

Statistical bulletin

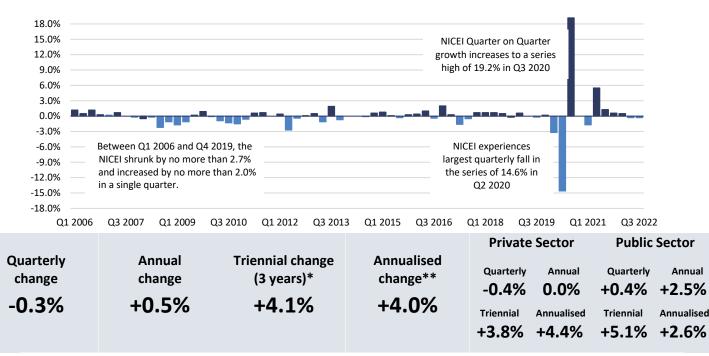
# Northern Ireland Composite Economic Index (NICEI)

## Experimental statistics

Quarter 3 (July - September) 2022

Economic Activity in Northern Ireland decreased by 0.3% in real terms during the third quarter of 2022. The NICEI has now experienced two consecutive quarters of declining economic activity.

Chart 1: Northern Ireland Composite Economic Index (NICEI), Quarter on quarter change (%), Q1 2006 – Q3 2022



\* We have temporarily included the Triennial change (i.e. Q3 2022 vs. Q3 2019) to illustrate to users the impact compared to the same quarter pre pandemic. \*\*Annualised change: Q4 2021 to Q3 2022 compared with Q4 2020 to Q3 2021.

## **Key Points**

- Economic Activity in Northern Ireland decreased by 0.3% in real terms over the quarter to Q3 2022. Compared to the same quarter last year, NI's output has increased by 0.5% and is now 4.1% above pre-pandemic levels seen in Q3 2019 (triennial change). When assessing annualised change, NI output has increased by 4.0%.
- Although the measures are not produced on a fully equivalent basis, <u>UK Gross Domestic Product (GDP)</u> decreased by 0.3% over the quarter, however it increased by 1.9% over the year to Quarter 3 2022. UK GDP is now -0.8% below pre-pandemic levels seen in Q3 2019.
- Over the same timeframe, GDP in <u>Ireland</u> increased by 2.3% over the quarter, 10.6% over the year and 34.7% over the last three years to Quarter 3 2022.
- The largest contribution to change this quarter came from decreased activity in the private Construction sector which contributed to 0.4 percentage points of the overall NICEI decrease.



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# 1 Context

The NICEI is a quarterly measure of economic activity in NI based on available official statistics<sup>1</sup>. 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 1<sup>st</sup> of July to 30<sup>th</sup> September 2022 (Q3 2022) and is the eleventh NICEI release to cover the COVID-19 shock to the economy.

NICEI estimates for Quarter 3 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.

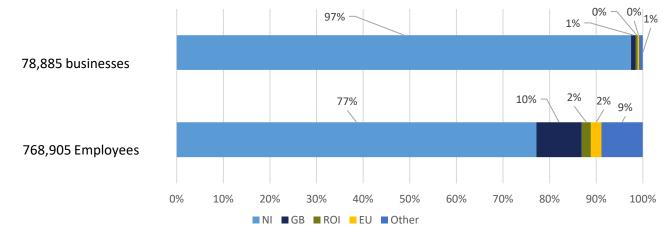
## **Development of NI Quarterly GDP**

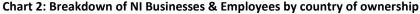
NISRA is currently working on the development of a Quarterly Gross Domestic Product (QGDP) measure for Northern Ireland. We will keep you aware of any subsequent public updates on NI QGDP via this section of the NICEI bulletin.

<sup>&</sup>lt;sup>1</sup> 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

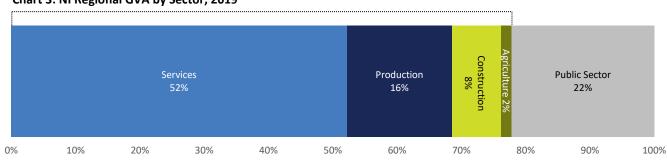
Latest figures from the NISRA Inter Departmental Business Register (IDBR) show that the number of VAT and/or PAYE registered businesses operating in Northern Ireland in 2022 is estimated to be 78,885; with 1,995 (2.5%) of these businesses having an ownership based outside of Northern Ireland. However 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.





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 people<sup>2</sup>, 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)<sup>3</sup> 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.





## **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, 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.

Source: NISRA IDBR; June 2022

<sup>&</sup>lt;sup>2</sup> Business population estimates 2022 - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>3</sup> As measured using the balanced approach. Further information can be found <u>here</u>.

