

Statistical bulletin

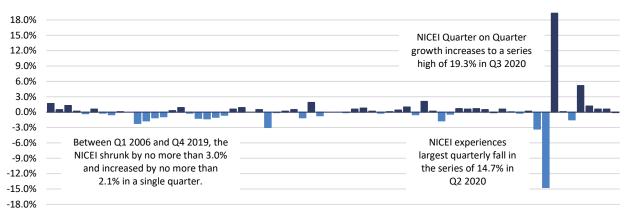
Northern Ireland Composite Economic Index (NICEI)

Experimental statistics

Quarter 2 (April - June) 2022

Economic Activity in Northern Ireland decreased by 0.1% in real terms over the quarter to Quarter 2 2022. The NICEI has experienced negative quarterly change in 2 of the last 8 quarters to Q2 2022.

Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 - Q2 2022



Q1 2006 Q2 2007 Q3 2008 Q4 2009 Q1 2011 Q2 2012 Q3 2013 Q4 2014 Q1 2016 Q2 2017 Q3 2018 Q4 2019 Q1 2021 Q2 2022

Quarterly change	Annual change 2.4%	Triennial change (3 years)*	Annualised change** 5.1%	Quarterly -0.2%	Annual 2.3%	Quarterly 0.3%	Annual 2.6%	
-0.1/0	2.4/0	4.070	5.1/0	Triennial	Annualised	Triennial	Annualised	
				4.4%	5.9%	5.2%	2.4%	

^{*} We have temporarily included the Triennial change (i.e. Q2 2022 vs. Q2 2019) to illustrate to users the impact compared to the same quarter pre pandemic.

Key Points

- Results for the NICEI for Quarter 2 2022 show that economic output in Northern Ireland in real terms, decreased by 0.1% over the quarter but increased by 2.4% over the year to Quarter 2 2022.
- Economic Activity in NI is now 4.6% above pre-pandemic levels seen in Q2 2019 (triennial change). When output for the most recent four quarters are compared to the previous four quarters, (annualised change) NI output has increased by 5.1%.
- Although the measures are not produced on a fully equivalent basis, <u>UK Gross Domestic Product (GDP)</u> decreased by 0.1% over the quarter, however it increased by 2.9% over the year to Quarter 2 2022. UK GDP is now 1.1% above pre-pandemic levels seen in Q2 2019.
- Over the same timeframe, GDP in <u>Ireland</u> increased by 1.8% over the quarter, 10.8% over the year and 32.1% over the last three years to Quarter 2 2022.

^{**}Annualised change: Q3 2021 to Q2 2022 compared with Q3 2020 to Q2 2021.

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 of April to 30th June 2022 (Q2 2022) and is the tenth NICEI release to cover the COVID-19 shock to the economy.

NICEI estimates for Quarter 2 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. 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 <u>Industrial</u> <u>Strategy</u> and the <u>10X Economic Vision</u>. 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

NISRA is currently working on the development of a Quarterly Gross Domestic Product (QGDP) measure for Northern Ireland. We will keep you aware of any subsequent public updates on NI QGDP via this section of the NICEI bulletin.

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.

Profile of the Northern Ireland Economy

Latest figures from the NISRA <u>Inter Departmental Business Register</u> (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.

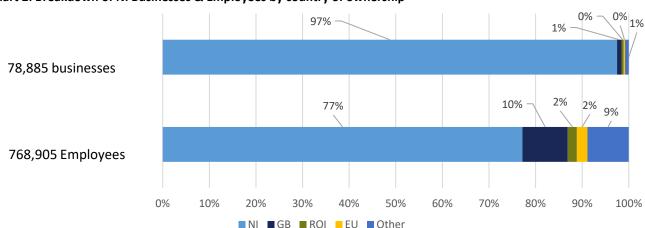
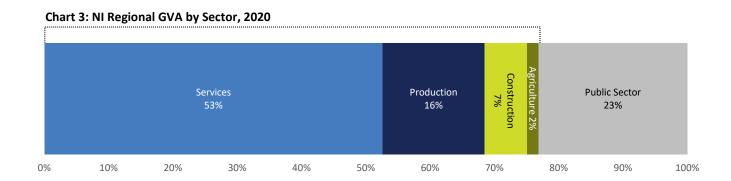


Chart 2: Breakdown of NI Businesses & Employees by country of ownership

Source: NISRA IDBR; June 2022

Furthermore, the Department for Business, Energy and Industrial Strategy (BEIS) estimates that in 2021 there were approximately 51,000 unregistered businesses operating in Northern Ireland employing 55,000 people², which is in addition to the figures reported by the IDBR.

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. We estimate the public split of GVA using detailed industry level employment shares as detailed in the NICEI methodology paper.



