

Northern Ireland Quarterly Index of Services

Quarter 1 (January - March) 2023

Theme: Economy

Frequency: Quarterly

Geographical Area: Northern Ireland

Date: 15 June 2023

Introduction

The quarterly Index of Services (IOS) provides a timely indicator of change in output within the private sector services industries in Northern Ireland (NI). IOS indices, along with published quarterly data and unpublished agricultural output data, are used to generate the [Northern Ireland Composite Economic Index \(NICEI\)](#). The NICEI is an experimental quarterly measure of economic activity in NI.

In line with guidance detailed in the [UK National Accounts Blue Book 2022](#) (published on 31 October 2022), figures in this publication have been weighted using the revised Northern Ireland 2019 GVA, and the base year has remained at 2019 for a second consecutive year. This is to account for any atypical movements in the series in 2020 as a result of the coronavirus (COVID-19) pandemic.

Output estimates are calculated from the IOS aspect of the Quarterly Business Survey (QBS). The IOS has a sample size of approximately 3,600 businesses, covering all private sector services businesses with 100 or more employees and a representative sample of smaller businesses. The latest quarterly estimates are compared to revised Quarter 4 2022 and Quarter 1 2022 estimates.

Key Points

- The NI IOS increased by 2.2% over the quarter (January - March) and by 2.4% over the year. NI services output is now at a new series high.
- UK output increased by 0.1% over the first quarter of 2023 and saw an increase of 0.7% over the year.
- NI services output is now 7.4% above the pre-Coronavirus pandemic level seen in Quarter 4 2019 while UK services output remains 1.0% below its Quarter 4 2019 level.
- When the most recent four quarters are compared to the previous four quarters the NI services sector increased by 1.2% while the UK services sector increased by 2.6%.
- NI services output is 38.1% higher than the lowest point (Quarter 2 2020) since the series began.
- UK services output is 30.8% higher than the lowest point (Quarter 1 2005) since the series began. UK services output is now 1.3% lower than its series high seen in Quarter 3 2019.

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NATIONAL STATISTICS STATUS

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.

These statistics were designated as National Statistics on 5 August 2011 following a full [Index of Services assessment](#) against the UK [Code of Practice for Statistics](#).

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 Services Statistics by amending the format and structure of reports in line with accessibility regulations.

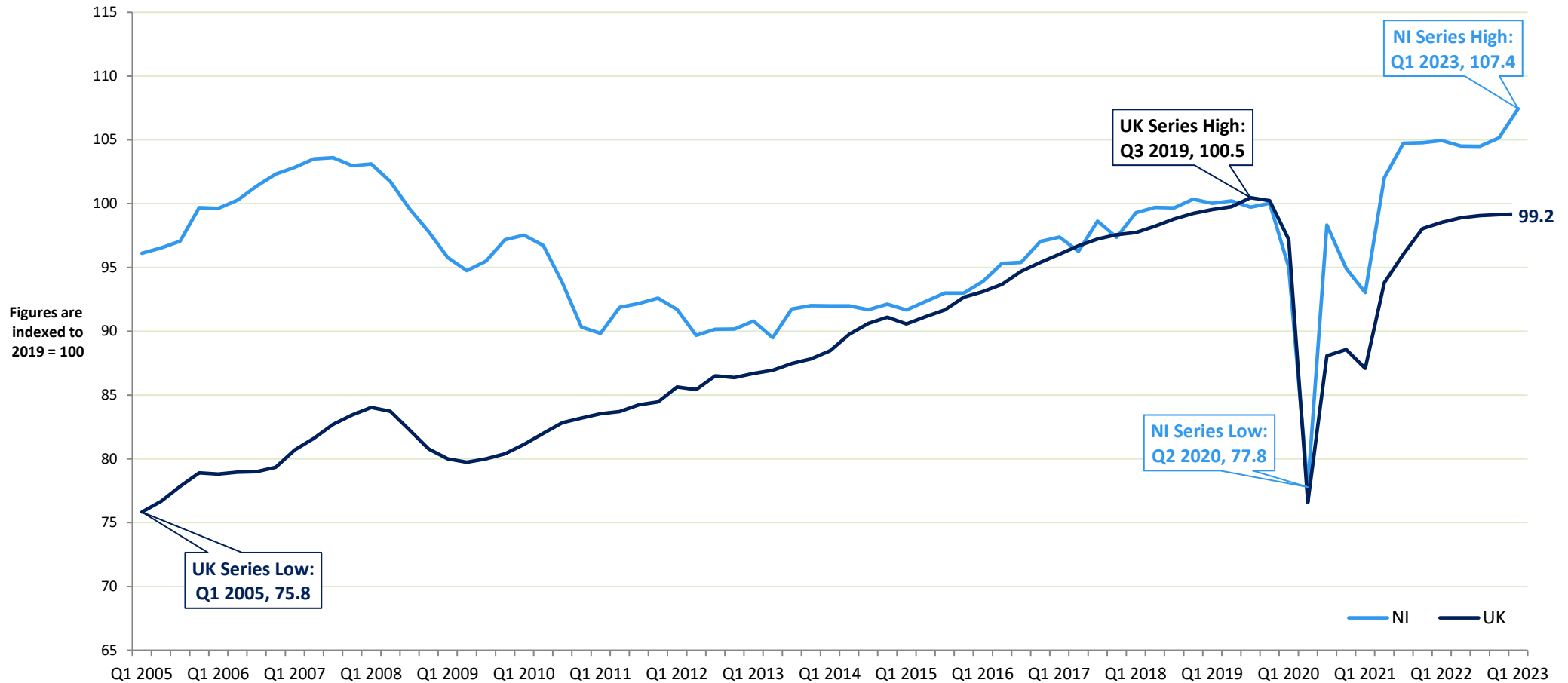
1 Summary of Index of Services

1.1 Changes in Index of Services

The seasonally adjusted estimate for the NI IOS for Quarter 1 2023 showed that output increased:

