

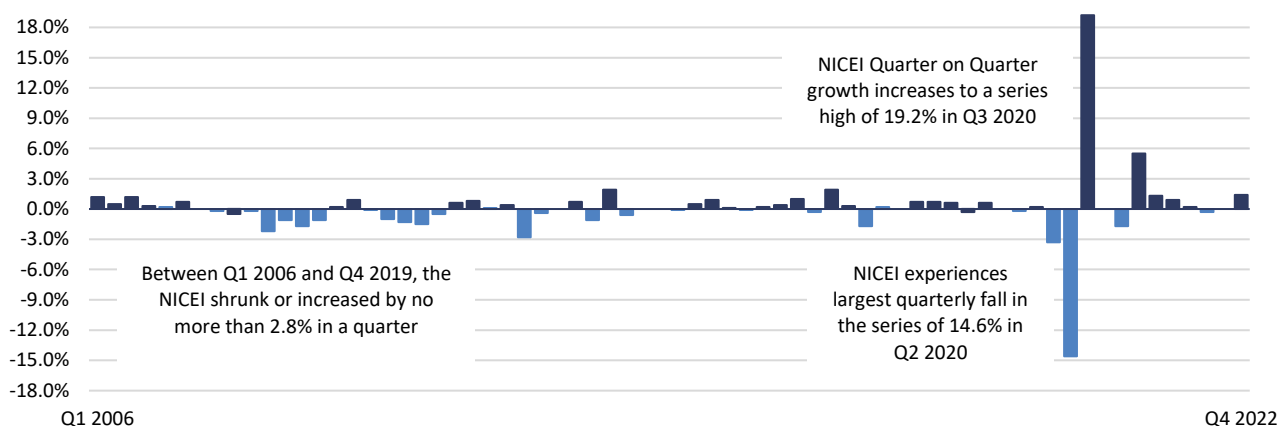
Northern Ireland Composite Economic Index (NICEI)

Experimental statistics

Quarter 4 (October - December) 2022

Economic Activity in Northern Ireland increased by 1.4% in real terms during Q4 2022. The quarterly growth means the NICEI is at a new series high of 105.7 and is 0.1% above the previous high recorded in Q3 2007.

Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 – Q4 2022



Quarterly change	Annual change	Triennial change (3 years)*	Annualised change**	Private Sector		Public Sector	
				Quarterly	Annual	Quarterly	Annual
+1.4%	+1.3%	+5.6%	+3.0%	+1.6%	+1.0%	+0.6%	+2.3%
				Triennial	Annualised	Triennial	Annualised
				+5.7%	+3.1%	+5.4%	+2.6%

* We have included the Triennial change (i.e. Q4 2022 vs. Q4 2019) to illustrate to users the impact compared to the same quarter pre pandemic.

**Annualised change: Q1 2022 to Q4 2022 compared with Q1 2021 to Q4 2021.

Key Points

- Economic Activity in Northern Ireland increased by 1.4% in real terms over the quarter to Q4 2022. Compared to Q4 2021 NI's output has increased by 1.3% and is now 5.6% above pre-pandemic levels seen in Q4 2019 (triennial change). When assessing annualised change, NI output has increased by 3.0%.
- Although the measures are not produced on a fully equivalent basis, [UK Gross Domestic Product \(GDP\)](#) showed no growth (0.0%) over the quarter, however it increased by 0.4% over the year to Quarter 4 2022. UK GDP is now -0.8% below pre-pandemic levels seen in Q4 2019.

Over the same timeframe, GDP in [Ireland](#) increased by 0.3% over the quarter, 13.1% over the year and 34.3% over the last three years to Quarter 4 2022.

- The largest contributions to change this quarter came from increased activity in the private Construction sector and Services sector which contributed to 0.6 percentage points (pps) and 0.5 pps respectively to the overall NICEI increase.

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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.

This report covers the period 1st October to 31st December 2022 (Q4 2022) and is the twelfth NICEI release to cover the COVID-19 shock to the economy.

NICEI estimates for Quarter 4 2022 are subject to more uncertainty than usual due to the impact of the COVID-19 pandemic and subsequent periods of business closure and resulting lower response rates to some of the NICEI input data series over recent quarters/years. Further information is available in the Quality and methodology section of this release.

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.

Development of NI Quarterly GDP

ONS completed a review into the NICEI, which made a number of recommendations to enhance the robustness of the measure of output for the NI economy with a view to producing a quarterly measure of Gross Domestic Product (QGDP) for NI. NISRA have worked through these recommendations, as a result improvements have

¹ Published quarterly indices (Index of Services, Index of Production, Quarterly Construction Enquiry), public sector employee jobs data from the Quarterly Employment Survey, plus unpublished 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.

been made to the measure of Public sector output i.e. a more granular public sector breakdown including measures for Public Construction, Health, Education and Other Collective Services.

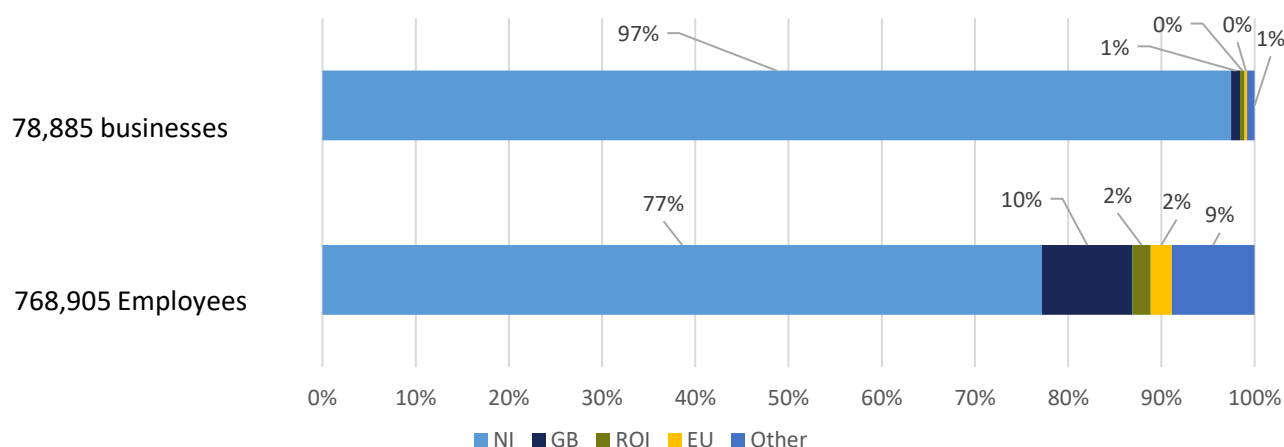
For private sector output, additional data relating to Imputed Rents and Financial Intermediation Services Indirectly Measured (FISIM) has been sourced to make the measure more robust and improve the coverage of the private sector output.