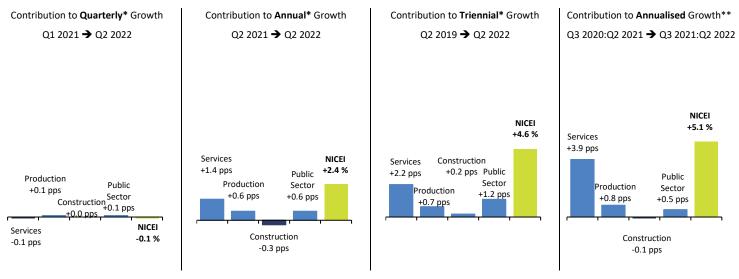
² Business population estimates 2021 - GOV.UK (www.gov.uk)

³ As measured using the balanced approach. Further information can be found here.

Contribution of sectors to overall NICEI

There was a decrease in Economic Activity over the quarter to Q2 2022, this was driven by a negative contribution from the Services sector. However, economic output increased, over the year, triennial and rolling annual average to Q2 2022.

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



^{*} May not sum due to rounding.

The small decline in the NICEI over the latest quarter (0.1%) was driven largely by decreased activity in the Services sector which had a negative contribution of 0.1 percentage points (pps). Both the Public Sector and the Production sector also had small positive contributions of (0.1 pps) each, whilst the contribution from the Construction sector remained flat (0.0 pps).

Over the year, the NICEI increased by 2.4% to Q2 2022. Increased activity in the Services sector (1.4pps) post pandemic has been the biggest contributor to the annual growth in the NICEI. There was also positive contributions from the Public Sector (0.6 pps) and the Production sector (0.6 pps). However, there was a negative contribution from the Construction sector (0.3 pps).

In terms of triennial change⁴, NI economic output has increased 4.6% compared to Q2 2019. Over the last three years, positive growth was largely driven by the Services sector (2.2 pps) but also had positive contributions from the Public sector (1.2 pps), the Production sector (0.7 pps) and the Construction sector (0.2 pps).

The 5.1% annualised increase in the NICEI (i.e. average of the four quarters to Quarter 2 2022 compared with the previous four quarters) was largely driven by increased activity in the Services sector (3.9 pps). There was also positive contributions from the Production sector (0.8 pps) and the Public Sector (0.5 pps). The Construction sector provided a negative contribution over the rolling annual average (0.1 pps).

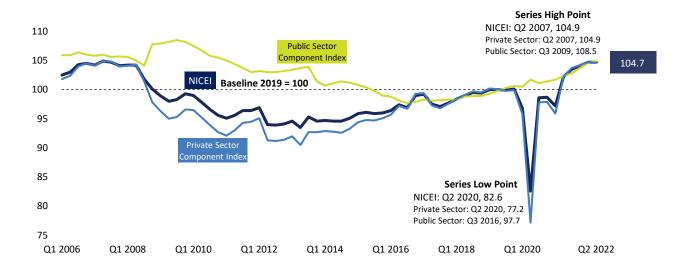
^{**}Annualised growth rates are helpful in determining long-term trends. Rates are calculated after the index is 'smoothed' on a rolling 4 quarter average basis. The annualised rate is less prone to short-term volatility than the annual rate.

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. Q2 2022 vs. Q2 2019).

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. Recently the NICEI and Private Sector Component Indices have recovered from their respective series lows in Q2 2020, reaching an almost 15 year high in Q1 2022, however whilst these indices have fallen back marginally in Q2 2022 they broadly remain at the 15 year high point.

Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 – Q2 2022



In Q1 2022, Economic Output as measured by the NICEI was almost at a 15 year high (i.e. 59 quarters). The quarterly decline in the NICEI between Q1 2022 and Q2 2022 meant that currently the NICEI is 0.2% below the maximum value recorded in Quarter 2 2007 (see chart 5).

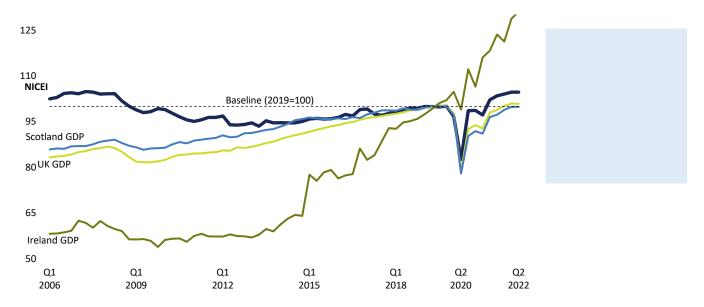
Over the last 5 years, annualised growth has ranged between -5.8% and 10.0%. The notable changes in the NICEI and Private Sector Component Index from Q2 2020 to date coincide with periods of imposing and relaxing lockdown restrictions in response to COVID-19. In particular, the NICEI (and Private Sector Component Index) fell to a series low in Q2 2020, with the NICEI decreasing 14.7% over the quarter then increasing 19.3% 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.

Comparison with measures of GDP

NI Economic Activity declined at the same rate as UK GDP over the quarter. However, output for both NI and the UK increased over the year, triennial and rolling annual average. There has been a general upward trend in Economic Activity from the series low in Q2 2020, however output appears to have plateaued in Q2 2022 with 3 out of the 4 nations recording flat or negative output.

