Office for National Statistics

Article

Labour Force Survey quality update: May 2025

Assessment of Labour Force Survey data quality, including the impact of recent changes on the statistics, response levels and rates, and respondent characteristics.

Table of contents

1 . Main points

- The main interventions made to address quality concerns with the Labour Force Survey (LFS) have now fed through all five waves of the survey for the latest data period (January to March 2025).

- Response levels and rates have shown clear improvement because of these interventions, with Wave 1 response levels now very close to their pre-coronavirus (COVID-19) pandemic level, although response levels for Waves 2 to 5 are still below their pre-pandemic level.

- The composition of respondents according to different characteristics has also shown some improvement since late 2023; however representativeness is lower than before the pandemic and has not improved for all characteristics.

- Investigations suggest that the current weighting of the LFS remains the best approach, with relevant insights being fed into the development of weighting methods for the Transformed Labour Force Survey (TLFS).

- The coherence of LFS estimates with other data sources has also improved since late 2023, with estimates of the number of employees recently showing similar trends to HM Revenue and Customs (HMRC) Pay As You Earn Real Time Information (PAYE RTI) data.

- Caution is still advised when assessing change over time periods affected by operational changes and when analysing more detailed estimates, as these remain subject to greater volatility than headline estimates.

- Further increases to interviewer capacity are planned for Waves 2 to 5 and will further improve response levels and representativeness, while a full reweighting of the LFS and Annual Population Survey, which are currently being planned, will further improve the coherence of our estimates.

- TLFS remains the long-term solution for collecting labour market data, with work underway to implement a short longitudinal "core" labour market-focused survey; this will be complemented by a separate cross-sectional "plus" survey to provide wider socioeconomic, household, and local data.

2 . Background to Labour Force Survey quality

As set out in our previous articles, over the last 18 months, the Office for National Statistics (ONS) has made several changes to address quality concerns with the Labour Force Survey (LFS). The five-wave structure of the LFS means that some of these changes can take up to 15 months to fully feed through into survey estimates and 18 months to feed through into measures of quarterly change. This article is timed alongside our May release of labour market statistics. This is because it coincides with the first period of data to incorporate some of the larger changes made from January 2024. These changes are now fully reflected in levels estimates for January to March 2025.

This article sets out how the quality of the LFS has evolved recently, considering the impact on response levels and rates, the characteristics of respondents and the statistics. It will focus on the LFS for simplicity, but given the linked design of the two surveys, impacts on the LFS also affect the size and quality of the Annual Population Survey (APS).

The quality of LFS estimates can be considered through the framework of the European Statistical System dimensions of statistical quality. The nature of the quality concerns on the LFS means that we focus on three of the dimensions. These are:

- accuracy and reliability

- comparability and coherence

- accessibility and clarity

Accuracy and reliability

Accuracy refers to the extent to which LFS estimates are accurately measuring "true" values within the labour market (accepting that these true values are unknown).

Reliability refers to the closeness of early and subsequent estimates.

Combined, this dimension is where we would primarily consider issues like the precision of our estimates, both of levels and changes, as well as bias and its impact on our estimates. Accuracy and reliability also covers reweighting, as it is the primary source of revisions to LFS-based estimates.

Comparability and coherence

Comparability refers to our ability to meaningfully compare estimates from the LFS with those derived from other survey and non-survey sources which measure the same or similar concepts. It also refers to our ability to compare estimates for the LFS over time, as the survey develops.

Given the relative comparability of the LFS and other sources, Coherence refers to the extent to which the story presented by LFS estimates is aligned with the story presented by other sources, as well as our ability to explain when this is not the case, and why. This can include coherence between different levels and their rates of change. Coherence also covers how LFS estimates fit within the wider suite of labour market statistics and within wider statistics on the economy and society.

This is one of the main areas where quality concerns become evident, especially among users of LFS data and estimates, where LFS coherence has shown clear signs of deterioration in recent years. LFS trends have likely been affected by recovery actions as well as real changes in the labour market.

Accessibility and clarity

Accessibility refers to the ease with which LFS estimates, data and supporting information can be accessed.

Clarity reflects the sufficiency of supporting commentary, advice and technical details provided alongside the estimates themselves, particularly to contextualise any ongoing quality concerns.

Taken together, this dimension refers to the ONS's work to communicate clearly and effectively how the quality of the LFS has evolved and to guide users on the appropriate use and interpretation of LFS data.

3 . Recovery of the Labour Force Survey

For many years, household surveys both in the UK and in comparable countries have been facing the challenge of falling response rates. Coupled with challenges in collecting and processing survey data since the start of the coronavirus (COVID-19) pandemic, quality concerns became acute for Labour Force Survey (LFS) data collected in 2023. This led to the suspension of releases using LFS data, as discussed in our Impact of reweighting on Labour Force Survey key indicators article, and the withdrawal of accredited official statistics status for releases using Annual Population Survey (APS) data in 2024.

In response to these concerns, we made several changes to the operation and processing of LFS data in late 2023 and early 2024. These have been detailed in our previous progress updates, but the main changes include:

- reinstating the sample boost (January 2024) – the sample is now 55% larger than before the pandemic

- increasing incentives (October 2023)

- returning to face-to-face interviewing (October 2023)

- recruitment of additional interviewers (ongoing)

- interim reweighting exercises (published in February and December 2024)

These changes have now been applied to respondents across all waves of data collection of the LFS for the period January to March 2025. These data have been published alongside our May 2025 Labour market overview. Changes will take longer to fully feed through to responses used for the Annual Population Survey (APS), as a result of its annual frequency.

