

Impact of the Labour Force Survey Reweighting on Annual Data 2020

August 2021

Theme: Labour Market

Geographical Area: Northern Ireland

The following short paper provides an overview of the impact of the reweighting to headline estimates of unemployment, employment, and economic inactivity for the year ending 31st December 2020 (referred to as 2020). Please note that all estimates of change are based on unrounded data. All data is available in Excel and ODS formats, and have been published alongside this paper on the NISRA website on the [Labour Force Survey Annual Report 2020](#) page.

Key Points

- The overall impact of the reweighting has been to increase the employment rate and decrease the economic inactivity rate. Whilst there was a slight decrease in the unemployment rate, the rate remains unchanged when rounded to 1 decimal place.
- The employment rate for 2020 has increased by 0.3 percentage points (pps) from 70.6% to 70.9%.
- The economic inactivity rate for 2020 has decreased by 0.3pps from 27.2% to 27.0%.
- The unemployment rate for 2020 decreased by 0.1pps but remains at 2.8% when rounded to 1 decimal place.

Background

The Labour Force Survey (LFS) is a household sample survey carried out by interviewing individuals about their personal circumstances and work. Headline indicators of unemployment, employment, and economic inactivity are derived from survey data in a process where responses are weighted to population totals to provide estimates at both NI and UK levels.

Typically, the Office for National Statistics (ONS) would reweight the LFS every two years to take account of updated population estimates and projections. However, investigations by ONS during 2020 showed the composition of the achieved LFS sample had changed because of the change in survey methods introduced in response to the COVID-19 pandemic. Traditionally, the survey is conducted via a face-to-face household interview with follow-up telephone interviews, but this changed to solely telephone interviews in April 2020.

In October 2020 LFS data were reweighted to include additional factors (household tenure) to mitigate the changing sample composition, and estimates were revised from January 2020. More information on the October 2020 reweighting is available on the NISRA website: [LFS Revision Note – October 2020](#).

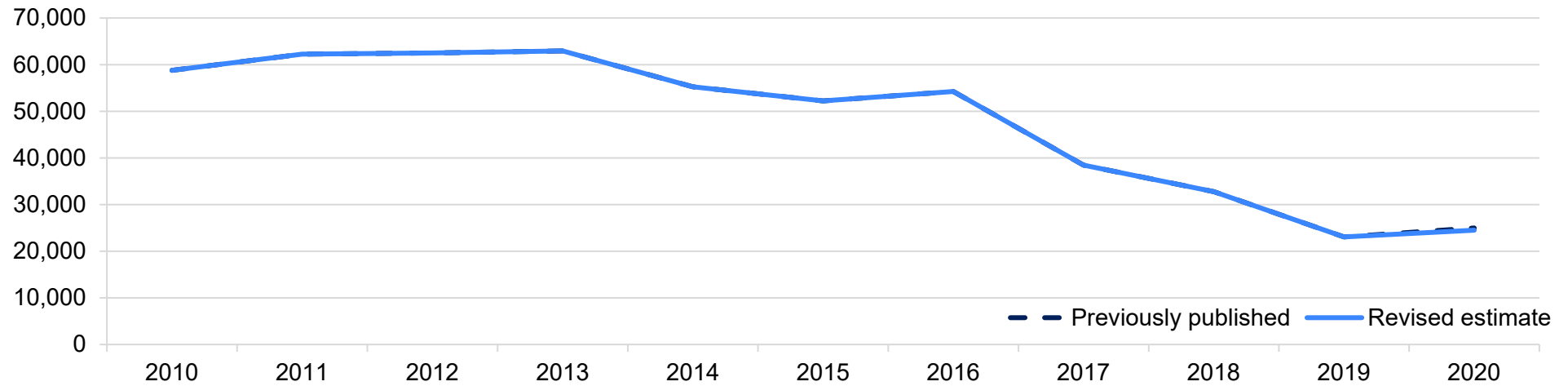
The ONS has continued to monitor the impact of the pandemic and the most appropriate statistical methods to use. Accordingly, the ONS has again reweighted the LFS annual datasets back to January 2020. The reweighting builds on insights from HMRC ‘Real Time Information’ that show, at a UK level, changes in employment vary by country of birth.

