

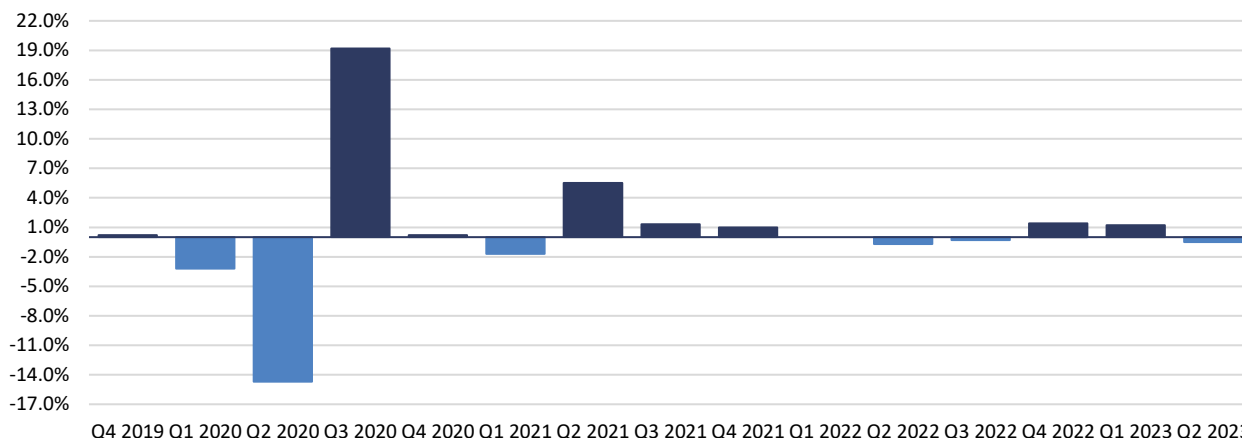
Northern Ireland Composite Economic Index (NICEI)

Experimental statistics

Quarter 2 (April - June) 2023

Economic Activity in Northern Ireland decreased by 0.5% in real terms during the second quarter of 2023.

Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), since Q4 2019



Quarterly change	Annual change	Pre-pandemic change (Q4 2019)*	Annualised change**	Private Sector		Public Sector	
				Quarterly	Annual	Quarterly	Annual
-0.5%	+1.7%	+5.8%	+0.9%	-0.8%	+1.9%	+0.2%	+1.3%
				Pre-pandemic	Annualised	Pre-pandemic	Annualised
				+5.8%	+0.7%	+5.8%	+1.9%

* We have included the pre-pandemic change (i.e. Q2 2023 vs. Q4 2019) to illustrate to users the impact compared to the last quarter before pandemic.

**Annualised change: Q3 2022 to Q2 2023 compared with Q3 2021 to Q2 2022.

Key Points

- Economic Activity in Northern Ireland decreased by 0.5% in real terms over the quarter to Q2 2023. Compared to Q2 2022, NI's output has increased by 1.7% and is now 5.8% above pre-pandemic levels seen in Q4 2019. When assessing annualised change, NI output has increased by 0.9%.
- Although the measures are not produced on a fully equivalent basis, [UK Gross Domestic Product \(GDP\)](#) showed growth (0.2%) over the quarter and also increased by 0.4% over the year to Quarter 2 2023. UK GDP is now -0.2% below pre-pandemic levels seen in Q4 2019.
- Over the same timeframe, GDP in [Ireland](#) increased by 0.5% over the quarter and decreased by 0.7% over the year. However, Ireland's GDP is 28.7% above pre-pandemic levels seen in Q4 2019.
- The largest contributions to change this quarter came from decreased activity in the Services sector and Construction sector which contributed 0.4 percentage points (pps) and 0.3 pps respectively.

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1 Context

The NICEI is a quarterly measure of economic activity in NI based on available official statistics¹. The NICEI statistics in this release are experimental statistics, which are still undergoing evaluation and are subject to revision (please refer to the background notes for further information). The NICEI is broadly equivalent to the output measure of Gross Domestic Product (GDP) produced by the Office for National Statistics (ONS) and is used to measure the performance of the NI economy. NISRA is currently working to develop a quarterly measure of GDP for NI which builds upon the NICEI.

This report covers the period 1st April to 30th June 2023 (Q2 2023).

Consultation on changes to NISRA's Statistical Outputs

NISRA has launched a consultation on proposed changes to a range of statistical outputs and this output is one of those affected.

We are proposing: That the statistical bulletin will be reduced to headline results only; some detailed analysis and economic commentary will be removed. The bulletin will be reduced from 19 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 12 tables).

Further information on the consultation and how to respond can be found on the [consultation page](#).

¹ Published quarterly indices (Index of Services, Index of Production, Quarterly Construction Enquiry), public sector employee jobs data from the Quarterly Employment Survey, plus agricultural output data from the Department of Agriculture, Environment and Rural Affairs, are weighted using the ONS Regional Accounts Gross Value Added (GVA) data and combined to provide a proxy measure of total economic output.

Uses of the NICEI

The NICEI is used to help monitor progress of a range of key government strategies in NI, notably the [Industrial Strategy](#) and the [10X Economic Vision](#). The statistics in this release are also used by a broad range of users with an interest in assessing and reporting on the level of economic activity here, such as the ONS, economists in the public and private sector, academics, media and the general public.

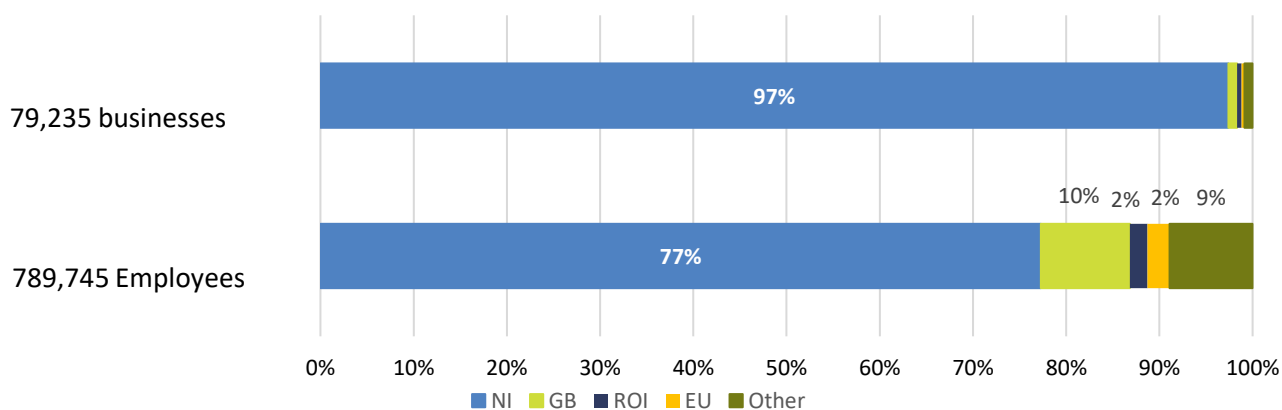
GVA Reference Year

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 figures, 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. This is aligned with the approach ONS has taken for their quarterly GDP and other business output statistics.