- by 2.2% over the quarter from the Quarter 4 2022 revised estimate;
- by 2.4% over the year from the Quarter 1 2022 revised estimate; and
- by 1.2% when the most recent four quarters are compared to the previous four quarters.

Figure 1.1 IOS, NI & UK, Q1 2005 – Q1 2023



[Download Q1 2023 data](#)

1.2 Commentary

NI services sector output increased by 2.2% over the first quarter of 2023 from the revised Quarter 4 2022 estimate to reach a series high. The NI Index of Services output is now 7.4% above the pre-pandemic level seen in Quarter 4 2019, while the UK IOS output remains 1.0% below its pre-pandemic level. Output in the NI services sector is 38.1% higher than the series low seen in Quarter 2 2020.

Between Quarter 1 2015 and Quarter 4 2019 both the NI and UK indices followed a similar trend until Quarter 1 2020 when the NI series saw a greater decrease than the UK series. Subsequent recovery has seen the series diverge but follow similar trends, with the NI index now outperforming the UK index.

Over the quarter, the Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector increased by 1.7%; the Business services and finance sector increased by 3.0%; and the Other services sector increased by 1.1%. These increases were offset by a 2.9% decrease in the Transport, storage, information and communications sector.

Over the year there were increases seen in Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector (1.5%); the Business services and finance sector (8.7%); and the Other services sector (5.7%). The only sector to show a decrease was the Transport, storage, information & communication sector (4.4%).

When the current four quarters are compared to the previous four quarters, three sectors showed an increase, the Business services and finance sector by 6.2%; the Other services sector by 10.6% and the Transport, storage, information & communication sector by 5.0%. The Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector decreased by 2.1%.

Figure 1.2 NI IOS Quarterly, Annual and Rolling Four Quarter Changes at Sector Level¹

