

Northern Ireland Quarterly Index of Production

Quarter 3 (July - September) 2023

Theme: Economy
Frequency: Quarterly
Geographical Area: Northern Ireland
Date: 14 December 2023

Introduction

The quarterly Index of Production (IOP) provides a timely indicator of growth in the output of the production industries in Northern Ireland (NI). The latest quarterly estimates are compared to revised Quarter 2 2023 and Quarter 3 2022 estimates. Output estimates are calculated from the IOP aspect of the Quarterly Business Survey (QBS). The IOP has a sample size of approximately 1,200 covering all production businesses with 40 or more employees and a representative sample of smaller businesses. The latest quarterly estimates are compared to revised Quarter 2 2023 and Quarter 3 2022 estimates.

Key Points

- The NI IOP decreased by 2.1% over the quarter (July - September) and by 4.1% over the year.
- The UK IOP was unchanged (0.0%) over the quarter and increased by 1.4% over the year.
- When the most recent four quarters are compared to the previous four quarters, the NI production sector decreased by 2.4% while the UK production sector decreased by 0.9%.
- The NI IOP is 1.0% above the pre-Coronavirus pandemic level seen in Quarter 4 2019, while the UK remains 7.8% below its Quarter 4 2019 level.
- The quarterly decrease in NI production output of 2.1% was driven by decreases in Manufacturing (2.7%), Electricity, gas, steam and air conditioning supply (0.1%) and Mining and quarrying sector (15.3%). This was partially offset by an increase in Water supply, sewerage and waste management (Inc. recycling) (0.9%).
- The annual decrease in NI production output of 4.1% was driven by decreases in all four sectors - Manufacturing (3.6%), Electricity, gas, steam and air conditioning supply (12.0%), Water supply, sewerage and waste management (Inc. recycling) (0.8%) and Mining and quarrying (9.2%).

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Accredited Official Statistics

[Accredited official statistics](#) are a sub-set of official statistics that have been independently reviewed by the Office for Statistics Regulation and confirmed as complying with the standards of trustworthiness, quality, and value in the [Code of Practice for Statistics](#). Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007.

These accredited official statistics, the quarterly Index of Services (IOS), were **independently reviewed** by the Office for Statistics Regulation in August 2011. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics and should be labelled 'accredited official statistics'.

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

Since the assessment by the UK Statistics Authority, we have continued to comply with the Code of Practice for Statistics and have made the following improvements:

- Removed pre-release access to enhance trustworthiness and also brought the publication date forward as a result;
- Reduced [business burden](#) by offering the option of online data returns.
- Improved accessibility of Index of Production Statistics by amending the format and structure of reports in line with accessibility regulations.
- [Consulted users](#) on streamlining the IOS statistical bulletin.

NISRA Outputs Consultation

NISRA recently consulted on proposed changes to statistical outputs, this output was part of that consultation. The consultation, which ended on 15 October, sought views from users and stakeholders to help NISRA to address the financial constraints imposed by the budget settlement for 2023-24, whilst minimising the impact on users and stakeholders. The full report on the outcome of the consultation, including users' responses, actions planned and mitigations, can be found on the [consultation webpage](#).

Northern Ireland Quarterly Index of Production Proposal: The statistical bulletin will be reduced to headline results only and analysis of subsectors (for example manufacturing) will also be removed. The bulletin will be reduced from 23 pages to approximately 5 pages. Data will continue to be provided in the existing supplementary tables, with the number of supplementary tables remaining the same (approximately 20 tables).

Northern Ireland Quarterly Index of Production Action: NISRA has proceeded with scaling back the statistical bulletin as planned with consideration to some detail of subsector analysis still included in the reduced bulletin.

Date proposed change will come into effect: 14 December 2023

Index of Production Output Definition

The quarterly Index of Production (IOP) measures the change in output within the production industries in Northern Ireland. Output, in this context, is defined as:

Output: turnover, the value of total sales generated from all NI based activity, excluding VAT. Turnover is rounded to the nearest thousand and is then grossed and deflated. This turnover is then converted into an index value which is a convenient form of expressing a series in a way that makes it easier to see changes in that series. The numbers in the series are expressed relatively, in this case the average of the turnover in 2019 chosen to be the 'base' (expressed as 100) and other turnover values being measured relative to this base.