The NICEI team now intends to roll out these improvements as part of the Quarterly GDP methodology. There remains work to be completed on the public sector developments. Once complete we intend to share the preliminary results with our expert users for feedback before finally replacing the NICEI with the QGDP measure during 2023.

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 2022 is estimated to be 78,885; with 1,995 (2.5%) 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 175,385 (22.8%) of all employees in NI as demonstrated below.

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



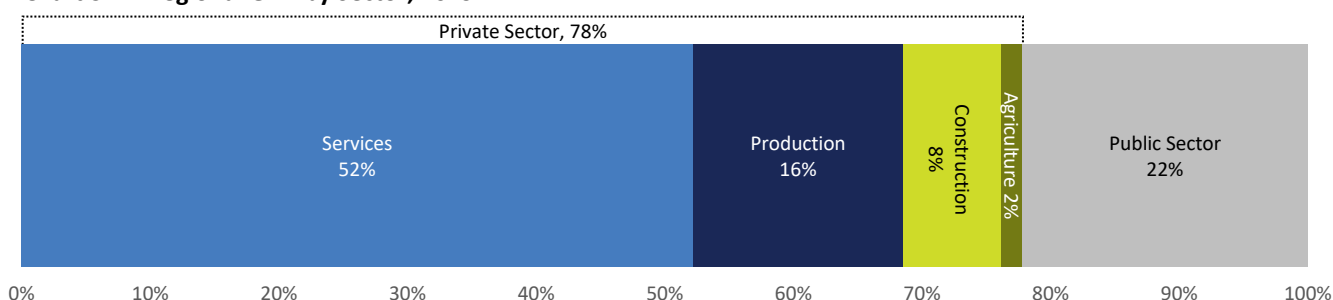
Source: NISRA [IDBR](#); June 2022

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 2020 Gross Value Added (GVA)³ was £43.7bn. 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 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



GVA Reference Year

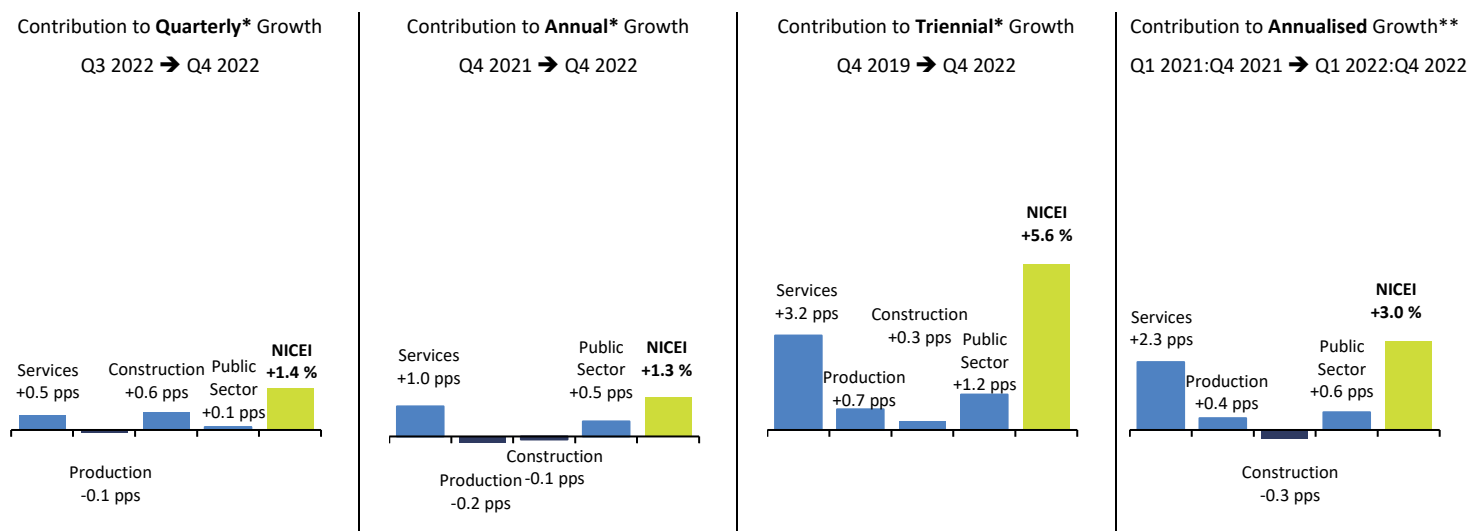
In line with guidance detailed in the [UK National Accounts Blue Book 2022](#) (published on 31 October 2022), figures in this publication have been weighted using the revised Northern Ireland 2019 GVA figures, and the base year has remained at 2019 for a second consecutive year. This is to account for 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.

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

2 Contribution of sectors to overall NICEI

Economic Activity in NI has increased over the quarter, annual, triennial and rolling annual average to Q4 2022. The largest positive contribution over the quarter came from the Construction sector. Whereas previously, the Services sector has provided the largest positive contribution to economic activity in NI post-pandemic.

Chart 4: NICEI, Contribution of sectors to quarterly, annual, Triennial and annualised growth



* May not sum due to rounding.

**Annualised growth rates are helpful in determining long-term trends. Rates are calculated after the index is 'smoothed' on a rolling 4 quarter average basis. The annualised rate is less prone to short-term volatility than the annual rate.

The increase in the NICEI over the latest quarter (1.4%) was driven by increased activity in the Construction sector (0.6 pps), Services sector (0.5 pps) and the Public Sector (0.1 pps). Whilst the Production sector had a small negative contribution (0.1 pps).

Over the year, the NICEI increased by 1.3% to Q4 2022. This was driven by positive contributions from the Services sector (1.0 pps) and the Public sector (0.5 pps) and was partially offset by negative contributions from the Construction sector (0.1 pps) and the Production sector (0.2 pps).

In terms of triennial change⁴, NI economic output has increased by 5.6%, with the growth largely driven by a positive contribution from the Services sector (3.2 pps), which has had a strong recovery post pandemic. There were also positive contributions from the Public sector (1.2 pps), Production sector (0.7 pps) and the Construction sector (0.3 pps).