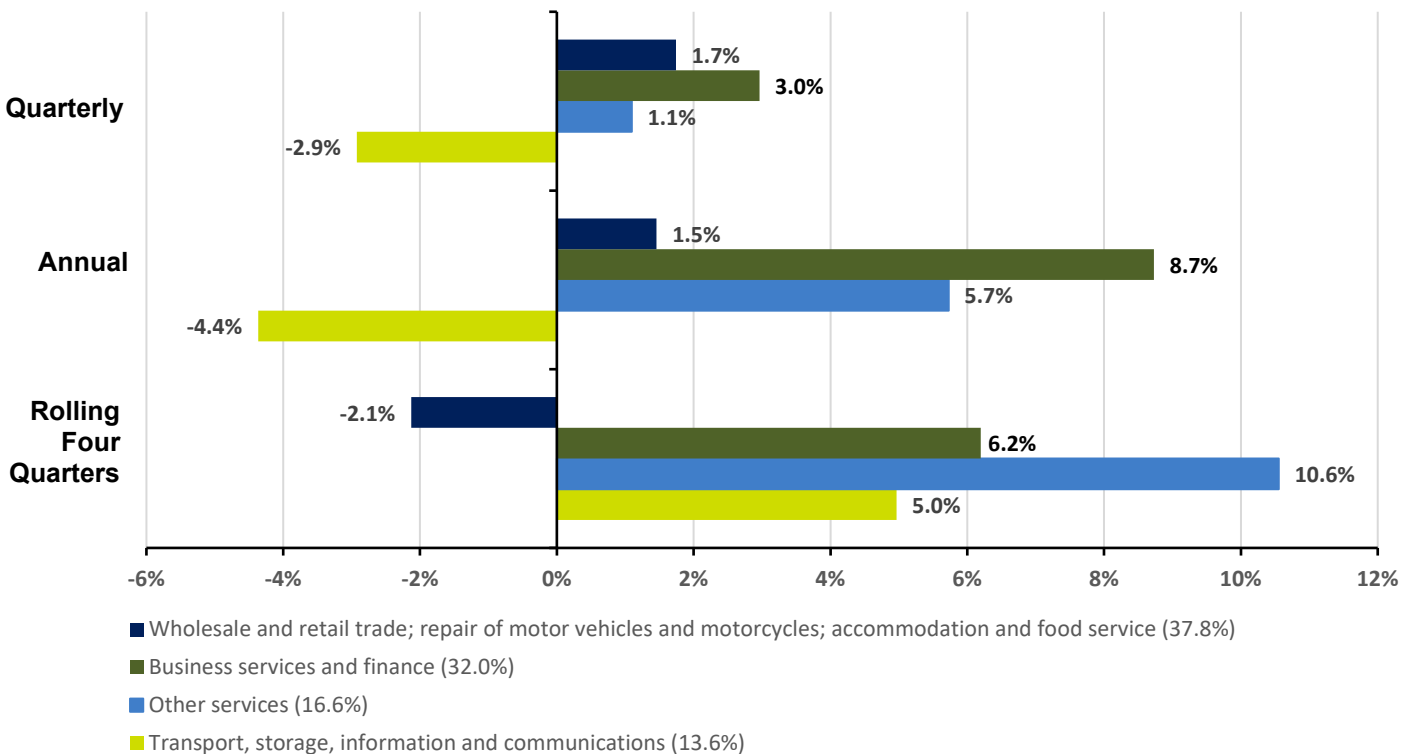


Figure 1.3 NI IOS Quarterly, Annual and Rolling Four Quarter Changes at Sector Level¹

Broad Sector	Change		
	Quarter on quarter	Year on year	Rolling four quarter
Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service (37.8%)	1.7%	1.5%	-2.1%
Business services and finance (32.0%)	3.0%	8.7%	6.2%
Other services (16.6%)	1.1%	5.7%	10.6%
Transport, storage, information and communications (13.6%)	-2.9%	-4.4%	5.0%

Note that each broad sector index and the overall IOS 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 IOS index.

¹ For further information on weights see Regional GVA information on page 14

1.3 Context

The IOS is an important short-term measure of change in the output of the production sector of the economy. The contents of this report will be of interest to government policymakers, Members of the Legislative Assembly, the business community, economic commentators, academics and members of the general public with an interest in the NI economy. A [summary of usage of the NI IOS](#) is available on the NISRA website.

The Department for the Economy (DfE) [Economic Commentary](#) provides an overview of the NI economy, setting it in context with the UK and Republic of Ireland.

The most up-to-date official statistics on the economy and labour market are available on the [Economic Overview](#) dashboard on the [Economic and Labour Market Statistics \(ELMS\) section](#) of the NISRA website.

The IOS is published on a Standard Industrial Classification 2007 (SIC07) basis. IOS data prior to Quarter 2 2011 were collected on a SIC 2003 (SIC03) basis and have been converted to approximate the SIC07 coverage. Volatility can arise when businesses inform NISRA of SIC code changes via business surveys, the Office of National Statistics (ONS) or HM Revenue & Customs (HMRC). This new information helps to improve the industry estimates of services output but can add volatility to quarterly and annual changes.

The [Background notes](#) section of this document provides information on the methodology used to produce these statistics as well as information on the quality and accuracy of the data.

This bulletin contains results for the service sector as a whole and the following four sectors:

- business services and finance;
- wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service;
- other services; and,
- transport, storage, information and communication.

All services sector series are seasonally adjusted on a 2019 = 100 basis using X-13 ARIMA SEATS.

Comparative UK data, produced by the ONS, are presented where these are available. The [latest UK IOS results](#) published on the ONS website.

The IOS is published at the same time as the experimental [Northern Ireland Quarterly Retail Sales Index \(RSI\)](#). The quarterly RSI provides a timely indicator of change in output within the private retail service industries in Northern Ireland (NI). The retail sales sector is a subset of IOS and refers to SIC 47 (Retail trade, except of motor vehicles and motorcycles).

This publication provides three measures of growth for all indices.

1. **Quarter-on-quarter change** provides the most recent measure of how the sector is changing. It is appropriate to compare consecutive quarters as the indices are seasonally adjusted to remove the effects of changes in output as a result of the time of the year;
2. **Year-on-year change** compares the current quarter with the same quarter one year ago; and
3. **Rolling four quarter change** compares the most recent twelve months with the twelve months before. This comparison is useful for identifying changes in output over a longer time period than the other two approaches.

1.4 Revisions

Results are provisional and subject to revision which can be made for a variety of reasons. The most common include late responses to surveys, estimates being replaced by actual data, revisions to seasonal adjustment factors, methodological changes and changes to business classifications. There can also be changes made to the deflators provided by ONS which may impact the entire series. A revisable period of the preceding four quarters is applied for late responses for IOS census businesses. Volatility also arises when businesses inform NISRA of SIC code changes via business surveys, ONS or HMRC. This new information helps to improve the estimates of growth each quarter but also adds volatility to quarterly and annual changes. Only rarely are there avoidable 'errors', such as human or system failures, and such mistakes are made quite clear when they do occur.

2 Services output by sector

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.

2.1 Key Findings:

- The NI IOS increased:
 - by 2.2% over the quarter;
 - by 2.4% over the year; and,
 - by 1.2% on a rolling four quarters basis.
- Output in the NI IOS is now at a series high.
- The 2.2% quarterly increase in NI services output was driven by increases in three of the four subsectors: the Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector (1.7%); the Business services and finance sector (3.0%) and the Other services sector (1.1%). There was a decrease in the Transport, storage, information and communications sector (2.9%).
- The 2.4% increase seen in NI services output over the year was driven by increases in three of the four subsectors, with increases in the Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector decreased over the year (1.5%); the Business services and finance sector (8.7%); and the Other services sector (5.7%). There was a decrease in the Transport, storage, information and communications sector (4.4%).
- The 1.2% increase seen in NI services output when the current four quarters are compared to the previous four quarters was driven by increases in three sectors, the Business services and finance sector by 6.2%; the Other services sector by 10.6% and the Transport, storage, information & communication sector by 5.0%. The Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector decreased by 2.1%.

