

Article

Comparison of furloughed jobs data, UK: March 2020 to June 2021

An overview of the similarities and differences between the fortnightly Business Insights and Conditions Survey (BICS) furlough estimates and HMRC's Coronavirus Job Retention Scheme statistics, over the period 23 March 2020 to 30 June 2021.

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1 . Main points

- Business Insights and Conditions Survey (BICS) estimates are based on a survey and provide an early indication of trends in furlough numbers, whereas the Coronavirus Job Retention Scheme (CJRS) estimates are published a little later and are based on administrative data.
- BICS "currently trading" estimates closely track past CJRS figures; however we recommend using the BICS "not permanently stopped trading" estimate as an early indicator of trends going forward.
- BICS "not permanently stopped trading" businesses estimate of the proportion of the workforce on furlough show the same trend as CJRS figures (BICS industries only) but have been notably higher at times of substantial COVID-19-related restrictions.
- BICS estimates based on "currently trading" businesses only are on average 0.5 percentage points lower than the CJRS figures and have been more aligned with CJRS estimates during times of substantial restrictions.
- For eight industries, the BICS not permanently stopped trading estimates and CJRS figures are closely aligned, and likely have similar coverage across each industry.
- BICS estimates on proportions of the workforce on furlough are lower than CJRS figures (all industries) for small businesses (fewer than 10 employees), but higher for large businesses (250 or more employees).

2 . Overview

The purpose of this article is to provide readers with the information needed to interpret the two sources of furlough data: The Office for National Statistics' (ONS) Business Insights and Conditions Survey (BICS), and HM Revenue and Customs' (HMRC) Coronavirus Job Retention Scheme (CJRS). This can then better inform further analysis based on these data sources. In providing this interpretation we consider the similarity of estimates, specifics of the data sources, and possible reasons for any difference between the BICS estimates and CJRS statistics from March 2020 to June 2021.

CJRS was announced by the UK Government on 20 March 2020 and is planned to end on 30 September 2021. The scheme enables employers to claim financial support to cope with the impact of coronavirus (COVID-19) on their business. The extent of furloughing over the last 18 months has had a profound impact on our understanding of the labour market in the UK. BICS has provided a timelier insight into how many employees have been put on furlough at any point in time.

As part of our regular and ongoing quality assessment of our methods we have recently improved methods to the weighting of smaller businesses within the BICS sample where we use employment and turnover to do so (first published [26 August 2021](#)). BICS furlough estimates may differ from previous publications comparing furlough estimates.

3 . Comparison between the two sets of figures

The Business Insights and Conditions Survey (BICS) samples most industries, with notable exceptions being the public sector, finance and agriculture. In comparison, HM Revenue and Customs' (HMRC) Coronavirus Job Retention Scheme (CJRS) statistics are based on all industries. This is a fundamental difference between the two sets of headline figures, making them not directly comparable. However, CJRS headline figures can be adjusted to cover BICS industries only.

For weighted BICS "not permanently stopped trading" estimates only, provisional standard errors have been calculated to illustrate the precision of the survey estimates, as the survey is only sent to a sample of the UK business population. Standard errors have been used to calculate 95% confidence intervals which are displayed on Figure 1.

Further information on standard errors and confidence intervals is available in [Uncertainty and how to measure it for our surveys](#).

Figure 1: Comparison between CJRS statistics and BICS estimates on proportions of the workforce on furlough

Proportion of workforce on furlough, broken down and averaged by BICS wave, UK, 23 March 2020 to 8 August 2021

Notes:

1. BICS stands for Business Insights and Conditions Survey and CJRS stands for Coronavirus Job Retention Scheme.
2. Final unweighted results, Wave 2 to Wave 6, and final weighted results, Wave 7 to Wave 37, of BICS.
3. The dates used in the plot are for the middle of each BICS Wave. Further information on the BICS reference periods can be found in the [Business insights and impacts on the UK economy](#) datasets.