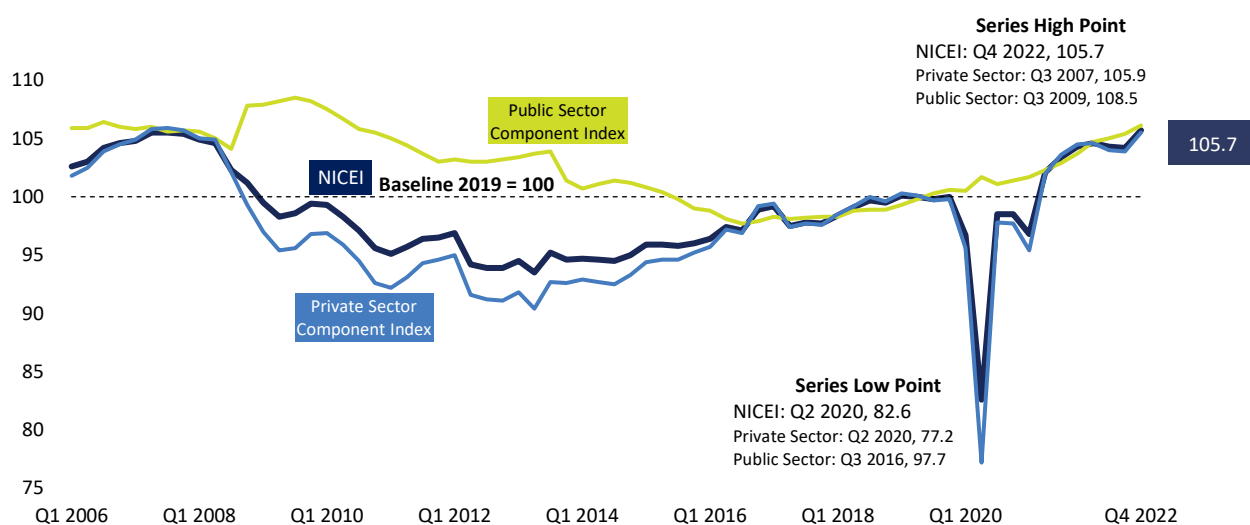
The 3.0% annualised increase in the NICEI (i.e. average of the four quarters to Quarter 4 2022 compared with the previous four quarters) was largely driven by increased activity in the Services sector (2.3 pps). There was also positive contributions from the Production sector (0.4 pps) and the Public Sector (0.6 pps). The Construction sector provided a negative contribution over the rolling annual average (0.3 pps).

⁴ We have temporarily included annual change over 3 years (triennial change) to illustrate to users the impact compared to the same quarter pre pandemic (i.e. Q4 2022 vs. Q4 2019).

3 Long-term NICEI trend

Economic activity had increased gradually in recent years (2013-2019) until the onset of the pandemic, following the prolonged downturn post 2007. During the pandemic the NICEI reached a series low in Q2 2020, however economic activity post pandemic has recovered substantially and in Q4 2022 a new series high was reached. Economic activity is now 27.9% above the series low point in Q2 2020.

Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 – Q4 2022



The quarterly growth in the NICEI between Q3 2022 and Q4 2022 means that currently the NICEI is at a new series a high and 0.1% above the previous high recorded in Quarter 3 2007.

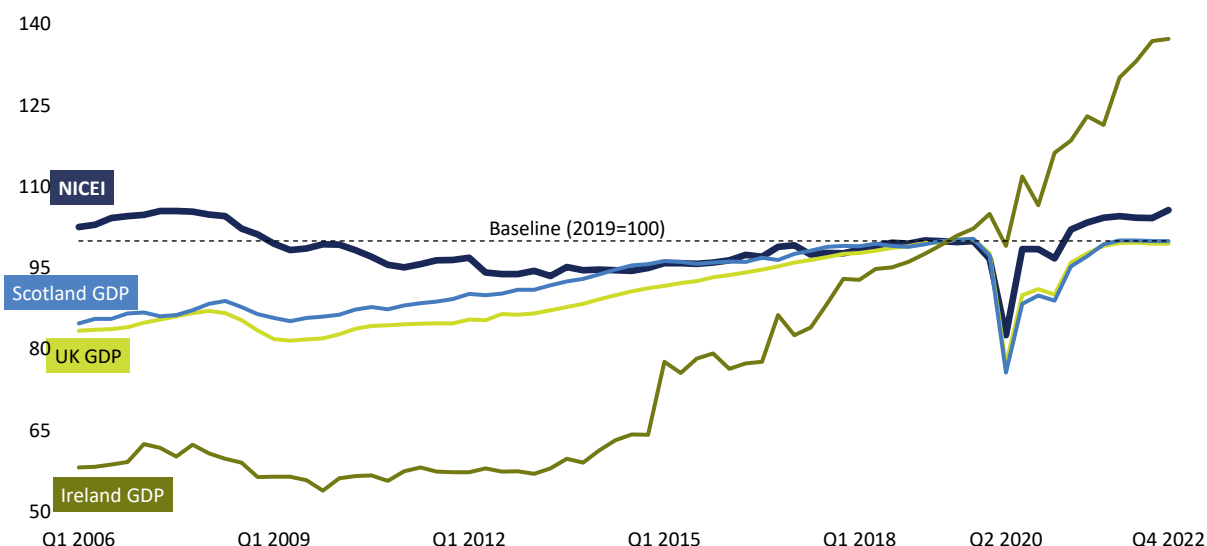
Over the last 5 years, annualised growth has ranged between -5.9% and 10.1%. The notable changes in the NICEI and Private Sector Component Index from Q2 2020 to date coincide with periods of imposing and relaxing lockdown restrictions in response to COVID-19. In particular, the NICEI (and Private Sector Component Index) fell to a series low in Q2 2020, with the NICEI decreasing 14.6% 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.

4 Comparison with measures of GDP

There was a general upward trend in Economic Activity in Q4 2022 with NI, Scotland and Ireland all recording increased output over the quarter, whilst UK GDP remained unchanged. NI recorded the strongest increase in output of the 4 nations over the quarter. All nations experienced increased output over the year and rolling annual average.

Chart 6: NICEI*, comparison with selected GDP measures Q1 2006 – Q4 2022**



* 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 over the time period in Q2 2020. In Q4 2022, the NICEI has now reached a series high and is 0.1% above the previous maximum value recorded in Quarter 3 2007.

However, by comparison, UK GDP in Q4 2022 is estimated to be 14.2% 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 24 of the last 40 quarters.

ONS Regional Accounts

In May 2022 ONS published [Balanced regional gross value added \(GVA\(B\)\) and GDP for 2020](#). These figures indicate that NI had the fourth lowest real GVA (B) per head of population (£23,035) amongst the UK countries and 12 regions of the UK in 2020 (International Territorial Level (ITL) 1)⁵. NI GVA (B) per head decreased by 0.9% in 2020, compared to a decrease of 3.4% in the UK less extra-region. Further information on the GVA(B) estimates, including regional comparisons and details of the income components of GVA can be found on the ONS website.

⁵ ONS note that while GDP per head can be a useful way of comparing regions of different size, comparisons can be affected by commuting flows into or out of the region. They should therefore be used with caution.