Chart 6: NICEI, comparison with selected GDP measures Q1 2006 - Q2 2022*



* Ireland's GDP figure has been volatile over recent years, the Central Statistics Office (CSO) highlights the impact <u>Globalisation</u> has had on Ireland's GDP figures. Over recent years a number of large foreign owned multinationals have setup headquarters in Ireland, income generated for these companies is registered in Ireland's GDP figures. However, the profits from these foreign owned companies may leave the country and go to the investor abroad, leaving much less in the domestic economy than appears in GDP.

Chart 6 above indicates that NI, Scotland and UK output all fell to their minimum level over the time period in Q2 2020. In Q2 2022, the NICEI is currently 0.2% below the maximum value recorded in Quarter 2 2007 by comparison, UK GDP in Quarter 2 2022 is estimated to be 16.2% 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 a decline in GDP in 5 of the last 40 quarters, whereas the NICEI has reported contraction in economic activity in 14 of the last 40 quarters. Over the last 2 years, decline in economic activity has been following similar trends with both the UK and NI both experiencing negative change in 2 of the last 8 quarters.

ONS Regional Accounts

In May 2022 ONS published <u>Balanced regional gross value added (GVA(B))</u> and <u>GDP for 2020</u>. 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-regio. 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 and the UK declined over the quarter, whereas Ireland experienced output growth and Scotland remained unchanged. All regions experienced growth in output over the year and rolling annual average, however NI recorded the weakest growth for both. In terms of triennial change, all regions except Scotland saw growth in Economic Activity. Ireland experienced the highest growth in output over the quarter, year, 3 year and the rolling annual average.

Annual Growth Annualised Growth* Quarterly Growth Growth over 3 vears** ■ NICEI ■ Scotland GDP ■ UK GDP ■ Ireland GDP 32.1% 33.0% 28.0% 23.0% 18.0% 11.4% 13.0% 10.8% 7.1% 6.3% 8.0% 5.1% 4.6% 3.5% 2.9% 2.4% 3.0% 1.8% 1.1% 0.0% -2.0% -0.1% -0.1% -0.3% Change on quarter Change on year Triennial change Rolling annual average change (Q2 2022 v Q1 2022) (Q2 2022 v Q2 2021) (Q2 2022 v Q2 2019) (Q3 2021-Q2 2022 v Q3 2020-Q2 2021)

Chart 7: Quarterly, annual and annualised change, NICEI compared with selected GDP measures to Q2 2022

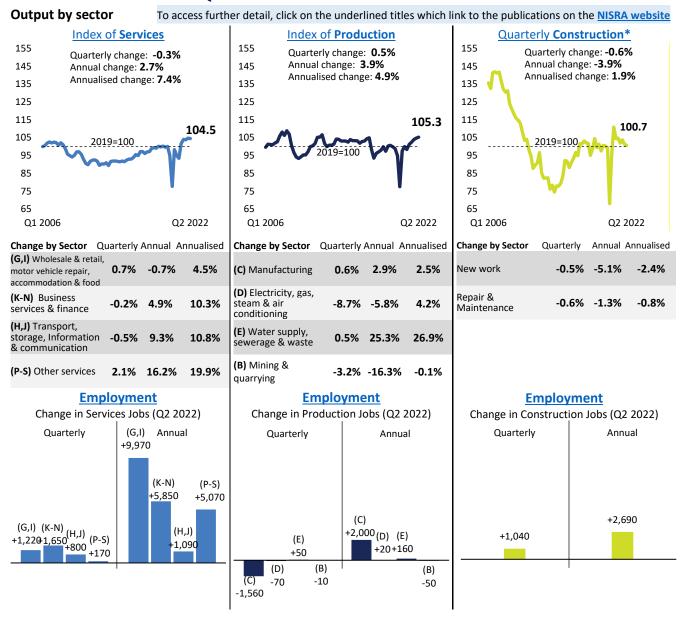
Chart 7 above compares the NICEI against the GDP of the UK, Scotland and Ireland. In Q2 2022, NI and UK output both fell by 0.1% over the quarter whereas Ireland experienced output growth (1.8%) and Scotland remained unchanged (0.0%) over the quarter.

Although all regions experienced growth in Economic Activity over the year and rolling annual average, NI had the weakest growth compared to all other regions. Comparing NI with the UK, NI had weaker growth over the year (2.4% vs 2.9%) and over the rolling annual average (5.1% vs 6.3%). However, Economic Activity in NI increased at a faster rate than UK GDP triennially (4.6% vs 1.1%).

Scotland experienced higher levels of growth than the UK over the quarter (0.0% vs -0.1%), year (3.5% vs 2.9%) and rolling annual average (7.1% vs 6.3%). Scotland also had higher levels of growth than NI over the quarter (0.0% vs -0.1%), over the year (3.5% vs 2.4%) and over the rolling annual average (7.1% vs 5.1%). However Economic Activity in NI increased at a faster rate than Scotland GDP triennially (-0.3% vs 4.6%).

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

Economic context to Q2 2022



^{*} All construction i.e. including public sector

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, the 'cost of living crisis', consumer confidence and trade.

- NICEI Q2 2022;
- Current Economic Conditions;
- Cost of Living;
- Trade; and
- Looking forward.