[Download the data](#)

The BICS not permanently stopped trading estimates and CJRS figures (BICS industries only) show a similar trend, although CJRS statistics only fall between the BICS not permanently stopped trading 95% confidence intervals for two survey waves. The improvements to the BICS weighting methodology has resulted in the BICS "businesses not permanently stopped trading" furlough estimates to be higher than CJRS figures. Previously they were slightly lower.

For the latest comparison in late June, the BICS estimate of the proportion of employees on furlough was 9.1% (provisional range of 8.4% to 9.7%), whilst the CJRS (BICS industries only) provisional proportion was 7.4%.

However, the alignment of the BICS not permanently stopped trading estimates and CJRS figures vary. The periods showing a greater difference coincide with periods of heightened coronavirus (COVID-19) restrictions when more businesses had paused trading.

For current point estimates from BICS and looking forward as COVID-19 regulations remain relaxed, it is recommended to use the "businesses not permanently stopped trading" estimates. This is because the number of responding businesses in industries previously highly affected by heightened COVID-19 restrictions has increased with the relaxation of restrictions.

It is recommended to use the BICS "currently trading" series when reviewing as a time series or looking backwards when there were heightened COVID-19 restrictions on businesses. However, please note that the BICS "currently trading" series represents a smaller range for the percentage of the workforce on furlough, as the estimate does not contain paused trading businesses, which typically have a higher proportion of their workforce on furlough.

These recommendations vary by industry, size band and flexible furlough, but more information is available in [Section 5](#).

We make these recommendations, as obtaining responses from paused traders, which increased during certain periods of the pandemic, was more difficult, particularly as business behaviours were adapting quickly during periods of changing restrictions making estimation more difficult. There is therefore more volatility and uncertainty for these traders.

For both BICS series, there is a notable decline in the trends in December 2020, which is not present in the CJRS figures. This is believed to reflect a period of significant short-term change (for example, staff returning to work to meet Christmas demand during a temporary relaxation in COVID-19 restrictions), which is more likely to have been picked up by BICS estimates than CJRS figures (See [Section 4](#) for methodological differences).

The scale of difference between both sets of BICS estimates and CJRS figures also differs depending on which period of the month CJRS are averaged over. There is more similarity at the start of the month (than averaged over the whole month). This is because for furlough claims for smaller businesses, HMRC does not collect information on the precise dates each job was furloughed, or when employees returned to work - dates for the claim as a whole are used. Therefore, when periods of furlough started or ended in the middle of a month, the HMRC statistics may overcount the number of jobs on furlough in the remainder of the month. This will affect the comparison when levels of furlough vary over a month, for example when they are increasing or decreasing rapidly.

4 . A comparison of how BICS estimates and CJRS statistics are produced

We consider the similarities and differences in furlough figures below to aid users in their interpretation of the statistics.

Business Insights and Conditions Survey (BICS) estimates

BICS estimates of furloughed employees are experimental and are based on survey results from a sample of around 39,000 businesses with a response rate of around 25%.

A detailed description of the BICS weighting and imputation methodology is available in [Business Insights and Conditions Survey \(BICS\): preliminary weighted results](#).

Possible sources of limitation of the BICS estimates are explored below.

- BICS is a survey, it collects information from only a proportion of UK businesses.
- BICS does not cover all industries, and some staff will have been put on furlough in industries not surveyed by BICS (with a registered employment of approximately 3 million jobs).
- As BICS collects information from just a sample of businesses, proportions are then weighted (by employment) to provide estimates for all private sector businesses (in the selected industries); the response rate and responding business profile can influence estimates and BICS weighted estimates may be more sensitive to change but may also possibly under or over-state the proportion of the workforce on furlough.
- For large businesses (businesses with 250 or more employees), results are imputed if businesses do not respond to the survey, resulting in us not being able to calculate confidence intervals and possibly over-estimate results (see over- or under-estimation below).
- Businesses are asked for their experiences for the reference period, however, during periods of rapid change (such as recent reductions in the levels of furlough because of the easing of coronavirus (COVID-19) regulations) some businesses' responses might reflect their circumstances at the time of completion of the questionnaire rather than for the reference period; on average over 50% of responses are completed in the first 3 days the survey is live.