The ONS published a blog on their website ([Meeting the challenges in population estimation](#)) explaining these changes, a more detailed article for more technical readers ([Labour Force Survey weighting methodology](#)) and an article discussing the impact of the revisions for the year 2020 ([Impact of reweighting on Labour Force Survey key indicators, UK - Office for National Statistics \(ons.gov.uk\)](#)).

This paper contains annual data (January to December) from 2010 to 2020, where previously published data and revised data is presented for 2020.

1. Unemployment

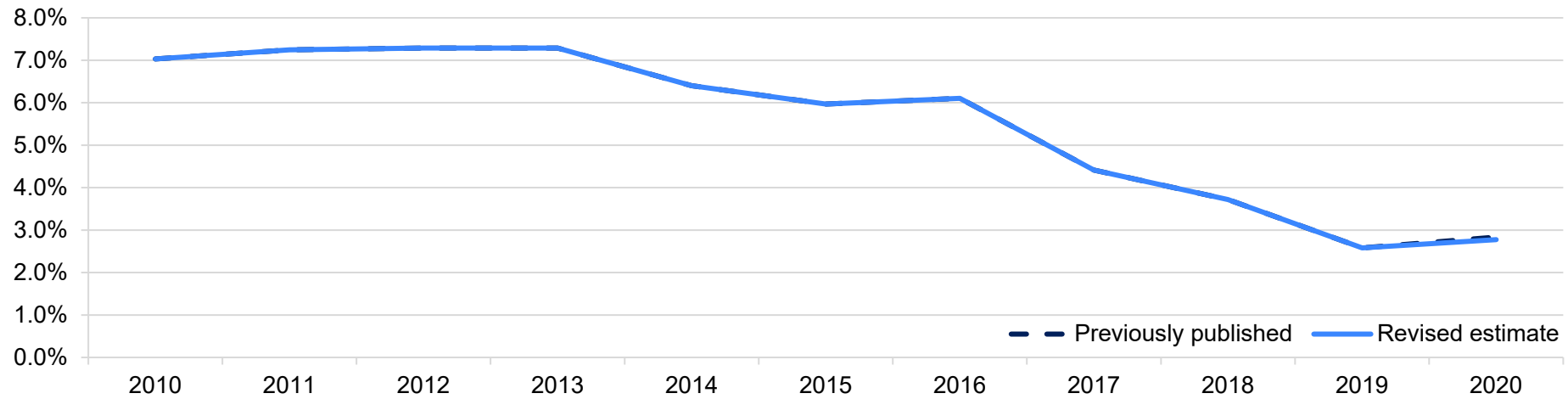
Figure 1: NI unemployment levels (aged 16 and over), previously published and revised estimate, 2010 to 2020



[Download figure 1 data](#)

The effect of the reweighting has been a slight decrease in the unemployment level for 2020. However, the decrease was less than 1,000 and therefore the unemployment level remains at 25,000.

Figure 2: NI unemployment rates (aged 16 and over), previously published and revised estimates, 2010 to 2020