2 Profile of the Northern Ireland Economy

Latest figures from the NISRA [Inter Departmental Business Register](#) (IDBR) show that the number of VAT and/or PAYE registered businesses operating in Northern Ireland in 2023 is estimated to be 79,235; with 2,065 (2.6%) of these businesses having an ownership based outside of Northern Ireland. However despite the small share of the overall number of businesses, these organisations employ 179,430 (22.7%) of all employees in NI as demonstrated below.

Chart 2: Breakdown of NI Businesses & Employees by country of ownership



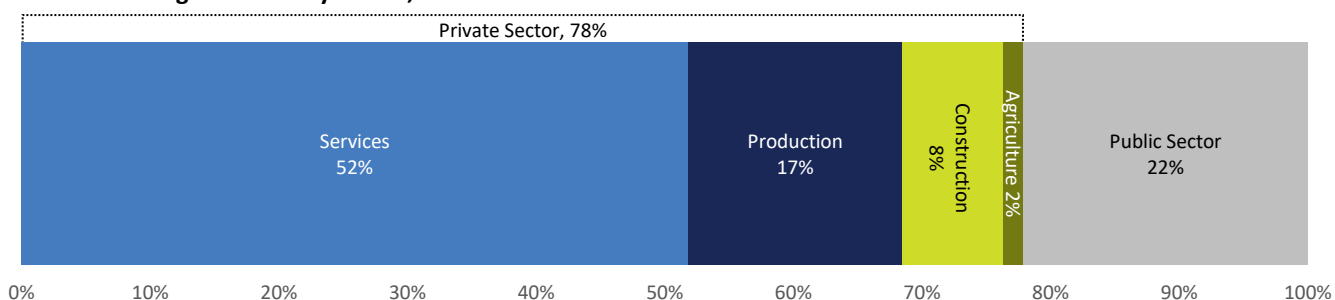
Source: NISRA [IDBR](#); June 2023

Furthermore, the Department for Business, Energy and Industrial Strategy (BEIS) estimates that in 2022 there were approximately 54,000 unregistered businesses operating in Northern Ireland employing 58,000 people², which is in addition to the figures reported by the IDBR.

² [Business population estimates 2022 - GOV.UK \(www.gov.uk\)](#)

In terms of the value of the Northern Ireland economy, the ONS estimate that in 2021 Gross Value Added (GVA)³ was £45.7bn. The chart below illustrates the sectoral breakdown of the NI Economy based on ONS regional GVA data. These figures are used to weight the respective industries' contribution to the overall output calculations for NI. However, given the turbulence in the economy during 2020 and 2021 we have used 2019 figures to create the weighting used for the NICEI calculations. We estimate the public split of GVA using detailed industry level employment shares as detailed in the [NICEI methodology paper](#).

Chart 3: NI Regional GVA by Sector, 2019

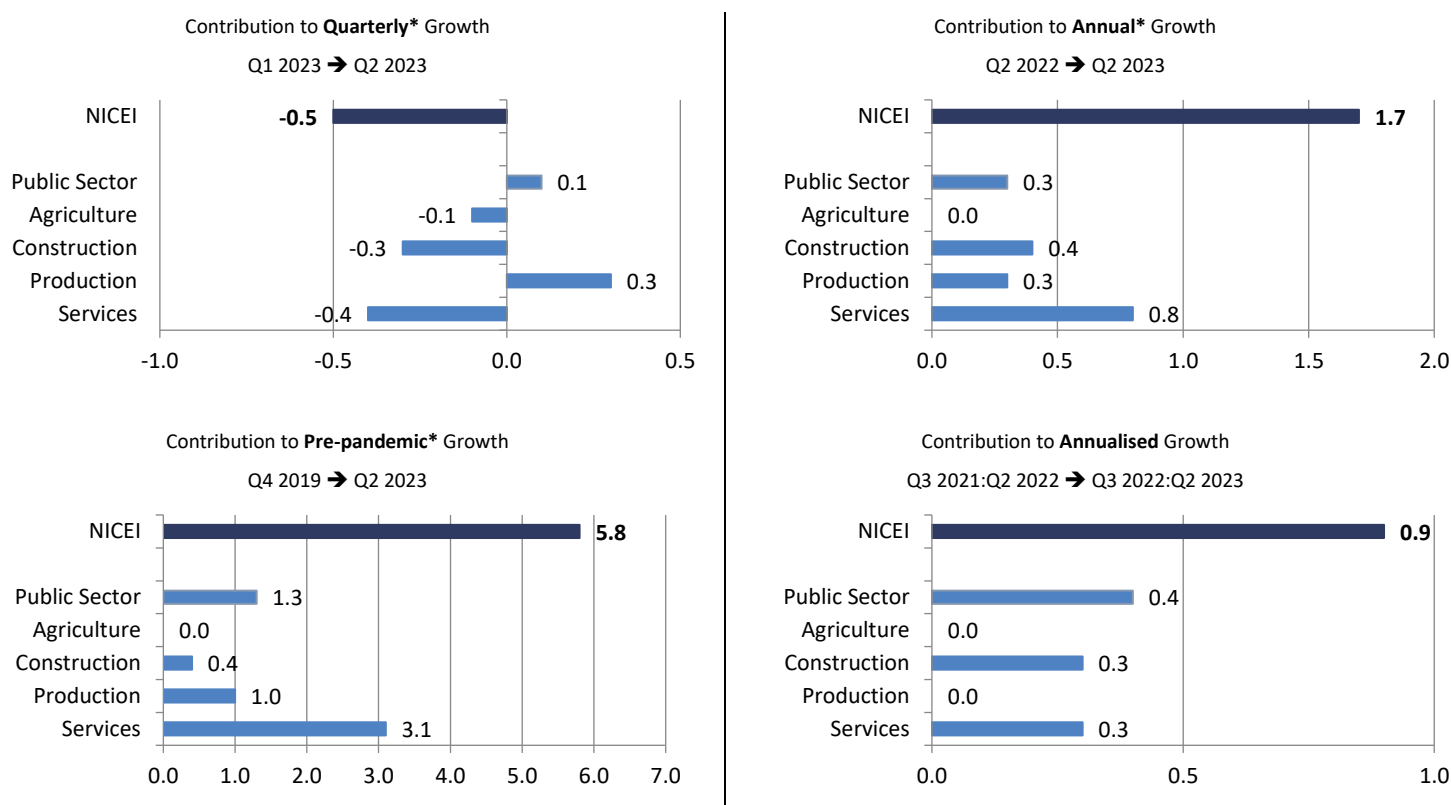


³ As measured using the balanced approach. Further information can be found [here](#).