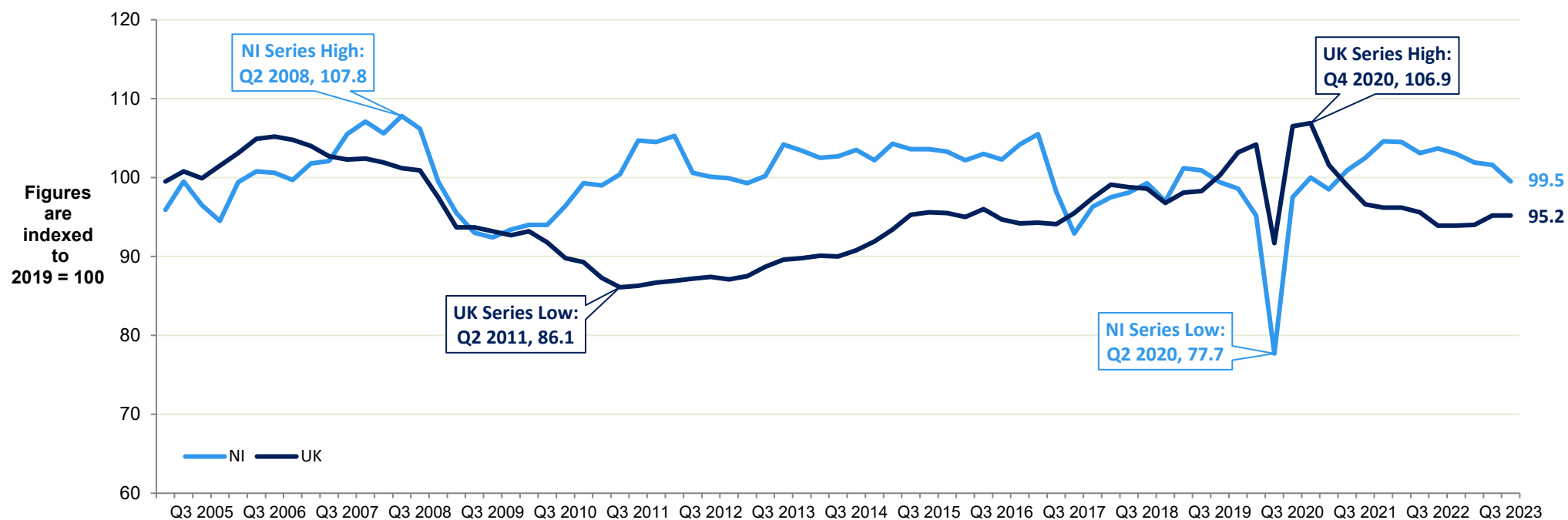
1 Summary of Index of Production

Change in IOP

The seasonally adjusted estimate for the NI IOP for Quarter 3 2023 showed decreases:

- of 2.1% over the quarter from the Quarter 2 2023 revised estimate;
- of 4.1% over the year from the Quarter 3 2022 revised estimate; and
- of 2.4% when the most recent four quarters are compared to the previous four quarters.

Figure 1.1 IOP, NI & UK, Q1 2005 – Q3 2023



[Download Q3 2023 Data](#)

