section 3](#).
- The latest business and workforce metrics show a varied picture, with a very slight fall in total online job adverts and decreases in 13 of the 28 categories; meanwhile, a net 2% of firms reported increasing turnover in August 2022 when compared with the previous month (Adzuna, HM Revenue and Customs Value Added Tax returns). [Section 4](#).
- A net 42% of trading businesses reported an increase in the prices of goods or services bought in August 2022 compared with July 2022; in comparison, a net 18% of businesses reported an increase in the prices of goods or services sold over the same period (initial results from Wave 65 of the [Business Insights and Conditions Survey](#) (BICS)). [Section 4](#).
- Transport indicators showed a mixed picture this week, with cargo and tanker ship visits increasing by 5%, daily UK flights falling by 2% and road traffic levels broadly unchanged from the previous week (exactEarth, EUROCONTROL, Department for Transport). [Section 5](#).
- The System Average Price (SAP) of gas fell by 31% in the week to 11 September 2022 following a new peak level seen two weeks ago; it is now 106% higher than the equivalent level seen on 12 September 2021 (National Grid).

Results presented in this bulletin are experimental and may be subject to revision. Data sources used to compile these indicators are regularly reviewed to ensure representativity and relevance, which may mean indicators change at short notice.

## 2 . Latest indicators at a glance

### Notes:

1. The breaks in the shipping timelines are because of method changes and technical issues.
2. Revolut adjustments to user count are at an aggregate level and as such, age bands may not adjust evenly.
3. Users should note that card spending over time is pushed upwards by the impacts of both inflation on value of transactions, and cash-to-card conversion.
4. Users should note that the week-on-week and year-on-year changes in automotive fuel price and demand indicators are the point differences of the indexed numbers, so may not match the percentage levels provided in the commentary.

### 3 . Consumer behaviour

UK seated diners fell by 16 percentage points in the week to 11 September 2022 but were 117% of the level in the equivalent week of 2019. Seated diner levels in London decreased by 4 percentage points and were 15 percentage points lower than the equivalent week of 2019.

Pret A Manger transactions increased in most locations in the week to 8 September 2022. The largest increases were seen in the London city worker and Manchester stores, which both saw an increase of 19 percentage points in the latest week. The only two regions to see a week-on-week fall in transactions were Yorkshire and Scotland, which fell by 8 and 6 percentage points, respectively. All three transport categories - London stations, London airports and regional stations - saw transactions increase by 7 percentage points in the latest week. Our [accompanying dataset](#): Transactions at Pret A Manger is available.

Google Mobility data showed that in the week to 9 September 2022, "park" visits decreased by 25%, while visits to "retail and recreation" fell by 6%. Elsewhere, "workplaces" visits increased by 14% and were 79% of their pre-coronavirus (COVID-19) levels. Our [accompanying dataset](#): Visits to location types using Google Mobility is available.

Please note that this indicator will no longer be published from October 2022, or soon thereafter. Further information is available on the [Google Community Mobility Reports](#) website.

Users should note that none of these data are seasonally adjusted, and the previous week coincided with the August bank holiday on 31 August 2022.

#### Automotive fuel insights

We analyse here the behavioural impacts of cost-of-living pressures on consumer demand for automotive fuel. Card spending data, in combination with Department for Business, Energy and Industrial Strategy (BEIS) total average road fuel sales data, provide a quantitative and behavioural dimension.

Automotive fuel insights include these indicators:

- estimated quantity of automotive fuel demand per average transaction is an experimental indicator used to isolate real demand after adjusting for growth in fuel prices; this indicator captures how consumer demand for fuel changes in response to rising fuel prices per visit at pumps over time but does not consider changes in the frequency of purchases
- average UK retail pump prices for petrol and diesel is an indicator compiled from six companies (four oil companies and two supermarkets) (BEIS)
- average road fuel sales are included in this bulletin to provide a UK representative overview of automotive fuel trends (BEIS)