Coronavirus Job Retention Scheme (CJRS) statistics

The CJRS figures are experimental statistics from an administrative source for the whole population of employers that use the CJRS. These statistics provide more detailed breakdowns of the characteristics of the employers using the scheme and the employees that have been on furlough.

Possible sources of limitation of the CJRS figures are explored below.

- CJRS has a lag in receiving the data; figures for June 2021 (the latest period covered) are provisional, as claims could be amended and submitted until 28 July 2021, and it's estimated that the total number of employments on furlough will be approximately 3% (0.1 million) higher once all claims are submitted and revisions applied.
- When an employer makes a claim, the number of employments being claimed for affects the information supplied, which can produce over-estimates of the number and proportion on furlough at the end of the month during periods where levels of furlough are decreasing.
- Where possible, the CJRS data has been matched with other HM Revenue and Customs (HMRC) data to enable additional analysis, where a match between the CJRS claims and other HMRC data is not possible it is denoted as "unknown"; these unknowns within industry and size band breakdowns cannot be compared with BICS estimates and are therefore excluded from comparisons and make up on average 1% of HMRCs' CJRS figure on the number of employees put on furlough.

These similarities and differences between both sets of figures are summarised in the points below.

Reference period

- BICS refers to "in the last two weeks" but businesses have two weeks to respond and there is no specification of whether this should be an average or a point in time.
- CJRS is a daily time series but is calculated as an average over each BICS two-weeks reference period for this article.

Representativeness

- Prior to Wave 7, BICS results were unweighted but apportioned by responding business employment size. From Wave 7 onwards results were weighted by employment for only industries sampled in BICS.
- CJRS statistics cover all UK employers for employments that are eligible to apply for it, however analysis can be done within industry sub-sectors.

Coverage of industries

- BICS covers all industries except agriculture, forestry and fishing; energy production; finance and insurance; public administration and defence; trade union, religious, political and repair (in the other services sector); domestic employers; unknown and other.
- CJRS covers all industries.

Source

- BICS are experimental estimates from a survey (around 39,000 businesses sampled, with a response rate of around 25%).
- CJRS use administrative data (census of those accessing scheme), PAYE Real Time Information data and industry codes from the Inter-Departmental Business Register (IDBR).

Timeliness

- BICS is published 2 weeks after the reference period.
- CJRS is published around four weeks after reference period, the previous month is provisional, and revisions for this period often increase the figure by approximately 3% because of late and amended claims.

Accuracy/precision

- BICS publish finalised survey statistics with standard errors/confidence intervals, and the sample size of BICS has been increased twice; once in Wave 7 to approximately 17,000 and again in Wave 17 to approximately 39,000.
- CJRS publish experimental statistics (still in development) and are subject to revisions, and the completeness of the data available to produce these statistics has gradually improved over time.

Over- or under-estimation

- For large businesses (more than 250 employees), BICS responses are imputed if they do not respond to the survey; based on the previous wave's response multiplied by an imputation factor for each stratum (around 7%) or imputed based on the currently responding businesses within each stratum (around 55% to 60%) which could lead to overestimation in periods of declining numbers, and underestimation with rising numbers.
- For CJRS, where an employer makes a claim for fewer than 16 jobs (fewer than 100 before 27 May 2021), HMRC collects the start and end date of the claim but does not collect the furlough start and end dates for each job in the claim.
- For these jobs, the claim period is used to estimate when the job was on furlough, as such the job would appear to be on furlough for the full month irrelevant of the time period within the month the job was on furlough, so during periods when furlough is decreasing, this leads to an over-estimate in the number of jobs on furlough at the end of the month.