4 . Impact on response rate and levels

Throughout this and subsequent sections, we refer to a mixture of Labour Force Survey (LFS) data for Great Britain and for the United Kingdom, reflecting that the operational responsibility for data collection is split between the Office for National Statistics for Great Britain, and the Northern Ireland Statistics and Research Agency (NISRA) for Northern Ireland. The ONS has responsibility for publishing statistics at the UK level. Data regarding the collection of the survey often refer to Great Britain, while references to published statistical measures often refer to the United Kingdom as a whole.

The changes described in section 3 have had a clear positive effect on the number of achieved responses to the LFS. Figure 1 shows that the overall level of response has increased steadily since July to September 2023. Considering the number of responses for the UK, including imputation (which is the same as the number of cases available to analyse in a dataset), there were 69,847 responses to the LFS in January to March 2025, an increase of 25,609 from the low point in July to September 2023. However, this does remain 14,215 responses below the figure seen in October to December 2019.

Figure 1: The achieved number of person interviews continued to increase in Quarter 1 2025

Achieved number of person interviews, Great Britain and UK, January to March 2015 to January to March 2025

Figure 1: The achieved number of person interviews continued to increase in Quarter 1 2025

Achieved number of person interviews, Great Britain and UK, January to March 2015 to January to March 2025

Legend:
- GB Includes Imputed
- GB Excludes Imputed
- UK Includes Imputed
- UK Excludes Imputed
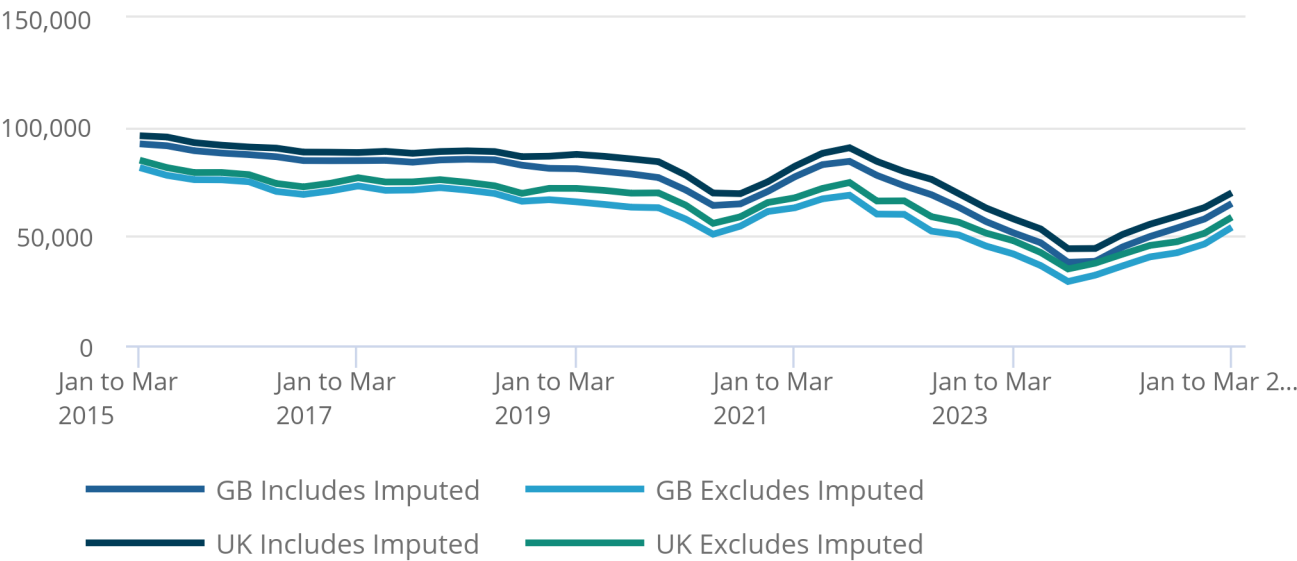
Source: Labour Force Survey from the Office for National Statistics

Breaking this down by wave of response, as reported in our Performance and quality monitoring report, we have seen Wave 1 response levels almost recover to pre-coronavirus (COVID-19) pandemic levels. 8,914 interviews were conducted in January to March 2025, compared with 8,963 in October to December 2019. Waves 2 to 5 remain further from their pre-pandemic position, with 22,574 individual responses in the latest period, compared with 26,823 at the end of 2019.

We have also seen improvements to response rates to the LFS, although by this measure improvements are more moderate. For a given period, the response rate for each wave is calculated by dividing the number of responding households in that wave or period by the number of households issued for that cohort when it was in its first wave. Attrition between waves typically mean that later waves have lower response rates, and that households drop out of the survey. However, the original issued sample size remains largely fixed.

Figure 2 shows that response rates for all waves in the latest period in Great Britain remained below their pre-pandemic positions. The overall response rate for January to March 2025 was 21.3%, an increase of 8.6 percentage points since July to September 2023, but 17.2 percentage points below October to December 2019.

The larger impact on levels compared with rates is caused by the boost to the sample of the LFS which remains 55% larger than before the pandemic, while the level of response has grown by a proportionally smaller amount.