# 2 Contribution of sectors to overall NICEI

There was a decrease in Economic Activity over the quarter to Q3 2022, this was driven by a negative contribution from the Construction sector. However, economic output increased, over the year, triennial and rolling annual average to Q3 2022.

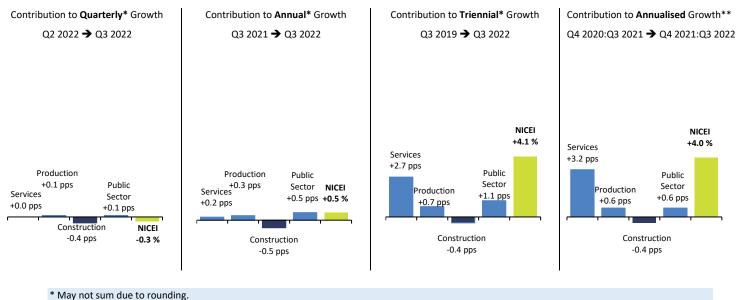


Chart 4: NICEI, Contribution of sectors to quarterly, annual, Triennial and annualised growth

\* 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 decrease in the NICEI over the latest quarter (0.3%) was driven by decreased activity in the Construction sector (a negative contribution of 0.4 pps). The Public Sector (0.1 pps) and the Production sector (0.1 pps) had small positive contributions and the contribution from the Services sector remained unchanged (0.0 pps).

Over the year, the NICEI increased by 0.5% to Q3 2022 this was driven by positive contributions from the Services sector (0.2 pps), the Production sector (0.3 pps) and the Public sector (0.5 pps) whilst these were partially offset by a negative contribution from the Construction sector (0.5 pps).

In terms of triennial change<sup>4</sup>, NI economic output has increased by 4.1%, the growth was driven largely by a positive contribution from the Services sector (2.7 pps) which has had a strong recovery post pandemic. There were also further positive contributions from the Public sector (1.1 pps) and the Production sector (0.7 pps), however the Construction sector had a negative contribution (0.4 pps).

The 4.0% annualised increase in the NICEI (i.e. average of the four guarters to Quarter 3 2022 compared with the previous four quarters) was largely driven by increased activity in the Services sector (3.2 pps). There was also positive contributions from the Production sector (0.6 pps) and the Public Sector (0.6 pps). The Construction sector provided a negative contribution over the rolling annual average (0.4 pps).

<sup>&</sup>lt;sup>4</sup> 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. Q3 2022 vs. Q3 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 is now 25.7% above this series low point. More recently, the post pandemic recovery has diminished somewhat with the indices recording negative quarterly change in 3 out of the last 8 quarters.

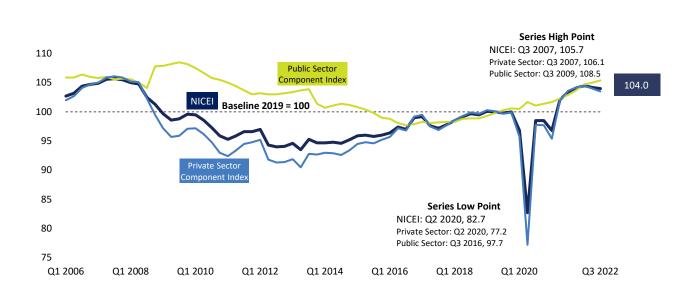


Chart 5: Northern Ireland Composite Economic Index (NICEI), Q1 2006 – Q3 2022

The quarterly decline in the NICEI between Q2 2022 and Q3 2022 means that currently the NICEI is 1.6% below the maximum value recorded in Quarter 3 2007.

Over the last 5 years, annualised growth has ranged between -5.9% 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 14.6% 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

NI Economic Activity declined at the same rate as UK GDP over the quarter. Output for both NI and the UK increased over the year and rolling annual average. The general upward trend in Economic Activity experienced after the series low in Q2 2020 appears to have ended with 3 out of the 4 nations recording negative output in Q3 2022.

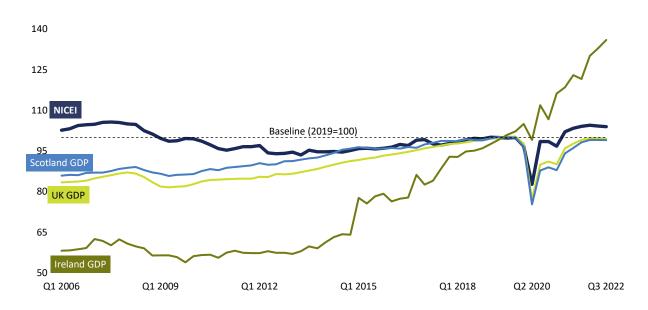


Chart 6: NICEI\*, comparison with selected GDP measures Q1 2006 - Q3 2022\*\*

 \* 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 <u>Globalisation</u> 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 Q3 2022, the NICEI is currently 1.6% below the maximum value recorded in Quarter 3 2007 by comparison, UK GDP in Quarter 3 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 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, the UK, Scotland and NI have experienced similar trends in economic activity. The UK and Scotland have experienced negative change in 2 of the last 8 quarters and NI has experienced negative change in 3 of the last 8 quarters.