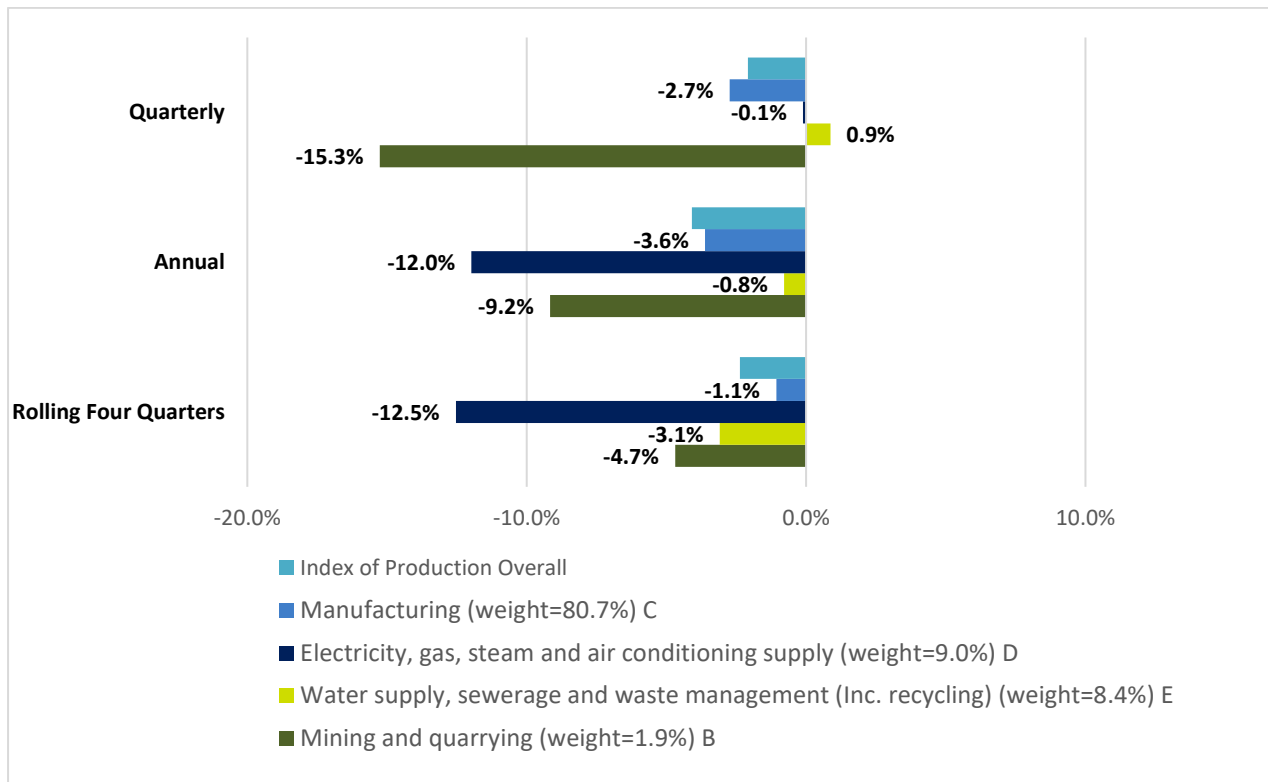
Commentary

Output in the NI Production sector decreased by 2.1% in real terms over the third quarter of 2023. The UK Production sector was unchanged over the same period. There was a decrease over the year in NI (4.1%) and an increase in the UK (1.4%).

The NI IOP typically outperformed the UK series until Quarter 3 2017. After this, the two series followed broadly similar trends, although the NI index saw a steeper decline in Quarter 2 2020. The NI IOP fell to its series low in Quarter 2 2020 but has since recovered to be 1.0% above the pre-pandemic level seen in Quarter 4 2019. Subsequently, the NI index has continued to outperform the UK series, which remains 7.8% below its pre-pandemic level.

In Quarter 3 2023 NI output is 28.1% above the series low (Quarter 2 2020) but remains 7.7% below the series high (Quarter 2 2008).

Figure 1.2 NI IOP Quarterly, Annual and Rolling Four Quarter Changes at sector level Quarter 3 2023¹



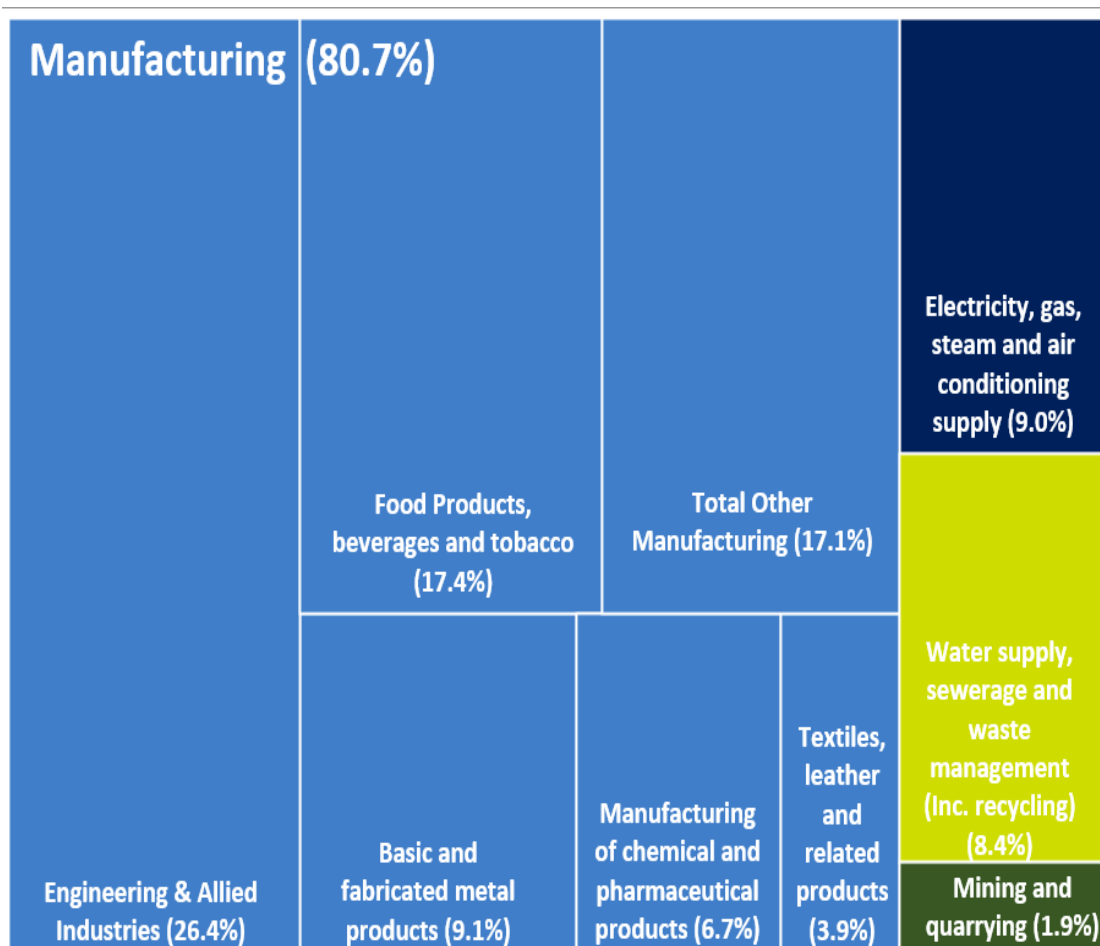
Note that each broad sector index and the overall IOP index are seasonally adjusted independently of each other. It is not appropriate to directly compare the changes in the broad sectors to the changes in the overall IOP index.