Estimation

- BICS industries operating at lower capacity, or with more temporarily closed or paused trading are more volatile making them less likely to be representative of all businesses within industries included in BICS.
- CJRS uses provisional figures (for example for June 2021) predicted to increase by 3%.

Sector breakdown

- BICS industrial sector information is based on the Inter-Departmental Business Register (IDBR) produced by the Office for National Statistics (ONS).
- CJRS industrial sector information is based on the IDBR, and where PAYE schemes are absent from the IDBR, HMRC used sector information from Companies House, linking on employer name where possible, and where CJRS have been unable to determine Standard Industrial Classification codes, the sector is reported as "unknown".

Source of employment estimates

- BICS uses information from the IDBR to determine employments within BICS industries to weight the furlough estimates, however, to calculate the number on furlough leave, BICS applies the proportion of workforce on furlough to the eligible employment figures (BICS industries only) published alongside HMRC's CJRS figures.
- The CJRS eligible population, used to calculate take-up figures and the breakdown by employer size, is based on a list of employees (who meet the scheme criteria set out within the published guidance, for example employed before specified dates), and because of the scheme extensions, there are three eligible employments.
- There is a different distribution of employees between employer size bands across PAYE RTI (Real Time Information) and the IDBR, for example, whilst in PAYE RTI about 55% of employees are in PAYE schemes with more than 250 employments; whereas the BICS furlough estimates, which are based on the employment figures on the IDBR, have in the region of 40% to 45% of employments in the same size band.

Further information on methodology for HMRC CJRS figures can be found in the [Measuring the data section](#) of HMRC's 29 July 2021 CJRS statistic's release, and BICS estimates can be found in the [Business Insights and Conditions Survey \(BICS\) QMI](#).

5 . Comparisons between BICS estimates and CJRS statistics

Sector comparison

Figure 2: Sector comparison of the CJRS statistics and BICS estimates of proportions of the workforce furloughed

Furlough estimates, broken down by trading status and sector, UK, 23 March 2020 to 8 August 2021

Notes:

1. BICS stands for Business Insights and Conditions Survey and CJRS stands for Coronavirus Job Retention Scheme.
2. Final unweighted results, Wave 2 to Wave 6, and final weighted results, Wave 7 to Wave 37, of BICS.
3. For disclosure purposes, BICS real estate and other services industry estimates were not published for some earlier BICS waves, and mining and quarrying estimates are not shown.

[Download the data](#)

For eight industries (including manufacturing and accommodation and food service activities), the Business Insights and Conditions Survey (BICS) not permanently stopped trading estimates and Coronavirus Job Retention Scheme (CJRS) figures are closely aligned, and likely have similar coverage across each industry. For the other six industries (including other service activities and wholesale and retail; repair of motor vehicles) several of BICS “not permanently stopped trading” estimates and CJRS figures do not align as closely.

The low number of responses in some industries (such as other service activities, real estate activities and information and communication) in BICS can mean the industry might not be fully captured in the BICS results. The large confidence intervals on the figures above, highlight when this is the case.

When using the BICS estimates as a time series, it is best to use the currently trading series for the six industries that do not align well.

However, for the other eight industries, including the accommodation and food service activities, professional, scientific and technical activities, arts, entertainment and recreation industries, the BICS headline series (“not permanently stopped trading” series) is best to use as a comparison between HM Revenue and Customs (HMRC) CJRS figures. This is likely because of higher numbers of paused traders in these industries responding to the survey, meaning certain strata in these industries are not underrepresented, leading to a more accurate headline figure.

Size band comparison

Figure 3: BICS not permanently stopped trading and CJRS figures are closely matched in small businesses, BICS currently trading estimates are more aligned in larger businesses

Furlough estimates, broken down by size band and trading status, UK, 1 June 2020 to 8 August 2021

Notes:

1. BICS stands for Business Insights and Conditions Survey and CJRS stands for Coronavirus Job Retention Scheme.
2. Final weighted results, Wave 7 to Wave 37, of BICS.

