

Impact of the Labour Force Survey Reweighting: June 2022

Theme: Labour Market

Geographical Area: Northern Ireland

The June 2022 Labour Market Report includes a revision to quarterly estimates derived from the Labour Force Survey data from January 2020 onwards. The following short paper provides an overview of the impact of the reweighting to headline estimates of unemployment, employment, and economic inactivity.

Please note that all statistics included in this paper refer to seasonally adjusted estimates and estimates of change are based on unrounded data. All data are available in Excel format, and have been published alongside this paper on the NISRA website on the [LFS background information](#) page.

Key Points

- The overall impact of the reweighting has been to increase the unemployment and economic inactivity rates, and to decrease the employment rate.
- The unemployment rate has been almost exclusively revised upwards over the reweighting period. Changes range from -0.1pps to +0.7pps.
- The employment rate has been revised downwards, with the largest change occurring in March to May 2021 (-2.9pps) from 70.3% to 67.4%.
- The economic inactivity rate has been revised upwards, with the largest change again occurring in March to May 2021 (+2.5pps, from 27.1% to 29.6%).

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.

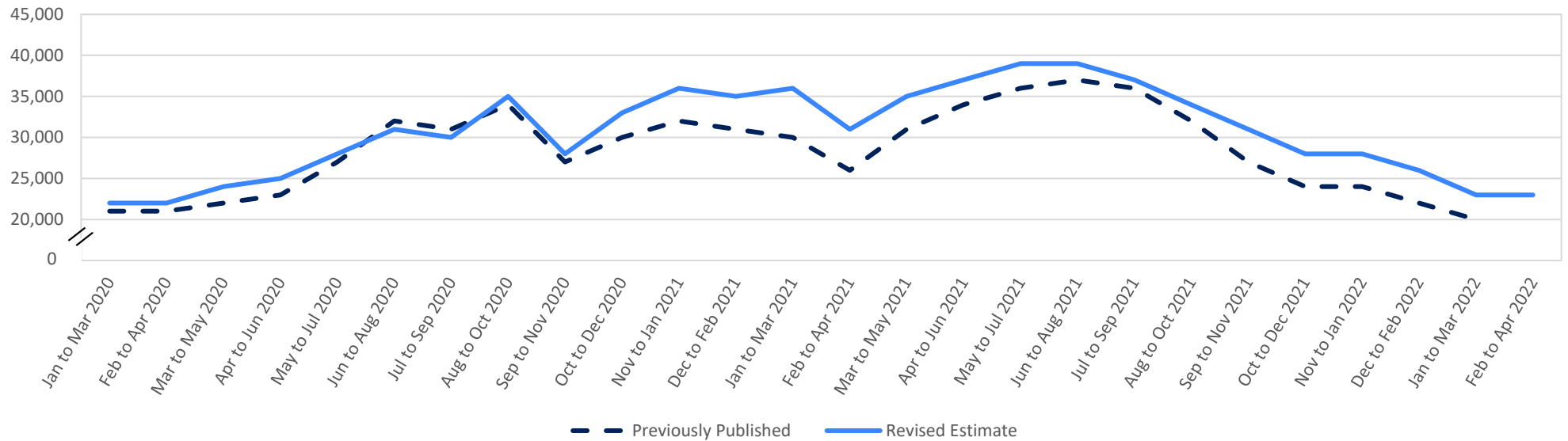
In October 2020 LFS data were reweighted to include additional factors (household tenure) to mitigate the changing sample composition, and estimates were revised from January 2020. More information on the October 2020 reweighting is available on the NISRA website: [LFS Revision Note – October 2020](#).

In July 2021 the LFS estimates were reweighted again covering estimates from January-March 2020 to February-April 2021 to include new population weights using PAYE Real-Time Information data. 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 \(ons.gov.uk\)](#)). An overview of the [impact of reweighting](#) on the NI estimates of unemployment, employment, and economic inactivity is available on the NISRA website.

In June 2022 the LFS estimates were reweighted from January-March 2020 to January-March 2022 to include new population weights using PAYE Real-Time Information data and the introduction of the non-response bias adjustment to NI data. More detail on the impact of this reweighting can be found in the ONS article [Impact of reweighting on Labour Force Survey key indicators: 2022](#).

