

Article

Impact of reweighting on Labour Force Survey key indicators, UK countries: 2020

Indicative estimates of the Labour Force Survey (LFS) reweighting methodology on key indicators by UK country for January to March 2020 to October to December 2020.



Release date: 8 July 2021

Next release: To be announced

Table of contents

- 1. Other pages in this release
- 2. Main points
- 3. Overview of Labour Force Survey reweighting
- 4. Methodology
- 5. Impact of reweighting on key indicators
- 6. Future developments
- 7. Related links

1. Other pages in this release

Impact of reweighting on Labour Force Survey key indicators, UK: 2020

2. Main points

- As part of continuing work to improve Labour Force Survey estimates (which have been affected by changes to survey operation caused by the coronavirus (COVID-19) pandemic), <u>weighting methodology</u>, improving the UK, EU and non-EU born population estimates, will be implemented from 15 July 2021, for periods from January to March 2020.
- The impact on headline measures of rates is relatively small but there is a larger impact on estimates of levels and changes in levels.
- Because the new methodology takes account of geographical area, the impact is not consistent across each of the countries of the UK.

3. Overview of Labour Force Survey reweighting

Following changes to the way the Labour Force Survey (LFS) operates, resulting from the pandemic, we have had to make changes to the way we weight the survey to account for the impact that these changes have on estimates.

In May 2021, an article was published regarding <u>Labour Force Survey weighting methodology</u>. This article gave details of further improvements planned, making use of information from the HM Revenue and Customs (HMRC) Real Time Information (RTI) system to provide estimated population weights, with the intention to apply in labour market publications from July 2021.

In an article about the reweighting on LFS key indicators, published today, we look at how this methodology is applied and the impact it has on the main UK headline labour market measures.

This article gives some indication of the impact these changes have on estimates for the individual countries of the UK.

4. Methodology

The new methodology uses new modelled population totals for UK, EU and non-EU country of birth as its weighting control totals. The new population totals used in LFS weighting are obtained by applying year-on-year growth rates by country of birth (UK, EU, non-EU) to the 2019 LFS estimates. These growths are applied for different area groups within the UK, meaning that the impact will vary by region.

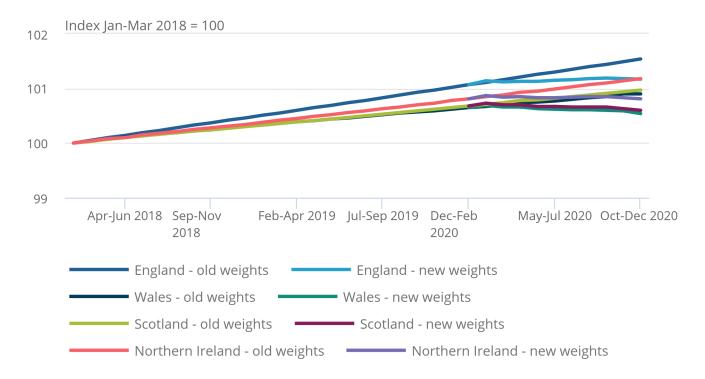
The following chart shows how the growth in the population weights previously used has been affected by the new estimates.

Figure 1: New weighting methodology lowers the Labour Force Survey population over the pandemic in all countries of the UK.

Indexed population used in the weighting of the LFS, countries of the UK (aged 16 years and over), between January to March 2018 and October to December 2020, (Jan - Mar 2018 = 100)

Figure 1: New weighting methodology lowers the Labour Force Survey population over the pandemic in all countries of the UK.

Indexed population used in the weighting of the LFS, countries of the UK (aged 16 years and over), between January to March 2018 and October to December 2020, (Jan – Mar 2018 = 100)



Source: Office for National Statistics - Labour Force Survey

5. Impact of reweighting on key indicators

Figures 2 to 4 show the main labour market series giving the indicative impact of applying the new weights. The full range of labour market outputs taking this into account will become available over the coming months as part of our normal release schedules, starting with the release on 15 July 2021.

We have said previously that these improvements would be likely to have a larger impact on the estimates of levels and therefore changes in levels over the course of the coronavirus (COVID-19) pandemic. Estimates of rates were considered more robust and likely to be less impacted. As with the UK figures, this is also the case for the countries of the UK.

Figure 2: New weighting methodology lowers the employment rate for England, but increases the employment rate for Northern Ireland

Employment rate (aged 16 to 64 years) by country, seasonally adjusted, between January to March 2018 and October to December 2020

Figure 2: New weighting methodology lowers the employment rate for England, but increases the employment rate for Northern Ireland

Employment rate (aged 16 to 64 years) by country, seasonally adjusted, between January to March 2018 and October to December 2020



Source: Office for National Statistics - Labour Force Survey

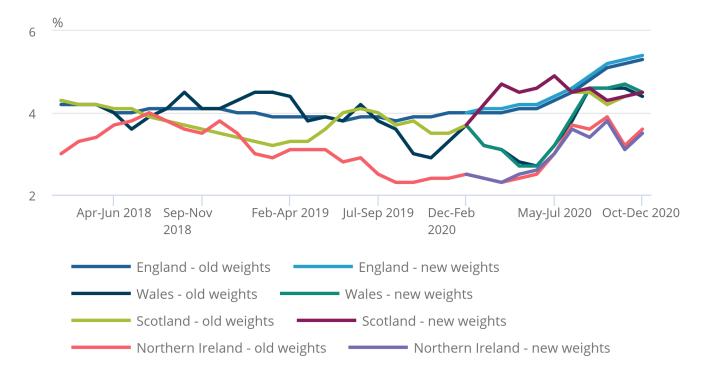
Indicative estimates suggest that there has been very little change in the employment rate estimates for Wales or Scotland resulting from the new methodology. Employment rates for England appear to have been a little more affected, resulting in a lower employment rate, whereas indicative estimates suggest a small increase in the employment rate for Northern Ireland.