[Download the data](#)

The closeness of the match between the BICS all businesses or currently trading businesses and CJRS figures varies by size band of the businesses.

For comparisons of size band data between the two sets of BICS estimates, it is recommended to use BICS not permanently stopped trading estimates for smaller businesses (0 to 49 employees), but BICS "currently trading" estimates for medium to larger businesses (more than 49 employees).

The main difference in the size band comparisons is the difference between estimates for 250 employees and over, for which confidence intervals cannot be calculated for. This is because, in BICS all non-responding businesses with more than 250 employees are imputed. This difference is driven by the limitations of imputation, the BICS design, and the low response rate (approximately 25%) of these large businesses. For large businesses that do not respond to the survey, their response is imputed based on either the previous waves response or responses of other businesses in the strata. Imputation may therefore lead to over-estimation in the proportion of businesses workforce on furlough in periods of declining furlough numbers.

Flexible furlough comparison

On 1 July 2020, the option to flexibly furlough employees was introduced for employers in addition to full furlough, where employers can put employees on furlough for part of their usual working hours, with the employee at work for the remainder.

A breakdown of flexible furlough was only introduced to BICS in October 2020.

Figure 4: BICS currently trading estimates are lower than CJRS all industry figures for full furlough, but higher for flexible furlough

Full and flexible furlough estimates, broken down by Wave, UK, 5 October 2020 to 8 August 2021

Notes:

1. BICS stands for Business Insights and Conditions Survey and CJRS stands for Coronavirus Job Retention Scheme.
2. Final weighted results, Wave 16 to Wave 37, of BICS.
3. For the purpose of comparison with BICS, the CJRS estimate series include all industries and are not limited to BICS only industries, as a similar industry comparison is not available.

[Download the data](#)

The broad trends between the BICS estimates and CJRS figures are similar, particularly when using the BICS “currently trading” series, but the relationship is not as strong as for the headline figures (“not permanently stopped trading”).

One reason that may drive this divergence in flexible furlough options, is to reduce complexity within BICS for respondents, the proportion of the workforce on full furlough is asked as a separate question. However, this leads to the estimate being a percentage of a percentage which may reduce the accuracy.

Secondly, the CJRS all industries figures include multiple industries that the BICS estimate do not cover as an industry by flexible furlough breakdown as it is not available.

6 . Comparison of furloughed jobs data

[Business insights and impacts on the UK economy](#)

Dataset | Released 26 August 2021

Weighted estimates from the voluntary fortnightly business survey (BICS) about financial performance, workforce, prices, trade, and business resilience.

[CJRS Statistics 29 July 2021 - data tables](#)

Dataset | Released 29 July 2021

Time series and statistics as of 30 June 2021 on the Coronavirus Job Retention Scheme, with analysis by scheme size, sector, geography, age, gender and flexible furlough.

7 . Glossary

Coronavirus

Coronaviruses are a family of viruses that cause disease in people and animals. They can cause the common cold or more severe diseases, such as COVID-19.

COVID-19

COVID-19 is the name used to refer to the disease caused by the SARS CoV-2 virus, which is a type of coronavirus. The Office for National Statistics (ONS) takes COVID-19 to mean presence of SARS-CoV-2 with or without symptoms.

Furlough

Furlough is a temporary absence from work allowing workers to keep their job while the coronavirus (COVID-19) pandemic continues.

Reporting unit

The business unit to which the Business Insights and Conditions Survey (BICS) questionnaires are sent is called the reporting unit. The response from the reporting unit can cover the enterprise as a whole or parts of the enterprise identified by lists of local units.

8 . Data sources and quality

The Business Insights and Conditions Survey (BICS) is voluntary and may only reflect the characteristics of those that responded, the results are experimental.

Further information on the BICS reference periods can be found in the [Business insights and impacts on the UK economy](#) datasets.

Weighting

A detailed description of the weighting methodology and its differences to unweighted estimates is available in [Business Insights and Conditions Survey \(BICS\): preliminary weighted results](#).