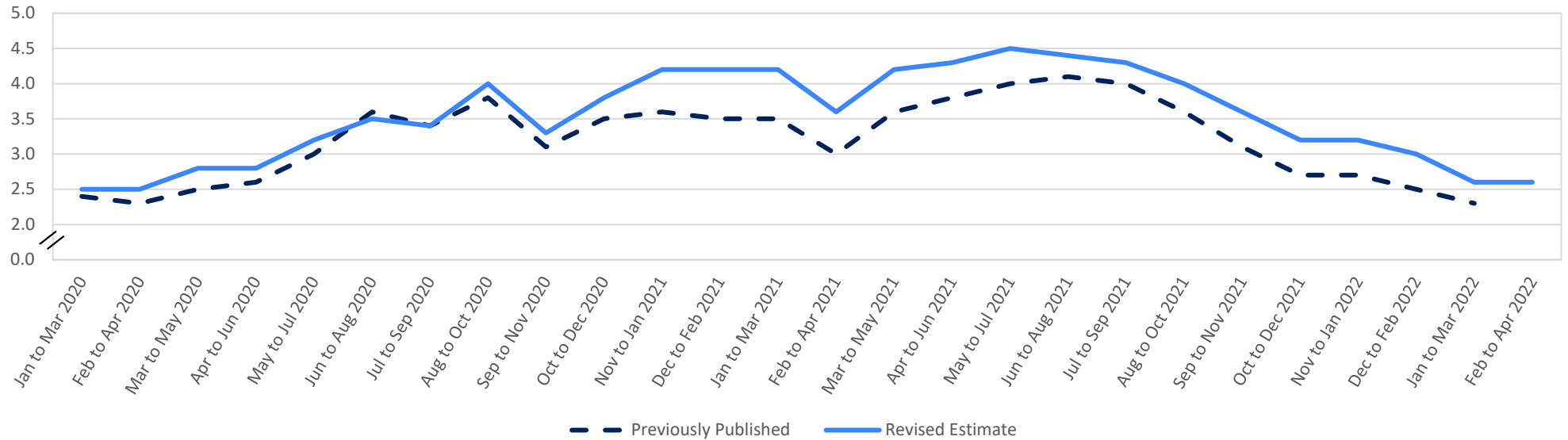
1. Unemployment

Figure 1: NI Unemployment Levels (Age 16 and over, Seasonally Adjusted), Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



The effect of the reweighting on the unemployment level trend has been to increase all estimates from January to March 2020 to January to March 2022 with the exceptions of June to August 2020 and July to September 2020. The impact of the reweighting on unemployment level estimates range from a decrease of 1,000 to an increase of 5,000.

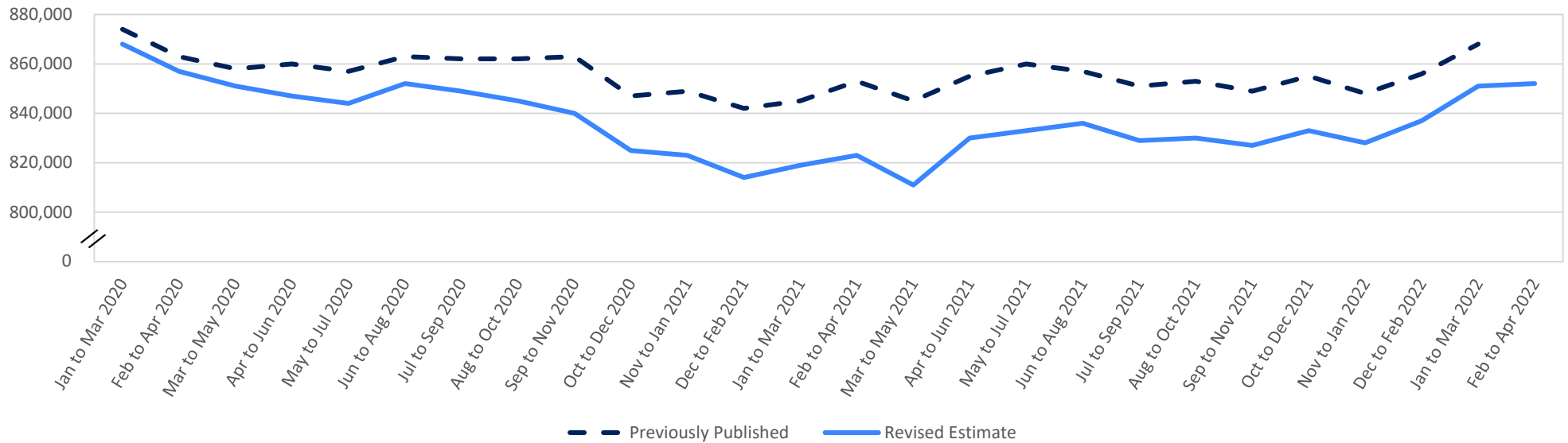
Figure 2: NI Unemployment Rates (Age 16 and over, Seasonally Adjusted), Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



The reweighting has had a similar impact on the unemployment rate estimates. The changes to the unemployment rate range from a decrease of 0.1 percentage points (pps) to an increase of 0.7pps. The largest changes between the previously published and revised estimates can be seen in the early quarters of 2021 where the increase was at least 0.6pps for all data points between November to January 2021 and March to May 2021.