## **ONS Regional Accounts**

In May 2022 ONS published <u>Balanced regional gross value added (GVA(B)) and 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)<sup>5</sup>. 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.

<sup>&</sup>lt;sup>5</sup> 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, the UK and Scotland decreased over the quarter, whereas Ireland experienced an increase in output. 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, NI and Ireland saw growth in Economic Activity whilst UK and Scotland have declined.

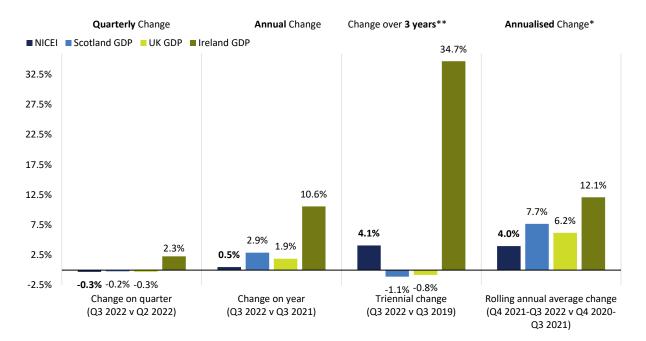


Chart 7: Quarterly, annual and annualised change, NICEI compared with selected GDP measures to Q3 2022

Chart 7 above compares the NICEI against the GDP of the UK, Scotland and Ireland. In Q3 2022, NI, UK and Scotland output fell over the quarter (-0.3%, -0.3% and -0.2% respectively) whereas Ireland experienced output growth (2.3%).

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 (0.5% vs 1.9%) and over the rolling annual average (4.0% vs 6.2%). However, Economic Activity in NI increased triennially whilst the UK experienced a reduction (4.1% vs -0.8%).

Scotland declined at a slower rate than the UK over the quarter (-0.2% vs -0.3%) but grew at a faster rate over the year (2.9% vs 1.9%) and rolling annual average (7.7% vs 6.2%). Similarly, Scotland also declined at a slower rate than NI over the quarter (-0.2% vs -0.3%) and grew at a faster rate over the year (2.9% vs 0.5%) and over the rolling annual average period (7.7% vs 4.0%). However Economic Activity in NI increased at a faster rate than Scotland GDP triennially (4.1% vs -1.1%).

Meanwhile Ireland achieved the highest rate of growth of all regions over the quarter, 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 subsectors 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 Q3 2022
- Current Economic Conditions
- Cost of Living
- <u>Trade</u>
- Looking forward



## NICEI Q3 2022

In terms of NI's economic performance in Q3 2022, the NICEI indicates NI economic output decreased by 0.3% in real terms over the quarter and increased by 0.5% over the year. In addition, output has increased at a faster rate triennially (4.1%) 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 4.0% over the period.

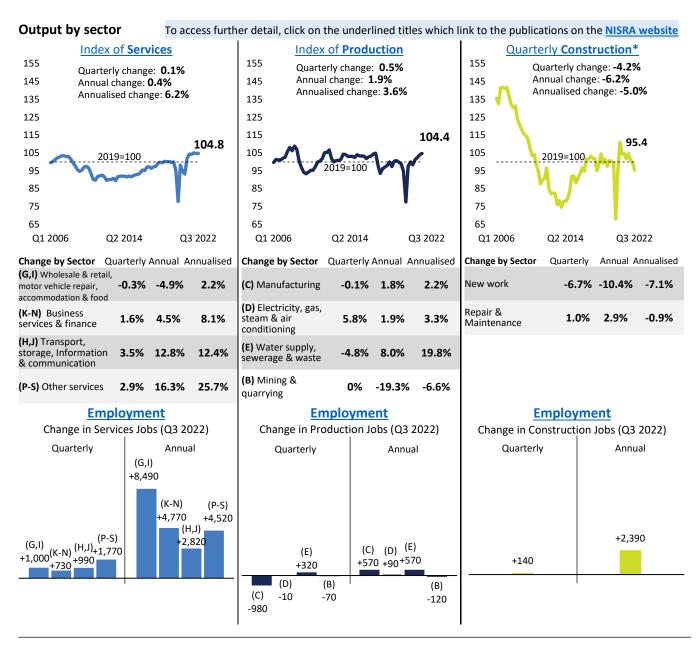
Over the short term (i.e. quarter) the overall decrease in the NICEI was driven by decreased activity in the Construction sector (-0.4 pps). The Construction sector was the only component index to record negative change over the quarter. The Public sector (0.1 pps) and the Production sector (0.1 pps) had small positive contributions whilst the contribution from the Services sector remained unchanged (0.0 pps).