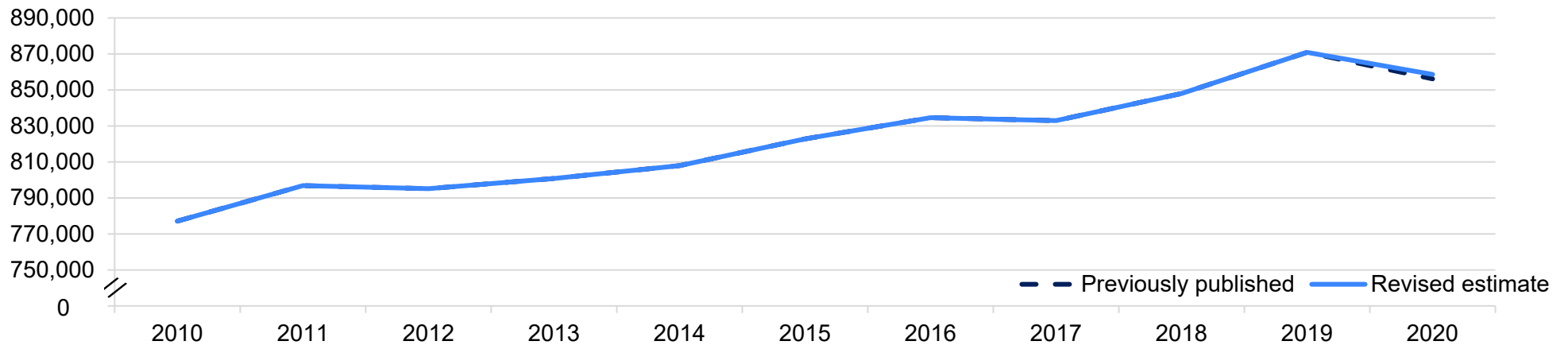


[Download figure 2 data](#)

The reweighting has had a similar impact on the unemployment rate estimate for 2020, which has slightly decreased. The revision downwards was 0.1pps, when rounded to 1 decimal place, and the unemployment rate remains at 2.8%.

2. Employment

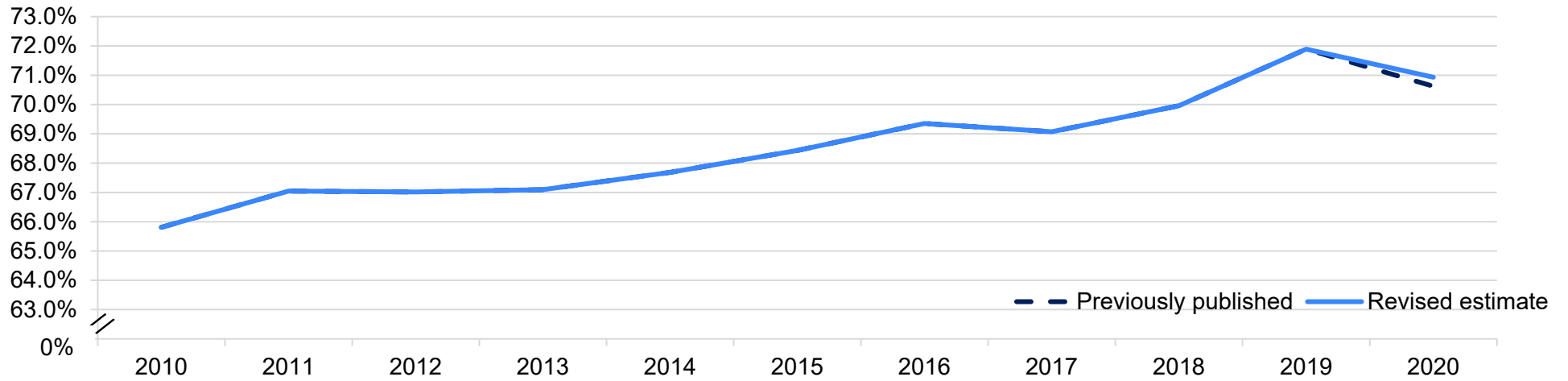
Figure 3: NI employment levels (aged 16 and over), previously published and revised estimates, 2010 to 2020



[Download figure 3 data](#)

The reweighting has moved the employment level upwards. The reweighting has resulted in an increase of 2,000 in the employment level for 2020, which is now 859,000.