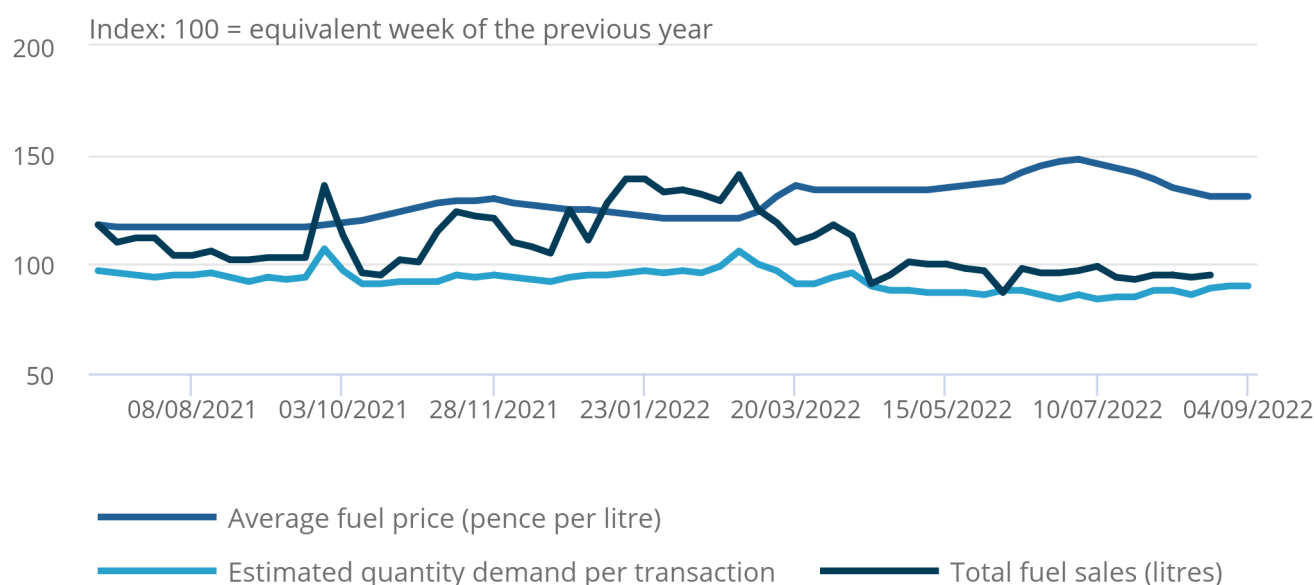
This analysis presents year-on-year growth to reduce the impacts of seasonality in card spending data. As [experimental statistics](#), these data are subject to revisions as our methodology and systems are refined. The data are not seasonally adjusted. More information is provided in our accompanying [methodology article: Behavioural impact of rising automotive fuel prices on UK consumers](#).

**Figure 1: In the week to 4 September 2022 estimated demand for fuel per transaction was broadly unchanged from the previous week, at 90% of the equivalent week of 2021**

Automotive fuel and experimental demand indicators, UK, index: 100 = equivalent week of the previous year, 4 July 2021 to 4 September 2022, non-seasonally adjusted

Figure 1: In the week to 4 September 2022 estimated demand for fuel per transaction was broadly unchanged from the previous week, at 90% of the equivalent week of 2021

Automotive fuel and experimental demand indicators, UK, index: 100 = equivalent week of the previous year, 4 July 2021 to 4 September 2022, non-seasonally adjusted



Source: Aggregated anonymised card spending data; Office for National Statistics calculations; Department for Business, Energy and Industrial Strategy – Road fuel price statistics; Experimental statistics on average road fuel sales and stock levels

#### Notes:

1. The year-on-year metric for average road fuel sales may be subject to coronavirus (COVID-19) impacts, which may distort automotive consumer trends.
2. The total average road fuel sales series (BEIS) is a combination of total diesel and petrol sales and is the average road fuel sales per filling station sampled.
3. Total average road fuel sales (BEIS) are published monthly, latest data periods may not cover data periods of other sources.

Over the last month estimated quantity of automotive fuel demand per transaction has gradually increased, coinciding with the fall in average fuel prices. In the week to 4 September 2022, average fuel prices were at 131% of the level seen in the equivalent week of 2021, broadly unchanged from the previous week. Our [accompanying dataset](#): Automotive fuel spending is available.

## Revolut debit card transactions: daily card spending by sector

Revolut is a financial technology company with over five million users within the UK financial payment ecosystem. Revolut data are presented on a per-account basis to account for Revolut's high user-growth over time, so that comparisons can be made on a like-for-like basis over a longer data time series. Revolut customers tend to be younger and more metropolitan than the average UK consumer, so spending may not be representative of the overall UK macroeconomic picture.

"Betting" expenditure can be erratic and is omitted from the data as its inclusion would lead to volatility in the spending category "entertainment" that affects user interpretation.