Figure 2: Response rates from all waves have improved from 2023 lows but remain below pre-pandemic levels

Wave-specific response rates, Great Britain, excluding imputed households, January to March 2015 to January to March 2025

Figure 2: Response rates from all waves have improved from 2023 lows but remain below pre-pandemic levels

Wave-specific response rates, Great Britain, excluding imputed households, January to March 2015 to January to March 2025
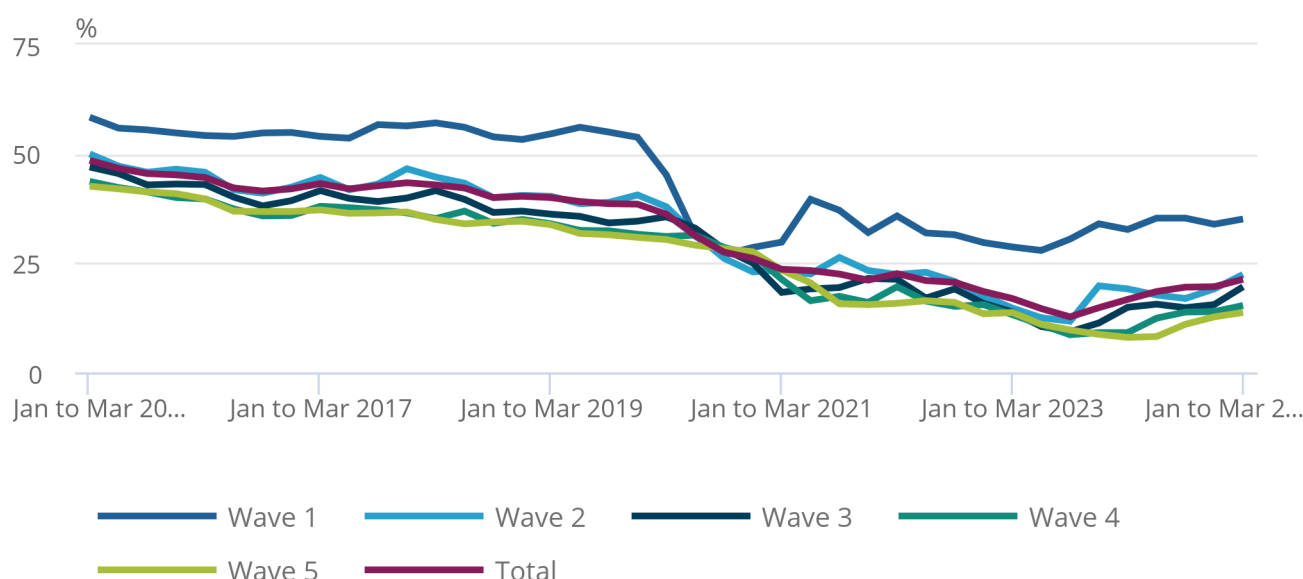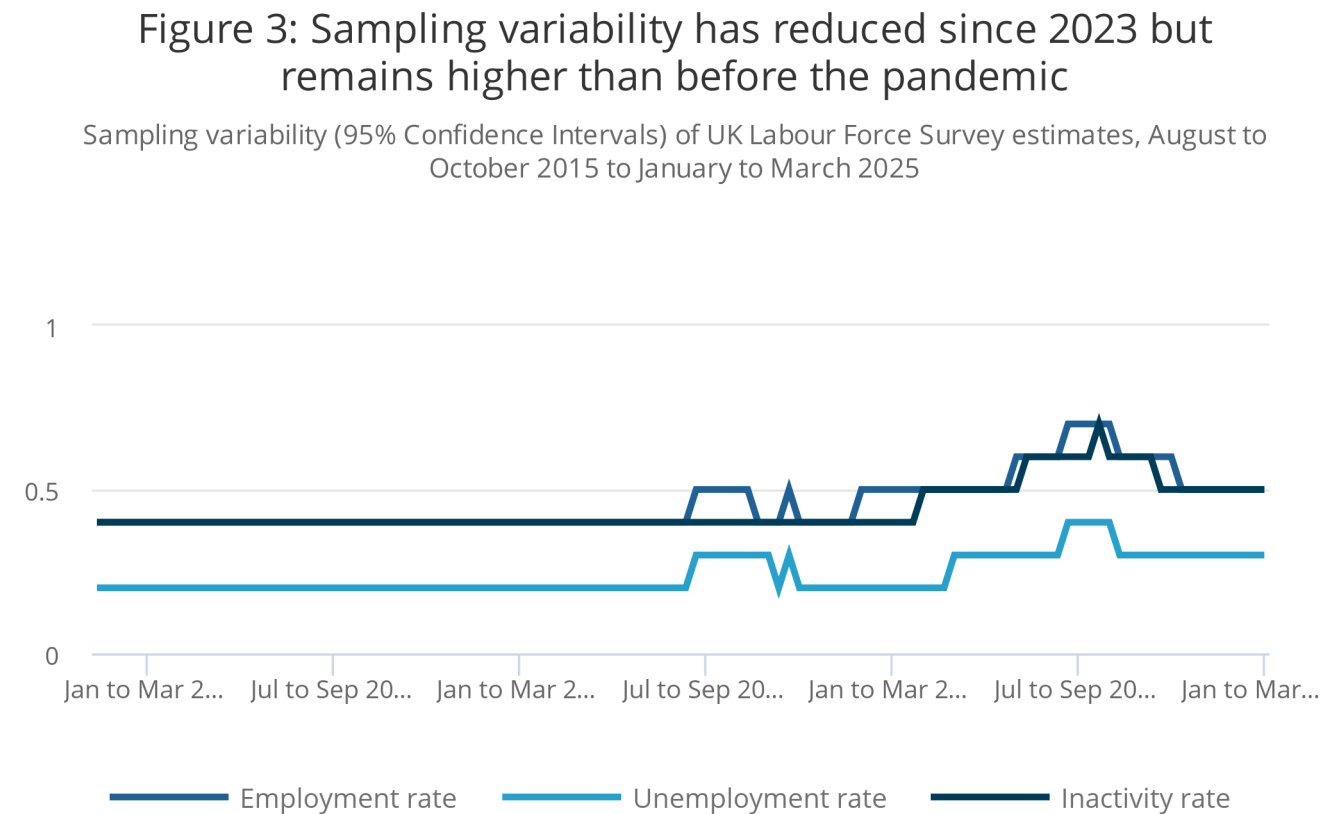
Source: Labour Force Survey from the Office for National Statistics

Further information on survey response levels and response rates can be found in our LFS Performance and quality monitoring report.

