



Northern Ireland Quarterly Index of Production

Date: 12th September 2019 Geographical Area: Northern Ireland Theme: Economy Frequency: Quarterly Quarter 2 (April - June) 2019

Introduction

The quarterly Index of Production (IOP) provides a timely indicator of growth in the output of the production industries in Northern Ireland. IOP indices along with other published quarterly indices and unpublished agricultural output data are used to generate the Northern Ireland Composite Economic Index (NICEI). NICEI provides a proxy measure of total economic output in the NI economy on a quarterly basis.

Key Points

Output estimates are calculated from the IOP aspect of the Quarterly Business Survey (QBS). The IOP has a sample size of approximately 1,100, covering all production businesses with 40 or more employees and a representative sample of smaller businesses.

- The NI IOP increased by 1.2% over the quarter (April June) and by 3.6% over the year.
- The UK IOP reported a decrease in output over both the quarter (1.4%) and the year (0.5%).
- The quarterly increase in production output of 1.2% has been driven by increases in all four of the main sectors: Manufacturing (1.0%); Water supply, sewerage and waste management (Inc. recycling) (2.7%); Electricity, gas, steam and air conditioning supply (0.8%) and Mining and quarrying (7.7%).
- The annual increase in NI production output of 3.6% was driven by increases in Manufacturing (3.6%); Water supply, sewerage and waste management (Inc. recycling) (4.4%) and Mining and Quarrying (11.7%). This increase was partially offset by a fall in Electricity, gas, steam and air conditioning supply (1.5%).

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NATIONAL STATISTICS STATUS

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

These statistics were designated as National Statistics on 5th August 2011 following a full assessment against the Code of Practice.

Since the assessment by the UK Statistics Authority, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Removed pre-release access to enhance trustworthiness and also brought the publication date forward as a result;
- Reduced <u>business burden</u> by offering the option of online data returns.

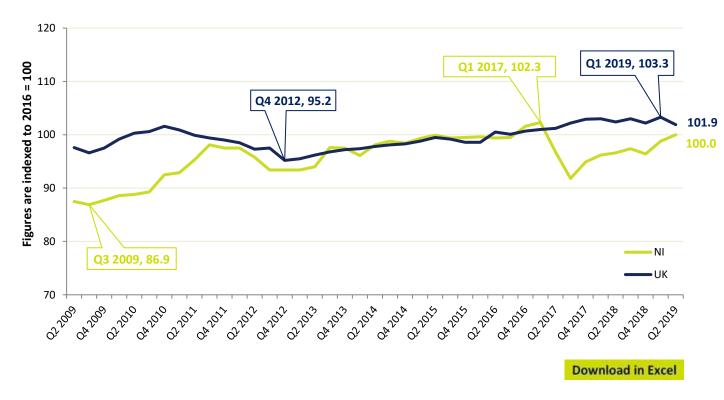
1 Summary of Index of Production

1.1 Change in IOP

The seasonally adjusted estimate for the NI IOP for Quarter 2 2019 showed:

- an increase of 1.2% over the quarter from the Quarter 1 2019 estimate;
- an increase of 3.6% over the year from the Quarter 2 2018 estimate;
- an increase of 3.5% when the most recent four quarters are compared to the previous four quarters.

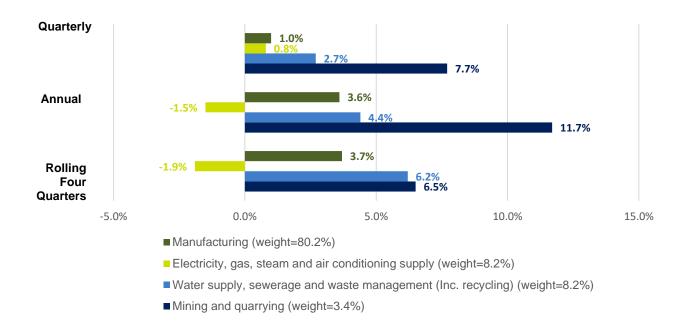
Figure 1.1 IOP NI & UK (Q2 2009 - Q2 2019)



Commentary

Output in the NI Production sector has increased in real terms by 1.2% over the second quarter of 2019. NI output remains 2.2% lower than its series high (Quarter 1 2017). NI showed growth over the year (3.6%) whilst the UK showed a decrease (0.5%). NI output has recovered 15.1% since the series low (Quarter 3 2009). In contrast the UK has recovered 5.5% over the same period.