3 Contribution of sectors to overall NICEI

The largest contribution to change over the quarter came from decreased economic activity in Services sector and Construction sector. When comparing the NI economy to its Pre-pandemic position, all sectors have had a positive contribution to economic activity.

Chart 4: NICEI, Contribution of sectors to quarterly, annual, pre-pandemic and annualised growth (pps)



The decrease in the NICEI over the latest quarter (0.5%) was driven by decreased activity in the Services sector (0.4 pps) and the Construction Sector (0.3 pps) with the Agriculture sector also decreasing marginally (-0.1 pps). The Production sector and Public sector had positive contributions (0.3 pps and 0.1 pps respectively).

Over the year, the NICEI increased by 1.7% to Q2 2023. This was driven by positive contributions from the Services sector (0.8 pps), the Construction sector (0.4 pps), the Public sector (0.3 pps) and the Production sector (0.3 pps). Agriculture was unchanged over this period (0.0 pps).

In terms of pre-pandemic change⁴, NI economic output has increased by 5.8%, with the growth largely driven by a positive contribution from the Services sector (3.1 pps), which has had a strong recovery post pandemic. There were also positive contributions from the Public sector (1.3 pps), Production sector (1.0 pps) and the Construction sector (0.4 pps). Agriculture was unchanged over this period (0.0 pps).

The 0.9% annualised increase in the NICEI (i.e. average of the four quarters to Quarter 2 2023 compared with the previous four quarters) was driven by increased activity in the Services sector (0.3 pps), Construction (0.3 pps) and Public sector (0.4 pps). The contributions from the Production and Agriculture sectors were negligible over this period.⁵

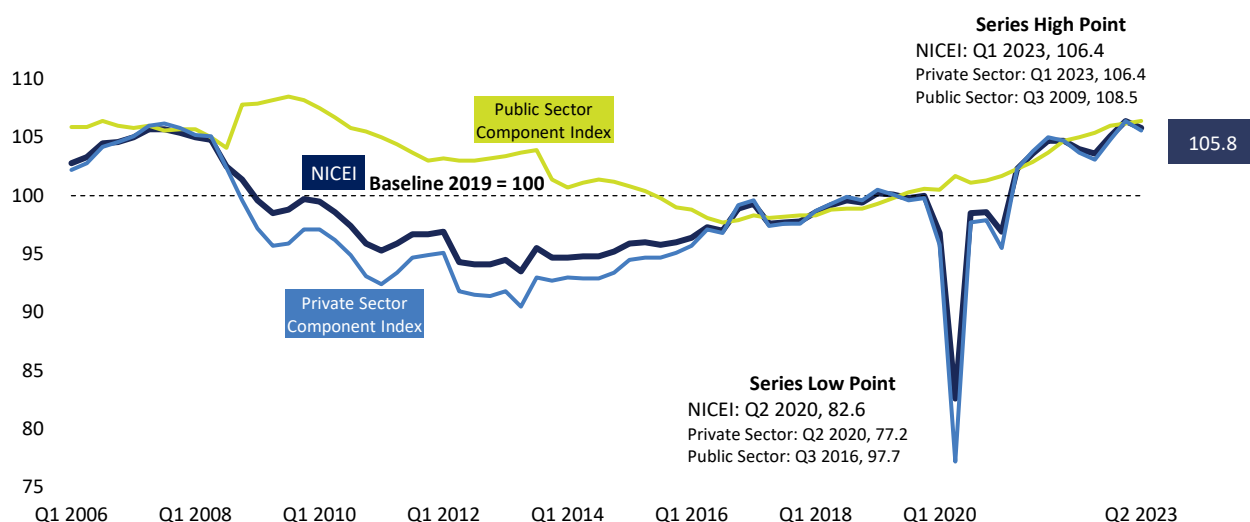
⁴ We have temporarily included pre-pandemic change to illustrate to users the impact compared to the last quarter before the pandemic (i.e. Q2 2023 vs. Q4 2019).

⁵ The quarterly agriculture output for the current year (2023) is provided before the Aggregate Agricultural Account (AAA) series for 2023 is produced but is based on its underlying data sources. Data are subject to revision when the AAA series for 2023 is published.

4 Long-term NICEI trend

Economic activity had increased gradually from years 2013-2019, following the prolonged downturn post the 2007 financial crisis. However, the onset of the Pandemic brought about a sharp downturn in output with the NICEI reaching a series low in Q2 2020. Since then however, economic activity in NI has recovered substantially and in Q2 2023 output is now 28.0% above that series low point.

Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 – Q2 2023



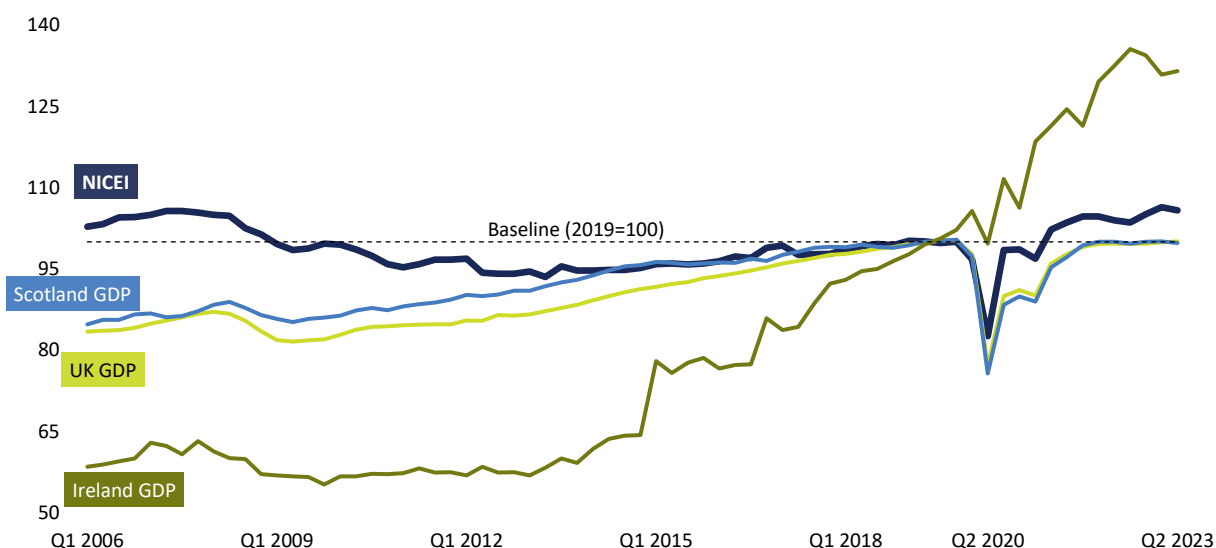
Over the last 5 years, annualised growth has ranged between -5.9% and 10.3%. There were notable changes in the NICEI and Private Sector Component Index from Q1 2020 to Q2 2021 coincide with periods of imposing and relaxing lockdown restrictions in response to COVID-19. In particular, the NICEI (and Private Sector Component Index) fell to a series low in Q2 2020, with the NICEI decreasing 14.7% over the quarter then increasing 19.2% over the next quarter (Q3 2020) as restrictions eased, resulting in a pronounced 'V' in economic output.