Output in NI, Scotland and Ireland increased over the quarter, whereas UK GDP remained unchanged. All regions experienced growth in output over the year and rolling annual average, however NI recorded the weakest annualised growth. In terms of triennial change (i.e. change over the previous 3 years), NI and Ireland saw growth in Economic Activity whilst the UK and Scotland have declined.

Chart 7: Quarterly, annual, triennial and annualised change, NICEI compared with selected GDP measures to Q4 2022

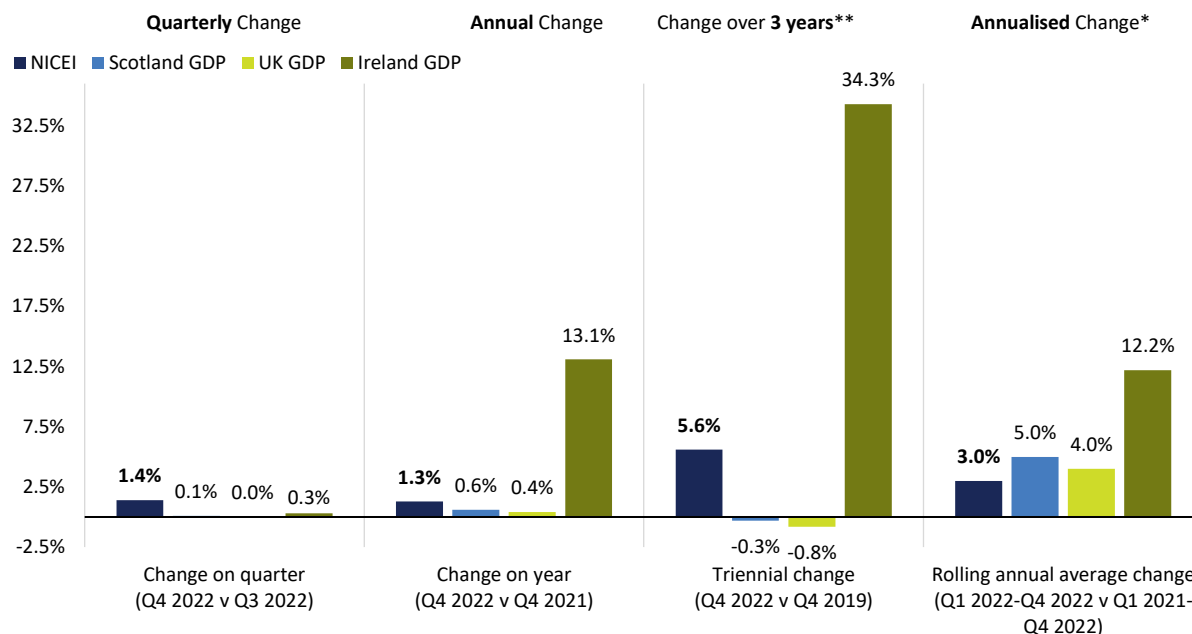


Chart 7 above compares the NICEI against the GDP of the UK, Scotland and Ireland. In Q4 2022, NI experienced the highest growth over the quarter (1.4%) whilst the UK remained flat (0.0%).

All regions experienced growth in Economic Activity over the year and rolling annual average. Comparing NI with the UK, NI had stronger growth over the year (1.3% vs 0.4%) but weaker growth over the rolling annual average (3.0% vs 4.0%). Economic Activity in NI increased triennially whilst the UK experienced a reduction (5.6% vs -0.8%).

Output in Scotland saw marginal growth over the quarter whilst the UK remained flat (0.1% vs 0.0%). Over the year and rolling annual average, output in Scotland also grew at a slightly faster rate than in the UK (0.6% vs 0.4%) and (5.0% vs 4.0%) respectively.

NI's output grew at a much faster rate over the quarter than Scotland (1.4% vs 0.1%) and grew at a faster rate over the year (1.3% vs 0.6%). Having said that, NI experienced slower growth than Scotland over the rolling annual average period (3.0% vs 5.0%). Comparing triennially, Economic Activity in NI increased whilst Scottish GDP declined (5.6% vs -0.3%).

Meanwhile Ireland achieved the highest rate of growth of all regions over the year, 3 year and rolling annual average.

5 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, such as the labour market, consumer confidence and trade.

- [NICEI Q4 2022](#)
- [Current Economic Conditions](#)
- [Cost of Living](#)
- [Looking forward](#)
- [Recent Publications](#)



[NICEI Q4 2022](#)

In terms of NI's economic performance in Q4 2022, the NICEI indicates NI economic output increased by 1.4% in real terms over the quarter and by 1.3% over the year. In addition, output has increased at a faster rate triennially (5.6%) compared to the annual change. The annualised rate of growth (i.e. the most recent four quarters compared to the previous four quarters) increased by 3.0% over the period.

Over the short term (i.e. quarter) the overall increase in the NICEI was driven by growth in the Construction sector (0.6 pps) and Services sector (0.5 pps). The Public sector also had a small positive contribution (0.1 pps) whilst the Production sector had a small negative contribution (0.1 pps).

Over the medium term (i.e. annual) the increase in the NICEI was driven by growth in the Services sector (1.0 pps) and the Public sector (0.5 pps) whilst these were partially offset by negative contributions from the Construction sector (0.1 pps) and the Production sector (0.2 pps).

In terms of triennial change⁶, NI economic output has increased by 5.6%, with the growth largely driven by a positive contribution from the Services sector (3.2 pps), which has had a strong recovery post pandemic. There were also further positive contributions from the Public sector (1.2 pps), the Production sector (0.7 pps) and the Construction sector (0.3 pps).