Over the medium term (i.e. annual) the increase in the NICEI was driven by growth in the Services sector (0.2 pps), the Production sector (0.3 pps) and the Public sector (0.5 pps) whilst these were partially offset by a negative contribution from the Construction sector (0.5 pps).

When comparing against the same quarter pre-pandemic i.e. Q3 2019 vs Q3 2022 (triennial change), the growth was driven largely by positive contributions from the Services sector (2.7 pps) which has had a strong recovery post pandemic. There were also further positive contributions from the Public sector (1.1 pps) and the Production sector (0.7 pps), however the Construction sector had a negative contribution (0.4 pps).

It is evident from the results in Chart 4 that the strong recovery in activity in the Services sector post pandemic (which accounts for 52% of NI GVA) is the main driver of growth in the NICEI's performance triennially and over the rolling four quarter average period. The pace of growth in the Services sector has slowed somewhat in Q3 2022, this coupled with decreased activity in the Construction sector has led to the NICEI recording negative economic activity for the second consecutive quarter.

## Sectoral Insights to Q3 2022



\* All construction i.e. including public sector

## • Sub-sector results

Looking at the performance of the sub-sectors of the IOS in the Sectoral Insights to Q3 2022 section above. The Index of Services sub-sector (P-S) Other Services sector saw the largest increase over the year and rolling annual average with 16.3% and 25.7% respectively. The Other Services sector also experienced growth over the quarter increasing by 2.9%. (K-N) Business services & finance experienced increases over the quarter, over the year and rolling annual average with increases of 1.6%, 4.5% and 8.1% respectively.

(H, J) Transport, storage, Information & communication recorded the largest increase in output over the quarter with 3.5%. There were also increases over the year and rolling annual average with 12.8% and 12.4% respectively. (G,I) Wholesale & retail, motor vehicle repair, accommodation & food bucked the wider trend by recording declines in output over the quarter (0.3%) and over the year (4.9%) but did experience an increase of 2.2% on a rolling annual average basis.

Employment in the Services sector increased in all sub-sectors over the quarter and over the year. There was a particularly strong annual increase in jobs, sector (G,I) saw the largest increase with 8,490 additional jobs.

The Index of Production sub-sector (E) Water supply, sewerage & waste experienced the highest positive growth over the year and on a rolling annual average basis with increases of 8.0% and 19.8% respectively. The Manufacturing sector (C) shrunk slightly over the quarter (0.1%) but experienced increases over the year and rolling annual average (1.8% and 2.2% respectively). Mining & quarrying (B) was unchanged over the quarter, however output over the year decreased significantly (19.3%). (D) Electricity, gas, steam & air conditioning increased over the quarter, over the year and rolling annual average (5.8%, 1.9% and 3.3% respectively). Subsectors (C) and (E) recorded the largest increases in employment over the year (570 jobs each), however the trend reversed for the Manufacturing sector over the most recent quarter showing a fall of 980 jobs.

Looking at the sub-sectors of the Construction sector, there was a reduction in 'New Work' over the quarter (-6.7%), over the year (-10.4%), and over the rolling annual average (-7.1%) to Q2 2022. On the other hand, 'Repair and Maintenance' experienced an increase over the quarter (1.0%) and the year (2.9%) but a reduction over the rolling annual average (-0.9%) to Q3 2022. Construction jobs grew marginally by 140 jobs over the quarter, however there was a much heftier increase (2,390 jobs) over the year.

## Retails Sales Index

The Quarterly <u>Retails Sales Index</u> (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 Q3 2022 saw a decrease of 1.7% over the quarter and a decrease of 5.3% over the year. GB RSI output saw a decrease of 2.0% over the quarter and a decrease of 5.2% over the year. NI RSI output remains 6.2% below the pre-pandemic level seen in Q4 2019 while GB RSI output is now 12.8% below the Q4 2019 level.

## **Current Economic Conditions**

## • Interest Rates & Fiscal events

The Bank of England's (BoE) <u>Monetary Policy Committee (MPC)</u> sets monetary policy to meet the 2% inflation target. In December, the MPC voted to increase the BoE Base rate by 0.5 percentage points to 3.5%. In the November MPC report, the MPC noted that the UK economy was expected to be in recession for a prolonged period and CPI inflation was expected to remain very high in the near term. Inflation was expected to fall sharply from mid-2023, to some way below the 2% target in years two and three of the projection. This reflected a negative contribution from energy prices, as well as the emergence of an increasing degree of economic slack and a steadily rising unemployment rate.