A number of changes have been made by ONS to the methods and data sources used in compiling the UK series as part of [Blue Book 2023](#). This has resulted in greater revision to the UK data than is normally expected. Further detail on the changes can be found in the [ONS GDP Monthly Estimate UK: Sept 2023](#).

¹ For further information on weights see Regional GVA information on page 6

The Production sector is dominated by Manufacturing, which accounts for approximately 80.7% of total production Gross Value Added (GVA) at 2019 prices. It is comprised of six subsectors, as shown in Figure 2.1.

Figure 2.1 IOP sector split (based on 2019 GVA)



Further information on these subsectors is available in the [IOP Tables](#).

2 Production output by sector

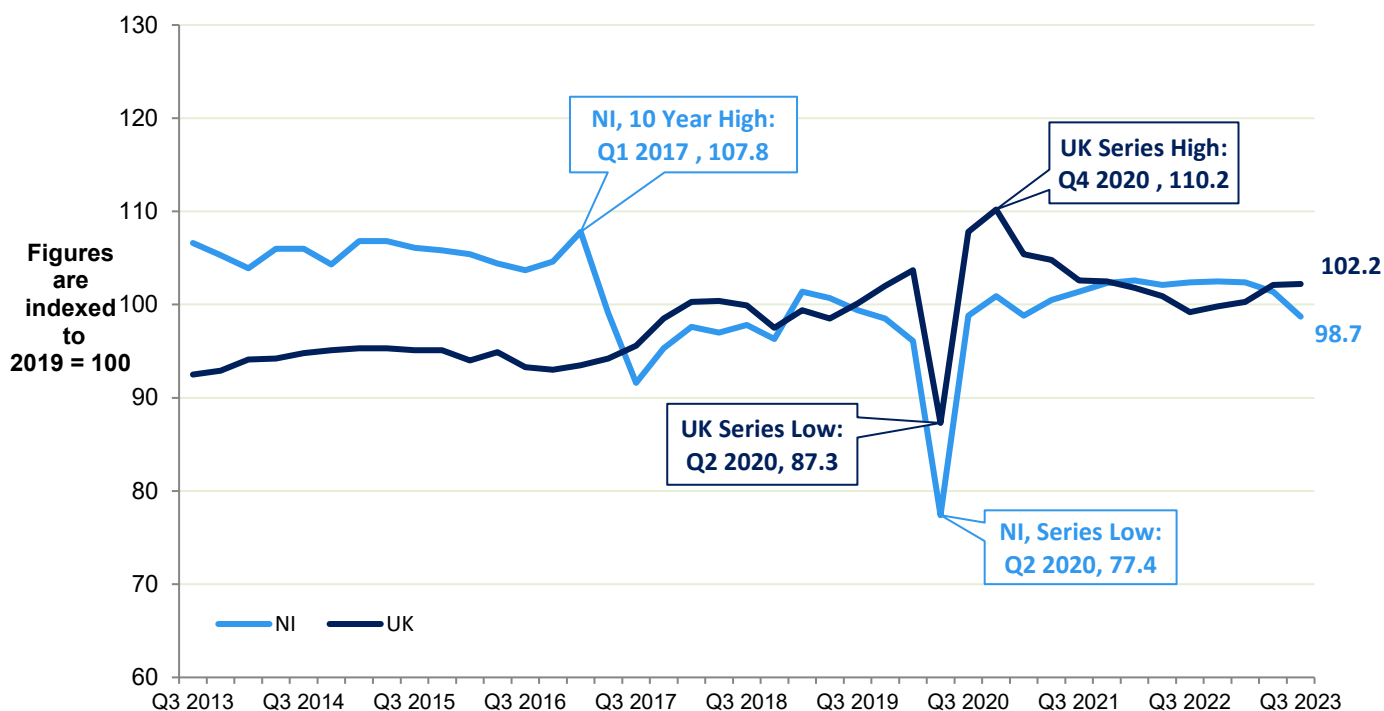
2.1 Manufacturing

Manufacturing sector (SIC07 Section C) - (weight = 80.7% of IOP): Manufacturing involves the transformation of materials into new products (outputs).

Key findings

- The NI seasonally adjusted figures show decreases of 2.7% over the quarter, 3.6% over the year and 1.1% on a rolling four quarters basis.