More information on Revolut data is provided in the accompanying [methodology article](#): Using Revolut cardholder data to derive real-time indicators of consumer spending.

Sectoral card spending shows consumer value spending over time across spending categories, which may provide insights into consumer behaviour in response to changing current events, preferences, governmental policy and other factors. These series are comprised of aggregated and mutually exclusive Merchant Category Codes, which are business attributes that classify businesses dependent upon their primary business category:

- "retail spending" includes clothing, department, mixed retail, services and household stores
- "food and drink" includes supermarkets, convenience and other food providers
- "entertainment" includes membership clubs, cinemas, ticketed events, sports, galleries and tourist attractions
- "pubs, restaurants, and fast food" includes pubs, nightclubs, restaurants and fast food
- "travel" includes airlines, hotels and motoring
- "automotive fuel" includes service stations and automated fuel dispensers

### Figure 2: Card spending on “automotive fuel” fell by 29 percentage points in the week to 11 September 2022

**Total spend by sectoral group, seven-day average, week ending 1 January 2020 to 11 September 2022, UK, non-seasonally adjusted, nominal prices**

#### Notes:

1. Percentage point differences are derived before rounding.

#### Download the data

[.xlsx](#)

There were falls in all sectors in the week to 11 September 2022, the largest of which was in "automotive fuel" spending, which decreased by 29 percentage points. However, "automotive fuel" spending remains 27 percentage points higher than it was in the equivalent week of 2021, though users should note that card spending over time is pushed upwards by the impacts of both inflation on value of transactions, and cash-to-card conversion.

In the latest week, "entertainment" and "retail" spending fell by 14 and 13 percentage points, respectively.

Total debit card spending was down by 9 percentage points in the week to 11 September 2022. Over this period, debit card spending in the 35 to 54 years age category fell by 17 percentage points. Spending for those aged 18 to 34 years decreased by 6 percentage points while spending increased by 7 percentage points for those aged over 55 years.

## UK spending on debit and credit cards: daily CHAPS-based indicator

These data series are experimental real-time indicators for estimating UK spending on credit and debit cards. They track the daily CHAPS payments made by credit and debit card payment processors to around 100 major UK retail corporates. These payments are the proceeds of recent credit and debit card transactions made by customers at their stores, both via physical and via online platforms. More information on the indicator is provided in the accompanying [methodology article](#): Guide to the Bank of England's UK spending on credit and debit cards experimental data series.

Companies are allocated to one of four categories based on their primary business:



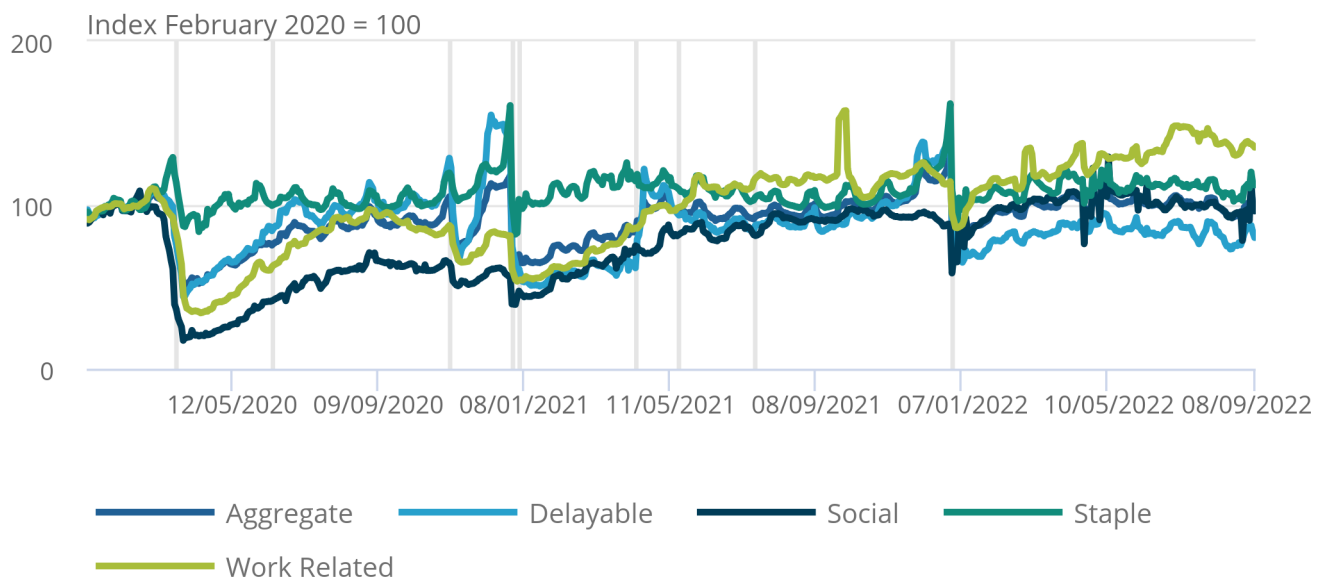
- "staples" refers to companies that sell essential goods that households need to purchase, such as food and utilities
- "work-related" refers to companies providing public transport or selling petrol
- "delayable" refers to companies selling goods whose purchase could be delayed, such as clothing or furnishings
- "social" refers to spending on travel and eating out