The <u>Autumn Statement</u> outlined a number of austerity measures aimed at stabilising the economy and ensuring that national debt falls as a proportion of the economy over the medium term. There were a number of NI-specific announcements such as that the NI Executive will receive an additional £650m in funding over the next two years and that government support for households that use alternative fuels will double to £200. This support will be rolled out to all NI households in recognition of the prevalence of alternative fuel usage in NI.

## • Consumer confidence

According to the latest <u>Danske Bank Northern Ireland Consumer Confidence Index</u> carried out in September 2022, consumer confidence in NI decreased again in Q3 2022 as higher prices continued to add pressure to household finances. This was the fifth consecutive quarterly decline in sentiment. The Consumer Confidence Index fell sharply to 92 in Q3 2022, down from 103 in Q2 2022 and well below the reading of 137 recorded in the third 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, 56% 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 respondents pointed to the impact of higher prices on their household finances.

## Ulster Bank PMI

The <u>Ulster Bank PMI report</u> for November 2022 indicated that output and new orders in the NI private sector remain on a downward trajectory. The headline seasonally adjusted Business Activity Index rose to 46.0 in November from 44.4 in October, but still pointed to a solid reduction in output across the NI private sector. Activity has now decreased in seven consecutive months, although the latest fall was the softest since May. Manufacturing, services and construction sectors saw output decline, but retail bucked the wider trend and posted a rise in activity. Inflationary pressures coupled with a wider economic slowdown are reportedly behind the latest falls in output and new orders. The report also notes that despite input and output prices continuing to rise sharply, the latest increases recorded are the softest since February 2021.

## • Labour Market

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

The latest statistics show that in November 2022, payrolled employee numbers increased by 0.3% over the month and increased by 2.4% over the year. Payrolled earnings also increased over the month by 1.2% and increased by 7.5% over the year. Employee jobs increased over both the quarter and the year to 802,960 jobs in September 2022. Over the most recent 12 month period, 1,490 redundancies were proposed and 850 were confirmed. The rolling 12 month total of confirmed redundancies is the lowest total in the time series.

The NI Claimant Count remained at 3.8% of the NI workforce in November 2022 (36,200 people). The November claimant count remains 21.4% higher than the pre-pandemic count in March 2020. The latest NI seasonally adjusted unemployment rate for August to October 2022 was estimated to be at 2.7%, this was a decrease of 0.2pps over the quarter and a decrease of 1.2pps 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 December 2022 there has been a 2.0% decrease in new car registrations over the year to date (YTD) i.e. January to December (1,614,063), compared with the same period last year (1,647,181). New car registrations for Diesel and Petrol vehicles have shrunk over the YTD with reductions of 38.9% and 10.4% respectively compared with the same period last year. Battery Electric Vehicles however have recorded a significant increase in registrations with a 40.1% increase compared with the same period last year.

## House Price Index

The latest <u>Northern Ireland House Price Index Q3 2022</u> produced by NISRA shows that the NI housing market continues to record healthy growth figures. The House Price Index increased with a quarterly growth rate of 4.1% between Q2 2022 and Q3 2022, annual prices also increased by 10.7% compared to Q3 2021. Residential property sales for Q3 2022 stood at 6,402 which was a 5.3% increase on Q2 2022. The report suggests the average price of a home in NI now stands at £176,131.

## • Gross Disposable Household Income (GDHI)

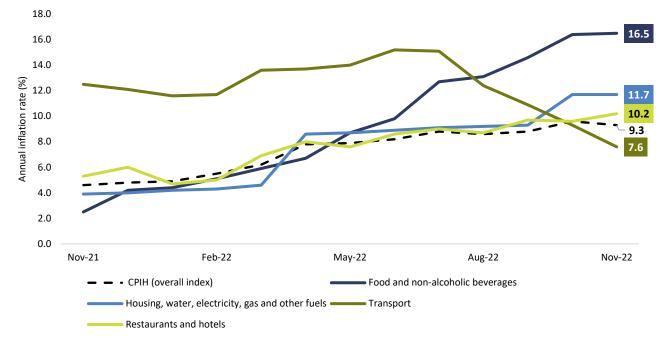
In October, ONS released <u>Regional GDHI estimates</u>, including figures for NI and NI District Councils. GDHI is a concept that is seen to reflect the "material welfare" of the household sector<sup>6</sup>. NI's total GDHI was estimated to be £32,794 million in 2020, this represented a decrease of 0.4% on the 2019 figure and was is in contrast to UK total GDHI, which increased by 0.3%. NI's GDHI per head of population was £17,301, this represented 80.7% of the corresponding UK figure and ranked NI as the lowest performing UK region.