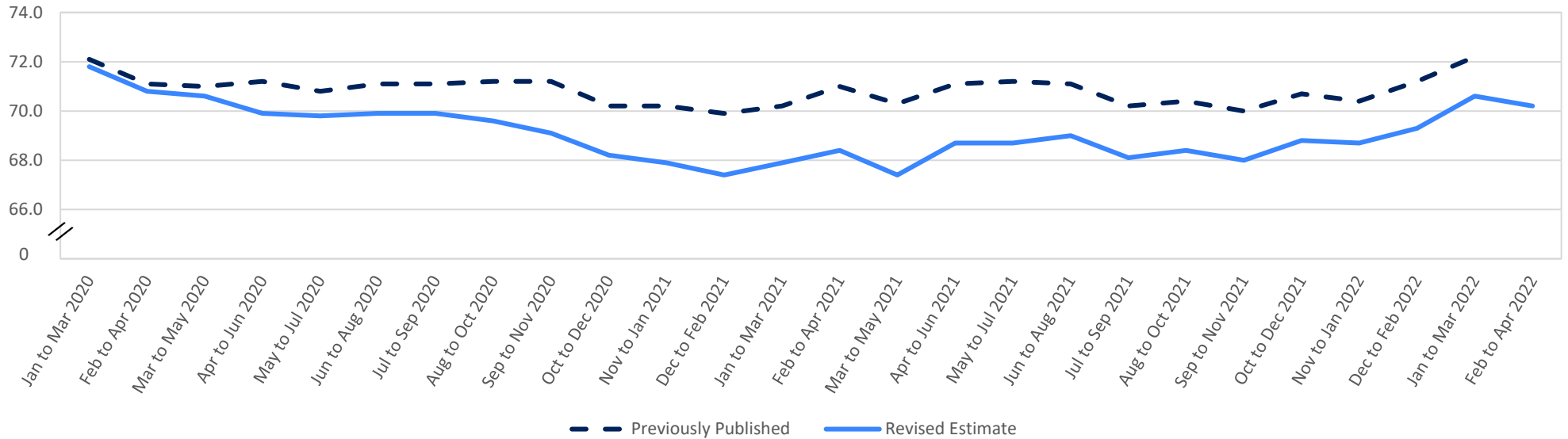
2. Employment

Figure 3: NI Employment Levels (Age 16 and over, Seasonally Adjusted), Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



The effect of the reweighting on the employment level trend has been downwards for all data points, with the greatest changes being seen in the early quarters of 2021. The revisions to the employment levels range from a decrease of 6,000, for both January to March 2020 and February to April 2020, to a decrease of 34,000 which occurred in March to May 2021.

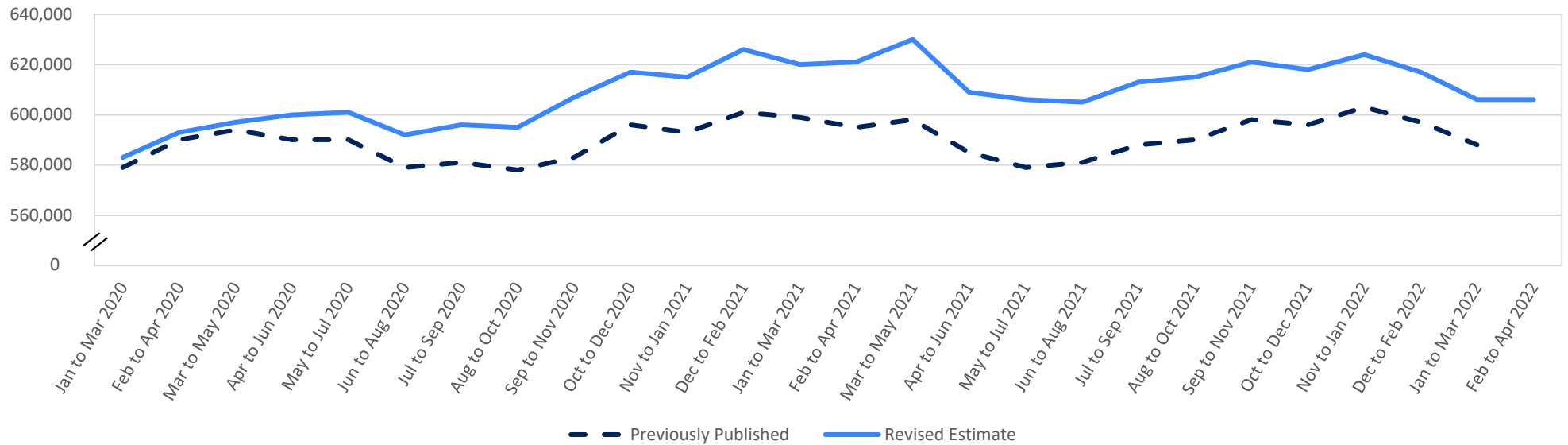
Figure 4: NI Employment Rates (Aged 16 to 64, Seasonally Adjusted) Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