**Figure 3: The aggregate CHAPS-based indicator of credit and debit card purchases decreased by 2 percentage points in the week to 8 September 2022 to 98% of its February 2020 average**

A backward looking seven-day rolling average, 13 January 2020 to 8 September 2022, non-seasonally adjusted, nominal prices

Figure 3: The aggregate CHAPS-based indicator of credit and debit card purchases decreased by 2 percentage points in the week to 8 September 2022 to 98% of its February 2020 average

A backward looking seven-day rolling average, 13 January 2020 to 8 September 2022, non-seasonally adjusted, nominal prices



**Source:** Office for National Statistics and Bank of England calculations

**Notes:**

1. Users should note the daily payment data is the sum of card transactions processed up to the previous working day, so there is a slight time lag when compared with real-life events on the chart.
2. The vertical lines indicate notable events and coronavirus (COVID-19) restriction changes.
3. Percentage point difference is derived from current week and previous week index before rounding.
4. Users should note aggregate UK spending on debit and credit cards data for 30 August 2022 and 6 September 2022 are affected by the summer bank holiday on 29 August 2022, because of how the data are collected, and should be treated with caution.

Figure 3 shows changes in the value of CHAPS payments received by large UK corporates from their credit and debit card processors, "merchant acquirers".

The spending categories recorded the following changes in the latest week:

- "delayable" decreased by 4 percentage points
- "work-related" (which includes spending on road fuel) decreased by 3 percentage points
- "staple" remained broadly unchanged
- "social" was unchanged

"Work-related" and "staple" spending were above their February 2020 average levels at 135% and 112%, respectively. "Social" and "delayable" spending remained below their February 2020 average levels at 96% and 80%, respectively.

## UK spending on debit and credit cards: monthly CHAPS-based indicator

The monthly data time series is available in the [accompanying dataset](#): UK spending on credit and debit cards and includes methodological notes that users should bear in mind. The monthly CHAPS index is calculated by the Office for National Statistics (ONS), rather than being an additional series that is produced and validated by the Bank of England.

The monthly CHAPS-based indicator of aggregate credit and debit card spending was at 97% of its February 2020 average level in August 2022. This is 5 percentage points lower than in July 2022 (102%) but 2 percentage points higher than in August 2021 (95%). This monthly fall meant the series was below 100% of the February 2020 average level for the first time since February 2022, when it was 96%.

There were falls in all spending categories in the monthly CHAPS -based indicator from July to August 2022. The largest decrease was in "work-related" spending, which includes spending on road fuel, which fell by 9 percentage points and followed growth of 13 percentage points in the previous month. Elsewhere, "delayable" spending fell by 5 percentage points, while "social" and "staple" spending both fell by 4 percentage points.

## 4 . Business and workforce

The number of total online job advertisements has decreased in six of the last eight weeks, falling by 10% in the eight weeks from 15 July to 9 September 2022. It was broadly unchanged in the latest week, though, there were falls in 13 of the 28 categories, with the largest decrease in the "legal" category, which fell by 8%. The largest week-on-week increase was in the "scientific and QA" category, which rose by 11% when compared with the previous week.

The largest week-on-week regional growth in online job adverts was in Northern Ireland, with an increase of 3%. Meanwhile, the largest weekly fall was in the North East, which fell by 4%. Three of the 13 UK countries and English regions saw increases in online job adverts compared with the same day last week. Our [accompanying dataset](#): Online job advert estimates is available.