## 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 <u>Consumer price inflation: UK November 2022</u> in December 2022, which show the Consumer Prices Index including owner occupiers' housing costs (CPIH) rose by 9.3% in the 12 months to November 2022, down from 9.6% in October (see chart 8 below). The Consumer Prices Index (CPI) also produced by the ONS rose by 10.7% in the 12 months to November 2022, down from 11.1% in October 2022.

<sup>&</sup>lt;sup>6</sup> GDHI is the amount of money that all the individuals in the household sector have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits.



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

Source: Office for National Statistics

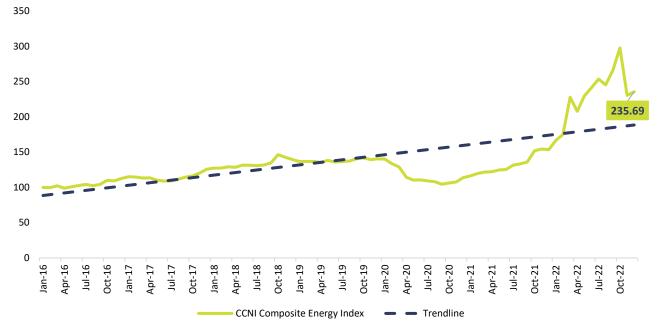
Chart 8 shows that the easing of the annual inflation rate was principally down to price changes in the Transport division, Transport had a notable downward contribution of 0.18pps which left the annual inflation rate in November at 7.6%, down from a peak of 15.2% in June 2022. Overall, there were downward contributions from 5 of the 12 divisions, with further large downward contributions from Alcohol and tobacco, Clothing and footwear, and Recreation and culture. The main drivers behind this easing between October and November came from price falls in motor fuels and second-hand cars. The inflation rate in the Food and non-alcoholic beverages division rose to 16.5% in November, which was the highest inflation rate of all the 12 divisions and marked its 16<sup>th</sup> consecutive monthly rise.

The easing of the annual CPIH<sup>7</sup> inflation rate was partially offset by rising prices in the Restaurants and hotels division which rose to 10.2% in November. The upward pressure came from price rises for alcohol served in restaurants, cafes and hotels. Meanwhile, the inflation rate in the Housing and household services division remained high at 11.7%.

Looking more broadly at the CPIH, the all goods index rose by 14.1% in the 12 months to November 2022, down from 14.8% in October. The all services index rose by 5.4% in the 12 months to November 2022, up from 5.3% in October. This is the highest rate since 5.5% was observed in March 1993.

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. The Consumer Council's <u>Home Energy Index</u> (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. Over the almost 7 years the HEI has been in existence, the HEI has seen significant increases, rising by 135.69 points (see chart 9 below).

<sup>&</sup>lt;sup>7</sup> 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 9: Home Energy Index (composite of electricity, gas and HHO) for Northern Ireland (Jan 2016 – Dec 2022)

Source: The Consumer Council

At the end of December 2022 the composite HEI stood at 235.69 a slight increase of 5.14 points from November. From October 2022 to November 2022 there was a significant index fall of 67.37 points. The monthly decline was due to a fall 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.

The Consumer Council's Northern Ireland Household Expenditure Tracker created in partnership with the Centre for Economics and Business Research shows on a quarterly basis what the lowest earning households<sup>8</sup> in NI are experiencing financially. Figures for Q2 2022 show that income after tax for NI's lowest earning households has risen by 1.2% or £2.80 per week from Q1 2022 to Q2 2022, however with the impact of rising prices, these households are now spending 3.6% or £7.25 per week more on basics. Over the quarter, discretionary income<sup>9</sup> for low earning households has fallen by 15.4%, leaving only £24.41 per week to live on.

## **Trade**

The Northern Ireland Economic Trade Statistics (NIETS) were published in December and show the latest estimates of local businesses' trade with markets inside and outside NI for 2021<sup>10</sup>. Results show that total sales by companies in NI were estimated to be worth £77.1 billion, of which £52.1 billion were Sales within NI. The remainder of sales were fairly evenly split between those to GB (£12.8 billion) and sales to markets outside the UK (i.e. exports) of £12.2 billion.

In 2021, total sales of goods were estimated to be worth £51.3 billion, whereas total sales of services were estimated to be worth £25.8 billion. Both sales of goods and services increased over the year by 13.8% and 13.3% respectively. Exports of goods represented 75.8% of all exports sales in 2021, with them estimated to be

<sup>&</sup>lt;sup>8</sup> Lowest earning households are defined as the bottom 25 per cent of the income distribution, also known as Quartile 1.

<sup>&</sup>lt;sup>9</sup> Discretionary income is defined as gross household income less taxes and spending on basics.