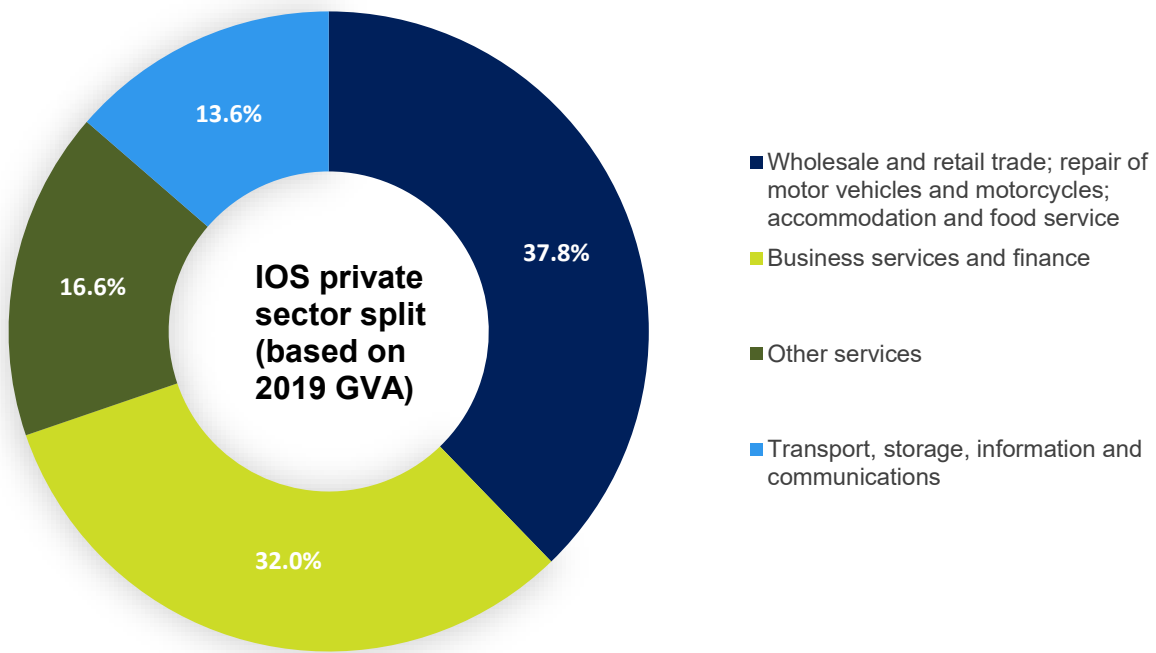
The private services sector is comprised of four sectors but is dominated by:

- i. Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food services; and
- ii. Business services and finance sectors.

Together these two sectors account for 69.8% of total Gross Value Added (GVA) at 2019 prices contributed to IOS by the private sector services industries. The sectors are listed in order of importance of their contribution made to the overall IOS.

Figure 2.1

IOS private sector split (based on 2019 GVA)²



² May not add to 100% due to rounding

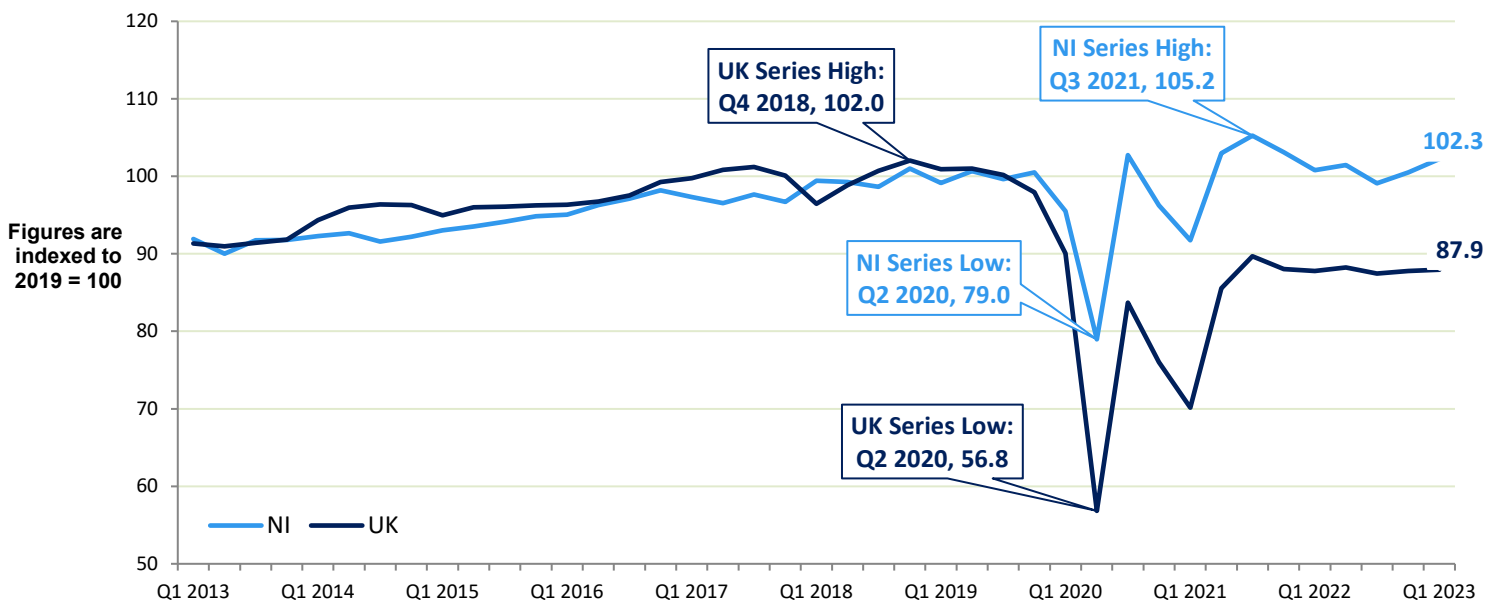
2.2 Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector

(SIC 07 Section G1) – (weight = 37.8% of IOS): includes the wholesale and retail sale and the supply of services incidental to the sale of merchandise as well as the repair of motor vehicles and motorcycles. This sector also includes the provision of short-stay accommodation for visitors and the provision of complete meals and drinks fit for immediate consumption.

Key Findings:

- The NI seasonally adjusted figures:
 - increased by 1.7% over the quarter;
 - increased by 1.5% over the year; and
 - decreased by 2.1% on a rolling four quarter basis.
- The UK seasonally adjusted figures:
 - increased by 0.2% over the quarter;
 - increased by 0.2% over the year; and
 - increased by 0.1% on a rolling four quarter basis.
- NI output in Quarter 1 2023 is 29.5% higher than the series low (Quarter 2 2020).
- NI output is 2.8% below the series high (Quarter 3 2021).
- NI output in this sector is 1.7% above its pre-pandemic level seen in Quarter 4 2019.

Figure 2.2 Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service sector, NI & UK, Q1 2013–Q1 2023



[Download Q1 2023 data](#)

The NI and UK indices followed a similar trend in this sector until Quarter 1 2020 when the UK series saw a greater decrease than the NI series. Subsequent recovery has seen the series diverge slightly but follow similar trends. In Quarter 1 2023 the UK index has dropped 13.8% from its series high in Quarter 4 2018 and remains 10.2% below its pre-pandemic level seen in Quarter 4 2019. The NI index is now 2.8% below the series high seen in Quarter 3 2021 but remains 1.7% above its pre-pandemic level.

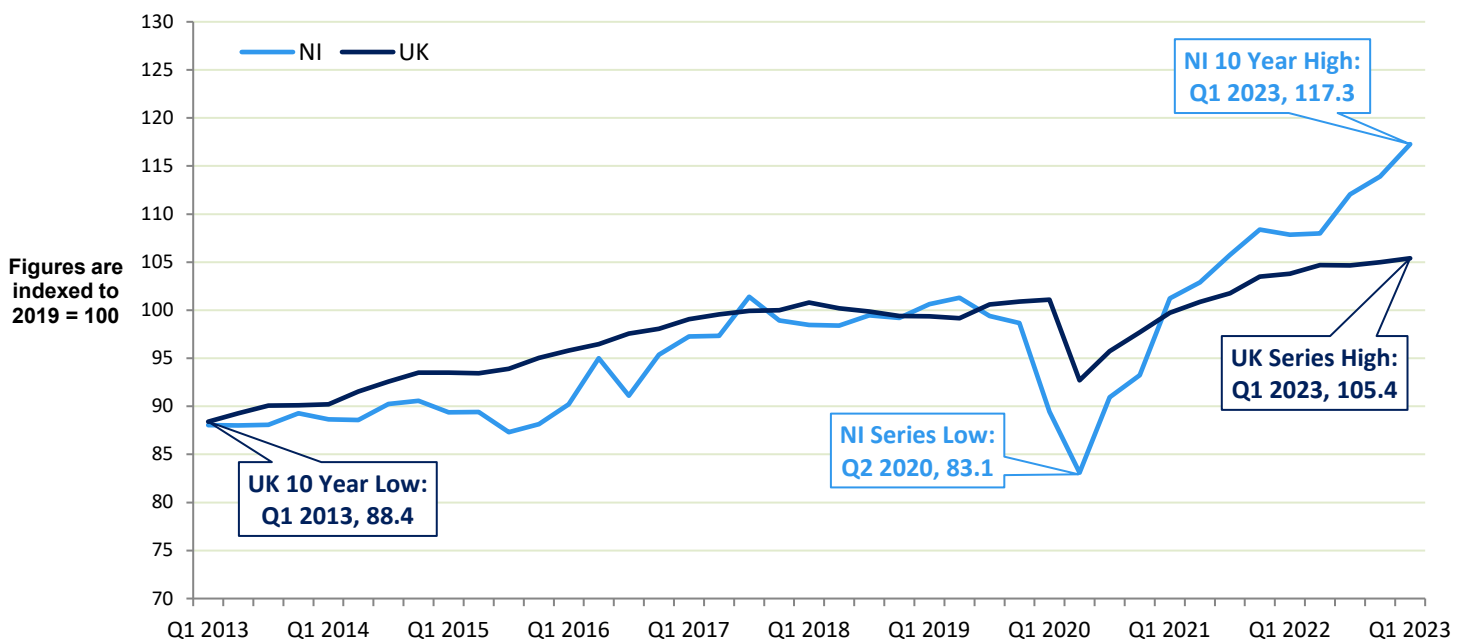
2.3 Business services and finance sector

(SIC 07 Section KLMN) - (weight = 32.0% of IOS): includes financial service activities, real estate activities, specialised professional, scientific and technical activities and a variety of activities that support general business operations.