Figure 1.2 Quarterly, annual and rolling four quarters changes in IOP at sector level Quarter 2 2019¹



Changes over the quarter

Comparing the seasonally adjusted NI IOP from Quarter 1 2019 to Quarter 2 2019 sectors showed the following changes:

- an increase in Mining and quarrying output by 7.7%;
- an increase in Water supply, sewerage and waste management (Inc. recycling) output by 2.7%;
- an increase in Manufacturing output by 1.0%; and
- an increase in Electricity, gas, steam and air conditioning supply output by 0.8%.

Changes over the year

Comparing the seasonally adjusted NI IOP from Quarter 2 2018 to Quarter 2 2019 showed:

- an increase in Mining and guarrying output by 11.7%;
- an increase in Water supply, sewerage and waste management (Inc. recycling) output by 4.4%;
- an increase in Manufacturing output by 3.6%; and
- a decrease in Electricity, gas, steam and air conditioning supply output by 1.5%.

Changes over a rolling four quarters basis

Comparing the seasonally adjusted NI IOP for Quarter 3 2018 to Quarter 2 2019 to Quarter 3 2017–Quarter 2 2018 showed:

- an increase in Mining and quarrying output by 6.5%;
- an increase in Water supply, sewerage and waste management (Inc. recycling) output by 6.2%;
- an increase in Manufacturing output by 3.7%; and
- a decrease in Electricity, gas, steam and air conditioning supply output by 1.9%.

¹ For further information on weights see Regional GVA information on page 19

1.2 Context

The IOP is an important short-term measure of change in the output of the production sector of the economy. The contents of this report will be of interest to government policymakers, Members of the Legislative Assembly, the business community, economic commentators, academics and members of the general public with an interest in the NI economy. A summary of recent uses is available here.

The Department for the Economy (DfE) **Economic Commentary (Summer 2019)** provides an overview of the NI economy, setting it in context with the UK and Republic of Ireland.

The most up-to-date official statistics on the economy and labour market are available on the <u>Economic Overview section</u> of the <u>Economic and Labour Market Statistics</u> (ELMS) section of the NISRA website.

The IOP is published on a Standard Industrial Classification 2007 (SIC07) basis. IOP data prior to Quarter 2 2011 were collected on a SIC03 basis and have been converted to approximate the SIC07 coverage.

The background notes (section 4) provide information on the methodology used to produce the statistics as well as information on the quality and accuracy of the data. This bulletin contains results for the production sector as a whole, for Manufacturing; Electricity, gas, steam and air conditioning supply; Water supply, sewerage and waste management (Inc. recycling) and Mining and quarrying sectors. Production sector series are seasonally adjusted (unless otherwise stated) on a 2016=100 basis, using X-13 ARIMA SEATS, giving data up to the most recent available quarter (Quarter 2 2019).

Comparative UK data, produced by the Office for National Statistics (ONS), are presented where these are available. Click here to see the latest UK IOP results.

This publication provides three measures of growth for the index.

- The quarter-on-quarter change provides the most recent measure of how the sector is changing. It is appropriate to compare consecutive quarters as the indices are seasonally adjusted to remove the effects of changes in output as a result of the time of the year;
- 2. Comparisons with the same quarter one year ago; and
- 3. A comparison of the most recent twelve months with the twelve months before. The quarterly comparison over the year provides an additional control on the seasonal effects. The comparison of the rolling annual average is useful for identifying changes in output over a longer time period than the other two approaches.

Revisions

Results are provisional and subject to revision, which can be made for a variety of reasons. The most common include late responses to surveys, estimates being replaced by actual data, revisions to seasonal adjustment factors, methodological changes and changes to business classifications.