This higher level of response to the LFS helps to increase the level of precision in our estimates. This is shown by the confidence intervals for our headline labour supply estimates, which are presented in Figure 3. Across all three headline rates, these have narrowed since mid- to late-2023, which suggests improved precision compared with the periods where response rates were at their lowest. However, confidence intervals remain wider than before the pandemic, reflecting the trends in response levels.

Figure 3: Sampling variability has reduced since 2023 but remains higher than before the pandemic

Sampling variability (95% Confidence Intervals) of UK Labour Force Survey estimates, August to October 2015 to January to March 2025

Figure 3: Sampling variability has reduced since 2023 but remains higher than before the pandemic

Sampling variability (95% Confidence Intervals) of UK Labour Force Survey estimates, August to October 2015 to January to March 2025

Employment rate — Unemployment rate — Inactivity rate

Source: Labour Force Survey from the Office for National Statistics

Detailed estimates will continue to see greater volatility compared with more aggregated measures. However, to some extent this has always been a feature of LFS-based analysis, when all else is equal. The lower achieved response level for the latest period, compared with before the pandemic, will make this volatility more acute.

For example, we can consider estimates of redundancies or estimates of young people not in employment, education or training. Both of these concepts focus on much smaller population subgroups compared with the headline rates and therefore continue to see relatively large quarterly changes, despite improved sample sizes.

5 . Impact on the composition of responses

Ideally, those responding to the Labour Force Survey (LFS) would be broadly representative of the overall population for which we are estimating. However, we know that the likelihood of responding to surveys varies by characteristic. For this reason, we apply a range of statistical methods to our data, including weighting and non-response bias adjustments. These aim to ensure that our estimates are as representative as possible.

LFS weighting uses several characteristics, including:

- age

- sex

- location of respondent

- housing tenure (included since the coronavirus (COVID-19) pandemic)

Our non-response bias adjustments operate at the household level and focus on Indices of Multiple Deprivation and Output Area classification.

We can analyse a range of characteristics to understand how the composition of respondents has shifted over time. For brevity, only a selection of these will be covered in this report.

These analyses showed that for a range of these characteristics, we have seen relatively large compositional shifts in recent years within our unweighted datasets. Initially, these moved the composition away from benchmarks like Census 2021, followed by improvement for some characteristics, as recovery actions were taken.

In each of the following subsections, we compare the unweighted distribution of respondents between different categories over time, specifically for July to September 2019, July to September 2023 and January to March 2025.

For each characteristic, we also include the equivalent distribution from the Census 2021 for England and Wales. This acts as a benchmark against which to consider the distributions from the LFS. Legitimate differences can arise for a variety of reasons, including because of:

- differences in the questions asked

- differences in population coverage

- genuine change in the population, as time progresses

Some characteristics are relatively static, while others can vary more over time, which makes a fixed benchmark less useful.

Age

There is good alignment between the unweighted distributions for the LFS in 2019 and for the Census in 2021, with the LFS respondents slightly older, on average, than suggested by the Census. By July to September 2023, this difference is starker, with those aged 50 years and over accounting for 60.2% of LFS respondents compared with 46.9% of Census respondents. The latest period shows an improvement from this low point, with 53.2% of respondents to the LFS aged 50 years or over.

Figure 4: The age composition of LFS respondents was more representative in the latest data than in 2023

Percentage age distribution of Labour Force Survey (LFS) respondents in Great Britain and 2021 Census population in England and Wales, selected time periods

Figure 4: The age composition of LFS respondents was more representative in the latest data than in 2023

Percentage age distribution of Labour Force Survey (LFS) respondents in Great Britain and 2021 Census population in England and Wales, selected time periods

Legend: 16 to 24, 25 to 34, 35 to 49, 50 to 64, 65 and over
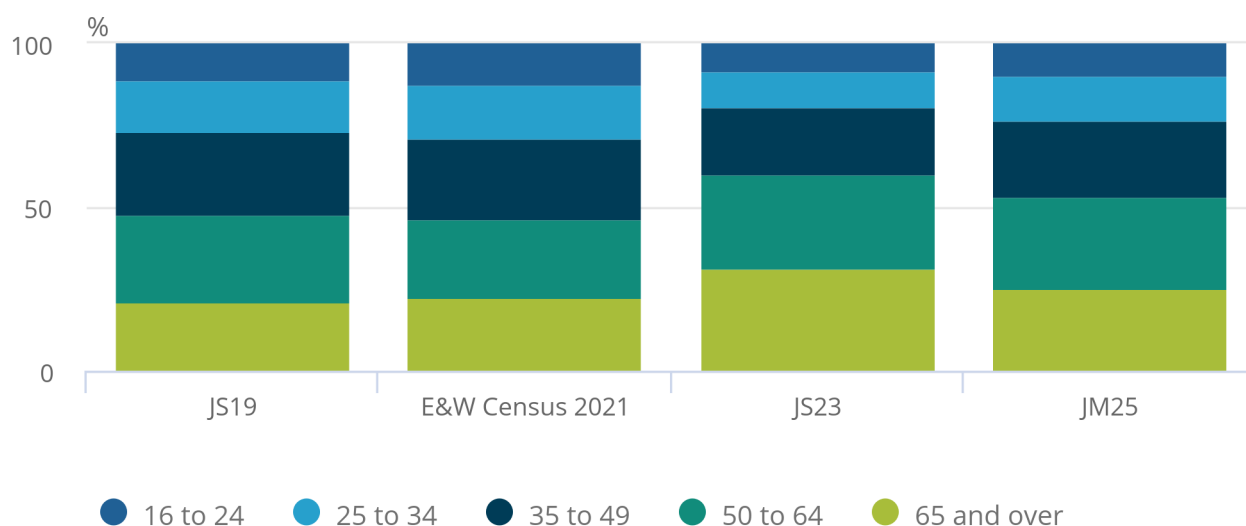
Source: Labour Force Survey and Census 2021 from the Office for National Statistics