- The UK seasonally adjusted figures show increases of 0.1% over the quarter and 3.0% over the year while the rolling four quarters was unchanged.
- NI output is 8.4% below the highest point recorded (Quarter 1 2017) over the last ten years.
- NI output is 27.4% above the series low recorded in Quarter 2 2020.

Figure 2.1 Manufacturing sector, NI & UK, Q3 2013 – Q3 2023



[Download Q3 2023 Data](#)

The UK and NI indices have had a broadly similar trend in the Manufacturing sector since Quarter 3 2017. The NI index fell to a series low in Quarter 2 2020 which was also a ten year low for the UK index. Both indices showed a recovery throughout 2021 and 2021 and have been on a relatively flat trend since Quarter 3 2021. In Quarter 3 2023 both the NI and UK Manufacturing indices were 0.2% above their pre-pandemic levels seen in Quarter 4 2019.

2.2 Electricity, gas, steam and air conditioning supply

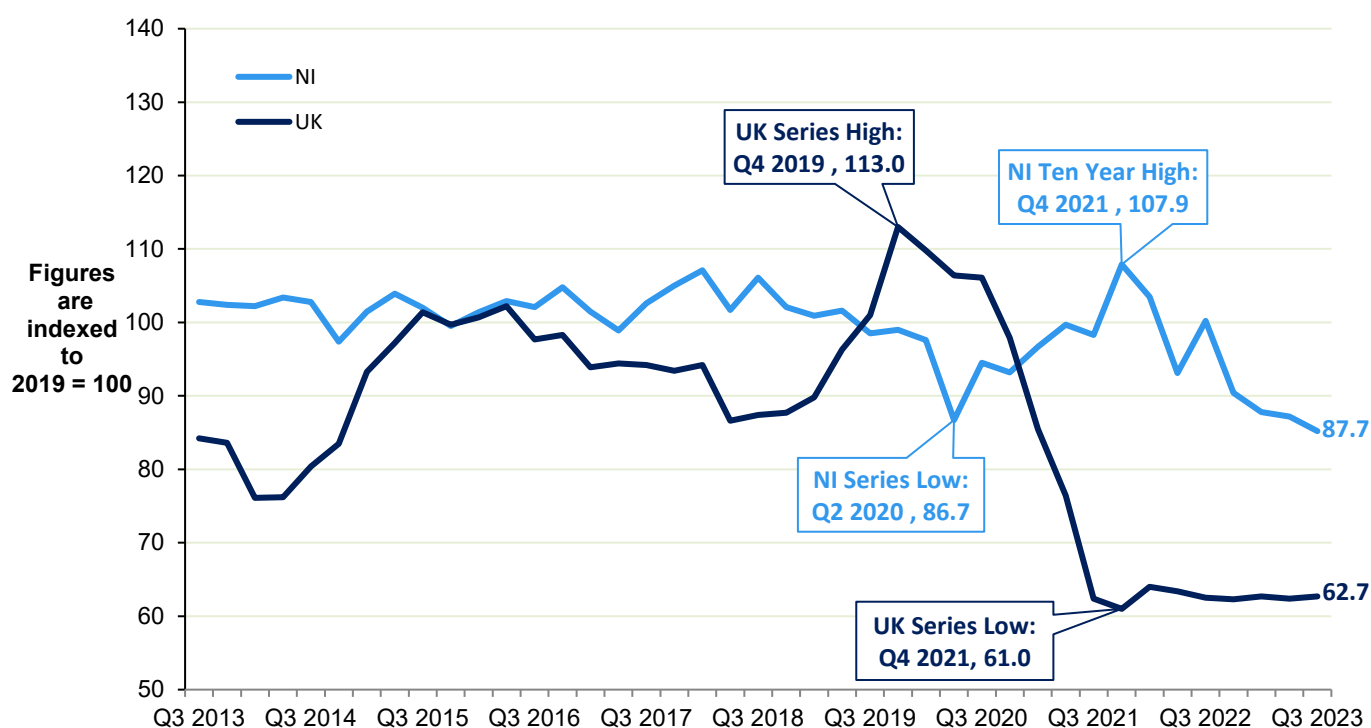
Electricity, gas, steam and air conditioning supply (SIC07 Section D) (weight = 9.0% of IOP):