2 Production output by sector

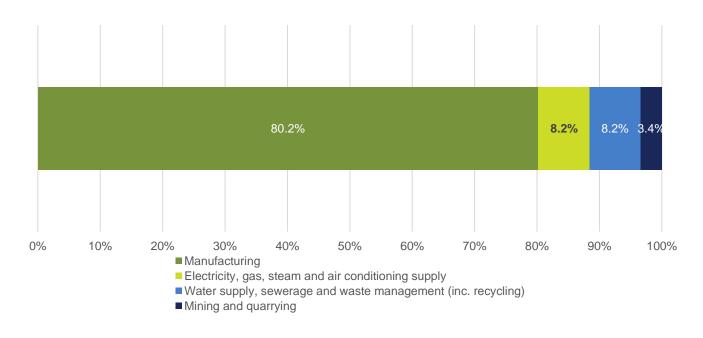
Output: turnover, defined as the value of total sales generated from all NI based activity, excluding VAT. Turnover is rounded to the nearest thousand and is then deflated and seasonally adjusted.

2.1 Key findings

- The IOP increased by 1.2% over the quarter; 3.6% over the year and 3.5% on a rolling four quarter basis.
- The quarterly increase in production output has been driven by increases in all four of the sectors: Manufacturing (1.0%); Water supply, sewerage and waste management (Inc. recycling) (2.7%); Electricity, gas, steam and air conditioning supply (0.8%) and Mining and quarrying (7.7%).
 - The annual increase in NI production output of 3.6% was driven by increases in Manufacturing (3.6%); Water supply, sewerage and waste management (Inc. recycling) (4.4%) and Mining and Quarrying (11.7%). This increase was partially offset by a fall in Electricity, gas, steam and air conditioning supply (1.5%).

The Production sector is composed of four sectors but is dominated by Manufacturing, which accounts for approximately 80.2% of total production Gross Value Added (GVA) at 2017 prices. The sectors are listed in order of the importance of their contribution made to the overall IOP.

Figure 2.1 IOP sector split (based on 2017 GVA)



2.2 Manufacturing

Manufacturing sector (SIC07 Section C) - (weight = 80.2% of IOP): Manufacturing involves the transformation of materials into new products (outputs). It is comprised of six subsectors. Subsectors are defined and presented in order of the importance of their contribution towards manufacturing in Section 3.

Key findings

- The NI seasonally adjusted figures show an increase of 1.0% over the quarter, an increase of 3.6% over the year and an increase of 3.7% on a rolling four quarters basis.
- The UK seasonally adjusted figures show a decrease of 2.3% over the quarter, a decrease of 1.0% over the year and a decrease of 0.1% on a rolling four quarters basis
- NI output is 4.2% below its highest point recorded (Quarter 1 2017) over the ten year period.
- NI output is 14.9% above the series low (Quarter 3 2009).
- Within manufacturing three of the six broad subsectors (as reported in section 3) are increasing. Of interest, one subsector has reached a ten year high (Manufacture of textiles, wearing apparel and leather products).

Figure 2.2 Manufacturing sector, NI & UK (Q2 2009–Q2 2019)

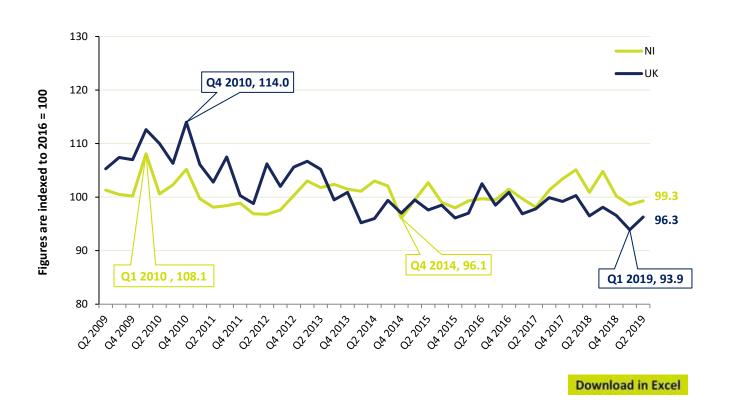


2.3 Electricity, gas, steam and air conditioning supply

Electricity, gas, steam and air conditioning supply (SIC07 Section D) (weight = 8.2% of IOP): This sector includes the activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains and pipes. Also included is its distribution in industrial parks or residential buildings. Therefore, the operation of electric and gas utilities are included.