Housing Tenure

The housing tenure characteristic shows a similar pattern. Though there are some differences in the distribution of the tenure type between the Census and the LFS in July to September 2019, these are relatively moderate, particularly compared with how these distributions look in later periods. In July to September 2019, 22.2% of respondents responded from households which were owned outright. By July to September 2023, the proportion of individuals responding to the LFS from houses which were owned outright was 30%, compared with 19.7% in the Census. The main category which offset this increase in the "owned outright" category in the LFS was the "other" category, which includes those renting. In the latest period, again, we see some reversion toward the Census with the share for "owned outright" falling to 26%.

Figure 5: The composition of LFS respondents according to housing tenure was more representative in the latest data than in 2023

Distribution by housing tenure type of Labour Force Survey (LFS) respondents in Great Britain and 2021 Census population in England and Wales, population aged 16-64, selected time periods

Figure 5: The composition of LFS respondents according to housing tenure was more representative in the latest data than in 2023

Distribution by housing tenure type of Labour Force Survey (LFS) respondents in Great Britain and 2021 Census population in England and Wales, population aged 16-64, selected time periods
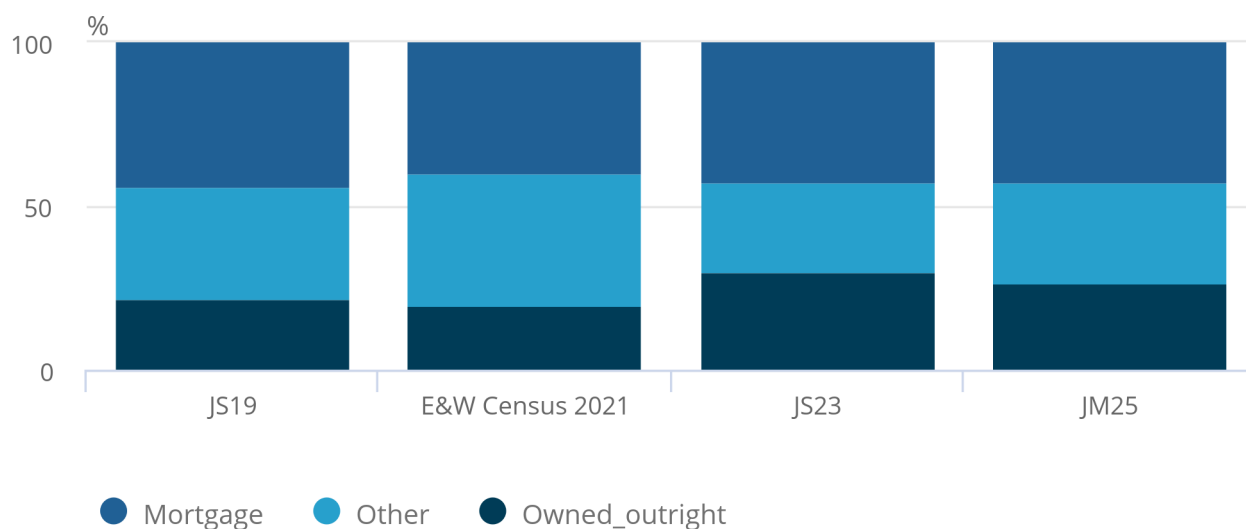
Source: Labour Force Survey and Census 2021 from the Office for National Statistics

Disability

The pattern for the disability characteristic is slightly different. Although we see the same shift in distribution for the LFS between 2019 and 2023, there is little change between 2023 and 2025. In July to September 2019, 19.7% of LFS respondents reported being disabled, compared with 15.3% of people in the Census. By July to September 2023, the gap between the LFS and the Census in 2021 had widened, with 22.8% of respondents reporting having a disability. In the latest data for January to March 2025, the proportion of LFS respondents reporting a disability had grown further to 23.7%. Over time, we have seen a steadily increasing proportion of the population reporting being disabled.

Figure 6: The composition of LFS respondents according to disability status remains further away from that reported in the Census

Distribution by disability status of Labour Force Survey (LFS) respondents in Great Britain and Census 2021 population in England and Wales, population aged 16 to 64 years, selected time periods

Figure 6: The composition of LFS respondents according to disability status remains further away from that reported in the Census