<sup>&</sup>lt;sup>10</sup> All values are in current prices. The Covid-19 pandemic had a major impact on the economy during 2020, this should be borne in mind when considering the change in trade estimates between 2020 and 2021.

worth £9.2 billion, an increase of 13.7% over the year. Exports of services represented 24.2% of all export sales in 2021, they were estimated to be worth £3.0 billion, an increase of 23.6% over the year.

Total purchases by NI businesses were estimated to be worth £48.7 billion in 2021, with the purchase of goods accounting for 79.6% of this amount. Purchases of goods increased by 13.6% over the year. The purchases of services represented 20.4% of total purchases in 2021 and were estimated to be worth £9.9 billion and remained static over the year.

Overall NI businesses exported more goods and services than they imported, resulting in a trade surplus of £4.5 billion. However, the reverse was the case with our trade with GB, with purchases exceeding sales, resulting in a trade deficit of £1.7 billion.

The <u>HMRC Regional Trade Statistics</u><sup>11</sup> 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 for Q3 2022, shows that the value of exports from NI over the year to Q3 2022 increased by 11% when compared with the value over the year to Q3 2021. The value of imports from NI increased by 20% in Q3 2022, compared with the same period of the previous year.

Over the quarter NI's goods exports to the EU fell by  $\pm 25 \text{m}$  (-1.7%), whereas exports to non-EU countries rose by  $\pm 61 \text{m}$  (8.0%) compared with the previous quarter. NI's goods imports from the EU fell by  $\pm 53 \text{m}$  (-3.2%), whereas imports from non-EU countries rose by  $\pm 98 \text{m}$  (13.7%).

NISRA's <u>monthly NI trade dashboard</u> extracts data from the Eurostat website<sup>12</sup>. The latest figures show, NI exported €1,452 million of goods in August 2022, a 23.2% increase on July 2022. Over the same period NI imported €1,205 million of goods, a 4.6% decrease compared with the previous month. Note that these figures do not include trade with GB.

The Quarterly Ports Traffic for Q3 2022 shows the estimated total tonnage through NI major ports in the rolling twelve months to September 2022 was 28.46 million tonnes, a decrease of 0.3% compared to 28.54 million tonnes in the same period of the previous year (i.e. the twelve months to September 2021). In the twelve months to September 2022 in NI, the estimated total tonnage of inward traffic increased by 0.7% to 17.0 million tonnes, and outward traffic decreased by 1.7% to 11.5 million tonnes. An estimated 906,257 roll-on/roll-off freight vehicles passed through Northern Ireland ports in the twelve months to September 2022 – a decrease of 5.1% from 955,039 in the twelve months to September 2021

## Looking forward

The latest projections from the <u>Bank of England's November Monetary Policy report</u> predicts that the UK economy will be in recession for a prolonged period and CPI inflation will remain elevated at over 10% in the near term. From mid-2023, inflation is expected to fall sharply, conditioned on the elevated path of interest rates and as previous increases in energy prices drop out of the annual comparison. Inflation declines some way below the 2% target in years 2 and 3 of the MPC projection. GDP is expected to decline by around 0.75 per cent during the second half of 2022, in part reflecting the squeeze on real incomes from higher global energy and tradable goods prices. GDP is projected to continue to fall throughout 2023 and the first half of 2024, as high energy prices and tougher financial conditions weigh on spending.

The OBR's medium-term forecast for the UK economy published in November 2022 expects CPI inflation to peak at a 40-year high of 11 per cent in Q4 2022. It is projected that rising prices will erode real wages and reduce

 $<sup>^{\</sup>rm 11}$  Note that HMRC do not collect any data on trade between NI and GB

<sup>&</sup>lt;sup>12</sup> 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 <u>ONS Blog</u>.

living standards by 7 per cent in total over the two financial years to 2023-24. The squeeze on real incomes, rise in interest rates and fall in house prices will all weigh on consumption and investment, tipping the economy into a recession lasting just over a year from Q3 2022, with an estimated peak-to-trough fall in GDP of 2 per cent. It is also projected that unemployment will rise by 505,000 from 3.5 per cent to peak at 4.9 per cent in Q3 2024.