Voluntary dissolution applications increased by 9% from the previous week in the week to 9 September 2022, while company incorporations increased by 19% over the same period. Our [accompanying dataset](#): Company incorporations, voluntary dissolutions and compulsory dissolutions is available. Users should note that these week-on-week increases will be partially driven by increased activity following the August bank holiday in the previous period.

Potential redundancies in the week to 4 September 2022 were 53% of their pre-coronavirus (COVID-19) level, while the number of employers proposing redundancies are now 69% of their pre-coronavirus levels. Our [accompanying dataset](#): Advanced notification of potential redundancies is available.

## Value Added Tax flash estimates

Turnover diffusion indices are an aggregate measure used to track whether most firms are reporting an increase or decrease in turnover in their Value Added Tax (VAT) returns. They are calculated as the percentage of firms with increasing turnover minus the percentage with decreasing turnover.

The indices are constructed to lie between 1 and negative 1, so an index of 0.05 means that 5% more firms reported an increase in turnover compared with the previous month than those reporting a decrease in turnover. Conversely, an index of negative 0.05 means that 5% more firms reported a decrease in turnover compared with the previous month.

More information on the compilation and methodology of these estimates can be found in our [Economic activity and social change in the UK, real-time indicators methodology](#).

Table 1: A net 2% of firms reported increasing turnover in August 2022 when compared with the previous month  
Value Added Tax turnover diffusion indices, day seven estimates, UK, February to August 2022, seasonally adjusted

	Agriculture, Total forestry and fishing		Production	Construction	Services
<b>Feb-22</b>	0.05	0.04	0.07	0.00	0.09
<b>Mar-22</b>	0.03	0.03	-0.06	0.00	0.01
<b>Apr-22</b>	0.00	0.00	0.05	0.01	0.00
<b>May-22</b>	0.04	0.04	0.03	-0.01	0.05
<b>Jun-22</b>	-0.03	0.05	-0.11	-0.08	-0.09
<b>Jul-22</b>	0.04	0.04	0.05	0.10	0.06
<b>Aug-22</b>	0.02	0.05	0.05	0.01	0.00

Source: HM Revenue and Customs – Value Added Tax (VAT) returns

### Notes

1. The contributions of these industries to monthly gross domestic product (GDP) are; agriculture 0.7% production 13.7% construction 6.4% and services 79.2%.

A net 1% of firms in the construction industry reported increasing turnover in August 2022. This figure is notably higher than in August 2021 when a net 6% of firms reported decreasing turnover.

Data for all available industries, including seasonally adjusted month-on-month estimates and non-seasonally adjusted month-on-month and month-on-year estimates, for turnover and expenditure, are available in our [accompanying dataset](#): VAT flash estimates.

## Business impact and insights

Initial results from Wave 65 of the [Business Insights and Conditions Survey](#) (BICS) cover the reference period 1 August to 31 August 2022, with a response rate of 21.7% (8,227 responses). The survey was live for the period 5 September to 13 September 2022.

Table 2: A net 42% of trading businesses reported an increase in the prices of goods or services bought in August 2022, while a net 18% reported an increase in the prices of goods or services sold  
Prices of goods or services bought or sold, businesses currently trading, weighted by count, UK, 1 August to 30 August 2022

	Prices increased	Prices stayed the same	Prices decreased	Not sure	Not applicable
<b>Bought</b>	43.3%	34.6%	1.1%	8.0%	13.0%
<b>Sold</b>	19.5%	59.8%	1.8%	5.6%	13.3%

Source: Office for National Statistics – Business Insights and Conditions Survey

### Notes

1. Initial weighted results, Wave 65 of the Office for National Statistics' (ONS') Business Insights and Conditions Survey (BICS).
2. Table may not sum to 100% because of rounding and percentages less than 1% being removed for disclosure purposes.
3. Net balance is given by subtracting the percentage of businesses reporting prices have increased, from the percentage of businesses who reported prices have decreased.

## 5 . Transport

The seasonally adjusted average count of traffic camera activity for cars in London was unchanged from the previous week at 112% of the level recorded before the national lockdown in March 2020. Pedestrian and cyclist activity was down 3% over the same period and is 116% of its pre-lockdown level. Our [accompanying dataset](#): Traffic camera activity is available.