Distribution by disability status of Labour Force Survey (LFS) respondents in Great Britain and Census 2021 population in England and Wales, population aged 16 to 64 years, selected time periods
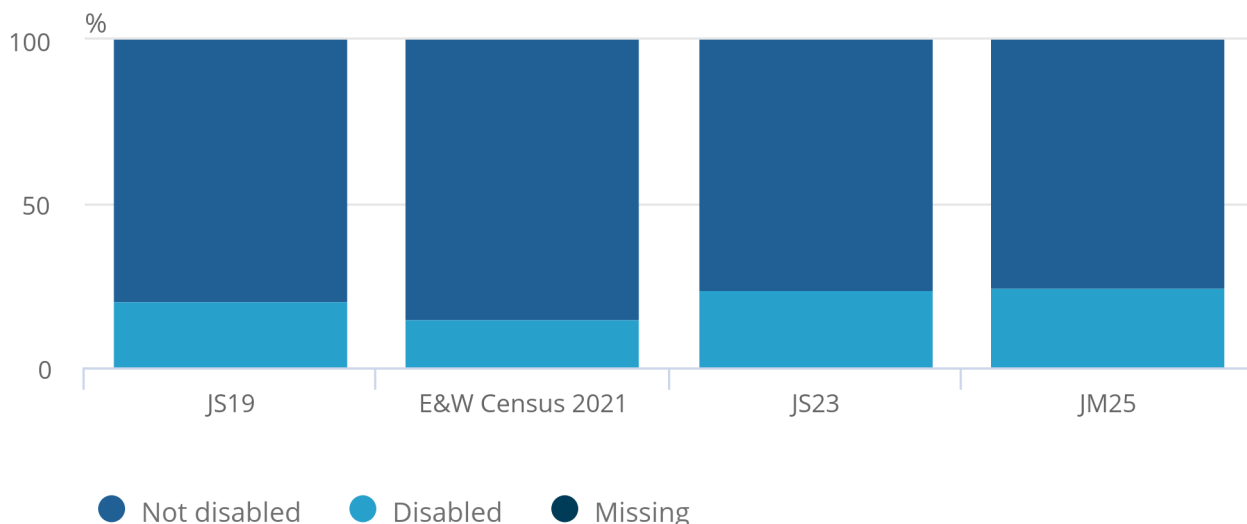
Source: Labour Force Survey and Census 2021 from the Office for National Statistics

It is not unusual for unweighted distributions to be out of alignment with benchmarks like the census and this is one reason why we apply weights to our data. Weighted distributions for those characteristics controlled for within weighting more closely align with the census.

However, a more representative unweighted sample means that weighting has less work to do and makes it less likely that the data include bias that cannot be controlled for.

We therefore remain confident that weighting is working as intended for each of these characteristics. Though we have seen some recent improvement for some characteristics, differences in unweighted distributions persist compared with the pre-pandemic period. This reinforces the ongoing need for the tenure adjustment introduced during the pandemic, and for the ongoing monitoring of these distributions.

For disability status, the unweighted distribution of response has continued to diverge from benchmarks implied by Census 2021 for England and Wales. We have therefore considered whether there could be further adjustments to LFS weighting to target additional characteristics like disability status. The main limitation here and elsewhere is a lack of appropriate external benchmark to which weights can be calibrated, particularly for those characteristics that are known to vary more over time, where a point-in-time benchmark would not be appropriate.

Furthermore, amendments to the existing weighting can improve estimates in one area but at the expense of another. For instance, the removal of tenure from the weighting approach improves the quality of estimates for disability but leads to a deterioration in estimates by country of birth.

Recent improvements in the representativeness of the LFS sample and the practical limitations of attempting further improvements to the LFS have meant that the Office for National Statistics (ONS) is now focussing on developing the Transformed Labour Force Survey (TLFS). For this reason, we are not recommending any further adjustments to the weighting approach for the LFS.

Relevant learning from this investigation will inform the ongoing assurance and development of the equivalent methods being applied to the TLFS. This approach has been assured and endorsed by stakeholders, users and academic experts.

6 . Coherence

As these changes have fed through Labour Force Survey (LFS) data over the last 18 months, we have been closely monitoring coherence between the LFS and other related sources of data on the labour market. In particular, we have focussed on the coherence between LFS measures of the number of employees, and those derived from workforce jobs (primarily business surveys) and administrative HM Revenue and Customs (HMRC) Pay As You Earn Real Time Information (PAYE RTI) data.

As shown in Figure 7, the degree of coherence between the LFS and these alternative sources was relatively low as of late 2023, with the LFS having reported consistently weaker trends in the number of employees (both levels and the implied growth rates).

Figure 7: Coherence between measures of the number of employees has improved in recent periods

Indices (November 2019 to January 2020 = 100), employment indicators, seasonally adjusted, UK, July to September 2014, to January to March 2025

Figure 7: Coherence between measures of the number of employees has improved in recent periods