The effect of the reweighting on the employment rate trend has been exclusively downwards. The largest change between the previously published estimates and the revised estimates can be seen in the March to May 2021 data, where the revised employment rate is 2.9pps lower than previously published. The changes (rounded to 1 decimal place) to the employment rate vary from -0.3pps to -2.9pps.

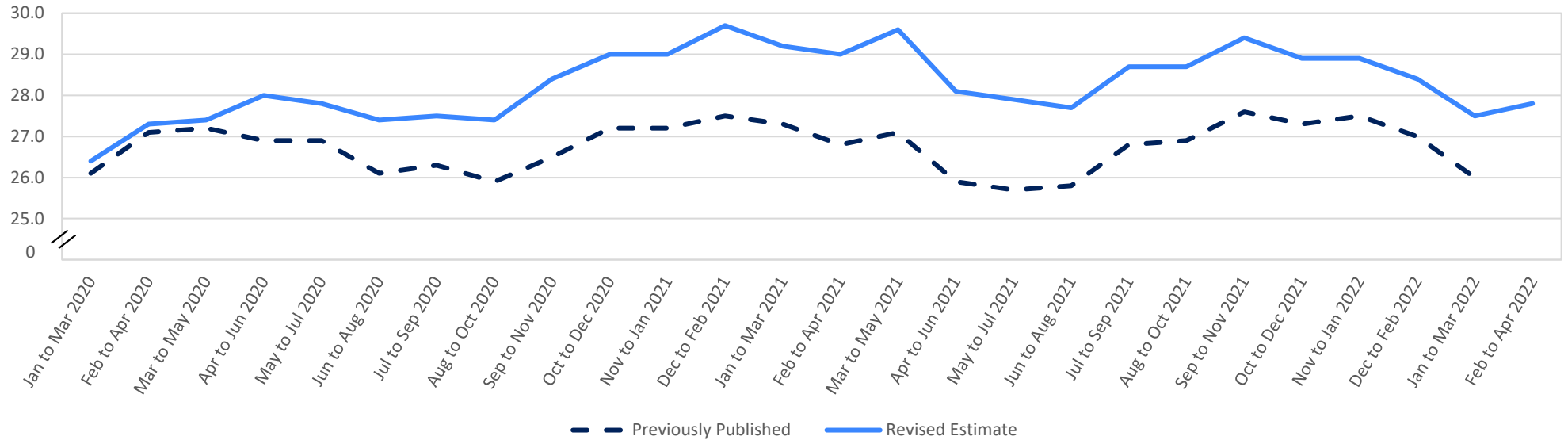
3. Economic Inactivity

Figure 5: NI Economic Inactivity Levels (Age 16 and over, Seasonally Adjusted), Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



All data points of the economic inactivity level trend have been revised upwards. The largest change again occurred in the March to May 2021 estimate, where an increase of 32,000 was seen. The changes to the economic inactivity level vary from an increase of 3,000 (February to April 2020 and March to May 2020) to an increase of 32,000 (March to May 2021).

Figure 6: NI Economic Inactivity Rates (Aged 16 to 64, Seasonally Adjusted), Previously Published and Revised Estimates, Rolling Quarters Jan to Mar 2020 to Feb to Apr 2022



The reweighting has caused the economic inactivity rate to be revised upwards for the complete trend from January to March 2020 onwards. The revisions to the economic inactivity rate range from an increase of 0.2pps in both February to April 2020 and March to May 2020 to an increase of 2.5pps in March to May 2021. The largest changes between the previously published and revised estimates can be seen in quarters at the start of 2021.