The NICEI time series is available in Table 1 in the Appendix and the accompanying data spreadsheet

5 Comparison with measures of GDP

NI is 5.8% above its Pre-Pandemic position in Q4 2019 and is outperforming both the Scottish and UK economies in this regard. Ireland's GDP has been rising sharply since the Pandemic with output now 28.7% above the Pre-Pandemic level.

Chart 6: NICEI*, comparison with selected GDP measures Q1 2006 – Q2 2023**



* The NICEI methodology has been shown to provide a close short-term approximation to the UK GDP series, readers are advised that due to differences in the underlying methodologies the measures presented here should not be considered as precisely like-for-like.

** Ireland's GDP figure has been volatile over recent years, the Central Statistics Office (CSO) highlights the impact [Globalisation](#) has had on Ireland's GDP figures.

Chart 6 above indicates that NI, Scotland and UK output all fell to their minimum level in Q2 2020 with Ireland's GDP minimum level dating back to Q4 2009, over the time period. In Q2 2023, the NICEI is now 0.5% below the maximum output value recorded in Quarter 1 2023. Compared to the pre-economic downturn peak in Q3 2007, output is now 0.1% higher.

However, by comparison, UK GDP in Q2 2023 is estimated to be 14.9% higher than its pre-economic downturn peak of Quarter 1 2008. This suggests that the UK has had a shorter downturn since the 2008 recession and a faster recovery.

Over the last 10 years, the UK has reported increases in GDP in 35 of the last 40 quarters, whereas the NICEI has reported increases in economic activity in 21 of the last 40 quarters.

Output in NI and Scotland decreased over the quarter, whereas in the UK and Ireland economic activity increased. NI experienced the highest growth in output over the year. All nations recorded increased output over the rolling annual average period.

Chart 7: Quarterly, annual, pre-pandemic and annualised change, NICEI compared with selected GDP measures to Q2 2023

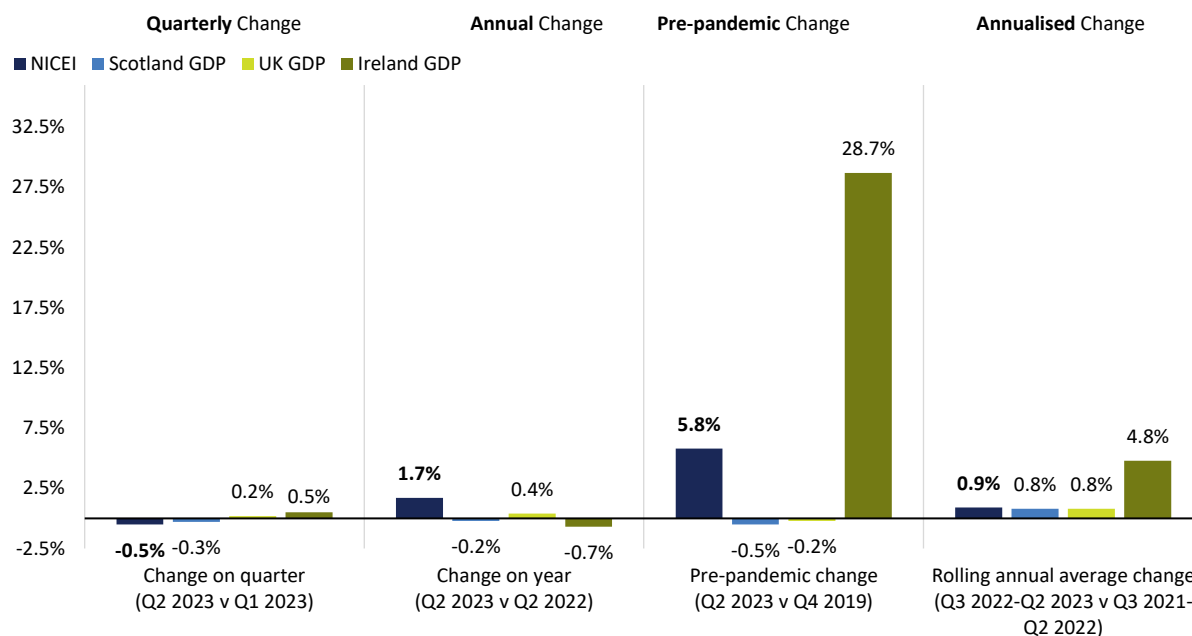


Chart 7 above compares the NICEI against the GDP of the UK, Scotland and Ireland.

Comparing NI with the UK in Q2 2023, NI's output decreased over the quarter (-0.5%) whilst the UK's output increased (0.2%). NI had stronger growth over the year (1.7% vs 0.4%) and over the rolling annual average (0.9% vs 0.8%). Comparing against pre-pandemic, Economic Activity in NI has increased whilst the UK experienced a reduction (5.8% vs -0.2%).

Both NI and Scotland recorded a decline in output over the quarter (-0.5% vs -0.3%). However, NI's output grew over the year whilst Scotland's declined (1.7% vs -0.2%). There was similar growth in output for NI and Scotland over the rolling annual average period (0.9% vs 0.8%). Comparing against pre-pandemic, Economic Activity in NI has increased whilst Scottish GDP has fallen (5.8% vs -0.5%).

Ireland had the highest growth in economic activity over the quarter (0.5%). Ireland has also recorded the strongest growth since pre-pandemic (28.7%) and has also achieved the highest rate of growth over the rolling annual average (4.8%).