This sector includes the activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains and pipes. Also included is its distribution in industrial parks or residential buildings. Therefore, the operation of electric and gas utilities are included.

Key findings

- The NI seasonally adjusted figures show decreases of 0.1% over the quarter, 12.0% over the year and 12.5% on a rolling four quarters basis.
- The seasonally adjusted figures for the UK show increases of 0.5% over the quarter and 0.3% over the year, and a decrease of 0.3% on a rolling four quarters basis.
- The Quarter 3 2023 NI estimate is 19.6% below the series high recorded in Quarter 1 2010 and 18.6% below the ten year high recorded in Quarter 4 2021.
- NI output is 0.9% above the series low recorded in Quarter 2 2020.

Figure 2.2 Electricity, gas, steam and air conditioning supply, NI & UK, Q3 2013 – Q3 2023



[Download Q3 2023 Data](#)

The NI index remained relatively stable between Quarter 3 2013 and Quarter 2 2019 while, during the same period, the UK index showed greater variation. The NI index has outperformed the UK index over the last ten years, except during the period of Quarter 3 2019 to Quarter 4 2020. NI output in this sector is 11.3% below the pre-pandemic level of Quarter 4 2019, while UK output is 44.5% below its Quarter 4 2019 level.

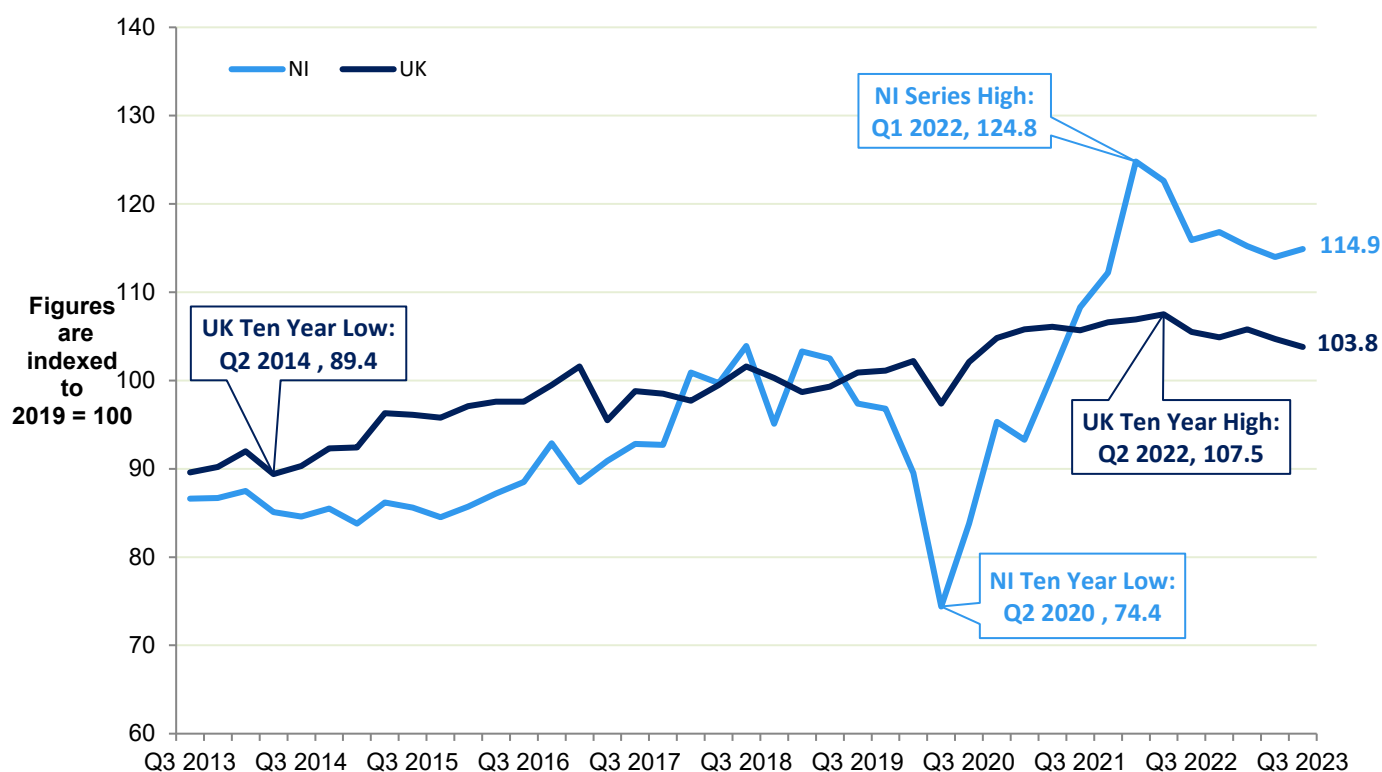
2.3 Water supply, sewerage and waste management (Inc. recycling)