Key Findings:

- The NI seasonally adjusted figures increased:
 - by 3.0% over the quarter;
 - by 8.7% over the year; and
 - by 6.2% on a rolling four quarter basis.
- The UK seasonally adjusted figures increased:
 - by 0.4% over the quarter;
 - by 1.5% over the year; and
 - by 2.4% on a rolling four quarter basis.
- NI output in Quarter 1 2023 is now at a 10 Year High.
- NI output in Quarter 1 2023 remains 15.4% below the highest point since the series began (Quarter 1 2008).
- UK output in Quarter 1 2023 is now at its highest level since the series began.
- NI output in Quarter 4 2022 is 41.1% above the series low seen in Quarter 2 2020.
- NI output is now 18.9% above the pre-pandemic level seen in Quarter 4 2019.

Figure 2.3 Business services and finance sector, NI & UK, Q1 2013 – Q1 2023



[Download Q1 2023 data](#)

The UK index in the Business services and finance sector generally outperformed the NI index between 2013 and Quarter 4 2020. NI output saw a substantially larger decrease in 2020 than UK output and reached a series low in Quarter 2 2020 but recovered throughout 2021 to outperform the UK level. The UK Quarter 4 2022 level is now 4.5% above its pre-pandemic level seen in Quarter 4 2019 and is at a series high.

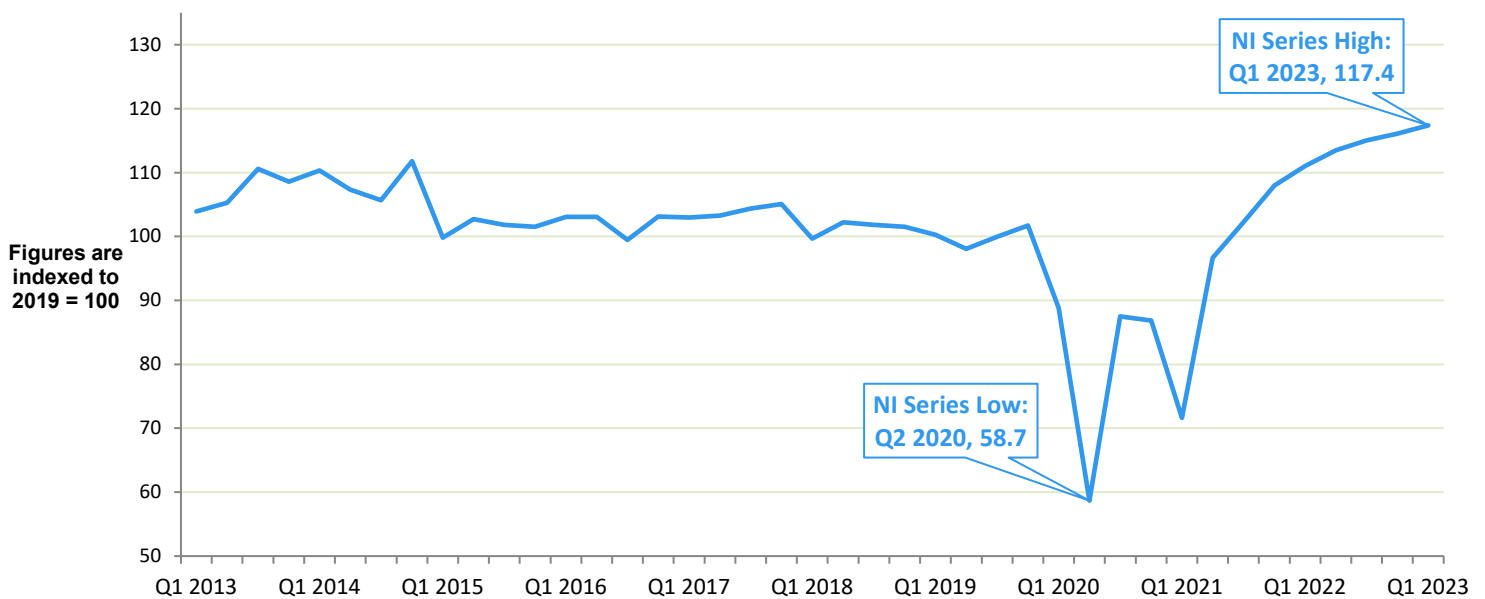
2.4 Other services sector³

(SIC 07 Section PQRS) - (weight 16.6% of IOS): includes other activities not covered elsewhere - education, health & social work, arts, entertainment and recreation and other services.