NICEI Q2 2022

In terms of NI's economic performance in Q2 2022, the NICEI indicates NI economic output decreased by 0.1% in real terms over the quarter and increased by 2.4% over the year. In addition, output has increased at a faster rate triennially (4.6%) 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 5.1% over the period.

It is evident in Chart 4 that changes in activity in the Services sector, which accounts for 53% of NI GVA, is the main driver of change in the NICEI's performance over the quarter, year, triennial and rolling four quarter average.

Over the shorter term (i.e. quarter) the overall decrease in the NICEI was driven primarily by the Services sector (-0.1 pps), followed by positive contributions from the Public Sector (0.1 pps) and the Production sector (0.1 pps) and the contribution from the Construction sector remained unchanged (0.0 pps).

Similarly, over the medium term (i.e. annual) the increase in the NICEI was driven by a growth in the Services sector (1.4 pps) which was further boosted by positive contributions from the Production sector (0.6 pps) and Public sector (0.6 pps) whilst these were offset by a negative contribution from the Construction sector (0.3 pps).

When comparing triennial change, the growth was driven largely by positive contributions from the Services sector (2.2 pps). There were also further positive contributions in the Public Sector (1.2 pps), Production (0.7 pps) and the construction sector (0.2 pps).

• Sub-sector results

Looking at the performance of the sub-sectors of the IOS in the Economic Context to Q2 2022 section (page 8). The Other Services sector (P-S) saw the largest increase over the quarter, year and rolling annual average with 2.1%, 16.2% and 19.9% respectively. (K-N) Business services & finance experienced a reduction of 0.2% over the quarter but experienced increases over the year and rolling average annual with 4.9% and 10.3% respectively.

Similarly (H, J) Transport, storage, Information & communication experienced a reduction over the quarter (0.5%) but experienced increases over the year and rolling average annual with 9.3% and 10.8% respectively. Furthermore (G,I) Wholesale & retail, motor vehicle repair, accommodation & food experienced growth over the quarter (0.7%) and rolling annual average (4.5%) but experienced a reduction over the year (0.7%) to Q2 2022.

The Index of Production sub-sector (E) Water supply, sewerage & waste experienced the highest positive growth over the year and the rolling annual average with large increases of 25.3% and 26.9% respectively. The Manufacturing sector (C) experienced growth over the quarter, year and rolling annual average (0.6%, 2.9% and 2.5% respectively). Mining & quarrying (B) experienced reductions over the quarter, the year and over the rolling annual average (-3.2%, -16.3% and -0.1% respectively) to Q2 2022.

Looking at the sub-sectors of the Construction sector (page 8), there was a reduction in 'New Work' over the quarter (-0.5%), over the year (-5.1%), and over the rolling annual average (-2.4%) to Q2 2022. Similarly, 'Repair and Maintenance' experienced a reduction over the quarter (-0.6%), the year (-1.3%) and over the rolling annual average (-0.8%) to Q2 2022.

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 2022 saw a decrease of 2.4% over the quarter and a decrease of 2.1% over the year. GB RSI output saw a decrease of 1.4% over the quarter and a decrease of 6.1% over the year. NI RSI output remains 3.6% below the pre-pandemic level seen in Q4 2019 while GB RSI output is now 0.8% above 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. In September, the MPC voted to increase the BoE Base rate by 0.5 percentage points to 2.25%. This is now the seventh consecutive time that the BoE has increased interest rates and represents the highest interest rate the UK has had since the financial crisis. In the August MPC report, the MPC noted that the risks around it projections from both external and domestic factors were exceptionally large, given the very large increase in wholesale gas prices since May and the consequent impacts on real incomes for UK households and on CPI inflation. Since August wholesale gas prices have been highly volatile, however uncertainty around the outlook for UK retail energy price has fallen. This follows the government's announcement of support measures including an Energy Price Guarantee. The Guarantee is likely to limit significantly further increases in CPI inflation.

Consumer confidence

According to the latest <u>Danske Bank Northern Ireland Consumer Confidence Index</u> carried out in June 2022, consumer confidence declined sharply in Q2 2022 as high prices continued to weigh heavily on household budgets. The survey has now recorded four consecutive quarters of decline in sentiment.

The Consumer Confidence Index fell to 103 in Q2 2022, down from 117 in Q1 2022, notably this is significantly below the reading of 149 posted in the second quarter of 2021. Compared with the previous quarter, people reported feeling less confident about their current finances, future finances, job security and expected spending on expensive items. Of those surveyed, 53% believed their finances had deteriorated compared with one year ago. When asked what factor had the largest negative impact on their confidence levels, 47% of people pointed to the impact of higher prices on their household finances. Other factors which made people feel less confident included Global risks such as the war in Ukraine at 13% and 12% stated post-Brexit trading arrangements in NI had an adverse impact on sentiment.