- The NI seasonally adjusted figures show an increase of 0.8% over the quarter, a
 decrease of 1.5% over the year and a decrease of 1.9% on a rolling four quarters
 basis.
- The seasonally adjusted figures for the UK show an increase of 2.6% on the quarter, a decrease of 0.2% over the year and a decrease of 2.8% on a rolling four quarters basis.
- NI estimate remains below (8.1%) the series high recorded in Quarter 1 2010.
- The NI index is observed to be 3.4% above its lowest point recorded (Quarter 4 2014) in the past ten years and 12.2% above the series low (Quarter 2 2007).

Figure 2.3 Electricity, gas, steam and air conditioning supply, NI & UK (Q2 2009–Q2 2019)



2.4 Water supply, sewerage and waste management (Inc recycling)

Water supply, sewerage, and waste management (Inc. recycling) (SIC07 Section E) (weight = 8.2% of IOP): This section covers activities related to the management (including collection, treatment and disposal) of various forms of waste, such as solid or non-solid industrial or household waste, as well as contaminated sites. Activities of water supply are also grouped in this section since they are often carried out in connection with, or by units also engaged in, the treatment of sewage.

- The NI seasonally adjusted figures show an increase of 2.7% over the quarter, an increase of 4.4% over the year and an increase of 6.2% on a rolling four quarters basis.
- The UK reports increases of 1.0% over the quarter, 0.9% over the year and 0.2% on a rolling four quarters basis.
- NI output was observed to have reached a series high.
- NI output was observed to be 27.1% above its lowest point recorded (Quarter 2 2013) in ten years.

Figure 2.4 Water supply, sewerage and waste management (Inc. recycling), NI & UK (Q2 2009–Q2 2019)

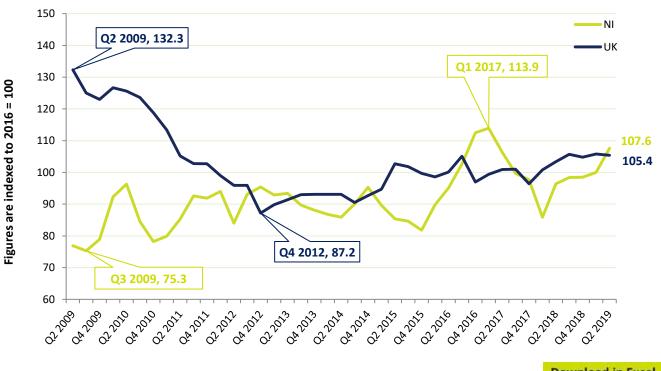


2.5 Mining and quarrying

Mining and quarrying (SIC07 Section B) (weight = 3.4% of IOP): This section covers the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining, etc.

- The NI seasonally adjusted figures show an increase of 7.7% over the quarter, an increase of 11.7% over the year and a 6.5% increase on a rolling four quarters basis.
- The UK seasonally adjusted figures show a decrease over the quarter (0.4%), an increase over the year (1.9%) and an increase of 5.0% over a rolling four quarters basis.
- NI output is 5.5% below the series high (Quarter 1 2017).
- NI output is 42.9% above the lowest reported level (Quarter 3 2009) in the last decade.

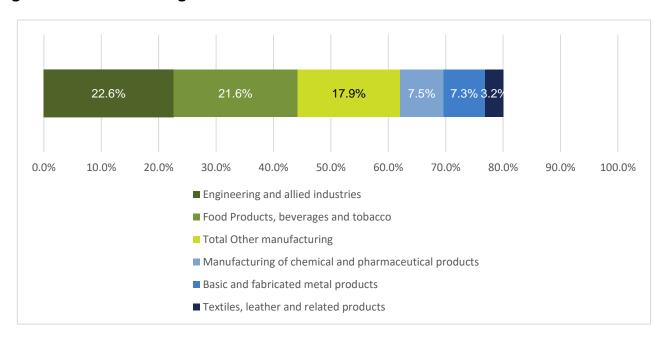
Figure 2.5 Mining and quarrying, NI & UK (Q2 2009–Q2 2019)



3 Manufacturing subsectors

Manufacturing subsectors: Manufacturing is comprised of six subsectors. Figure 3.1 shows the contribution of each to the Production sector. The six subsectors make up 80.2% of the Production sector.

