

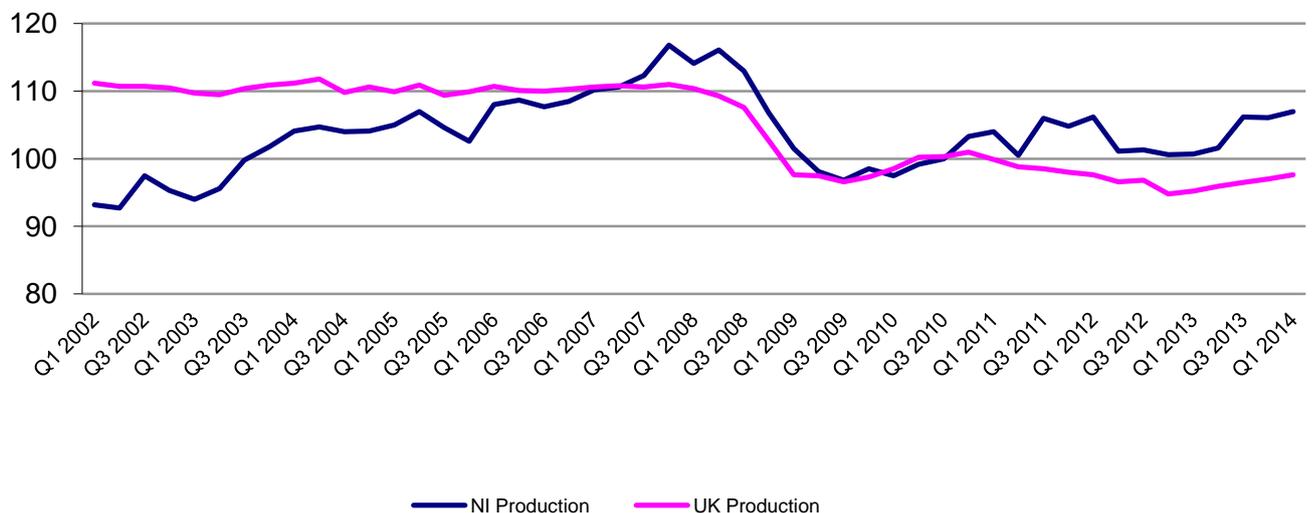
NORTHERN IRELAND INDEX OF PRODUCTION – QUARTER 1 2014

Published 11/06/14

The Index of Production is a quarterly survey of companies designed to provide a general measure of changes in the output of the Northern Ireland production sector industries in real terms. This publication contains seasonally adjusted NI Index of Production data on a 2010=100 basis. These data are provisional and may be subject to change.

- Provisional results from the Index of Production for the first quarter of 2014 showed that output in NI increased by 0.8% over the quarter, and output in the UK as a whole increased by 0.6%.
- In the last four quarters there have been three quarterly increases with one quarterly decrease in output. Over the year, the NI Production levels increased by 6.2% while the UK recorded a rise of 2.5%.
- The NI index remains some 8.4% below the peak recorded in Q4 2007 (116.8), whilst the UK index decreased by 12.1% over the same time period.

Index of Production in NI and UK (Seasonally Adjusted)
(2010 =100)



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National Statistics

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

Northern Ireland Statistics and Research Agency

From the 1st April 2011, the responsibility for the collection of data and production of official labour market and economic statistics transferred from the Department of Enterprise, Trade and Investment to the Northern Ireland Statistics and Research Agency (NISRA), an agency of the Department of Finance and Personnel (DFP). This transfer mirrored the position in Great Britain where most business surveys and labour market data collection and statistical production have been transferred from the departments with policy responsibilities to the Office for National Statistics (ONS). However, it is important to note that there are no planned changes to the production of economic and labour market statistical publications and outputs as a result of the transfer.

1: Context

Introduction

This bulletin provides provisional data from the Index of Production (IOP) for Northern Ireland (NI). The IOP is one of the earliest official indicators of the performance of Northern Ireland industry and, as such, represents an important short-term measure of change in a significant area of the economy. The contents of this report will be of interest to government policy makers, Members of the Legislative Assembly, the business community, economic commentators, academics and members of the general public with an interest in the state of the NI economy. A summary of uses is available on the website at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm>

The latest Department of Enterprise, Trade and Investment Economic Commentary (February 2014) provides an overview of the state of the Northern Ireland economy, setting it in context with the UK and Republic of Ireland. This can be found at <http://www.detini.gov.uk/february-2014-deti-economic-commentary.pdf>

The most up-to-date official statistics on the economy and labour market, including those published on the same day as the Northern Ireland Index of Services and Index of Production, are available on the Economic Overview page of the DETI website at <http://www.detini.gov.uk/deti-stats-index/deti-stats-index-2.htm>

The Northern Ireland Index of Services (IOS) provides a general measure of changes in the output of the private sector services. Provisional figures for Quarter 1 2014 show that output decreased by 1.1% over the quarter, compared with a 0.9% increase for the UK as a whole. The full bulletin can be accessed at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-ios.htm>

The Index of Production is published on a Standard Industrial Classification 2007 (SIC07) basis. This has an impact on the type of businesses classified as production sector. For example, publishing activities move from the production to the services sector and sewerage and waste disposal moves from services to the production sector. Within the production sector there are some new groupings of businesses. IOP data prior to Q2 2011 were collected on a SIC03 basis and it has been converted to approximate the SIC07 coverage. Further detail can be found in the background notes (section 7).