6 Economic Commentary

The following section discusses the performance of the NI economy, including the latest NICEI results for the quarter and how the NICEI component sub-sectors have performed. It also provides an overview of topics relevant to the local economy.

- [NICEI Q2 2023](#)
- [Labour Market](#)
- [Current Economic Conditions](#)
- [Recent Publications](#)



[NICEI Q2 2023](#)

The NI economy faced challenging economic conditions last year brought on by acute inflationary pressures, however the local economy had shown resilience with increased economic output in Q4 2022 and Q1 2023. However, the NICEI indicates that there has been a weakening in economic activity during Q2 2023 with a fall of 0.5% over the quarter. The NICEI also indicates that output increased by 1.7% over the year and the annualised rate of growth (i.e. the most recent four quarters compared to the previous four quarters) increased by 0.9% over the period.

Although inflation is now on a downward trend from its recent 40-year peak, the slowdown in NI economic activity in Q2 2023 comes amidst continued challenging economic conditions as consumers and businesses deal with elevated prices and higher interest rates.

The largest contribution to change in the NICEI over the quarter came from declined activity in the Services sector and private Construction sector (0.8% and 3.7% respectively) which was largely driven by decreases in the Services sub-sector Wholesale & retail trade⁶ and Construction sub-sector Repair and Maintenance. This decline in economic activity was partially offset by increased activity in the Production sector (1.6%) and the Public Sector (0.2%).

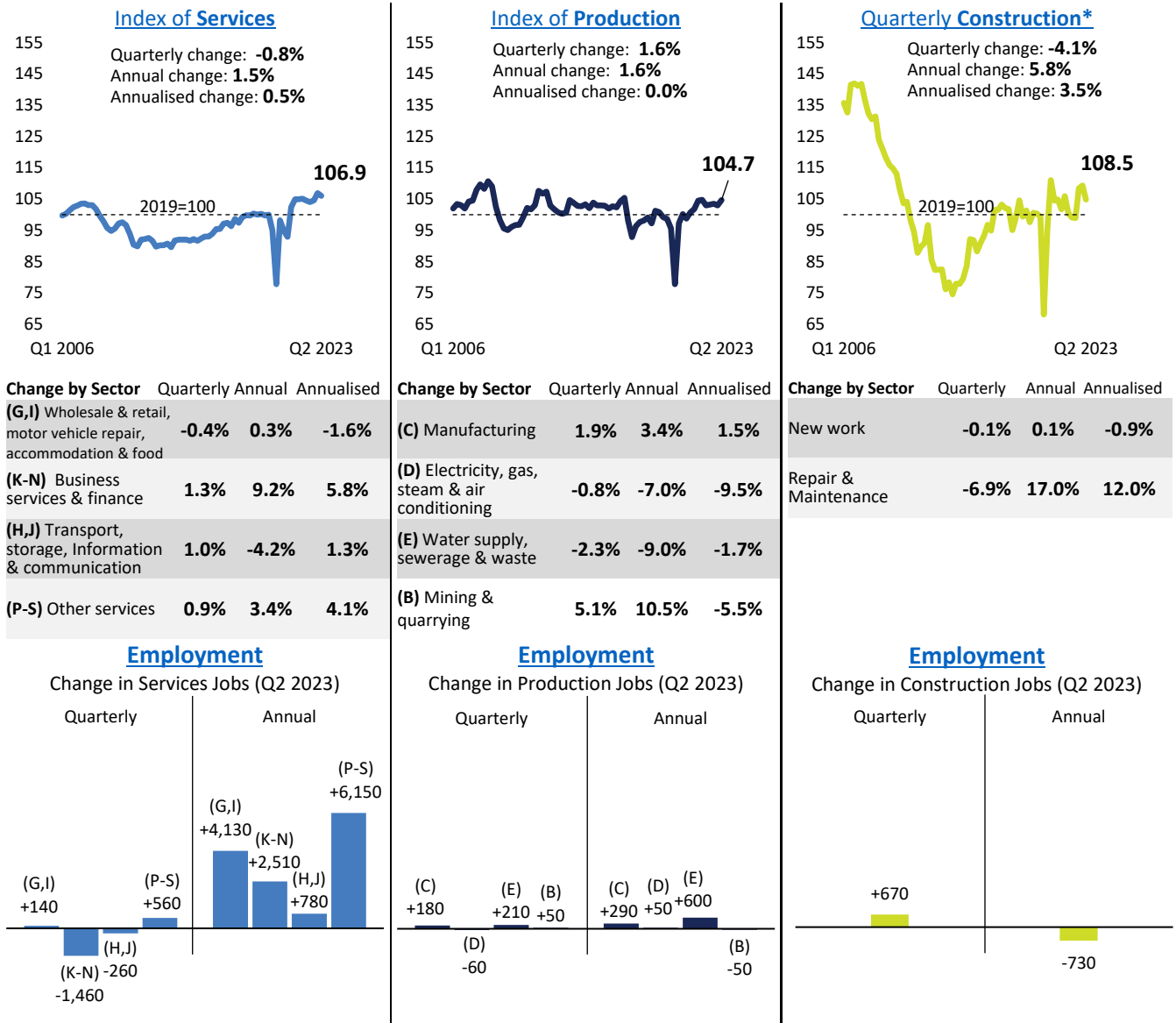
NI economic output is now 5.8% higher than pre-pandemic i.e. since Q4 2019. The services sector (which accounts for 52% of NI GVA) has had a sizeable positive contribution (3.1 pps) showing a strong recovery post pandemic. There were also further positive contributions from the Public sector (1.3 pps), the Production sector (1.0 pps) and the Construction sector (0.4 pps). The Agriculture sector was unchanged over this period.

⁶ The Services sector is comprised of four sectors but is dominated by Wholesale & retail trade and Business services and finance. Together these two sectors account for 69.5% of total Service sector GVA: [IOS Q2 23](#)

Sectoral Insights to Q2 2023

Output by sector

To access further detail, click on the underlined titles which link to the publications on the [NISRA website](#)



* All construction i.e. including public sector

• Sub-sector results

Looking at the performance of the sub-sectors of the Index of Services (IOS) above. (K-N) Business services & finance saw the largest increase in activity over the quarter (1.3%), over the year (9.2%) and rolling annual average (5.8%). Sub-sectors (P-S) Other Services and (H, J) Transport, storage, Information & communication also had increased activity over the quarter (0.9% and 1.0% respectively). (G, I) Wholesale & retail was the only sub-sector to record decreased activity over the quarter (0.4%).