Figure 3.1 Manufacturing subsectors



^{*}Total Other includes Manufacture of wood, paper products & printing and Rubber, plastic products & non-metallic mineral products

3.1 Key findings

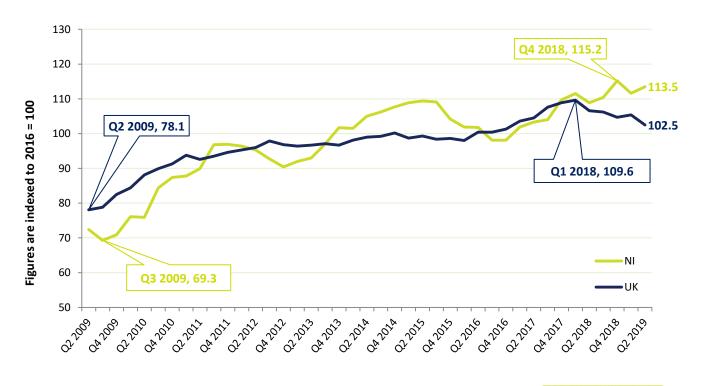
- The quarterly increase in manufacturing output was driven by increases from the Manufacture of textiles, leather and related products (4.0%); Food products, beverages and tobacco (1.9%) and Engineering and allied industries (1.7%) subsectors.
- This increase was partially offset by decreases from the Basic metals and fabricated metal products (5.1%); Manufacture of chemical and pharmaceutical products (4.9%) and Total other manufacturing (2.0%) subsectors.
- Over the year, the increase in Manufacturing is driven by increases in Manufacture of textiles, leather and related products (35.3%); Basic metals and fabricated metal products (7.7%); Manufacture of chemical and pharmaceutical products (7.6%); Engineering and allied industries (4.2%) and Food products, beverages and tobacco (0.9%) subsectors and is partially offset by a decrease in the Total other manufacturing (7.3%) subsector.

3.2 Engineering and allied industries

Key findings

- NI seasonally adjusted figures show an increase over the quarter of 1.7%, an increase over the year (4.2%) and an increase on a rolling four quarters basis (3.8%).
- The UK estimate shows a decrease of 2.8% over the quarter, a decrease of 3.8% over the year and a decrease of 3.2% on a rolling four quarters basis.
- NI output is 1.5% below its highest point recorded (Quarter 4 2018).
- NI output is 63.8% above the series low recorded (Quarter 3 2009).

Figure 3.2 Engineering and allied industries NI & UK (Q2 2009–Q2 2019)

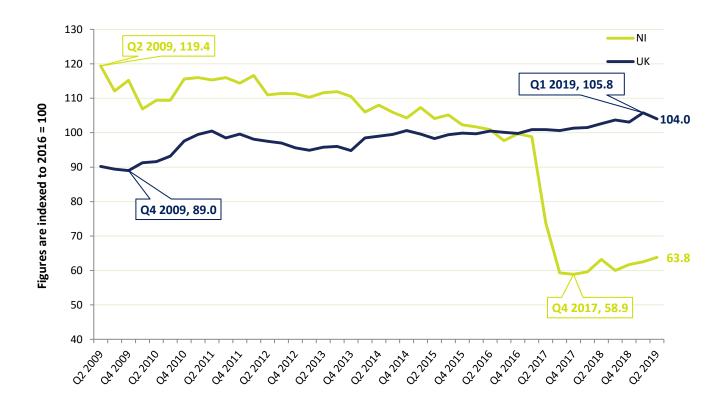


3.3 Food products, beverages and tobacco

Key findings

- NI output increased by 1.9% from Quarter 1 2019, by 0.9% over the year and by 2.9% on a rolling four quarters basis.
- The UK estimated a decrease of 1.7% over the quarter, an increase of 1.4% over the year and an increase of 2.6% on a rolling four quarters basis.
- NI output is estimated to be 8.3% above the series low (Quarter 4 2017).
- NI output remains 46.6% below its peak (Quarter 2 2009).