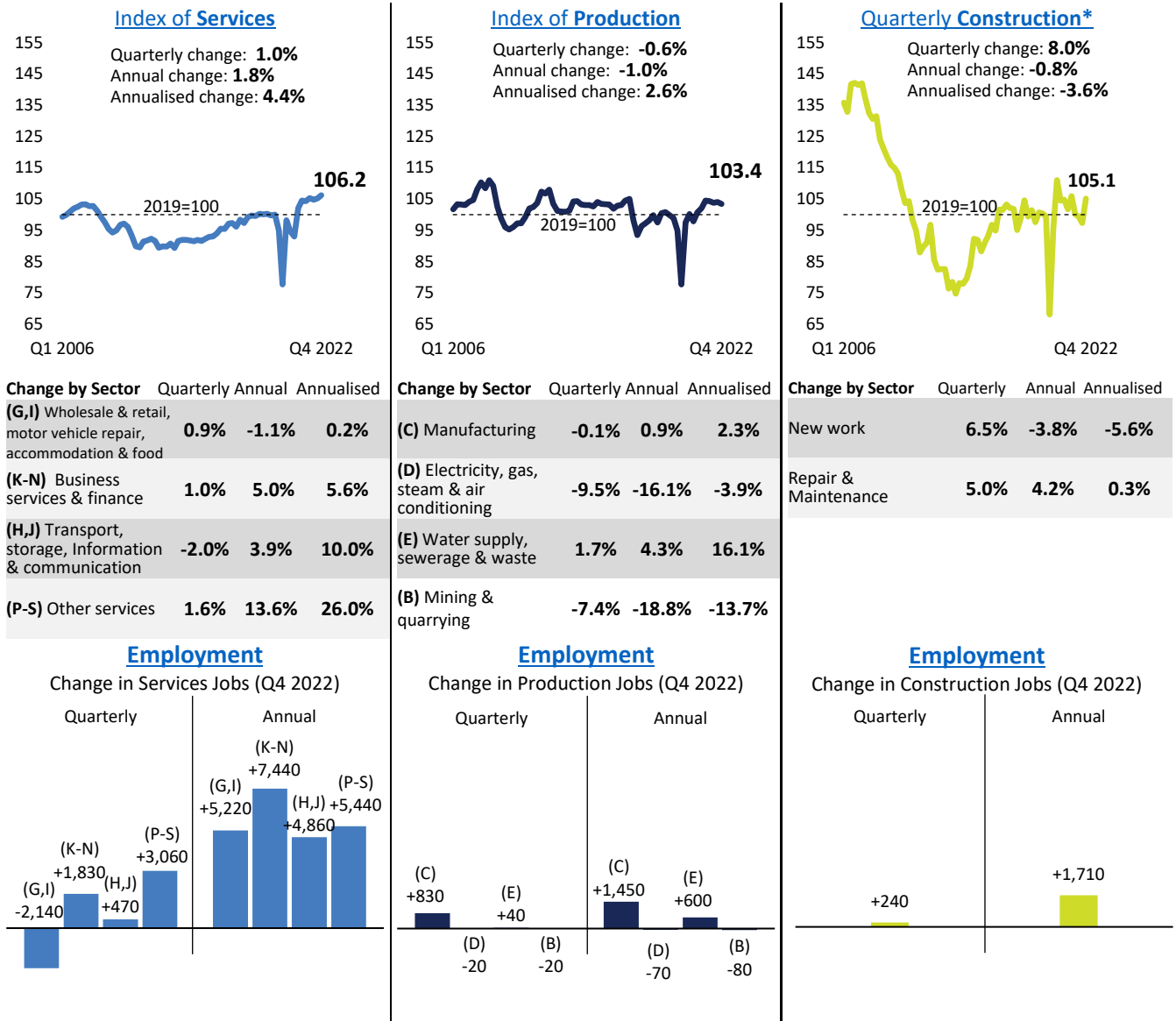
A large increase in activity in the private Construction sector (8.8%) coupled with a strong performance in the Services sector (1.0%) led to the NICEI recording a sizeable increase in economic activity in the final quarter of 2022. The services sector (which accounts for 52% of NI GVA) continues to have a strong recovery post pandemic and has been the main driver of growth in the NICEI's performance annually, triennially and over the rolling four quarter average.

⁶ We have included annual change over 3 years (triennial change) to illustrate to users the impact compared to the same quarter pre pandemic (i.e. Q4 2022 vs. Q4 2019).

Sectoral Insights to Q4 2022

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) in the Sectoral Insights to Q4 2022 above. The sub-sector (P-S) Other Services sector saw the largest increase over the quarter, year and rolling annual average with increases of 1.6%, 13.6% and 26% respectively. (K-N) Business services & finance also experienced increases over the quarter, over the year and rolling annual average with increases of 1.0%, 5.0% and 5.6% respectively. (H, J) Transport, storage, Information & communication was the only sub-sector of the IOS to record a decrease over the quarter (2.0%). (G,I) Wholesale & retail, motor vehicle repair, accommodation & food had a modest increase in output over the quarter (0.9%) but experienced a decline in output over the year (1.1%).

The Index of Production (IOP) sub-sector (E) Water supply, sewerage & waste experienced the highest positive growth over the quarter, the year and on a rolling annual average basis with increases of 1.7%, 4.3% and 16.1%

respectively. The Manufacturing sector (C) shrunk slightly over the quarter (0.1%) but experienced increases over the year and rolling annual average (0.9% and 2.3% respectively). (D) Electricity, gas, steam & air conditioning experienced the biggest decline over the quarter (9.5%) and decreased over the year (16.1%) and over the rolling annual average (3.9%). Mining & quarrying (B) decreased over the quarter, over the year and rolling annual average (7.4%, 18.8% and 13.7% respectively).

Looking at the sub-sectors of the Construction sector, 'New Work' experienced an increase over the quarter (6.5%) but experienced decreases over the year (-3.8%), and over the rolling annual average (-5.6%) to Q4 2022. On the other hand, 'Repair and Maintenance' experienced an increase over the quarter (5.0%), the year (4.2%) and over the rolling annual average (0.3%) to Q4 2022.

In terms of employment, there were quarterly increases in employment in 3 out of the 4 Services sub-sectors, however sub-sector (G, I) experienced a decrease of 2,140 jobs. There was a particularly strong annual increase in jobs in the Services sector, sub-sector (K,N) which saw the largest increase with 7,440 additional jobs. The Production sub-sectors (C) and (E) recorded the largest increases in employment over the year with 1,450 jobs and 600 jobs respectively. Construction jobs grew marginally by 240 jobs over the quarter, however there was a much heftier increase (1,710 jobs) over the year.