The Index of Production (IOP) performance indicates that (B) Mining & quarrying had the largest increase in activity over the quarter (5.1%) and over the year (10.5%). Positive results were also seen for sub-sector (C) Manufacturing which had increased activity over the quarter, year and rolling annual average (1.9%, 3.4% and 1.5% respectively). However, contrasting results were seen in sub-sectors (D) Electricity, gas, steam & air conditioning and (E) Water supply, sewerage & waste management. (D) and (E) both also decreased over the

quarter (0.8% and 2.3% respectively), year (7.0% and 9.0% respectively) and over the rolling annual average (9.5% and 1.7% respectively).

Latest results show that 'New Work' activity in the Construction sector remains largely unchanged with a marginal decrease in activity over the quarter (0.1%) and a marginal increase over the year (0.1%). On the other hand, 'Repair and Maintenance' activity experienced large increases over the year (17.0%) and over the rolling annual average (12.0%). However, over the quarter 'Repair and Maintenance' has fallen (6.9%).

There was a decline in Service sector employment over the quarter with sub-sector; Business services & Finance (K-N) recording the largest change with a decline in employment of 1,460 jobs. Annual increases in employment were recorded across all Service sector sub-sectors amounting to 13,570 jobs in total. Production jobs increased marginally over the quarter and year. Construction jobs increased by 670 jobs over the quarter and decreased by 730 jobs over the year.

- **Retails Sales Index**

The Quarterly [Retails Sales Index](#) (RSI) provides a timely indicator of change in output within the private retail service industries in NI. The retail sales sector is a subset of the IOS and refers to SIC 47 (Retail trade, except of motor vehicles and motorcycles). Retail output in NI for Q2 2023 saw an increase of 0.5% over the quarter and a decrease of 1.2% over the year. GB RSI output saw an increase of 0.4% over the quarter and a decrease of 2.5% over the year. NI RSI output remains 3.6% below the pre-pandemic level seen in Q4 2019 while GB RSI output is now 1.6% below the Q4 2019 level.

Labour Market

On the 12th September 2023, NISRA published its latest [Labour Market Report \(LMR\)](#). The LMR is a monthly overview of key labour market statistics for NI. It includes figures from the Labour Force Survey (LFS), the Quarterly Employment Survey (QES), claimant count, redundancies counts, and HMRC PAYE statistics. An infographic of the latest findings can be found [here](#).

The number of payrolled employees in NI decreased by 0.1% over the month and increased by 1.5% over the year to August 2023. Median monthly pay in NI increased by 0.1% (£2) over the month to £2,094 in August 2023 and increased by 6.0% (£119) over the year. Employee jobs in NI decreased over the quarter but increased over the year to 813,450 jobs in June 2023. 200 redundancies were confirmed in August 2023, taking the annual total to 1,520, which was 40.7% more than the previous year (1,080). In the latest 12-month period, there were 4,420 proposed redundancies, which was over three and a half times the figure for the previous year (1,220).

Over the month to August 2023, the NI claimant count increased by 0.4% to 36,700. In August 2023, 3.8% of the NI workforce were recorded on the claimant count. The NI unemployment rate for May-July 2023 increased over the quarter and decreased over the year to 2.7%.

Current Economic Conditions

- **Inflation**

The latest figures from ONS for [Consumer price inflation, UK: August 2023](#) in September 2023 show the Consumer Prices Index including owner occupiers' housing costs (CPIH⁷) rose by 6.3% in the 12 months to August 2023, down from 6.4% in July. The Consumer Prices Index (CPI) rose by 6.7% in the 12 months to August 2023, down from 6.8% in July. The largest downward contributions to the monthly change in both CPIH and CPI annual rates came from food, where prices rose by less in August 2023 than a year ago, and accommodation services, where prices can be volatile and fell in August 2023.

- **Interest Rates**

The Bank of England's (BoE) [Monetary Policy Committee \(MPC\)](#) sets monetary policy to meet the 2% inflation target, and in a way that helps sustain growth and employment. In September 2023, the MPC voted by a majority of 5–4 to maintain the Bank Rate at 5.25%. The Committee also voted unanimously to reduce the stock of UK government bond purchases held for monetary policy purposes, and financed by the issuance of central bank reserves, by £100 billion over the next twelve months, to a total of £658 billion.

- **House Price Index**

The latest [Northern Ireland House Price Index Q2 2023](#) produced by NISRA shows that the House Price Index increased by 1.4% between Q1 2023 and Q2 2023. Annual prices increased by 2.7% compared to Q2 2022. There were 4,776 verified residential property sales and the report also suggests the average price for a house in NI now stands at £173,898.

- **Trade**

The [HMRC Regional Trade Statistics](#)⁸ provides a dis-aggregation of the UK Overseas Trade in Goods Statistics, including a breakdown at the NI level. In the year ending June 2023, compared with the year ending June 2022. NI's goods exports to EU countries were worth £6.6bn (up £1.1bn, 19%). The largest increase in EU exports was to Ireland (up £0.5bn, 15%). NI's goods exports to non-EU countries were worth £3.6bn (up £0.6bn, 20%). The largest increase in non-EU exports was to the USA (up £0.3bn, 33%). NI's goods imports from EU countries were worth £6.7bn (up £0.6bn, 9.8%). The largest increase in EU imports was from Ireland (up £0.2bn, 7.7%). NI's goods imports from non-EU countries were worth £3.2bn (up £0.3bn, 12%). The largest increase in non-EU imports was from the USA (up £0.2bn, 36%).

- **Household Expenditure**

The Consumer Council's [Northern Ireland Household Expenditure Tracker](#) shows on a quarterly basis what the lowest earning households⁹ in NI are experiencing financially. Figures for Q1 2023 show that income after tax for NI's lowest earning households has risen by 1.2% or £2.90 per week from Q4 2022 to Q1 2023. These households are now spending 1.1% or £2.44 per week more on basics. Over the quarter, discretionary income¹⁰ for low earning households increased by 2.4%, from £19.37 to £19.83 per week. This is the first quarter in two years where discretionary income has risen, but it is important to note that this increase is marginal and follows seven quarters where it fell consecutively.

⁷ CPIH is the lead inflation index produced by ONS; it is the most comprehensive measure of inflation as it includes owner occupiers' housing costs and Council Tax, which are excluded from the CPI.

⁸ Note that HMRC do not collect any data on trade between NI and GB

⁹ Lowest earning households are defined as the bottom 25 per cent of the income distribution, also known as Quartile 1.

¹⁰ Discretionary income is defined as gross household income less taxes and spending on basics.