Indices (November 2019 to January 2020 = 100), employment indicators, seasonally adjusted, UK, July to September 2014, to January to March 2025
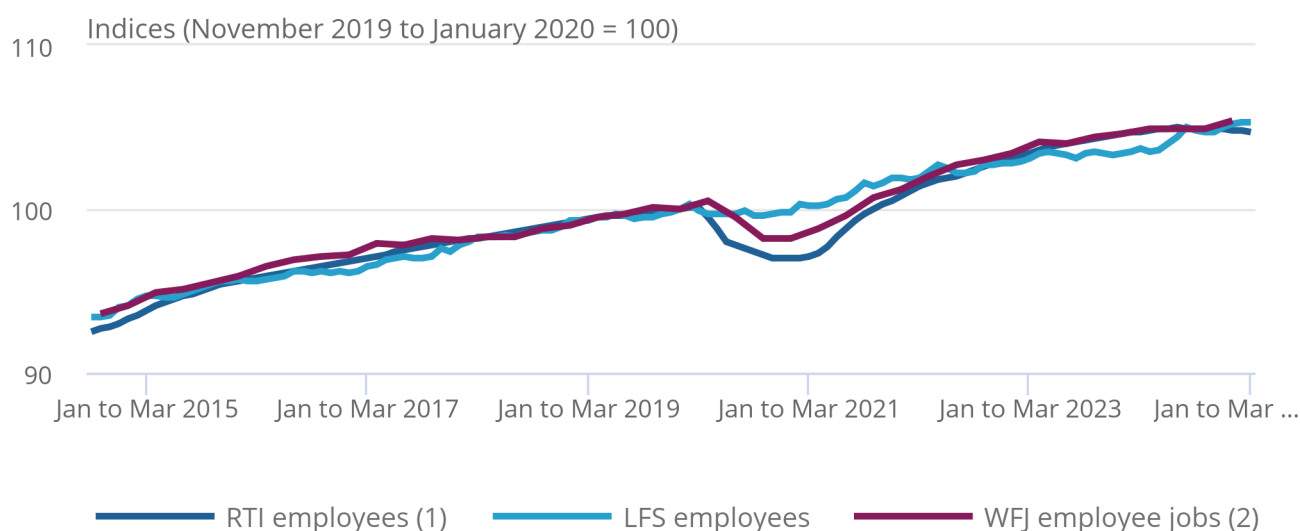
Source: Labour Force Survey and Workforce Jobs from the Office for National Statistics, and Pay as you Earn Real Time Information from HM Revenue and Customs
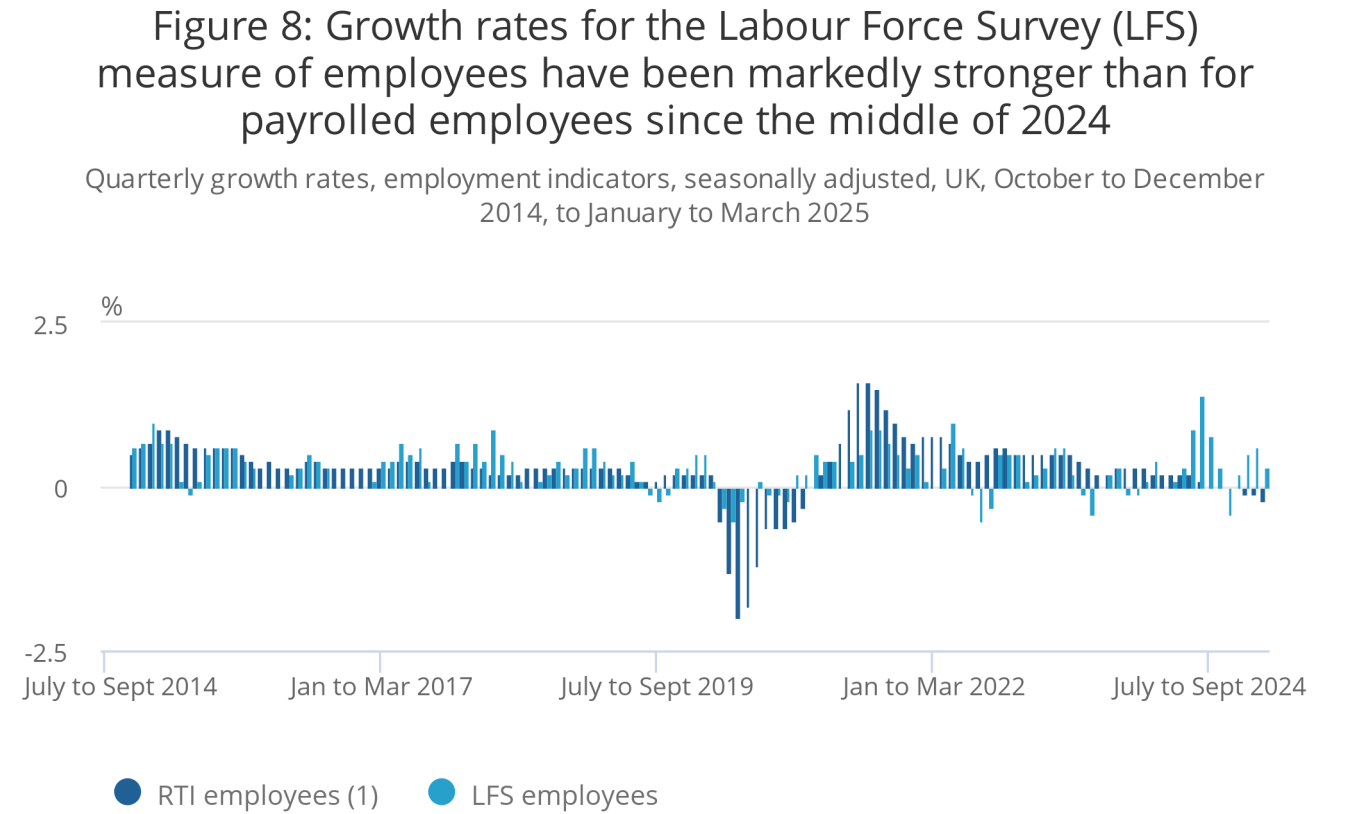
Notes:

1. Three-month averages of RTI payrolled employees have been used here for comparability.

2. Workforce jobs are published for the months of March, June, September and December. For presentational purposes, they have been plotted against the middle month of the time period shown. For example, September is plotted against August to October.

Over time, level estimates from these sources have appeared to show improving coherence. This is likely at least in part because of the changes described in [Section 3: Recovery of the Labour Force Survey](). However, the steady improvement in the quality of levels estimates means that our measures of change have seen lower coherence with other sources, with change estimates including both "real" change in the labour market and change caused by changes to the operation of the survey. This is shown in Figure 8, where quarterly growth rates for the LFS measure of employees have been much stronger since May to July 2024, compared with growth rates in payrolled employees.

Figure 8: Growth rates for the Labour Force Survey (LFS) measure of employees have been markedly stronger than for payrolled employees since the middle of 2024

Quarterly growth rates, employment indicators, seasonally adjusted, UK, October to December 2014, to January to March 2025

Figure 8: Growth rates for the Labour Force Survey (LFS) measure of employees have been markedly stronger than for payrolled employees since the middle of 2024

Quarterly growth rates, employment indicators, seasonally adjusted, UK, October to December 2014, to January to March 2025

Source: Labour Force Survey from the Office for National Statistics, and Pay as you Earn Real Time Information from HM Revenue and Customs

Notes:

1. Three-month averages of RTI payrolled employees have been used here for comparability.

As all major changes have now fed into all five waves of the survey. We expect that short-term measures of change should become more reliable than has recently been the case. Coherence for annual measures of change will take longer to reflect these improvements, given that base periods for these annual changes will take longer to reach periods where operational changes are not affecting the data.