Appendix

Table 1: Comparison of Previously Published and Revised Estimates: NI Unemployment Level and Rates (Age 16 and over, Seasonally Adjusted)

Period	Previously Published Level (number)	Revised Estimated Level (number)	Change (number)	Previously Published Rate (percent)	Revised Estimated Rate (percent)	Change (pps)
Jan to Mar 20	21,000	22,000	0	2.4	2.5	+ 0.1pps
Feb to Apr 20	21,000	22,000	+ 1,000	2.3	2.5	+ 0.2pps
Mar to May 20	22,000	24,000	+ 2,000	2.5	2.8	+ 0.3pps
Apr to Jun 20	23,000	25,000	+ 2,000	2.6	2.8	+ 0.2pps
May to Jul 20	27,000	28,000	+ 1,000	3.0	3.2	+ 0.2pps
Jun to Aug 20	32,000	31,000	- 1,000	3.6	3.5	- 0.1pps
Jul to Sep 20	31,000	30,000	0	3.4	3.4	- 0.0pps
Aug to Oct 20	34,000	35,000	+ 1,000	3.8	4.0	+ 0.2pps
Sep to Nov 20	27,000	28,000	+ 1,000	3.1	3.3	+ 0.2pps
Oct to Dec 20	30,000	33,000	+ 3,000	3.5	3.8	+ 0.4pps
Nov to Jan 21	32,000	36,000	+ 5,000	3.6	4.2	+ 0.6pps
Dec to Feb 21	31,000	35,000	+ 4,000	3.5	4.2	+ 0.6pps
Jan to Mar 21	30,000	36,000	+ 5,000	3.5	4.2	+ 0.7pps
Feb to Apr 21	26,000	31,000	+ 4,000	3.0	3.6	+ 0.6pps
Mar to May 21	31,000	35,000	+ 4,000	3.6	4.2	+ 0.6pps
Apr to Jun 21	34,000	37,000	+ 3,000	3.8	4.3	+ 0.5pps
May to Jul 21	36,000	39,000	+ 3,000	4.0	4.5	+ 0.5pps
Jun to Aug 21	37,000	39,000	+ 2,000	4.1	4.4	+ 0.3pps
Jul to Sep 21	36,000	37,000	+ 2,000	4.0	4.3	+ 0.3pps
Aug to Oct 21	32,000	34,000	+ 3,000	3.6	4.0	+ 0.4pps
Sep to Nov 21	27,000	31,000	+ 3,000	3.1	3.6	+ 0.4pps
Oct to Dec 21	24,000	28,000	+ 4,000	2.7	3.2	+ 0.5pps
Nov to Jan 22	24,000	28,000	+ 4,000	2.7	3.2	+ 0.5pps
Dec to Feb 22	22,000	26,000	+ 4,000	2.5	3.0	+ 0.5pps
Jan to Mar 22	20,000	23,000	+ 3,000	2.3	2.6	+ 0.3pps
Feb to Apr 22	X	23,000	X	X	2.6	X

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 Age 16 and over and Rates Aged 16 to 64, Seasonally Adjusted