Ulster Bank PMI

According to the <u>Ulster Bank PMI report for August 2022</u> the NI private sector experienced a contraction in output/sales and new orders during August, this marks the fourth consecutive month of decline. Inflationary pressures continued to be the key factor to dampened demand. The headline seasonally adjusted Business Activity Index⁶ posted 45.4 in August, up from 41.9 in July, nevertheless it still showed that there had been a reduction in output over the month. The sharpest reduction in activity was seen retail, while manufacturing reversed the wider trend by posting a rise in production.

⁶ Indices within the PMI vary between 0 and 100, a reading of above 50 indicates an overall increase compared to the previous month. A reading of below 50 represents an overall decrease.

Labour Market

On the 13th September 2022, NISRA published its <u>Labour Market Report (LMR)</u>. The Labour Market Report (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 <u>here</u>.

The latest figures by NISRA show record levels of payrolled employees (3.6% higher than March 2020 i.e. prepandemic), payroll earnings (13.8% above pre-pandemic levels) and employee jobs (797,840 jobs in June 2022). The trend of low numbers of redundancies continues, where the latest 12 months totals of confirmed and proposed redundancies (1,080 and 1,220) were the lowest in the time series (since 2000).

The NI Claimant Count remained at 3.8% of the NI workforce in August 2022 (35,600 people). The August claimant count remains 19.4% higher than the pre-pandemic count in March 2020. The latest NI seasonally adjusted unemployment rate for May to July 2022 was estimated to be at 2.9%, this was an increase over the quarter of 0.3pps and a decrease of 1.6pps over the year.

Car registrations

According to <u>The Society of Motor Manufacturers and Traders</u> there has been a decrease in new car registrations at the UK level. To the end of August 2022 there has been a 10.7% decrease in new car registrations over the year to date (YTD) i.e. January to August (983,099), compared with the same period last year (1,101,302). New car registrations for Diesel and Petrol vehicles have shrunk over the YTD with reductions of 47.0% and 17.7% respectively compared with the same period last year. Battery Electric Vehicles however have recorded a significant increase in registrations with a 48.8% increase compared with the same period last year.

House Price Index

The latest Northern Ireland House Price Index Q2 2022 produced by NISRA shows that the NI housing market continues to remain buoyant with strong enquiry and transactions levels, this coupled with the lack of quality stock led to price competition during the quarter. As a result, the House Price Index increased with a quarterly growth rate of 3.2% between Q1 2022 and Q2 2022, annual prices also increased by 9.6% compared to Q2 2021. However, despite the positive price growth in Q2 2022, findings from the survey suggest that the housing market appears to be reaching an apex and there are signals that the market is beginning to cool amidst ongoing supply-side issues relating to the cost labour/materials and rising interest rates.

Cross Border Traffic flows & Activity at NI Airports

Figures from the <u>Transport Infrastructure Ireland (TII) Traffic Data website</u>⁷ show that the onset of the pandemic caused the volume of traffic to drop from 2.9m vehicles in March 2020 to 1.1m in April 2020, a decrease of 61.3%. The latest figures for August 2022 show that 4.4m vehicles were observed, 283,000 vehicles (or 7.0%) more than observed in August 2021. However, this is still 26,000 vehicles (or 0.6%) less than recorded in August 2019 (i.e. pre COVID-19). In addition, there has been a 49.5% increase in all vehicle traffic between the series low in March 2021 and August 2022 as measured by the rolling 12-month counts.

⁷ Users should note that the data is collected at fifteen border locations on the National Road Network of Ireland, and are therefore a subset of all border crossings and would not present full coverage of all vehicle border crossings. Due to the location of the traffic counters, it is possible that vehicles captured in the data do not cross the Northern Ireland-Ireland border.

<u>Civil Aviation Authority (CAA)</u> data showed that there was a sharp decline in the number of air transport movements at NI airports because of lockdown restrictions introduced during the Covid-19 pandemic. In February 2020 there were 559,213 passengers moving through NI airports; this fell to 296,860 in March 2020 and continued to fall to May 2020 when there were only 6,078 passengers recorded across all three of NI's airports. This represented a reduction of 99.3% compared to May 2019. Latest figures show that there has been an increase in air transport movements at NI Airports between June 2021 and June 2022 rising by 126%. This is still below pre-pandemic levels and 36.8% below the value measured in February 2020 as measured by the rolling 12 month figure.

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 thought to be a result of high inflation outstripping wage and benefit increases. Cost pressures have been prevalent across many advanced countries since these economies reopened following coronavirus lockdowns, bringing back a strong recovery in demand⁸.

Inflation measured by the Consumer Price Index is defined as the rate at which the price of the goods and services bought by households rise or fall. One way to understand this index is how the total cost of a large basket containing goods and services bought by a household changes overtime.

ONS released the latest figures for <u>Consumer price inflation</u>: <u>UK August 2022</u> in September 2022. The latest figures show the Consumer Prices Index including owner occupiers' housing costs (CPIH)⁹ rose by 8.6% in the 12 months to August 2022, down from 8.8% in July (see chart 8 below). The Consumer Prices Index (CPI) also produced by the ONS rose by 9.9% in the 12 months to August 2022, down from 10.1% in July 2022.