- **Retails Sales Index**

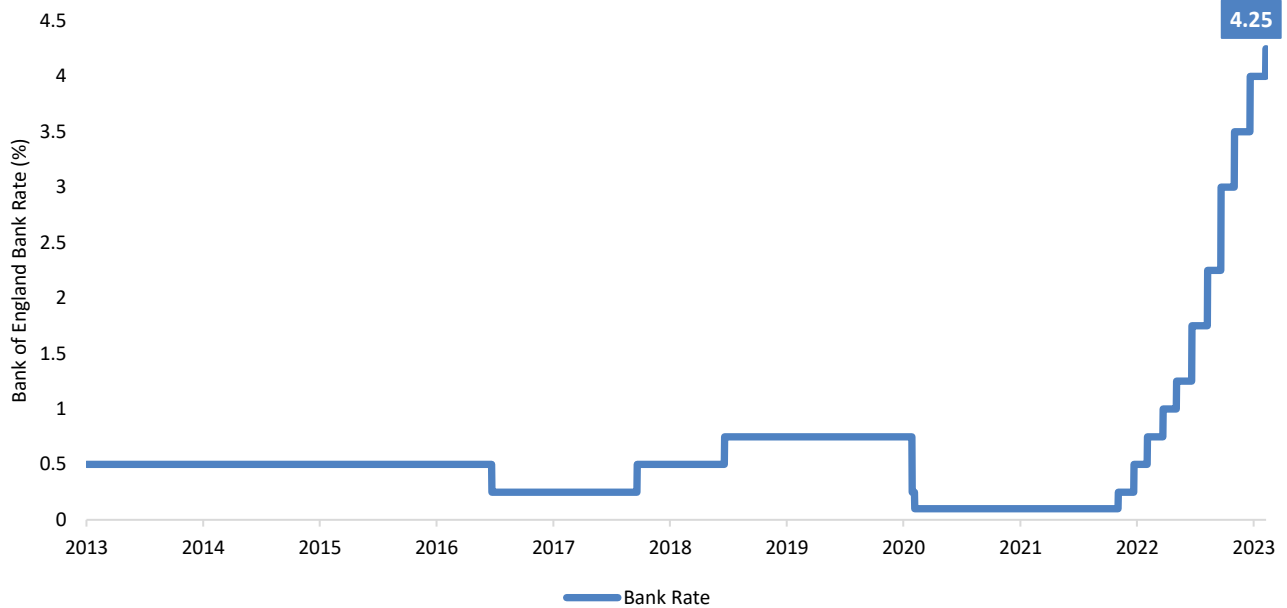
The Quarterly [Retails Sales Index](#) (RSI) provides a timely indicator of change in output within the private retail service industries in NI. The retail sales sector is a subset of the IOS and refers to SIC 47 (Retail trade, except of motor vehicles and motorcycles). Retail output in NI for Q4 2022 saw an increase of 2.2% over the quarter and a decrease of 2.3% over the year. GB RSI output saw a decrease of 1.1% over the quarter and a decrease of 6.1% over the year. NI RSI output remains 4.5% below the pre-pandemic level seen in Q4 2019 while GB RSI output is now 14.1% below the Q4 2019 level.

Current Economic Conditions

- **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 March 2023, the MPC voted to increase the BoE Base rate by 0.25 percentage points to 4.25%. Global growth is expected to be stronger than projected in the February Monetary Policy Report, and core consumer price inflation in advanced economies has remained elevated.

Chart 8 below shows how the BoE bank rate has changed over the last 10 years. The onset of the global financial crisis in 2007/08 led to interest rates in the UK falling from over 5% to 0.5% by March 2009 in a bid to stimulate growth and lessen the extent of the recession. The bank rate remained at very low levels over the next decade. In March 2020, the bank rate reached a historic low point of 0.1%. However, the onset of rising inflation in 2021 above the 2% target led to the BoE raising the bank rate, the latest increase in the bank rate in March 2023 was the 11th consecutive rise since December 2021. The Bank rate is now at its highest level in 14 years.

Chart 8: Bank of England Bank Rate (2013-2023)

Source: Bank of England

- **Financial Markets**

The MPC meeting in March noted that there had been large and volatile moves in financial markets since the MPC's previous meeting, in particular since the failure of Silicon Valley Bank in early March and reflecting market concerns about the possible broader impact of these events. In the days leading up to the MPC's decision, UBS had agreed to buy Credit Suisse, and major advanced economy central banks had announced a coordinated action to enhance the provision of liquidity via the standing US dollar liquidity swap line arrangements.

Reflecting these developments, bank wholesale funding costs had risen in the United Kingdom and other advanced economies. The MPC will continue to monitor closely any effects on the credit conditions faced by households and businesses, and hence the impact on the macroeconomic and inflation outlook.

- **Consumer confidence**

According to the latest [Danske Bank Northern Ireland Consumer Confidence Index](#) survey carried out in December 2022, consumer confidence increased modestly in the fourth quarter of 2022 but remained low as the impact of higher prices on household finances continued to weigh on sentiment. The Consumer Confidence Index posted a reading of 95 in 2022 Q4, up from 92 in the third quarter of the year but below the reading of 134 posted in the fourth quarter of 2021. Compared with the previous quarter, people reported feeling more confident about their future finances and expected spending on expensive items but less confident about their current finances and job security.

- **Ulster Bank PMI**

The [Ulster Bank PMI report](#) for February 2022 indicated that output and new orders in the NI private sector were increasing and showing signs of demand improving. The headline seasonally adjusted Business Activity Index rose to 52.2 in February from 45.3 in January. Output increased slightly amid an increase in new orders and signs of demand improving. The manufacturing and retail sectors posted increases in activity, while services and construction remained in decline. Input prices continued to rise sharply on the back of higher costs for energy, transportation and wages, but the rate of inflation was at a 25-month low.

- **Labour Market**

On the 14th March 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 latest statistics show that in February 2023, payrolled employee numbers increased by 0.4% over the month and increased by 2.2% over the year. Payrolled earnings also increased over the month by 0.5% and increased by 7.0% over the year. Seasonally adjusted employee jobs increased over both the quarter (0.6%) and the year (3.5%) to 810,210 jobs in December 2022. Over the most recent 12 month period, 2,180 redundancies were proposed and 940 were confirmed. The rolling 12 month total of confirmed redundancies was the joint third-lowest total in the time series.

In February 2023, the seasonally adjusted number of people on the claimant count was 35,600 (3.8% of the workforce), a decrease of 0.1% from the previous month's revised figure. The February 2023 claimant count remains 19.5% higher than the pre-pandemic count in March 2020. The latest NI seasonally adjusted unemployment rate for the period November-January 2023 was estimated from the Labour Force Survey at 2.4%. This was a decrease of 0.4pps over the quarter and a decrease of 0.8pps over the year.

- **Car registrations**

According to [The Society of Motor Manufacturers and Traders](#) there has been an increase in new car registrations at the UK level. To the end of February 2023 there has been an 18.6% increase in new car registrations over the year to date (YTD) i.e. January to February (206,435), compared with the same period last year (174,081). New car registrations for Petrol vehicles increased by 21.0%, however Diesel vehicles registrations have shrunk over the YTD reducing by 13.1%. Battery Electric Vehicles continue to record significant increases in registrations with a 19.1% increase compared with the same period last year.

- **House Price Index**

The latest [Northern Ireland House Price Index Q4 2022](#) produced by NISRA shows that the House Price Index showed a slight decrease of 0.5% between the third and fourth quarter of 2022. However, annual prices have increased by 10.2% compared to Q4 2021. Verified residential property sales for Q4 2022 stood at 6,142 which was a 5.2% decrease on Q3 2022. The report also suggests the standardised price of a home in NI now stands at £175,234.

- **Trade**

The [HMRC Regional Trade Statistics](#)⁷ provides a dis-aggregation of the UK Overseas Trade in Goods Statistics, including a breakdown at the NI level. When comparing 2022 with 2021, the value of exports from NI increased by 15% whereas the value of imports to NI increased by 21%.