Period	Previously Published Level (number)	Revised Estimated Level (number)	Change (number)	Previously Published Rate (percent)	Revised Estimated Rate (percent)	Change (pps)
Jan to Mar 20	874,000	868,000	- 6,000	72.1	71.8	- 0.3pps
Feb to Apr 20	863,000	857,000	- 6,000	71.1	70.8	- 0.3pps
Mar to May 20	858,000	851,000	- 7,000	71.0	70.6	- 0.4pps
Apr to Jun 20	860,000	847,000	- 13,000	71.2	69.9	- 1.2pps
May to Jul 20	857,000	844,000	- 12,000	70.8	69.8	- 1.0pps
Jun to Aug 20	863,000	852,000	- 11,000	71.1	69.9	- 1.2pps
Jul to Sep 20	862,000	849,000	- 13,000	71.1	69.9	- 1.2pps
Aug to Oct 20	862,000	845,000	- 17,000	71.2	69.6	- 1.6pps
Sep to Nov 20	863,000	840,000	- 23,000	71.2	69.1	- 2.0pps
Oct to Dec 20	847,000	825,000	- 22,000	70.2	68.2	- 2.0pps
Nov to Jan 21	849,000	823,000	- 25,000	70.2	67.9	- 2.3pps
Dec to Feb 21	842,000	814,000	- 28,000	69.9	67.4	- 2.5pps
Jan to Mar 21	845,000	819,000	- 26,000	70.2	67.9	- 2.4pps
Feb to Apr 21	853,000	823,000	- 30,000	71.0	68.4	- 2.6pps
Mar to May 21	845,000	811,000	- 34,000	70.3	67.4	- 2.9pps
Apr to Jun 21	855,000	830,000	- 25,000	71.1	68.7	- 2.4pps
May to Jul 21	860,000	833,000	- 27,000	71.2	68.7	- 2.5pps
Jun to Aug 21	857,000	836,000	- 21,000	71.1	69.0	- 2.1pps
Jul to Sep 21	851,000	829,000	- 22,000	70.2	68.1	- 2.1pps
Aug to Oct 21	853,000	830,000	- 23,000	70.4	68.4	- 2.0pps
Sep to Nov 21	849,000	827,000	- 22,000	70.0	68.0	- 2.0pps
Oct to Dec 21	855,000	833,000	- 21,000	70.7	68.8	- 1.9pps
Nov to Jan 22	848,000	828,000	- 20,000	70.4	68.7	- 1.7pps
Dec to Feb 22	856,000	837,000	- 20,000	71.2	69.3	- 1.8pps
Jan to Mar 22	868,000	851,000	- 17,000	72.2	70.6	- 1.7pps
Feb to Apr 22	X	852,000	X	X	70.2	X

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 Level Age 16 and over and Rates Aged 16 to 64, Seasonally Adjusted

Period	Previously Published Level (number)	Revised Estimated Level (number)	Change (number)	Previously Published Rate (percent)	Revised Estimated Rate (percent)	Change (pps)
Jan to Mar 20	579,000	583,000	+ 4,000	26.1	26.4	+ 0.3pps
Feb to Apr 20	590,000	593,000	+ 3,000	27.1	27.3	+ 0.2pps
Mar to May 20	594,000	597,000	+ 3,000	27.2	27.4	+ 0.2pps
Apr to Jun 20	590,000	600,000	+ 10,000	26.9	28.0	+ 1.1pps
May to Jul 20	590,000	601,000	+ 11,000	26.9	27.8	+ 0.9pps
Jun to Aug 20	579,000	592,000	+ 13,000	26.1	27.4	+ 1.3pps
Jul to Sep 20	581,000	596,000	+ 15,000	26.3	27.5	+ 1.2pps
Aug to Oct 20	578,000	595,000	+ 17,000	25.9	27.4	+ 1.5pps
Sep to Nov 20	583,000	607,000	+ 23,000	26.5	28.4	+ 2.0pps
Oct to Dec 20	596,000	617,000	+ 21,000	27.2	29.0	+ 1.8pps
Nov to Jan 21	593,000	615,000	+ 22,000	27.2	29.0	+ 1.9pps
Dec to Feb 21	601,000	626,000	+ 25,000	27.5	29.7	+ 2.2pps
Jan to Mar 21	599,000	620,000	+ 21,000	27.3	29.2	+ 1.9pps
Feb to Apr 21	595,000	621,000	+ 27,000	26.8	29.0	+ 2.2pps
Mar to May 21	598,000	630,000	+ 32,000	27.1	29.6	+ 2.5pps
Apr to Jun 21	585,000	609,000	+ 24,000	25.9	28.1	+ 2.1pps
May to Jul 21	579,000	606,000	+ 28,000	25.7	27.9	+ 2.2pps
Jun to Aug 21	581,000	605,000	+ 24,000	25.8	27.7	+ 1.9pps
Jul to Sep 21	588,000	613,000	+ 25,000	26.8	28.7	+ 2.0pps
Aug to Oct 21	590,000	615,000	+ 25,000	26.9	28.7	+ 1.8pps
Sep to Nov 21	598,000	621,000	+ 23,000	27.6	29.4	+ 1.7pps
Oct to Dec 21	596,000	618,000	+ 22,000	27.3	28.9	+ 1.6pps
Nov to Jan 22	603,000	624,000	+ 20,000	27.5	28.9	+ 1.4pps
Dec to Feb 22	597,000	617,000	+ 20,000	27.0	28.4	+ 1.5pps
Jan to Mar 22	588,000	606,000	+ 18,000	26.0	27.5	+ 1.4pps
Feb to Apr 22	X	606,000	X	X	27.8	X

X – data not revised

Levels rounded to nearest thousand

Rates rounded to 1 decimal place

Changes calculated on unrounded figures