Water supply, sewerage, and waste management (Inc. recycling) (SIC07 Section E) (weight = 8.4% of IOP): This section covers activities related to the management (including collection, treatment and disposal) of various forms of waste, such as solid or non-solid industrial or household waste, as well as contaminated sites. Activities of water supply are also grouped in this section since they are often carried out in connection with, or by units also engaged in, the treatment of sewage.

Key findings

- The NI seasonally adjusted figures show an increase of 0.9% over the quarter while over the year and on a rolling four quarters basis the series decreased by 0.8% and 3.1% respectively.
- The UK reports decreases of 0.9% over the quarter, 1.6% over the year, and 1.7% on a rolling four quarters basis.
- The NI estimate is 7.9% below the series high seen in Quarter 1 2022.
- NI output is 54.5% above the ten year low recorded in Quarter 2 2020 and is 66.8% above the series low recorded in Quarter 3 2005.

Figure 2.3 Water supply, sewerage and waste management (Inc. recycling), NI & UK, Q3 2013 – Q3 2023



[Download Q3 2023 Data](#)

The UK index has generally been outperforming the NI index in this sector since Quarter 3 2013. NI output saw a substantially larger decrease in 2020 than the UK output but has recovered in recent quarters. In NI this sector is 18.8% above the pre-pandemic level seen in Quarter 4 2019 while the UK is 2.7% above its Quarter 4 2019 level.