The August 2022 CPIH reduced slightly compared to last month, this can be partly attributed to the fall in the price of motor fuels over the month. However the July 2022 figure was the highest recorded annual inflation rate in the National Statistics series (January 2006). The rate was last higher in the constructed historical estimates in December 1990, when it stood at 9.2%.

The largest upward contributions to the annual CPIH inflation rate in August 2022 came from Housing, water, electricity, gas and other fuels category (2.90 pps), Transport (1.36 pps) and Food and non-alcoholic beverages (1.20 pps). Contributions from these three categories accounted for nearly two-thirds of the annual CPIH inflation rate.

⁸ Cost of living crisis | The Institute for Government

⁹ 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.

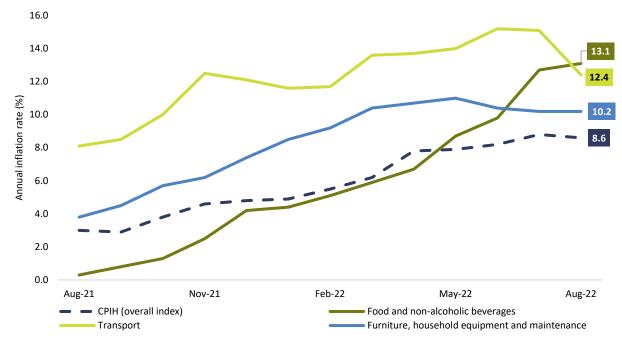


Chart 8: CPIH detailed changes, percentage change over 12 months: UK, August 2021 to August 2022

Chart 8 also shows the top 3 categories of goods and services which have experienced the largest percentage increases in CPIH in the 12 months to August 2022, they include; 'Food and non-alcoholic beverages' which have risen by 13.1%, 'Transport' which has risen by 12.4% and 'Furniture, household equipment and maintenance' which has increased by 10.2% over the year.

Looking more broadly at the CPIH, the all goods index rose by 13.0% in the 12 months to August 2022, down from 13.6% in July 2022, which was the highest level in the series history. The all services index rose by 5.1% in the 12 months to August 2022, which represented the highest annual inflation rate since March 1993.

The ONS have produced <u>CPI and CPIH estimates for NI</u> for the first time in September 2022, early provisional results show price inflation estimates for NI from January to June 2022. Comparing NI CPIH with the published UK CPIH, it is apparent that in recent months, NI shows higher growth in prices (with the largest difference being 0.4 index points in April and May 2022). The results were broadly similar for CPI. It should be noted that the methodology is at an early stage of development, and so the results presented are indicative and experimental at this point, and are therefore liable to change in future publications.

A key driver of price inflation has been the rapid rise in energy costs, which reflect broader global energy market dynamics, in particular the rise in the wholesale price of gas. Global gas prices have risen due to a range of factors including; increased demand from Asia, depleted gas storage supplies in Europe and the war between Ukraine and Russia (a major supplier of European gas)¹⁰.

The Consumer Council produces a <u>Home Energy Index</u> (HEI) which tracks 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. Over the 6.5 years the HEI has been in existence, the HEI has seen significant increases, rising by 145.53 points (see chart 9 below). The majority of this increase has been experienced since January 2021 with the HEI increasing by around 129 points to August 2022.

¹⁰ https://www.iea.org/news/statement-on-recent-developments-in-natural-gas-and-electricity-markets

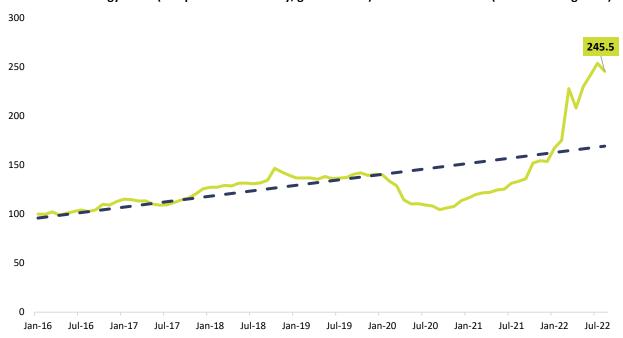


Chart 9: Home Energy Index (composite of electricity, gas and HHO) for Northern Ireland (Jan 2016 – Aug 2022)

At the end of July 2022, the HEI had risen to a historical high, however from July 2022 to August 2022 a decrease in the price of HHO (used by approximately 68% of NI households) meant the index fell by 8.14 points, or 3.2%. At the end of August 2022, the composite HEI stood at 245.5.

The rising costs of energy in NI is also shown in the Consumer Council's price checker tools. The <u>Home Heating Oil Price Checker</u> indicated that the average price of 500 litres of HHO in NI on 22 September 2022 was £496.28, which represented a 115% increase in the average price compared to this time last year¹¹. Based on the latest fuel prices from the <u>Fuel Price Checker</u> on the 22 September 2022, the average price of diesel and petrol has increased by 32% and 22% respectively compared with this time last year. However, recently average fuel prices have been falling with diesel and petrol decreasing over the last 3 months by 9% and 15% respectively.