Figure 4: NI employment rates (aged 16 to 64), previously published and revised estimates, 2010 to 2020

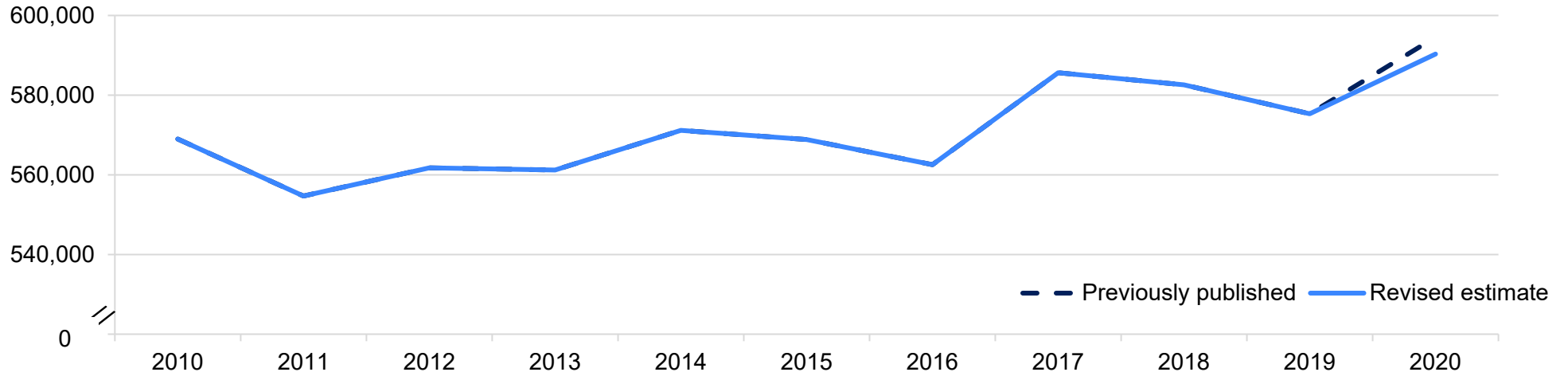


[Download figure 4 data](#)

Similar to the employment level, the reweighting has increased the employment rate. The revised employment rate is 0.3pps higher than previously published, which is now 70.9% for 2020.

3. Economic Inactivity

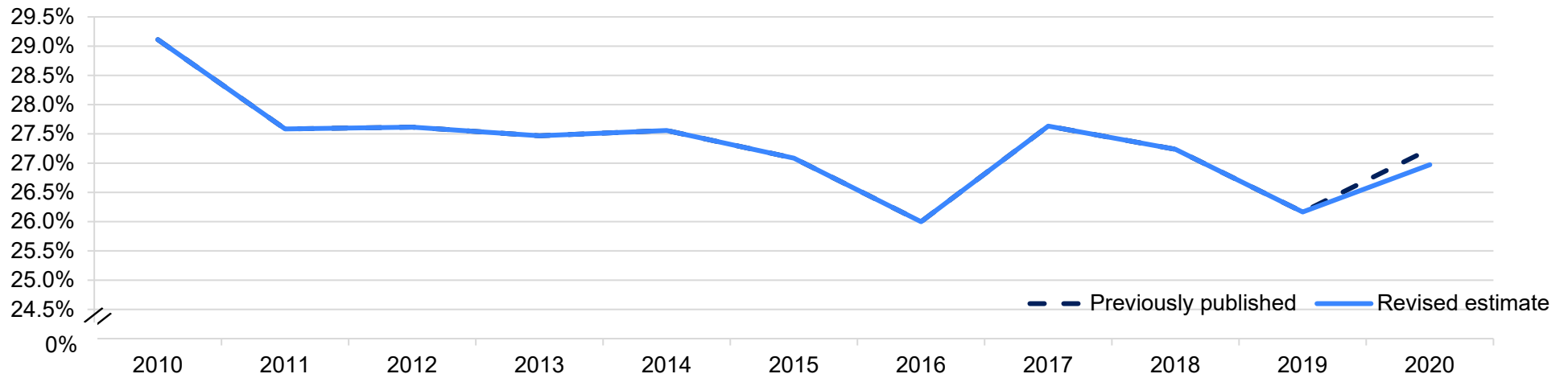
Figure 5: NI economic inactivity levels (aged 16 and over), previously published and revised estimates, 2010 to 2020



[Download figure 5 data](#)

The economic inactivity level has been revised downwards (by 4,000) and now stands at 590,000 for 2020.