Key Findings:

- The NI seasonally adjusted figures increased:
 - by 1.1% over the quarter;
 - by 5.7% over the year; and
 - by 10.6% on a rolling four quarter basis.
- NI output in Quarter 1 2023 is now at the highest point since the series began.
- NI output in Quarter 1 2023 is 100.1% above the lowest point since the series began (Quarter 2 2020).
- The NI level is now 15.4% above the pre-pandemic level seen in Quarter 4 2019.

Figure 2.4 Other services sector, NI, Q1 2013 – Q1 2023



[Download Q1 2023 data](#)

The NI index followed a consistent trend in this sector between Quarter 3 2015 and Quarter 4 2019. The index fell to a series low in Quarter 2 2020, 42.3% below the pre-pandemic level seen in Quarter 4 2019. The index has seen a recovery since then and is now 15.4% above the level seen in Quarter 4 2019.

³ The UK does not publish results on the same basis as NI so there are no UK results to compare against.

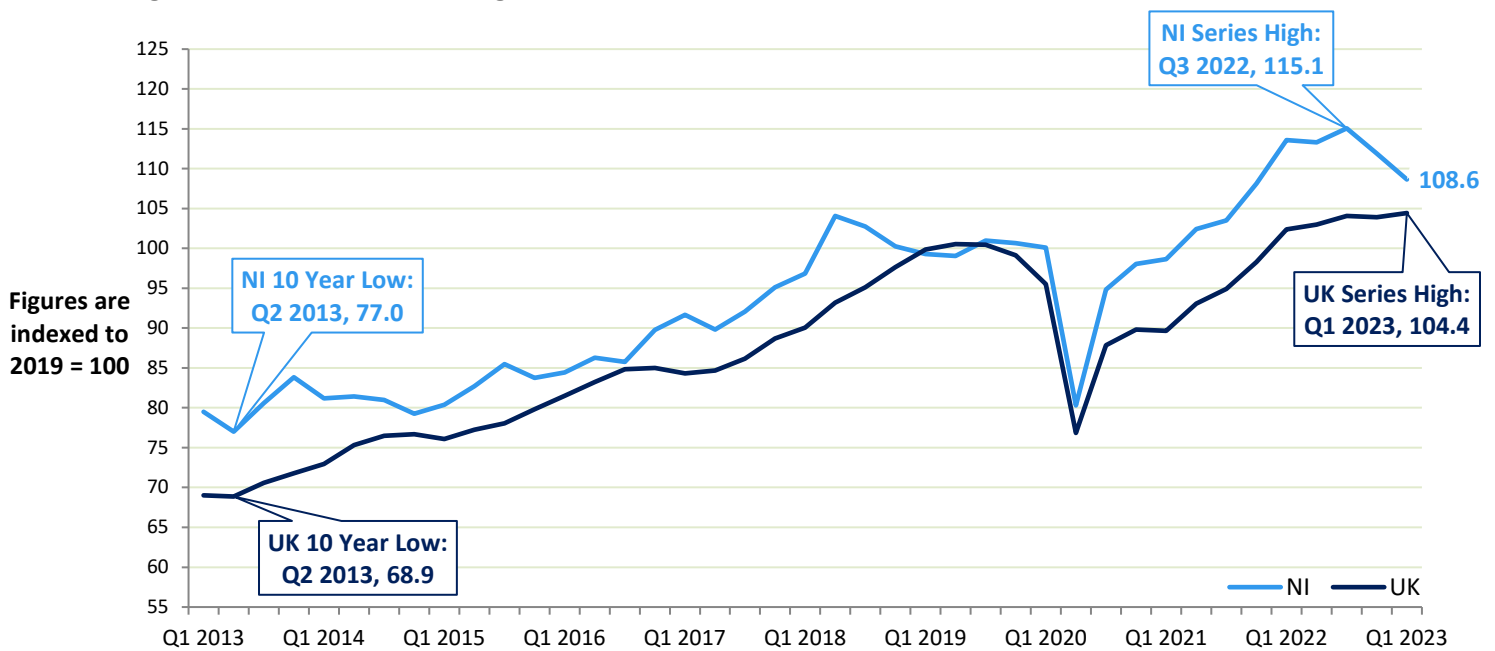
2.5 Transport, storage, information and communications sector

(SIC 07 Section HJ) - (weight 13.6% of IOS) : includes the provision of passenger or freight transport and associated activities, postal and courier activities, the production and distribution of information and cultural products, as well as data or communications, information technology activities and the processing of data and other information service activities.

Key Findings:

- The NI seasonally adjusted figures:
 - decreased by 2.9% over the quarter;
 - decreased by 4.4% over the year; and
 - increased by 5.0% on a rolling four quarter basis.
- The UK seasonally adjusted figures:
 - increased by 0.5% over the quarter;
 - increased by 2.0% over the year; and
 - increased by 6.9% on a rolling four quarter basis.
- NI output is now 5.6% below the series high seen in Quarter 3 2022 while UK output is now at a new series high.
- NI output in Quarter 1 2023 is 41.1% above the lowest point recorded over the past ten years (Quarter 2 2013) and is 85.8% above the lowest point recorded since the series began (Quarter 1 2005).
- The NI level is now 7.9% above its pre-pandemic level seen in Quarter 4 2019.