The difficulties facing vulnerable consumers in NI during the 'cost of living crisis' is evident in the Consumer Council's Northern Ireland Household Expenditure Tracker created in partnership with the Centre for Economics and Business Research. The tracker shows on a quarterly basis what the lowest earning households ¹² in NI are experiencing financially. Figures for Q1 2022 show that income for NI's lowest earning households has only increased by 0.1% or £0.27 per week from Q4 2021 to Q1 2022, however with the impact of rising prices, these households are now spending 3.5% or £6.82 per week more on basics. Over the quarter, discretionary income ¹³ for low earning households has fallen by 18.5%, leaving only £28.86 per week to live on.

The magnitude of the 'cost of living crisis' is further highlighted when comparing the annual change, from Q1 2021 to Q1 2022 there has been an increase income after tax of only 0.8% or £1.88 per week, however spending on basics has increased by 22.7% or £37.29 more per week. Over the year, the lowest earning households have had a squeeze on their discretionary income, which has fallen by 55.1% or £35.41 less per week.

¹¹ The Consumer Council surveys suppliers across NI each week to benchmark prices on the cost of home heating oil. Not every town or supplier is represented.

¹² Lowest earning households are defined as the bottom 25 per cent of the income distribution, also known as Quartile 1.

¹³ Discretionary income is defined as gross household income less taxes and spending on basics.

Trade

The <u>HMRC Regional Trade Statistics</u> ¹⁴ provides a dis-aggregation of the UK Overseas Trade in Goods Statistics, including a breakdown at the NI level. The UK regional trade in good statistics covering Q1 2022, was released on the 7th July. The value of exports from NI over the year to Q1 2022 increased by 9.5% when compared with the value over the year to Q1 2021. However when comparing biannually i.e. comparing the annual period ending March 2022 with the annual period ending March 2020, the value of exports from NI decreased by 8.4%. The value of imports from NI increased by 22% in Q1 2022, compared with the same period of the previous year. However when comparing biannually the value of imports from NI increased by a much smaller rate of 7.2%.

NI's goods exports with EU and non-EU countries fell by £33m (2.4%) and £15m (1.9%) respectively compared with the previous quarter. NI's goods imports from the EU rose by £69m (4.8%), whereas imports from non-EU countries fell by £45m (6.4%).

NISRA has created a <u>monthly NI trade dashboard</u> which extracts data from the Eurostat website¹⁵. According to Eurostat, NI exported €1,045 million of goods in May 2022, a 4.2% increase on April 2022. Over the same period NI imported €1,433 million of goods, a 12.5% decrease compared with the previous month. Note that these figures do not include trade with GB.

The Quarterly Ports Traffic for Q2 2022 shows the estimated total tonnage through NI major ports in the rolling twelve months to June 2022 was 29.0 million tonnes, an increase of 2.7% compared to 28.3 million tonnes in the same period of the previous year (i.e. the twelve months to June 2021). In the twelve months to June 2022 in NI, the estimated total tonnage of inward traffic increased by 3.5% to 17.3 million tonnes, and outward traffic increased by 1.5% to 11.7 million tonnes. An estimated 926,461 roro freight vehicles passed through Northern Ireland ports in the twelve months to June 2022 – a decrease of 1.5% from 940,708 in the twelve months to June 2021

Looking forward

In the <u>Bank of England's August Monetary Policy report</u> CPI inflation was expected to peak slightly over 13% in Q4 2022 however given the Energy Price Guarantee the peak in measured CPI inflation is now likely to be lower than projected in the August Report at just under 11% in October 2022. Inflation is expected to remain above 10% over the following few months before starting to fall back.

The August report also expected that the UK economy would enter recession later this year. Output is projected to fall in each quarter from 2022 Q4 to 2023 Q4. However in the <u>MPC meeting in September</u> modest downside news from manufacturing and construction output means the bank staff now expect GDP to fall by 0.1% in 2022 Q3, below the August Report projection of 0.4% growth, and a second successive quarterly decline.

¹⁴ Note that HMRC do not collect any data on trade between NI and GB

¹⁵ Users should be aware that there are differences in how ONS and HMRC record and report trade figures vis-à-vis how Eurostat report them. Trade statistics for imports can be reported on a country of dispatch and country of origin basis. Whereas for exports only country of destination is recorded. This fundamental accounting difference can produce varying estimates from the different sources. Further information is available in this ONS Blog.

Recent ELMS publications

<u>Ports Traffic Publication 2021</u> – 24/08 <u>Retail Sales Index</u> – 15/09 <u>Index of Production</u> – 15/09

Quarterly Employment Survey - 13/09 **Quarterly Construction Enquiry** – 29/09

Index of Services – 15/09

Recent DfE publications

Northern Ireland High Street Scheme Survey October 2021 to March 2022 Report – 17/08

Q2 2022 Research Digests - 18/08

Research Bulletins 2022 – 31/08

Recent ONS publications

Subnational economic activity statistics: user guide – 18/08

GDP, UK regions and countries - Office for National Statistics – 01/09

ONS-GDP monthly estimate, UK: July 2022 - 12/09

Economic activity and social change in the UK, real-time indicators - 22/09

Upcoming ELMS releases

Monthly Labour Market Review - 11/10
Annual Business Inquiry - Nov 2022

BESES - Dec 2022

Research and Development - Dec 2022

Index of Services & Retail Sales Index - 15/12

Index of Production - 15/12

Quarterly Construction Enquiry & NICEI - 12/01/23

Research and Development – Dec 2022 Index of Services & Retail Sales Index - 15/12

An interactive <u>Quarterly Economic Output dashboard</u> 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 <u>Economic Overview dashboard</u>.