In addition, this example only discusses coherence for a single concept. For example, wider coherence for total employment remains lower than was the case before the coronavirus (COVID-19) pandemic. Additionally, coherence for other concepts can be much more challenging to assess because comparable alternative sources are not as readily available.

Reweighting

Two interim reweighting exercises have taken place within the last 18 months, with notable positive impacts on coherence between the LFS and alternative data sources. These have ensured that headline LFS estimates have remained aligned with the latest data on the size and composition of the UK population, during a period of substantial population change. This has improved accuracy and therefore coherence.

Interim reweighting exercises have been more limited in scope than a typical "full reweighting", both in terms of the time series they cover and the datasets that are reweighted. Specifically, datasets for the Annual Population Survey (APS) and Household datasets for both the LFS and APS have not benefitted from the same updated population information.

It is our intention that the next reweighting will be a "full" reweighting exercise, covering estimates back to 2011 for the full suite of LFS and APS datasets. This reflects preferences among users of LFS and APS data and also sets a clear benchmark for LFS estimates ahead of a future transition to the Transformed Labour Force Survey (TLFS). The precise timing of this full reweighting exercise is still being finalised, with the availability of subnational population projections being a prerequisite for reweighting work to commence.

7 . Communication and guidance

Given the quality concerns surrounding the Labour Force Survey (LFS); the subsequent changes made to the survey and the impact this has had on comparability and coherence, there have also been changes made to the communication of statistics from the LFS and for the wider narrative on the labour market.

We have used the monthly [Labour market overview bulletin](#) to monitor the coherence of LFS estimates and other sources, providing advice on the appropriate use of LFS estimates. This advice has developed in line with the evolution of the data and its quality.

The LFS remains the sole official source of data for a number of concepts and breakdowns. As referenced above, although the volatility of LFS estimates appears to have improved in recent periods for headline measures (as shown in Figure 3), it remains a challenge for more detailed concepts and breakdowns where we continue to advise caution in interpreting short-term measures of change.

As described in [Section 6: Coherence](#), caution is also advised when comparing to a base period during which substantial survey changes were implemented, where measures of change are likely to incorporate both "real" change and change caused by operational changes. For example, this could include a quarterly comparison between October to December 2023 and January to March 2024, or an annual comparison between January to March 2024 and the equivalent period in 2025.

As we have communicated for some time, where possible, we continue to advise that users make use of a wide range of data sources to inform their views on the labour market, balancing the information provided across survey and administrative data sources as well as data on relevant concepts like earnings and vacancies.

In addition, in April we published an update on our work on [reconciling estimates of employment from the LFS and workforce jobs (WFJ)](#). This analysis gave an updated assessment of comparability and coherence between estimates from the LFS and workforce jobs, making certain adjustments to address known measurement and conceptual differences between the two sources. For the first time, it also incorporated high-level comparisons with HM Revenue and Customs (HMRC) Pay As You Earn Real Time Information (PAYE RTI) data. As with the figures presented in the Labour market overview bulletin, the main finding here is that coherence between sources has seen some recent improvements but remains below the position seen before the coronavirus (COVID-19) pandemic.

8 . Future developments

In April, we set out our [latest plans for transitioning to the Transformed Labour Force Survey (TLFS)](#), implementing an improved design including a shortened labour market-focussed questionnaire. We will carry out a readiness assessment based on data from the new design in collaboration with our main users in July 2026. We are aiming for transition of priority labour market statistics in November 2026. However, transition timing will be data-led and could be in 2027 if our assessment or user needs require more data to be collected and assessed.

In this context, the recent improvements to the Labour Force Survey (LFS) are important as they increase confidence that the LFS can be fit for purpose until transition takes place as well as being a more robust point of comparison when assessing TLFS estimates.

As we work towards transition it will be necessary to focus efforts on building TLFS quality and preparing for a smooth transition. For this reason, we do not anticipate any further substantial changes being made to the LFS beyond the "full" reweighting described earlier in this article, and some further increases to the number of interviewers available to complete interviews at Waves 2 to 5 of the survey.

These increases in the coverage of Waves 2 to 5 of the survey improve the level and composition of the response to the survey. Through this, our number of achieved interviews for all waves of the LFS, and subsequent dataset sizes, should be comparable with pre-coronavirus (COVID-19) pandemic levels. These changes are, however, more moderate than those implemented throughout 2024, which enables us to better interpret the statistics.

As set out in April, we will be publishing quarterly updates on progress towards TLFS transition, with the next article in Summer 2025. Wider information on developments to LFS statistics will also be provided here, such as details on full reweighting. Our latest views on interpreting LFS statistics and the labour market story will remain in the Labour market overview.

9 . Related links

[Labour market overview, UK: May 2025](#)
Bulletin | Released 13 May 2025
Estimates of employment, unemployment, economic inactivity and other employment-related statistics for the UK.

[Labour Force Survey](#)
Methodology | 2 May 2023
Introduction to the Labour Force Survey explaining to respondents what it is, how it functions and how it is used.

[Labour market transformation – update on progress and plans: April 2025](#)
Article | Released 10 April 2025
Labour market transformation overview, building on previous engagement on the Transformed Labour Force Survey.

[Labour Force Survey performance and quality monitoring report](#)
Article | Released 13 May 2025
Response rates, sample size and quality assessment of the Office for National Statistics quarterly Labour Force Survey.

10 . Cite this article

Office for National Statistics (ONS), released 13 May 2025, ONS website, article, [Labour Force Survey quality update: May 2025](#)