

Article

# Single-month Labour Force Survey estimates: December 2019

Comparison of the Labour Force Survey (LFS) headline three-month average rates for employment, unemployment and economic inactivity with their equivalent single month estimates.

Contact: Bob Watson labour.supply@ons.gov.uk +44 (0)1633 455070 Release date: 17 December 2019 Next release: 21 January 2020

### Table of contents

- 1. Main points and information
- 2. Things you need to know about this release
- 3. Quality and methodology
- 4. Other quality information

## 1. Main points and information

This article contains charts that compare the Labour Force Survey (LFS) single-month estimates with their equivalent three-month average rates for employment, unemployment and economic inactivity. The single-month estimates are derived from the same data source as the headline three-month figures but are not designated as <u>National Statistics</u>. Their use is restricted to helping to understand the movements in the headline three-month averages. For the three-month averages, the dates shown on the charts relate to the last month of the three (for example, August to October is indicated by October).

Model-based single-month estimates are now also produced and included within the data table attached to this article. The model uses single-month wave-specific time series estimates for each variable, along with estimated variances, to produce modelled seasonally adjusted time series. These are currently <u>Experimental Statistics</u>.

### Main points

- The single-month estimate for the employment rate in the UK, for October 2019, shows an increase of 0.5 percentage points compared with the previous month.
- The single-month estimate for the unemployment rate in the UK, for October 2019, shows a decrease of 0.5 percentage points compared with the previous month.
- The single-month estimate for the economic inactivity rate in the UK, for October 2019, is largely unchanged compared with the previous month.

### Summary of Labour Force Survey single-month estimates

### Figure 1: Single-month employment rate up on the previous month

### UK employment rates, ages 16 to 64 years (seasonally adjusted), October 2016 to October 2019

## Figure 1: Single-month employment rate up on the previous month

UK employment rates, ages 16 to 64 years (seasonally adjusted), October 2016 to October 2019



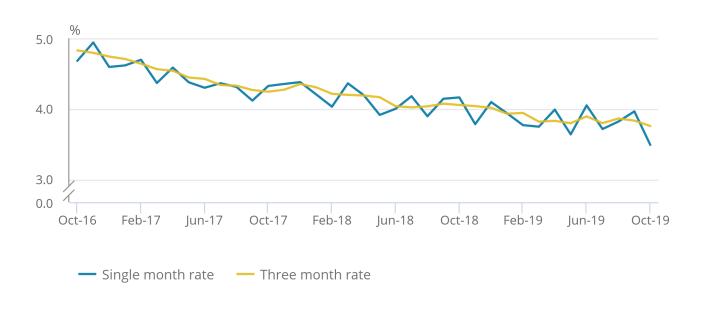
### Source: Labour Force Survey – Office for National Statistics

The single-month estimate of the employment rate, for people aged 16 to 64 years in the UK, for October 2019 was a record high of 76.7%. This represents an increase of 0.5 percentage points compared with the previous month (September 2019) and an increase of 0.3 percentage points compared with three months ago (July 2019). The headline estimate for the three months August to October 2019 was largely unchanged on the previous quarter (May to July 2019) and stands at a record high of 76.2%.

### UK unemployment rates, ages 16 years and over (seasonally adjusted), October 2016 to October 2019

## Figure 2: Single-month unemployment rate down on the previous month

UK unemployment rates, ages 16 years and over (seasonally adjusted), October 2016 to October 2019



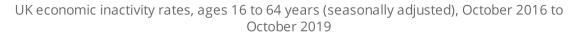
#### Source: Labour Force Survey – Office for National Statistics

The single-month estimate for the unemployment rate, for people aged 16 years and over in the UK, for October 2019 was a record low of 3.5%. This represents a decrease of 0.5 percentage points compared with the previous month (September 2019) and a decrease of 0.2 percentage points compared with three months ago (July 2019). The headline estimate for the three months August to October 2019 is largely unchanged on the previous quarter (May to July 2019), at 3.8%.

### Figure 3: Single-month inactivity rate largely unchanged on the previous month

### UK economic inactivity rates, ages 16 to 64 years (seasonally adjusted), October 2016 to October 2019

## Figure 3: Single-month inactivity rate largely unchanged on the previous month





#### Source: Labour Force Survey – Office for National Statistics

The single-month estimate for the economic inactivity rate, for people aged 16 to 64 years in the UK, for October 2019 was 20.5%. This is largely unchanged on the previous month (September 2019) and a decrease of 0.1 percentage points compared with three months ago (July 2019). The headline estimate for the three months August to October 2019 is largely unchanged on the previous quarter (May to July 2019), at 20.8%.

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

In June 2019 we released additional new experimental versions of the single-month estimates alongside the current estimates. The new estimates are based on time series models using single-month wave-specific time series estimates.

We now also publish new experimental single month wave estimates, alongside the current wave estimates, based on the new time series models.

## 3. Quality and methodology

The Labour Force Survey (LFS) single-month estimates provide additional information about the latest quarterly movements in the headline three-monthly aggregates of employment, unemployment and economic inactivity. The production and evaluation of the estimates is an important part of our quality assurance of the three-monthly averages published in the <u>Labour market overview</u>.

Single-month estimates are based upon one-third of the sample of the three-monthly series – approximately 15,000 households. Consequently, sampling variability of the changes in the single-month estimates is higher in relative terms than those of the headline aggregates and so any interpretation of them can only be in fairly broad terms.

The LFS sample is designed so that the data collected for any three consecutive monthly reference periods (or rolling quarters) are representative of the UK population, however, the data for any given single month are unlikely to be representative of the UK. These sampling effects can cause movements in the single month that are a consequence of the survey nature of the LFS and are not a true reflection of change in the wider economy. The movement in the latest single-month figures is, in theory, a better indication of the latest change in the labour market than the difference between the latest two overlapping three-month periods, but it must still be treated with caution.

The sample design of the LFS often produces clear patterns in the single-month series, which can aid interpretation of the LFS aggregates. The estimates help users determine how closely the movements in the headline aggregates reflect changes in the UK labour market and how far they reflect the survey nature of the LFS, in particular sampling variability. For example, 80% of the households surveyed in one month will also have been surveyed three months ago. This means the comparison between the latest month and three months ago usually provides a better indicator of the latest underlying change than the comparison with the previous month, for which there is no sample overlap.

The single-month estimates are regarded as an <u>official statistic</u> and are not considered National Statistics because they do not have sufficient methodological robustness.

A methodological article explaining the <u>background to the Labour Force Survey (LFS) single-month estimates and</u> <u>describing how they are calculate</u>d is available.

The model-based single-month Labour Force Survey estimates are derived from a state-space model and aim to improve upon the current single month estimates. The model uses single-month wave-specific time series estimates for each variable, along with estimated variances, to produce modelled seasonally adjusted time series. These new model-based estimates are considered to be Experimental Statistics.

A <u>methodological article</u> giving more detail regarding the new series is available.

## 4. Other quality information

Quality and Methodology Information reports for the Labour Force Survey are available:

- Labour Force Survey Quality and Methodology Information.
- Labour Force Survey performance and quality monitoring reports.

Further information about the Labour Force Survey (LFS) is available from the Labour Force Survey - user guide.