Figure 6: NI economic inactivity rates (aged 16 to 64), previously published and revised estimates, 2010 to 2020



[Download figure 6 data](#)

The reweighting has caused the economic inactivity to be lowered. The economic inactivity rate is 0.3pps lower than the previously published estimate, and is now 27.0% for 2020.

Appendix

Table 1: Comparison of previously published and revised estimates: NI unemployment level and rates, aged 16 and over

Period	Previously published level (number)	Revised estimated level (number)	Change (number)	Previously published rate (percent)	Revised estimated rate (percent)	Change (pps)
2010	59,000	59,000	x	7.0%	7.0%	x
2011	62,000	62,000	x	7.2%	7.2%	x
2012	63,000	63,000	x	7.3%	7.3%	x
2013	63,000	63,000	x	7.3%	7.3%	x
2014	55,000	55,000	x	6.4%	6.4%	x
2015	52,000	52,000	x	6.0%	6.0%	x
2016	54,000	54,000	x	6.1%	6.1%	x
2017	38,000	38,000	x	4.4%	4.4%	x
2018	33,000	33,000	x	3.7%	3.7%	x
2019	23,000	23,000	x	2.6%	2.6%	x
2020	25,000	25,000	0	2.8%	2.8%	-0.1

x – data not revised

Levels rounded to nearest thousand

Rates rounded to 1 decimal place

Changes calculated on unrounded figures

Table 2: Comparison of previously published and revised estimates: NI employment level (aged 16 and over) and rates (aged 16 to 64)

Period	Previously published level (number)	Revised estimated level (number)	Change (number)	Previously published rate (percent)	Revised estimated rate (percent)	Change (pps)
2010	777,000	777,000	x	65.8%	65.8%	x
2011	797,000	797,000	x	67.0%	67.0%	x
2012	795,000	795,000	x	67.0%	67.0%	x
2013	801,000	801,000	x	67.1%	67.1%	x
2014	808,000	808,000	x	67.7%	67.7%	x
2015	823,000	823,000	x	68.4%	68.4%	x
2016	835,000	835,000	x	69.4%	69.4%	x
2017	833,000	833,000	x	69.1%	69.1%	x
2018	848,000	848,000	x	70.0%	70.0%	x
2019	871,000	871,000	x	71.9%	71.9%	x
2020	856,000	859,000	+2,000	70.6%	70.9%	+0.3

x – data not revised

Levels rounded to nearest thousand

Rates rounded to 1 decimal place

Changes calculated on unrounded figures

Table 3: Comparison of previously published and revised estimates: NI economic inactivity levels (aged 16 and over) and rates (aged 16 to 64)

Period	Previously published level (number)	Revised estimated level (number)	Change (number)	Previously published rate (percent)	Revised estimated rate (percent)	Change (pps)
2010	569,000	569,000	x	29.1%	29.1%	x
2011	555,000	555,000	x	27.6%	27.6%	x
2012	562,000	562,000	x	27.6%	27.6%	x
2013	561,000	561,000	x	27.5%	27.5%	x
2014	571,000	571,000	x	27.6%	27.6%	x
2015	569,000	569,000	x	27.1%	27.1%	x
2016	563,000	563,000	x	26.0%	26.0%	x
2017	586,000	586,000	x	27.6%	27.6%	x
2018	583,000	583,000	x	27.2%	27.2%	x
2019	575,000	575,000	x	26.2%	26.2%	x
2020	595,000	590,000	- 4,000	27.2%	27.0%	-0.3

x-data not revised

Levels rounded to nearest thousand

Rates rounded to 1 decimal place

Changes calculated on unrounded figures