Over the quarter NI's goods exports to the EU and non-EU rose by £93m (6.3%) and £102m (12%) respectively compared with the previous quarter. NI's goods imports from the EU and non-EU rose by £43m (2.7%) and £16m (2.0%) respectively.

⁷ Note that HMRC do not collect any data on trade between NI and GB

Cost of Living

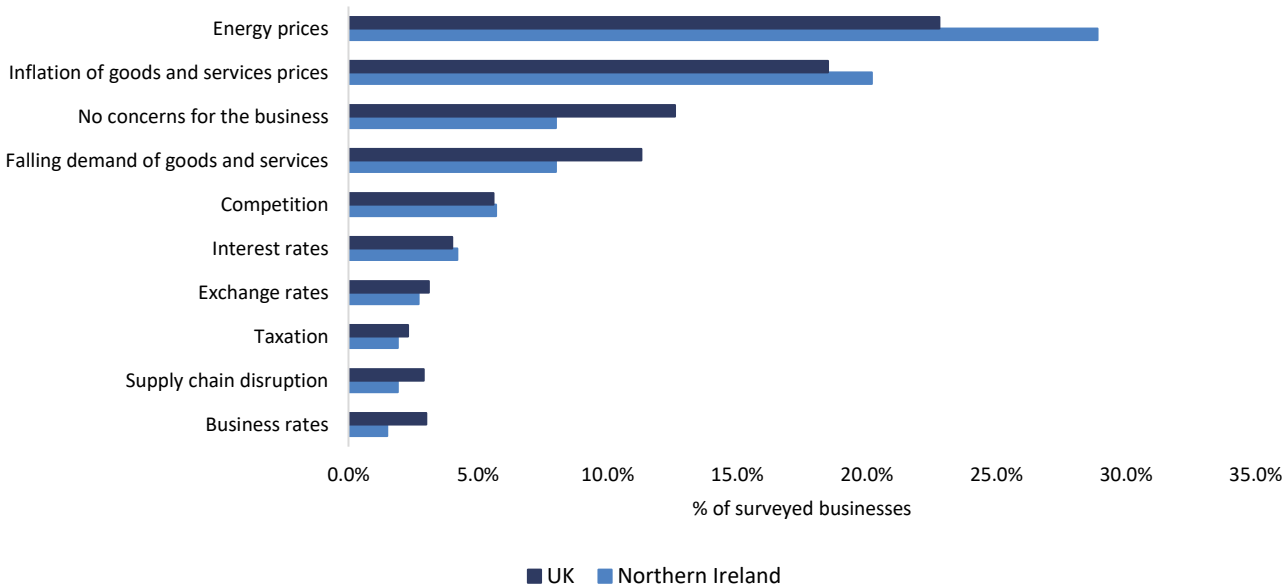
The ‘cost of living crisis’ refers to the fall in real disposable incomes that UK households have experienced since late 2021. The main cause of the ‘cost of living crisis’ is a result of high inflation outstripping wage and benefit increases.

ONS released the latest figures for [Consumer price inflation: UK February 2023](#) in March 2023, which show the Consumer Prices Index including owner occupiers' housing costs (CPIH⁸) rose by 9.2% in the 12 months to February 2023, up from 8.8% in January 2023. The Consumer Prices Index (CPI) also produced by the ONS rose by 10.4% in the 12 months to February 2023, up from 10.1% in January 2023.

The increase in the annual inflation rate in February 2023 mainly reflected price rises in the restaurants and hotels, food and non-alcoholic beverages, and clothing and footwear divisions. These were partially offset by downward effects coming from recreation and culture, and from motor fuels within the transport division. The CPIH all goods index rose by 13.4% in the 12 months to February 2023, up slightly from 13.3% in January 2023. The CPIH all services index rose by 5.6% in the 12 months to February 2023, up from 5.2% in January 2023.

Real-time information from the fortnightly [Business Insights and Conditions Survey \(BICS\)](#) helps to assess issues affecting UK businesses. Latest results suggest business conditions remain challenging, but estimates show small signs of positive improvement for some measures. In March 2023 (Wave 77 results), survey results show that 7 in 10 businesses reported some form of concern for their business. As depicted in Chart 9 below, the top two concerns reported by NI and UK businesses continued to be energy prices (28.9% and 22.8% of surveyed businesses respectively) and inflation of goods and services prices (20.2% and 18.5% respectively).

Chart 9: Main concerns for NI and UK businesses in March 2023⁹



Source: ONS – Business Insights and Conditions Survey (Wave 77)

The percentage of UK businesses concerned about energy prices has risen by 0.6% compared with the previous wave and has risen by 4.4% compared with the equivalent period last year. There has also been a rise of 1.4% of businesses reporting that they have no concerns for their business, compared with the previous wave.

⁸ 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.

⁹ The survey was sent to around 39,000 UK businesses, around 25.9% (10,193) of all businesses surveyed responded.

The Consumer Council's [Home Energy Index](#) (HEI) tracks monthly changes in household gas, electricity and home heating oil (HHO) prices across Northern Ireland. A composite index is then calculated combining all 3 energy prices into one overarching figure. In the just over 8 years the HEI has been in existence, the HEI has seen significant increases, rising by 133.89 points.

At the end of February 2023, the composite HEI stood at 233.89 having decreased by 8.13 points since January 2023. The HEI reached a series high in October 2022 of 297.92 points. However, the HEI is now 64.03 points below the series high following a drop in HHO prices and the introduction of the Government's Energy Price Guarantee which applied a unit rate reduction to the price of electricity and gas.

Looking forward

The latest projections from the [Bank of England's March Monetary Policy report](#) estimates that the UK economy will grow by almost 0.3% over the coming years following the additional fiscal support announced in the spring budget. GDP was expected to have been broadly flat around the turn of the year, but is now expected to increase slightly in the second quarter, compared with the 0.4% decline anticipated in the February Report. CPI inflation is still expected to fall significantly in 2023 Q2, to a lower rate than anticipated in the February Report. This lower-than-expected rate is largely due to the near-term news in the Budget including on the Energy Price Guarantee, alongside the falls in wholesale energy prices.