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

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 2022 NICEI back series with the Q1 2022 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 <u>IOS</u> and <u>IOP</u> webpages.

A full comparison of the NICEI Series at Q2 2022 and Q1 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 <u>Model-based early estimates of regional gross value added</u> and <u>GDP</u>, <u>UK regions and countries</u>.

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.

The ONS model estimated NI growth to be 0.4% in Q1 2022, which is aligned with the NICEI estimate for the quarter. NICEI estimates of quarterly growth may be subject to revision, however the current and previous estimates have fallen within the 95% confidence interval for the ONS modelled estimates as demonstrated in Figure 1 of the ONS release 16.

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 1st September 2022 and covers Quarter 4 (Oct to Dec) 2021. A guide to the methodology document for this release is available here.

For completeness, ONS includes both Scottish GDP and the NICEI for Northern Ireland in the release. The ONS state in their paper data within the release has been updated to include Quarter 4 2021 and incorporate revisions that are aligned with the Blue Book 2021 consistent with <u>regional accounts estimates</u> published on 30 May 2022.

¹⁶ These modelled estimates are based on historical relationships, as a result regional shocks for a reported quarter will not be detected and the results should be treated with some caution. ONS state, development work is being conducted with a view to add more timely regional indicators into the model to aid detection of regional shocks.

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 <u>Gross Value Added (GVA (B))</u> by industry obtained from <u>Regional Accounts produced by ONS</u>. 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 <u>NICEI Methodology report</u> for further information

Appendix 1 - NICEI and component indices by quarter and year

Table 1: NICEI and component indices by quarter, Q1 2019 – Q2 2022

		NICEI	Private Sector	Public Sector	Services	Production	Construction
2019	1	100.0	100.2	99.3	99.9	100.4	100.4
2019	2	100.0	100.1	99.8	100.3	100.7	98.0
2019	3	99.9	99.8	100.3	99.7	99.9	100.8
2019	4	100.1	99.9	100.6	100.1	98.9	100.8
2020	1	96.8	95.8	100.5	95.2	94.8	99.0
2020	2	82.6	77.2	101.7	77.7	77.6	67.7
2020	3	98.6	97.8	101.1	98.3	97.6	95.9
2020	4	98.7	97.9	101.4	95.0	100.0	111.8
2021	1	97.2	95.9	101.7	93.5	98.4	104.1
2021	2	102.2	102.2	102.3	101.8	101.3	105.2
2021	3	103.5	103.7	102.8	104.1	102.5	102.2
2021	4	104.1	104.2	103.7	103.9	104.1	103.9
2022	1	104.7	104.7	104.6	104.8	104.8	101.1
2022	2	104.7*	104.6	104.9	104.5	105.3	101.3

Data by quarter for the NICEI and component indices dating back to Q1 2006 can be accessed here
*Index position has remained at 104.7 due to rounding, the quarterly change records a 0.1% decrease in the NICEI

Table 2: NICEI and component indices by year, 2019 – 2021

Year	NICEI	Private Sector	Public Sector	Services	Production	Construction
2019	100.0	100.0	100.0	100.0	100.0	100.0
2020	94.2	92.2	101.2	91.6	92.5	93.6
2021	101.8	101.5	102.6	100.8	101.6	103.8

Data by year for the NICEI and component indices dating back to 2006 can be accessed here

List of Tables

Data accompanying this bulletin are available from the <u>NISRA website</u> in both Open Document and Excel formats. The spreadsheet includes the following tables.

Table 1: NICEI and component indices by quarter, Q1 2006 – Q2 2022 (2019=100)

Table 2: NICEI and component indices by year, 2006 – 2021 (2019=100)

Table 3: Data for Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 - Q2 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, 2020

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 - Q2 2022

Table 8: Data for Chart 6: NICEI, comparison with selected GDP measures Q1 2006 – Q2 2022

Table 9: Data for Chart 7: Quarterly, annual, triennial and annualised change, NICEI compared with selected GDP measures to Q2 2022

Table 10: Data for Chart 8: CPIH detailed changes, percentage change over 12 months: UK, August 2021 to August 2022

Table 11: Data for Chart 9: Home Energy Index (composite of electricity, gas and HHO) for Northern Ireland (Jan 2016 – Aug 2022)

Table 12: Comparison of the NICEI Series at Q2 2022 and Q1 2022, Q1 2006 – Q2 2022

Table 13: NICEI Sector Contributions to Quarterly Change, Q1 2006 – Q2 2022

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.

If you wish to receive regular NICEI updates via email or join the NICEI expert user group please contact:

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