Figure 2.5 Transport, storage, information and communications, NI & UK, Q1 2013 – Q1 2023



[Download Q1 2023 data](#)

The NI and UK indices followed a similar upward trend in the Transport, storage, information and communications sector throughout the series until the decline seen in Quarter 2 2020. Since then both the NI and UK indices have recovered and are now above the pre-pandemic levels seen in Quarter 4 2019, with the NI index having reached a series high in Quarter 3 2022, before decreasing over the last two quarters, while the UK index has increased slightly to reach a new series high this quarter. The NI index is now 7.9% above its pre-pandemic level seen in Quarter 4 2019, while the UK index is 5.3% above its Quarter 4 2019 level.

3 Background notes

Background

The quarterly IOS provides a measure of changes in the output of the private sector services industries in NI (this is defined as SIC07 sections G to S). Based on 2020 employee jobs data these private sector services industries accounted for 63.6% of the service sector Regional GVA, the remainder made up by public sector services. For further information please see the [Methodology for the NI Index of Services \(IOS\)](#).

Impact of coronavirus (COVID-19) on data collection and estimates

The Covid-19 pandemic impacted on the data collection and the validation of turnover data, which are collected on the Quarterly Business Survey.

The following provides an overview of the IOS coverage response rates for Quarter 1 2023, compared to overall median rates for 2022, 2021 and 2020:

	Quarter 1 2023	2022 (median)*	2021 (median)*	2020 (median)*
Coverage response rate (returned turnover)	63%	64%	64%	55%

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

Gross Value Added (GVA)

Weighting has been carried out using the balanced GVA approach which balances the income and production approaches to measuring the economy into a single estimate. For more information please see [Regional GVA information](#). In line with recent guidance from the [UK National Accounts Blue Book 2022](#), published October 2022, figures in this publication are weighted using revised 2019 GVA which became available on 30 May 2022. Publications for Quarter 1 and Quarter 2 2022 had been weighted using 2020 GVA figures.

Deflation

All series are measured at a constant market price (2019 = 100). Deflators adjust the value series, taking out the effect of price change, to create the volume series. The deflators used in this bulletin were provided by ONS on 7 June 2023. Details on [deflation improvements in the UK national accounts](#) can be found on the archived section of the ONS website.

Seasonal Adjustment Review

Following the seasonal adjustment review conducted in May 2022 changes have been made to some regressors and models used to seasonally adjust time series using X13 ARIMA SEATS. This improves the reliability of results. Further details on [this review and other methodological changes](#) implemented in June 2022 are available on the NISRA website.

Changes to recent releases

Quarter	Change	Detail
Quarter 1 2021	Seasonal Adjustment Review	Following the seasonal adjustment review conducted in March 2021 changes have been made to some regressors and models used to seasonally adjust (where applicable) time series using X13 ARIMA SEATS.
Quarter 1 2021	2019 GVA	Figures in this publication are weighted using 2019 GVA which became available on 26 March 2021.
Quarter 1 2021	Housing Association businesses added to IOS sample and universe.	Following passage of the Housing (Amendment) Act (Northern Ireland) 2020 , an assessment of registered housing associations (RHAs) in Northern Ireland concluded that, in the context of international rules laid out in the European System of Accounts 2010 and the accompanying Manual on Government Deficit and Debt 2019, RHAs in Northern Ireland are private non-financial corporations and as such they will be reclassified to the Business Services and Finance Sector (KLMN) for the purpose of national accounts and other economic statistics.
Quarter 3 2021	NI Index Rebased to 2019	Figures rebased to 2019 = 100 in line with ONS. For further information on this please see the Quarter 3 2021 Rebasing Notice .
Quarter 3 2021	Double deflation methods and deflator improvements	The UK National Accounts Blue Book 2021 was published on 29 October 2021. This introduced a number of improvements to methods, including implementing double deflation using Supply and Use Tables (SUTs). Double deflation is recognised as the best approach for producing volume estimates of GVA. These changes may result in some revisions to the backseries data. These changes are part of the wider development plan for UK Economic Accounts.
Quarter 1 2022	Seasonal Adjustment Review	Following the seasonal adjustment review conducted in May 2022 changes have been made to some regressors and models used to seasonally adjust time series using X13 ARIMA SEATS.
Quarter 1 2022	2020 GVA	Figures in this publication are weighted using 2020 GVA which became available on 30 May 2022.
Quarter 3 2022	Updated 2019 GVA Reference Year	The UK National Accounts Blue Book 2022 was published on 31 October 2022. The reference year and base year have remained at 2019 due to the impact of the coronavirus (COVID-19) pandemic. In line with international guidance, figures in this publication have been weighted using the revised Northern Ireland 2019 GVA which became available on 30 May 2022.

Publications policy

All ELMS publications are available to download free of charge from the [ELMS section of the NISRA website](#). The IOS bulletin and tables from the current publication, which includes all the data from the start of the series in 2005, are available in Excel and Open Document format to download from the [IOS section of the NISRA website](#).

Future IOS publications are due to be published on the same day as the [Index of Production](#) and the experimental [Northern Ireland Quarterly Retail Sales Index \(RSI\)](#) in March, June, September and December of each year. The [ELMS Publication Schedule](#) is available on the NISRA website.

Next publication

The next bulletin is due to be published on 14 September 2023.

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