- **Gross Disposable Household Income (GDHI)**

In September, ONS released [Regional GDHI estimates](#), including figures for NI and NI District Councils. GDHI is a concept that is seen to reflect the "material welfare" of the household sector¹¹. NI's total GDHI was estimated to be £33,588 million in 2021, this represented an increase of 4.5% on the 2020 figure. NI's total GDHI growth rate was higher than that of any other UK region. UK total GDHI was estimated to be £1,453,047 million in 2021, this represented an increase of 3.6% on the 2020 figure. NI's GDHI per head of population was £17,636, this represented 81.3% of the corresponding UK figure and ranked NI as the lowest performing UK region.

Recent Publications

ELMS publications

[Quarterly Employment Survey](#) - 12/09

[Labour Market Report](#) – 12/09

[Index of Services, Index of Production](#) & [Retail Sales](#)

[Index](#) – 14/09

[NI Ports Traffic 2022](#) – 20/09

[Business Register and Employment Survey](#) – 26/09

[Ports Traffic Quarterly](#) – 27/09

[Quarterly Construction Enquiry](#) – 28/09

[Input-Output Tables & Multipliers 2019](#) – 28/09

DfE publications

[The relationship between exports, innovation and productivity in small advanced economies: implications for Northern Ireland](#) – 21/09

[DfE Economic commentary – Summer 2023](#) – 25/08

[Global Entrepreneurship Monitor \(GEM\) UK: NI Report 2022/23](#) – 07/07

[NI Local Growth Dashboard 2023](#) – 07/07

ONS publications

[UK business; activity, size and location: 2023](#) – 27/09

[GDP monthly estimate, UK: July 2023](#) – 13/9

[Economic activity and social change in the UK, real-time indicators](#) – 21/09

[Cost of living latest insights](#) – 27/09

Upcoming ELMS releases

[NI Labour Market Report](#) – 17/10, 14/11, 12/12

[Index of Services, Index of Production](#) & [Retail Sales Index](#) – 14/12

[Quarterly Construction Enquiry](#) & [NICEI](#) – 11/1

An interactive [Quarterly Economic Output dashboard](#) is now available and provides the latest quarterly results from the NICEI. The most up-to-date official statistics on the NI economy and labour market are also available via the [Economic Overview dashboard](#).

NISRA also produces a monthly NI trade dashboard which extracts data from the Eurostat website, the latest figures are available [here](#)

For the full range of official statistics produced by ELMS and NISRA please visit the links below:

[Economic and Labour Market Statistics \(ELMS\)](#)

[NISRA website](#)

¹¹ GDHI is the amount of money that all the individuals in the household sector have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits.

7 Quality and methodology

Uncertainty

All estimates are subject to statistical uncertainty and for many well-established statistics we measure and publish the sampling error and non-sampling error associated with the estimate, using this as an indicator of accuracy.

Unlike many indicators that NISRA publish, there is no simple way of measuring the accuracy of the NICEI. The NICEI is constructed from a variety of data sources, some of which are not based on random samples or do not have published sampling and non-sampling errors available. As such it is very difficult to measure both error aspects and their impact on the NICEI. As a result we don't publish a measure of the sampling error or non-sampling error associated with the NICEI.

One dimension of measuring accuracy is reliability, which can be measured using evidence from analyses of revisions to assess the closeness of earlier to subsequent estimates. Revisions are an inevitable consequence of the trade-off between timeliness and accuracy. It is our role to produce the best possible estimate of the NICEI using all of the available information at that time. Therefore, the only way to avoid subsequent revisions would be to either delay publication until all the relevant information has been received, or to publish an estimate and then ignore any subsequent new data and any methodological improvements. So, revisions should be treated as generally a good thing, as long as we document the reasons for them and communicate this to users.

All NICEI estimates are provisional and subject to revision in light of:

- Ongoing data validation and clarification of responses from individual businesses and late responses to surveys and administrative sources which form input to the Index.
- Revisions to seasonal adjustment factors, which are re-estimated every month and reviewed annually.
- Changes to the methodological processes used to gather and process the data and other revisions and developments implemented by the input sources.
- Incorporating new annual GVA data from the ONS.

The NICEI back series is calculated each quarter, typically the revisions to the NICEI are reasonably minor. Comparing the Q2 2023 NICEI back series with the Q1 2023 back series, revisions to each quarter of the index ranged between -0.2 and 0.2 index points.

This variance was driven by revisions in the Index of Production (IOP) and Index of Services (IOS).

Normally, revisions in the IOS and IOP back series are relatively minor but throughout the Covid-19 pandemic period these revisions have been larger, largely due to lower response rates and an increased number of late returns from businesses. There have also been methodology changes applied to the deflators used which have resulted in larger than normal changes in the back series data. Further information can be found on the [IOS](#) and [IOP](#) webpages.

A full comparison of the NICEI Series at Q2 2023 and Q1 2023 is available in Table 10 of the [NICEI spreadsheet](#).

NICEI component data

The NICEI is based on a range of Official and National Statistics datasets as outlined below. Whilst the component survey data is based on sample surveys, the processes employed by each individual survey to gross results to be representative of the respective business population use employment and turnover data from the [Interdepartmental Business Register](#). This is a register of c78,000 NI businesses and as such the NICEI results are considered to be a robust barometer of the performance of the NI economy.

Agricultural Output Index: The agricultural output index is an unpublished dataset based on survey and administrative sources held by the Department of Agriculture, Environment and Rural Affairs (DAERA).

HMF: The number of Her Majesty's Forces (HMF) stationed in Northern Ireland is included in the NICEI. This data is published by the Ministry of Defence (MoD) and further information can be found [here](#).

IOP: The quarterly NI Index of Production (IOP) is currently based on a sample of around 1,200 businesses out of a population of c. 5,500. This covers approximately 92% of the turnover of the population at the time of selection and a targeted response rate of 75%. This includes a census of all companies employing 40 or more employees as well as those employing 0 to 39 employees and having a turnover of £10 million or more. The sample has been designed to have a minimum precision of 10% for each of the production subsectors.

IOS: The quarterly NI Index of Services (IOS) is currently based on a sample of around 3,600 businesses out of a population of c. 43,000. The sample consists of a census of dominant companies and a Neyman stratified random sample of the remaining companies and covers approximately 75% of turnover. The census element consists of all companies employing 100 or more employees as well as those employing 0 to 99 employees and having a turnover of £10 million or more.