Figure 3: New weighting methodology increases the unemployment rate for England, but lowers the rate for Northern Ireland

Unemployment rate (aged 16 years and over) by country, seasonally adjusted, between January to March 2018 and October to December 2020

Figure 3: New weighting methodology increases the unemployment rate for England, but lowers the rate for Northern Ireland

Unemployment rate (aged 16 years and over) by country, seasonally adjusted, between January to March 2018 and October to December 2020



Source: Office for National Statistics - Labour Force Survey

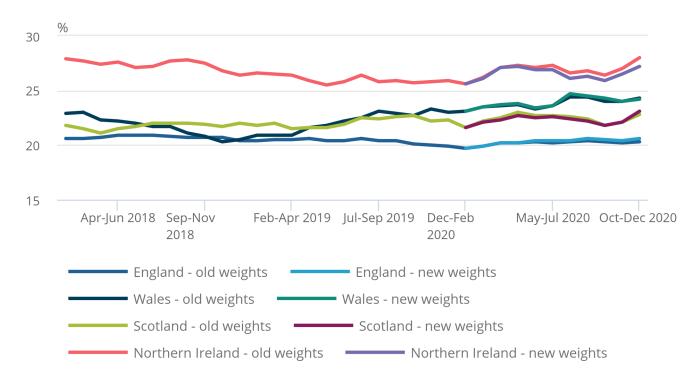
Again, as with employment rates, indicative estimates suggest little change to the unemployment rates for Wales or Scotland. However, in contrast to employment, for unemployment the small revisions increase the rate for England and decrease the rate for Northern Ireland.

Figure 4: New weighting methodology increases the economic inactivity rate for England, but decreases the rate for Northern Ireland

Economic inactivity rate (aged 16 to 64 years) by country, seasonally adjusted, between January to March 2018 and October to December 2020

Figure 4: New weighting methodology increases the economic inactivity rate for England, but decreases the rate for Northern Ireland

Economic inactivity rate (aged 16 to 64 years) by country, seasonally adjusted, between January to March 2018 and October to December 2020



Source: Office for National Statistics - Labour Force Survey

Finally, for economic inactivity, again the indicative estimates suggest there has been little impact on the rates for Scotland and Wales. However, in England there has been a small increase in the rate, with a decrease in the rate for Northern Ireland.

While impacts on rates appear to be very small, the indicative impacts on levels in each of the regions are much larger. Table 1 gives an indication of the impact on the estimates of the levels for each of the countries in the three-month period October to December 2020.

Table 1: Indicative impact on employment, unemployment and economic inactivity levels, seasonally adjusted, UK countries, October to December 2020

		Employment 16 and over (thousands)	Unemployment 16 and over (thousands)	Economic Inactivity 16 to 64 (thousands)
England	Old weight	27,456	1,522	7,088
	New weight	27,231	1,548	7,161
	Difference	-225	26	73
Wales	Old weight	1,458	68	465
	New weight	1,453	69	460
	Difference	-5	1	-5
Scotland	Old weight	2,637	123	785
	New weight	2,617	124	791
	Difference	-20	1	6
Northern Ireland	Old weight	841	32	326
	New weight	847	30	316
	Difference	6	-2	-10

Source: Office for National Statistics - Labour Force Survey

6. Future developments

On 15 July 2021, we intend to publish the normal tables that are released monthly as part of the labour market release, using the new and improved population and methodology basis. In addition, we will publish tables covering labour market status by <u>country of birth</u>, <u>nationality</u>, <u>ethnicity</u> and <u>disability</u>. These tables will include estimates of levels, which had been suspended awaiting reweighting.

On 17 August, we intend to update the remaining Labour Force Survey (LFS) tables in the labour market release that are normally published on a quarterly basis, including figures relating to industry, socio-economic classification, earnings and labour market flows.

To allow us to facilitate these changes, we will not release Annual Population Survey (APS) estimates for April 2020 to March 2021 in July as would normally be the case. Instead, these will be released when the APS is reweighted. Following the July and August releases, we intend to update our outputs that make use of the APS for our September release, and household versions of our datasets in the subsequent months.

The new estimates, in particular regarding the size of the levels and changes, constitute an improvement in the LFS estimates compared with those previously published. However, the population figures involved are still based on partial information and may be further refined when more data become available.

7. Related links

Employment in the UK Bulletin | Released 15 June 2021

Estimates of employment, unemployment, and economic inactivity for the UK.

Labour market in the regions of the UK

Bulletin | Released 15 June 2021

Regional, local authority and Parliamentary constituency breakdowns of changes in UK employment, unemployment, economic inactivity, and other related statistics.