Figure 3.3 Food products, beverages and tobacco, NI & UK (Q2 2009–Q2 2019)

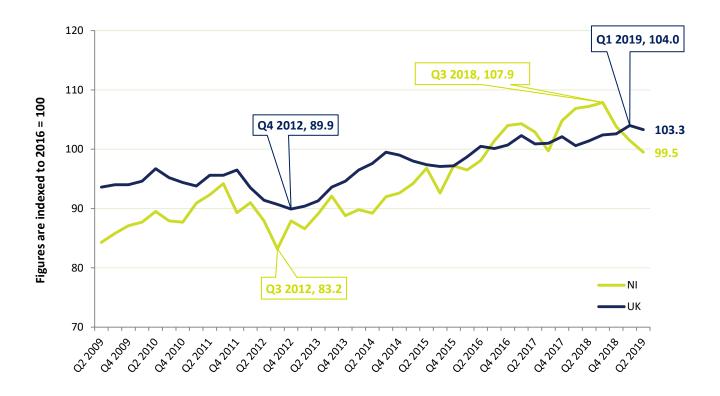


3.4 Total Other Manufacturing

Key findings

- Seasonally adjusted figures show a decrease of 2.0% over the quarter. There was a
 decrease over the year (7.3%) and a decrease on a rolling four quarters basis
 (1.4%).
- The UK had a decrease over the quarter (0.7%), and increases over the year (1.9%) and on a rolling four quarters basis (1.8%).
- NI output is estimated to be 7.8% below the highest point of the past ten years (Quarter 3 2018).
- NI output is estimated to be 19.5% above its series low (Quarter 3 2012).

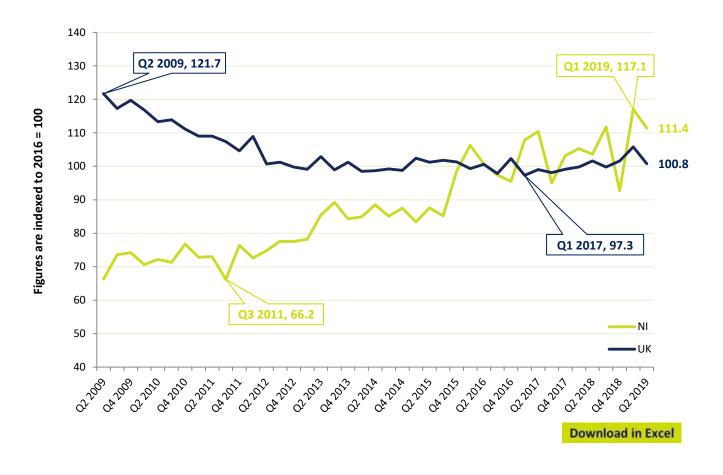
Figure 3.4 Total Other manufacturing, NI & UK (Q2 2009–Q2 2019)



3.5 Manufacturing of chemical and pharmaceutical products²

- The NI non-seasonally adjusted figures show a decrease of 4.9% over the quarter and increases of 7.6% over the year and 6.4% on a rolling four quarters basis.
- The UK figures show decreases of 4.7% over the quarter, 0.8% over the year and an increase of 2.4% on a rolling four quarters basis.
- NI output is 4.9% below its highest point recorded (Quarter 1 2019).
- NI output is 68.4% above the ten year low point (Quarter 3 2011).

Figure 3.5 Manufacturing of chemical and pharmaceutical products, NI & UK (Q2 2009–Q2 2019)



² The Manufacturing of chemical and pharmaceutical products subsector has not been seasonally adjusted as this subsector shows no evidence of seasonality.

3.6 Basic and fabricated metal products

- The NI seasonally adjusted figures show a decrease of 5.1% over the quarter, an increase of 7.7% over the year and an increase of 7.0% on a rolling four quarters basis.
- UK seasonally adjusted figures show a decrease of 2.4% over the quarter, and decreases of 0.1% over the year and 1.8% on a rolling four quarters basis.
- NI output has fallen 5.1% below its peak (Quarter 1 2019).
- NI output is 128.3% above the series low (Quarter 3 2010).