HMRC data

The HM Revenue and Customs (HMRC) Coronavirus Job Retention Scheme (CJRS) data is produced using data from both the HMRC's CJRS claims and HMRC's Pay as You Earn (PAYE) Real Time Information (RTI) system. It covers the whole population rather than a sample of people or employers.

For these statistics, "employments" are defined according to the CJRS criteria. For an employer to qualify for the scheme they need to have created a PAYE scheme by 19 March 2020. The rules for an employment to qualify to be covered by the scheme are set out in the guidance.

The dataset covers all CJRS claims made by employers from the start of the scheme up to 14 July 2021 for support for the wages of furloughed staff up to 30 June 2021. However, the data for June is incomplete as claims relating to June may still be filed; thus, the estimates for June 2021 are preliminary.

The CJRS statistic's proportion of jobs on furlough is calculated by an average of the number of employments furloughed over the two-week BICS reference period, divided by the total eligible employments. Further information on the BICS reference periods can be found in the [Business insights and impacts on the UK economy](#) datasets.

Description of methods

Within the BICS, estimates of the proportion of the workforce furloughed, either flexibly or fully, are from businesses who responded they had "not permanently stopped trading" in each wave and includes those "currently trading" and those "temporarily closed or paused trading".

In comparison, HMRC has published 14 releases of the [Coronavirus Job Retention Scheme statistics](#) that provide daily estimates of the number and value of claims made to the CJRS up to 30 June 2021.

Support under the CJRS can be claimed by PAYE schemes, which HMRC consider to be broadly equivalent to employers for statistical purposes. "Employments" are defined according to the CJRS criteria. An important part of the CJRS criteria is that the furloughed employee must have been employed on specific dates (dependent on the scheme extensions and the businesses made a PAYE RTI submission to HMRC between specified dates, notifying a payment of earnings for that employee. This may differ when employees have been made redundant, or they stopped working and have subsequently been re-employed. When the CJRS was extended, the criteria were redefined at each stage.

9 . Future developments

Results presented in this article cover Waves 2 to 37 only, while the section on flexible furlough started later. In the future we hope to complete monitoring of the relationship between BICS furlough estimates and CJRS statistics after the scheme ends on 30 September 2021.

10 . Related links

[Business insights and impact on the UK economy](#)

Bulletin | Released 26 August 2021

The impact of the coronavirus (COVID-19) pandemic and other events on UK businesses and the economy. Based on responses from the voluntary fortnightly business survey (BICS) about financial performance, workforce, prices, trade, and business resilience.

[Understanding the business impacts of local and national restrictions, UK: May 2021](#)

Article | Released 25 May 2021

Experimental estimates from the voluntary fortnightly Business Insights and Conditions Survey (BICS), for single site businesses only, on topics such as trading status, financial performance, workforce and business resilience. Geographical breakdowns include country, regional and local authority levels.

[Business Impact of Coronavirus \(COVID-19\) Survey: preliminary weighted results](#)

Article | Released 14 September 2020

Early estimates of weighted responses from the voluntary fortnightly business survey, focusing on businesses' responses on how turnover, workforce and trading status have been affected in two-week reference periods, from Wave 7 (1 to 14 June 2020) to Wave 12 (10 to 23 August 2020).

[Business Insights and Conditions Survey, analysis over time, UK: 24 August 2020 to 4 April 2021](#)

Article | Released 6 May 2021

These indicators and analysis are based on selected responses over time from the new voluntary fortnightly Business Insights and Conditions Survey (BICS), which captures businesses' responses on how their turnover, trade and business resilience have been affected in the two-week reference period. The data relate to the period 24 August 2020 to 4 April 2021 (Wave 13 to Wave 27).

[HMRC coronavirus \(COVID-19\) statistics](#)

Article and data | Released 29 July 2021

HMRC data about the Coronavirus Job Retention Scheme, the Self-Employment Income Support Scheme, the Eat Out to Help Out scheme, and the VAT payments deferral scheme.