Road traffic on Monday 12 August 2022 was 99% of the level seen on the Monday of the first week in February 2020. This was broadly unchanged from the previous week. Car traffic increased by 2 percentage points when compared with the previous week, while over the same period light commercial and heavy goods vehicle traffic was broadly unchanged.

The average number of UK flights in the week to 11 September 2022 fell by 2% and was 86% of the level seen in 2019. Our [accompanying dataset](#): Daily UK flights is available.

In the week to 11 September 2022, total ship visits, and cargo and tanker visits increased by 2% and 5%, respectively, compared with the previous week. Our [accompanying dataset](#): Weekly shipping indicators is available.

## 6 . Data

### [Advanced notification of potential redundancies](#)

Dataset | Released 15 September 2022

Weekly dataset showing the number of potential redundancies and employers proposing redundancies, submitted to Insolvency Service via HR1 forms.

### [Company incorporations, voluntary dissolutions and compulsory dissolutions](#)

Dataset | Released 15 September 2022

Weekly dataset showing the number of Companies House incorporations and voluntary dissolutions accepted, and companies placed into compulsory dissolution.

### [Revolut spending on debit cards](#)

Dataset | Released 15 September 2022

Insight into the spending patterns of UK consumers from financial technology company Revolut.

### [System Average Price \(SAP\) of gas](#)

Dataset | Released 15 September 2022

Daily and rolling average System Average Price (SAP) of gas traded in the UK.

### [Transactions at Pret A Manger](#)

Dataset | Released 15 September 2022

Weekly transactional data from approximately 400 Pret A Manger stores around the UK.

### [UK spending on credit and debit cards](#)

Dataset | Released 15 September 2022

Experimental indicator for monitoring UK retail purchases derived from the Bank of England's CHAPS data.

Users should note that this section lists a selection of the data available with this publication. For the full list of available datasets please see the [accompanying dataset page](#).

## 7 . Glossary

### Real-time indicator

A real-time indicator provides insights into economic activity using close-to-real-time big data, administrative data sources, rapid response surveys or Experimental Statistics, which represent useful economic and social concepts.

### Diffusion index

The diffusion index tracks the growth in turnover and expenditure of firms. It is constructed to lie between negative 1 and 1. For example, if 65% of firms have increasing turnover, 30% have decreasing turnover and 5% turnover remains unchanged, then the diffusion index is 0.35.

## 8 . Measuring the data

Information on the methodology used to produce the indicators in this bulletin is available in the [Economic activity and social change in the UK, real-time indicators methodology](#).

## 9 . Strengths and limitations

These statistics have been produced to provide timely indicators of the effect of developing world events on the UK economy and society, using close-to-real-time big data, administrative data sources, rapid response surveys or Experimental Statistics.

The data presented in this bulletin are reviewed and refreshed on a regular basis. Indicators are swapped in and out of the publication based on their suitability and availability.

### UK coronavirus (COVID-19) restrictions

A full overview of coronavirus restrictions for each of the four UK constituent countries can be found:

- [coronavirus in England](#)
- [coronavirus in Scotland](#)
- [coronavirus in Wales](#)
- [coronavirus in Northern Ireland](#)

These restrictions should be considered when interpreting the data featured throughout this bulletin.

### Seasonality

Seasonal fluctuations are likely to be present in many of these indicators so caution must be applied when interpreting changes in series that are not seasonally adjusted.

## 10 . Related links

#### [Coronavirus \(COVID-19\) latest data and analysis](#)

Webpage | Updated as and when data become available

Latest data on the coronavirus in the UK and its effect on the economy and society.

#### [Public opinions and social trends, Great Britain](#)

Bulletin | Released fortnightly

Social insights on daily life and events, including the cost of living, location of work, health and well-being from the Opinions and Lifestyle Survey (OPN).

#### [Deaths registered weekly in England and Wales, provisional](#)

Bulletin | Released weekly

Provisional counts of the number of deaths registered in England and Wales, including deaths involving coronavirus, in the latest weeks for which data are available.

#### [Coronavirus \(COVID-19\) Infection Survey, UK](#)

Bulletin | Released weekly

Percentage of people testing positive for coronavirus (COVID-19) in private residential households in England, Wales, Northern Ireland and Scotland, including regional and age breakdowns.

## 11 . Cite this statistical bulletin

Office for National Statistics (ONS), published 15 September 2022, ONS website, statistical bulletin, [Economic activity and social change in the UK, real-time indicators: 15 September 2022](#).