Figure 3.6 Basic and fabricated metal products, NI & UK (Q2 2009–Q2 2019)

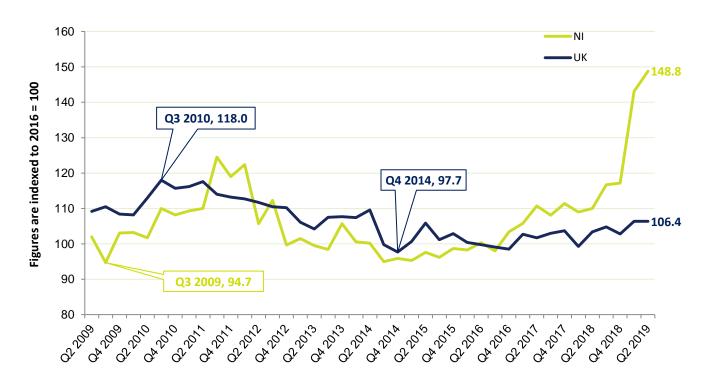


3.7 Textiles, leather and related products

Key findings

- The NI seasonally adjusted figures show increases over the quarter (4.0%), over the year (35.3%), and on a rolling four quarters basis (20.0%).
- UK seasonally adjusted figures show no change over the quarter and increases of 2.9% over the year and 2.7% on a rolling four quarters basis.
- NI output for this sector has reached a ten year high. This broad subsector has
 experienced quarterly growth in nine of the last eleven quarters. This is contributing
 to the annual increase in the Manufacturing sector and the overall IOP. The UK has
 also reported quarterly increases in five of the last nine quarters.
- NI output is 57.1% above the ten year low (Quarter 3 2009).

Figure 3.7 Textiles, leather and related products, NI & UK (Q2 2009–Q2 2019)



3.8 Other notable trends in manufacturing

The six broad subsectors within manufacturing can be further broken down into ten more detailed subsectors that are not reported elsewhere in this bulletin, but are reported on within the IOP tables.

This section summarises any notable trends in these manufacturing sectors.

The following subsector is at a series low:

Manufacture of rubber, plastic and other non-metallic mineral products (<u>Table 5.15</u>).
This subsector has experienced declines over the quarter in three of the last four quarters. In contrast, the UK reported quarterly increases in this subsector in two of the last four quarters.

4 Background notes

Background

The quarterly IOP provides a measure of change in the output of the production industries in NI (this is defined as SIC07 sections B to E). In 2017 these production industries accounted for 17% of Regional GVA. For further information please see the <u>Methodology</u> for the NI Index of Production (IOP).

Background

The IOP is a statutory survey with an average response rate of 73%.

Gross Value Added (GVA)

From Quarter 4 2017, weighting has been carried out using the balanced GVA approach which balances the income and production approaches to measuring the economy into a single estimate. For more information please see <u>Regional GVA information</u>. Figures in this publication are weighted using 2017 GVA which became available on 12th December 2018.

Deflation

All series, unless otherwise quoted, are measured at a constant market price (2016 = 100). Deflators adjust the value series to take out the effect of price change to give the volume series. The deflators used in this bulletin were sent directly by ONS on 2nd September 2019. Details on the changes to the ONS deflators methodology can be found here.

Seasonal adjustment Review

Following the annual seasonal adjustment review conducted in November 2018 changes have been made to some regressors and models used to seasonally adjust (where applicable) time series using X13 ARIMA SEATS. This improves the reliability of results. Further details on this review and other methodological changes implemented in March 2019 are available here.

Productivity

The NI Index of Manufacturing Productivity has been removed from the Index of Production report. We are currently reviewing the methodology as part of a wider review of productivity.

Publications policy

All ELMS publications are available to download free of charge from the **ELMS section of the NISRA website**.

The IOP bulletin and tables from the current publication, which includes all the data from the start of the series in 2005, are available in Excel and Open Document format to download free of charge from the <u>IOP section of the NISRA website</u>.

Future IOP publications are due to be published on the same day as the Index of Services in March, June, September and December of each year.

Next publication

The next bulletin is due to be published on 19th December 2019.

The ELMS publication schedule is available here.

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5 Index of tables

NI Quarterly IOP

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