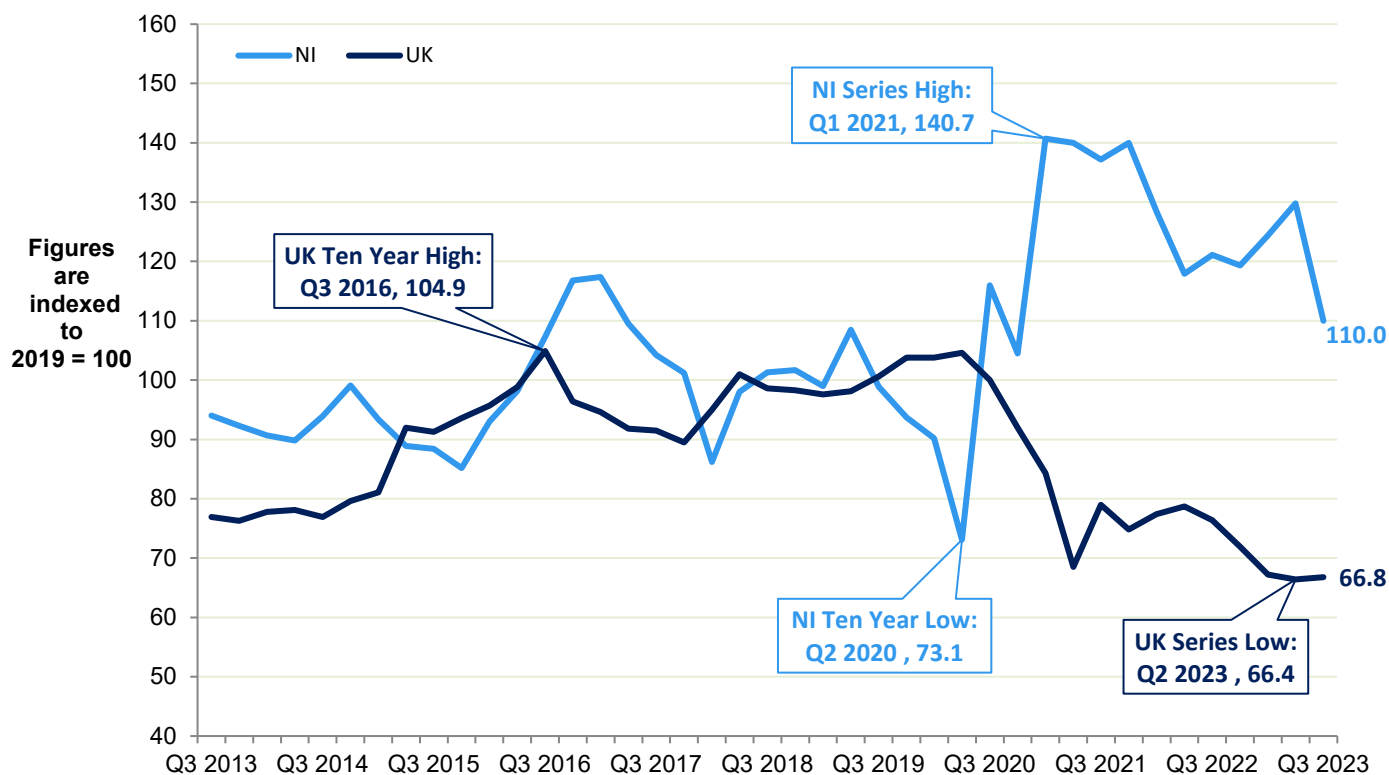
2.4 Mining and quarrying

Mining and quarrying (SIC07 Section B) (weight = 1.9% of IOP): This section covers the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining, etc.

Key findings

- The NI seasonally adjusted figures show decreases of 15.3% over the quarter, 9.2% over the year and 4.7% on a rolling four quarters basis.
- The UK seasonally adjusted figures show an increase of 0.6% over the quarter while over the year and on a rolling four quarters basis it decreased by 12.6% and 11.4% respectively.
- NI output is 21.8% below the series high recorded in Quarter 1 2021.
- NI output is 50.4% above its ten year low (Quarter 2 2020) and 61.8% above the series low (Quarter 1 2005).

Figure 2.4 Mining and quarrying, NI & UK, Q3 2013 – Q3 2023



[Download Q3 2023 Data](#)

Both the NI and the UK indices have shown volatility in the Mining and quarrying sector. Since Quarter 3 2016 NI has generally performed better than the UK in this sector. In NI this sector is currently 17.4% above the pre-pandemic level reported in Quarter 4 2019, whereas in the UK this sector is 35.6% below its Quarter 4 2019 level.

3 Background Notes

Further Information

Data published within this bulletin is available to download from our [website](#) and the new NISRA Data Portal.

Detailed [background information](#) documents and [methodology](#) information have also been published online for users to refer to for more detailed information on the IOP.

Data collection and estimates

The following provides an overview of the IOP coverage response rates for Quarter 3 2023, compared to overall median rates for 2022, 2021 and 2020:

	Quarter 3 2023	2022 (median)*	2021 (median)*	2020 (median)*
Coverage response rate (returned turnover)	69%	66%	69%	60%

*median value achieved at IOP database closure of quarters 1 to 4 for 2020, 2021 and 2022.

Changes to recent releases

Quarter	Change	Detail
Quarter 2 2023	Seasonal Adjustment Review	Following the seasonal adjustment review conducted in July 2023 changes have been made to some regressors and models used to seasonally adjust time series using X13 ARIMA SEATS.
Quarter 2 2023	Revised 2019 GVA	Figures in this publication have been weighted using the revised Northern Ireland 2019 GVA which became available on 25 April 2023.
Quarter 3 2023	Updated 2019 GVA Reference Year, and methodological changes.	The UK National Accounts, The Blue Book: 2023 was published on 31 October 2023. For the third consecutive year the reference year and base year have remained at 2019 due to the impact of the coronavirus (COVID-19) pandemic. There were methodological changes made by the ONS detailed here, that resulted in greater revision to the UK data than is normally expected.
Quarter 3 2023	Outputs Consultation	Following a public consultation on NISRA outputs, the Index of Production bulletin has been streamlined.

Next publication

The next bulletin is due to be published on 14 March 2024.

If you require any further information, please contact:

Stephanie Bruce
Economic and Labour Market Statistics Branch
Floor 1
Stranmillis Court
Colby House
Email: economicstats@nisra.gov.uk
X (Formerly Twitter): [@NISRA](#)

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