Recent Publications

ELMS publications

[Quarterly Employment Survey](#) - 14/3

[Labour Market Report](#) – 14/3

[Retail Sales Index](#) – 16/3

[Index of Production](#) – 16/3

[Index of Services](#) – 16/3

[Quarterly Construction Enquiry](#) – 30/3

DfE publications

[Purchases by businesses in Northern Ireland](#) – 1/2

ONS publications

[GDP, UK regions and countries: April to June 2022](#) – 9/2

[Business insights and impact on the UK subnational single-site economy: February 2023](#) – 16/02

[GDP monthly estimate, UK: January 2023](#) – 10/3

[Economic activity and social change in the UK, real-time indicators](#) – 23/3

Upcoming ELMS releases

[Monthly Labour Market Review](#) - 18/4

[Index of Production](#) – 15/6

[Ports Traffic Quarterly](#) – 5/4

[Index of Services](#) & [Retail Sales Index](#) – 15/6

[Quarterly Construction Enquiry](#) & [NICEI](#) – 29/6

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](#)

6 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 Q4 2022 NICEI back series with the Q3 2022 back series, revisions to each quarter of the index ranged between -0.3 and 0.6 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 Q4 2022 and Q3 2022 is available in Table 12 of the [NICEI spreadsheet](#).

Comparability with ONS regional annual GDP

ONS released [balanced estimates of Gross Value Added \(GVA\) and GDP for the countries and regions of the UK](#) on 30th May 2022. This is the third annual estimate of GDP published by ONS at this level of disaggregation. Users should be aware that NISRA acknowledge that the trends presented by the NICEI do not align with these new Regional GDP figures from ONS. This is due to methodological differences. NISRA statistics are produced on a bottom-up basis whereas the ONS figures are produced on a top-down basis, where UK level GVA and GDP figures are apportioned to regions using various apportionment methods. NISRA continue to engage with ONS to better understand the differences and the drivers behind their figures and where possible identify areas where coherence in the figures can be improved.

NI Benchmarking against ONS quarterly releases

This section aims to provide a brief overview of quarterly economic performance releases published by the ONS, namely [Model-based early estimates of regional gross value added](#) and [GDP, UK regions and countries](#).

- **ONS Model-based early estimates of regional GVA**

The ONS Regional GDP team produce experimental estimates of regional GVA using an econometric model (an overview of which is provided [here](#)). This was developed by the Economic Statistics Centre of Excellence (ESCoE) to improve the timeliness and frequency of regional economic growth estimates in the UK. The publication estimates Gross Value Added (GVA) for all nine English regions, Wales, Scotland and Northern Ireland, the most recent estimates were published on the 7th June [Quarter 1 \(Jan to Mar\) 2022](#).

- **ONS GDP, UK regions and countries**

The ONS Regional GDP team also produce experimental estimates of quarterly economic activity in England, Wales and the nine English regions. The most recent release was published on the 9th February 2023 and covers [Quarter 2 \(Apr to June\) 2022](#).

For completeness, ONS includes both Scottish GDP and the NICEI for Northern Ireland in the release. The ONS state the main data for these estimates are turnover data from approximately 1.9 million Value Added Tax (VAT) returns, along with other sources where VAT is not appropriate. ONS recently improved their methods, and details on these changes can be found in their [Quality and Methodology Information \(QMI\)](#).

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. Typically each quarter's LFS sample of around 4,500 households in NI is made up of 5 waves with around 1,300 private households selected for the first time in wave 1 and the remaining 3,200 private households spread across waves 2 to 5. This results in a total of around 7,000 individuals included each quarter. Self-employed estimates from the LFS are incorporated into the NICEI.

NISRA suspended all face-to-face household interviews in the middle of March 2020 due to COVID-19 and from April 2020 all LFS interviews have been conducted by telephone. This has reduced the achieved sample size and precision of the estimates. The total eligible sample for the January-March 2021 LFS consisted of 9,551 addresses (2,573 chosen at random from the Land and Property Services (LPS) list of domestic properties and 6,978 carried forward from the previous quarter). The response rate for January-March 21 was 21% and the achieved sample size was 23% lower than the same time last year.

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 May 2022 includes provisional figures for 2020. The NICEI calculations are based on GVA balanced figures up to and including the 2020 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.

Experimental Statistics

These statistics are experimental statistics which are still undergoing evaluation and are subject to revision. NISRA is currently working to develop a quarterly measure of GDP for NI which builds upon the NICEI. It is our goal that the new quarterly measure of GDP will undergo assessment by the Office for Statistics Regulation to ensure compliance with the standards of the [Code of Practice for Statistics](#).

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 – Q4 2022

		NICEI	Private Sector	Public Sector	Services	Production	Construction
2019	1	100.1	100.3	99.3	100.1	100.5	100.4
2019	2	100.0	100.1	99.8	100.3	100.8	98.0
2019	3	99.8	99.7	100.3	99.7	99.8	100.8
2019	4	100.0	99.8	100.6	100.0	98.9	100.8
2020	1	96.7	95.6	100.5	95.0	94.9	99.0
2020	2	82.6	77.2	101.7	77.7	77.7	67.7
2020	3	98.5	97.8	101.1	98.2	97.5	95.9
2020	4	98.5	97.7	101.4	94.6	100.2	111.8
2021	1	96.8	95.4	101.7	93.0	97.9	104.1
2021	2	102.1	102.0	102.3	102.1	100.7	105.2
2021	3	103.4	103.6	102.9	104.5	102.1	101.9
2021	4	104.3	104.5	103.7	104.3	104.5	106.1
2022	1	104.6	104.6	104.7	105.3	104.3	99.8
2022	2	104.3	104.0	105.0	104.8	103.8	100
2022	3	104.2	103.9	105.4	105.2	104	96.9
2022	4	105.7	105.5	106.1	106.2	103.4	105.4

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 – 2022

Year	NICEI	Private Sector	Public Sector	Services	Production	Construction
2019	100.0	100.0	100.0	100.0	100.0	100.0
2020	94.1	92.1	101.2	91.4	92.6	93.6
2021	101.7	101.4	102.6	101.0	101.3	104.3
2022	104.7	104.5	105.3	105.4	103.9	100.5

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

7 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 – Q4 2022 (2019=100)

Table 2: NICEI and component indices by year, 2006 – 2022 (2019=100)

Table 3: Data for Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 - Q4 2022

Table 4: Data for Chart 2: Breakdown of NI Businesses & Employees by country of ownership, 2022

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, Triennial and annualised growth

Table 7: Data for Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 - Q4 2022

Table 8: Data for Chart 6: NICEI, comparison with selected GDP measures Q1 2006 – Q4 2022

Table 9: Data for Chart 7: Quarterly, annual, triennial and annualised change, NICEI compared with selected GDP measures to Q4 2022

Table 10: Data for Chart 8: Bank of England Bank Rate (2013-2023)

Table 11: Data for Chart 9: Main concerns for NI and UK businesses in March 2023

Table 12: Comparison of the NICEI Series at Q4 2022 and Q3 2022, Q1 2006 – Q4 2022

Table 13: NICEI Sector Contributions to Quarterly Change, Q1 2006 – Q4 2022

8 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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