LFS: The Labour Force Survey (LFS) is a quarterly sample survey carried out by interviewing people about their personal circumstances and work. The quarterly survey has been designed to give reliable estimates for each quarter, as well as estimates of change over consecutive quarters. These aims have been achieved by using an unclustered sample with a large element of overlap between quarters. The theoretical sample for each quarter of around 3,900 addresses, made up of five 'waves', each containing approximately 780 private households. Every sampled address is interviewed in five successive quarters, such that in any one quarter one wave will be receiving their first interview, one wave their second and so on, with one wave receiving their fifth and final interview. This results in an 80% sample overlap between quarters.

QCE: From a sampling universe of approximately 10,000 firms, a disproportionate sample of 750 construction firms is randomly selected to take part in the NI Quarterly Construction Enquiry (QCE). The sample is disproportionately stratified (into six strata) using Inter Departmental Business Register (IDBR) turnover as the stratification variable. This includes a census of all companies with a turnover of £5.25m or greater, and a representative sample of smaller businesses. Further information on the QCE sample coverage and methodology can be found [here](#). NICEI includes private sector construction only.

QES: The Quarterly Employment Survey (QES) provides short-term employee jobs estimates for Northern Ireland. It has a sample size of approximately 6,000 and covers all private sector firms with 25 or more employees, all public sector employers and a representative sample of smaller firms. The QES excludes the self-employed, HM Armed Forces, private domestic servants, homeworkers and training for success trainees without a contract of employment (non-employed status). The number of jobs are counted rather than the number of persons with jobs. For example, a person holding both a full-time job and part-time job, or someone with two part-time jobs, will be counted twice.

Weighting the components

Weights are based on the balanced estimate of [Gross Value Added \(GVA \(B\)\)](#) by industry obtained from [Regional Accounts produced by ONS](#). The latest available GVA by industry published in April 2023 including figures for 2021. The NICEI calculations are based on GVA balanced figures up to and including the 2019 year.

Annual chain-linking

Annual chain-linking is a method for aggregating volume measures on a yearly basis - it can be thought of as rebasing every year rather than having a fixed base year to which all subsequent years are weighted. In this way dynamic changes in the structure of the economy are better reflected in the index. Instead of referring back to value shares from a base year, volume measures for each year are produced in prices of the previous year. These volume measures are then "chain-linked" together to produce a continuous time series, preserving the growth rates of the underlying component series. The use of annual chain-linking is standard National Accounts practice. Using chained volume measures makes use of more up-to-date weights and is therefore more relevant. Rebasing will affect the relative movements between periods.

Re-referencing

The reference year for the index is currently 2019 (i.e. 2019=100). NISRA changes the NICEI reference period (a process known as re-referencing) from time to time, but not frequently. This is because frequently changing the reference base is inconvenient for users. Re-referencing should not be confused with rebasing. Re-referencing does not change the relative movements between periods

Seasonal adjustment

The indirect method of seasonal adjustment was employed. Seasonally adjusted figures were input (where possible) and when the combined output series were tested for seasonality there was no residual seasonality found, therefore no seasonal adjustment was required.

Please refer to the [NICEI Methodology report](#) for further information.

Appendix 1 - NICEI and component indices by quarter and year

Table 1: NICEI and component indices by quarter, Q1 2019 – Q2 2023

		NICEI	Private Sector	Public Sector	Services	Production	Construction	Agriculture
2019	1	100.2	100.5	99.3	100.0	101.3	100.4	106
2019	2	100.1	100.1	99.8	100.3	100.8	98.0	98.1
2019	3	99.8	99.6	100.3	99.7	99.2	100.8	95.5
2019	4	100.0	99.8	100.6	100.0	98.7	100.8	100.4
2020	1	96.8	95.8	100.5	95.0	95.6	99.0	108.5
2020	2	82.6	77.2	101.7	77.8	77.8	67.7	96.9
2020	3	98.5	97.7	101.1	98.2	97.2	95.9	93.3
2020	4	98.6	97.9	101.3	94.8	100.2	111.8	104.1
2021	1	96.9	95.5	101.7	92.9	98.8	104.1	106
2021	2	102.3	102.3	102.3	102.4	100.7	105.2	101.4
2021	3	103.6	103.8	102.9	104.9	101.8	101.9	98.5
2021	4	104.7	105.0	103.7	104.9	104.5	106.1	105.2
2022	1	104.7	104.7	104.7	105.1	104.8	100.1	111.1
2022	2	104	103.7	105.0	104.5	103	99.6	103.3
2022	3	103.6	103.1	105.4	104	103.2	98.6	95.4
2022	4	105.1	104.8	106	104.6	103.5	108.9	103.9
2023	1	106.4	106.4	106.2	106.9	103	109.4	109.4
2023	2	105.8	105.6	106.4	106	104.7	105.4	101.9

Data by quarter for the NICEI and component indices dating back to Q1 2006 can be accessed [here](#)

Table 2: NICEI and component indices by year, 2019 – 2023

Year	NICEI	Private Sector	Public Sector	Services	Production	Construction	Agriculture
2019	100.0	100.0	100.0	100.0	100.0	100.0	78.3
2020	94.1	92.1	101.2	91.5	92.7	93.6	77.7
2021	101.9	101.6	102.6	101.3	101.4	104.3	77.7
2022	104.3	104.1	105.3	104.6	103.6	101.8	77.6
2023	106.4	106.4	106.2	106.9	103	109.4	78.0

Data by year for the NICEI and component indices dating back to 2006 can be accessed [here](#)

8 List of Tables

Data accompanying this bulletin are available from the [NISRA website](#) in both Open Document and Excel formats. The spreadsheet includes the following tables.

Table 1: NICEI and component indices by quarter, Q1 2006 – Q2 2023 (2019=100)

Table 2: NICEI and component indices by year, 2006 – 2023 (2019=100)

Table 3: Data for Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 – Q2 2023

Table 4: Data for Chart 2: Breakdown of NI Businesses & Employees by country of ownership, 2023

Table 5: Data for Chart 3: Proportion of NI Regional GVA by Sector, 2019

Table 6: Data for Chart 4: NICEI, Contribution to quarterly, annual, pre-pandemic and annualised growth

Table 7: Data for Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 – Q2 2023

Table 8: Data for Chart 6: NICEI, comparison with selected GDP measures Q1 2006 – Q2 2023

Table 9: Data for Chart 7: Quarterly, annual, pre-pandemic and annualised change, NICEI compared with selected GDP measures to Q2 2023

Table 10: Comparison of the NICEI Series at Q2 2023 and Q1 2023, Q1 2006 – Q2 2023

Table 11: NICEI Sector Contributions to Quarterly Change, Q1 2006 – Q2 2023

9 Further Information

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As a user of these statistics, we would welcome feedback on this release, in particular on the content, format and structure.

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