#### **Recent ELMS publications**

<u>NI Economic Accounts Project - 2017 and 2018</u> – 22/11 <u>Annual Business Inquiry</u> – 23/11 <u>Quarterly Employment Survey</u> - 13/12 <u>Labour Market Report</u> - 13/12 <u>NIETS</u> – 14/12 **Retail Sales Index** – 15/12 **Index of Production** – 15/12 **Index of Services** – 15/12 **Research and Development** – 15/12 **Ports Traffic Quarterly** – 21/12 **Quarterly Construction Enguiry** – 12/01

**Recent DfE publications** 

<u>The business journey through year one of EU Exit</u> – 20/12 <u>Customs Capacity Study</u> – 08/11 <u>Q3 2022 Research Digests</u> - 07/11 <u>The impact on Northern Ireland arising from the UK's exit from the EU: Partial Equilibrium Modelling</u> – 04/11 <u>Attracting foreign direct investment to Northern Ireland in the context of our post EU exit trading</u> <u>relationships</u> – 04/11

#### **Recent ONS publications**

<u>Subnational economic activity statistics: user guide</u> – 18/08 <u>GDP, UK regions and countries - Office for National Statistics</u> – 17/11 <u>ONS-GDP monthly estimate, UK : October 2022</u> – 12/12 <u>Economic activity and social change in the UK, real-time indicators - 06/01</u>

#### **Upcoming ELMS releases**

Monthly Labour Market Review - 17/1 Index of Production - 16/3 Index of Services & <u>Retail Sales Index</u> - 16/3 Quarterly Construction Enquiry & <u>NICEI</u> - 30/3

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**.

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 Q3 2022 NICEI back series with the Q2 2022 back series, revisions to each quarter of the index ranged between -0.5 and 1.4 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 Q3 2022 and Q2 2022 is available in Table 12 of the NICEI spreadsheet.

## **Comparability with ONS regional annual GDP**

ONS released <u>balanced estimates of Gross Value Added (GVA) and GDP for the countries and regions of the</u> <u>UK</u> on 30<sup>th</sup> 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, 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 <u>here</u>). 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 7<sup>th</sup> June <u>Quarter 1 (Jan to Mar) 2022</u>.

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<sup>13</sup>.

## • 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 17<sup>th</sup> November 2022 and covers <u>Quarter 1 (Jan to Mar) 2022</u>. A guide to the methodology document for this release is available <u>here</u>.

For completeness, ONS includes both Scottish GDP and the NICEI for Northern Ireland in the release. The ONS state in their paper that estimates produced are in line with the most recent publication of Blue Book 2022 consistent with the <u>Quarterly National Accounts</u>, published on 30 September 2022.

<sup>&</sup>lt;sup>13</sup> 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 <u>here</u>.

**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 <u>here</u>. 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</u> <u>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 <u>Code of Practice for Statistics</u>.

Please refer to the **<u>NICEI Methodology report</u>** for further information.

## Appendix 1 - NICEI and component indices by quarter and year

		NICEI	Private Sector	Public Sector	Services	Production	Construction
2019	1	100.1	100.3	99.3	100.1	100.4	100.4
2019	2	100.0	100.1	99.8	100.3	100.8	98.0
2019	3	99.8	99.7	100.3	99.6	99.9	100.8
2019	4	100.0	99.9	100.6	100.0	98.9	100.8
2020	1	96.8	95.7	100.5	95.1	94.8	99.0
2020	2	82.7	77.2	101.7	77.8	77.7	67.7
2020	3	98.5	97.8	101.1	98.2	97.7	95.9
2020	4	98.5	97.7	101.4	94.8	100.0	111.8
2021	1	96.8	95.4	101.7	93.2	97.7	104.1
2021	2	102.1	102.0	102.3	102.0	100.9	105.2
2021	3	103.4	103.6	102.9	104.4	102.4	101.9
2021	4	104.1	104.2	103.7	104.2	103.6	104.8
2022	1	104.5	104.5	104.7	105.1	103.9	101.1
2022	2	104.2	104	105	104.7	103.8	100.2
2022	3	104	103.5	105.4	104.8	104.4	94.9

Table 1: NICEI and component indices by quarter, Q1 2019 – Q3 2022

Data by quarter for the NICEI and component indices dating back to Q1 2006 can be accessed here

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	91.5	92.6	93.6			
2021	101.6	101.3	102.6	101	101.2	104			

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

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 guarter, Q1 2006 – Q3 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 - Q3 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 – Q3 2022 Table 8: Data for Chart 6: NICEI, comparison with selected GDP measures Q1 2006 – Q3 2022 Table 9: Data for Chart 7: Quarterly, annual, triennial and annualised change, NICEI compared with selected GDP measures to Q3 2022 Table 10: Data for Chart 8: CPIH detailed changes, percentage change over 12 months: UK, November 2021 to November 2022 Table 11: Data for Chart 9: Home Energy Index (composite of electricity, gas and HHO) for Northern Ireland (Jan 2016 – Dec 2022) Table 12: Comparison of the NICEI Series at Q3 2022 and Q2 2022, Q1 2006 – Q3 2022 Table 13: NICEI Sector Contributions to Quarterly Change, Q1 2006 – Q3 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.

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

economicstats@nisra.gov.uk

Statistical Contact - David Graham: Email: David.Graham2@nisra.gov.uk Tel: 028 9052 9439 Next NICEI publication: 30<sup>th</sup> March 2023