The background notes in Section 7 of this publication provide detailed information on the methodology used to produce the statistics as well as information on the quality and accuracy of the data. This bulletin contains detailed results for the Production Industries i.e. the Mining & quarrying, the Manufacturing, the Electricity, gas, steam and air conditioning supply and the Water supply, sewerage, waste management (inc. recycling) sectors on a 2010=100 basis, giving data up to the most recent available quarter (Quarter 1 2014).

Manufacturing is typically the main determinant of change in the production sector, representing 86% of the approximate Gross Value Added in the production industries. The other elements of the Index relate to Water supply, sewerage, waste management (inc. recycling) which represents around 7% of the Index; Electricity, gas, steam and air conditioning supply which represents around 6% and Mining and quarrying which represents around 1%.

Comparative UK data (produced by the Office for National Statistics) are presented where these are available. The latest ONS IOP results on a comparative 2010= 100 basis are available at: <http://www.ons.gov.uk/ons/rel/iop/index-of-production/march-2014/stb-iop-mar-2014.html>

Information on the manufacturing sub-sectors (e.g. Food, drink and tobacco) along with information by market sector (classifying production under one of three headings, according to the purpose for which output is intended i.e. Investment Goods, Intermediate Goods and Consumer Goods) are included in the publication.

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, where appropriate, to remove the effects of changes in output as a result of the time of the year. We also provide comparisons with the same quarter one year ago and a comparison of the most recent twelve months with the twelve months before. The quarterly comparison over the year provides an additional control on 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.

Northern Ireland Production

Revisions

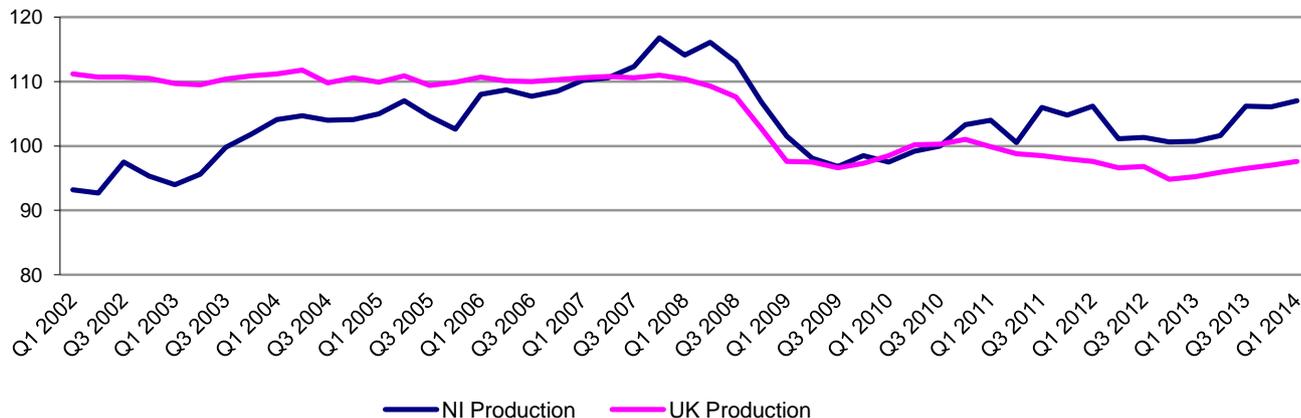
Results, particularly for the most recent quarter, are provisional and subject to revision as more up-to-date data become available (e.g. through late returns). Figures can also change as a result of the seasonal adjustment process, methodological changes or changes to classifications.

The Production Index publication has published data on a 2010=100 basis to correlate with ONS publications. SIC07 deflators have also been revised to the base year 2010=100 and applied to the series from Q1 2001 to Q1 2014.

2: Summary and Commentary

Provisional results from the seasonally adjusted Index of Production for the first quarter (January to March) of 2014 show an increase of 0.8% over the quarter, while output in the UK as a whole increased by 0.6%. The NI index remains some 8.4% below the peak recorded in Q4 2007 while the UK index fell by 12.1% in the same time period.

Figure 1: Index of Production in NI and UK (Seasonally Adjusted)
(2010 = 100)

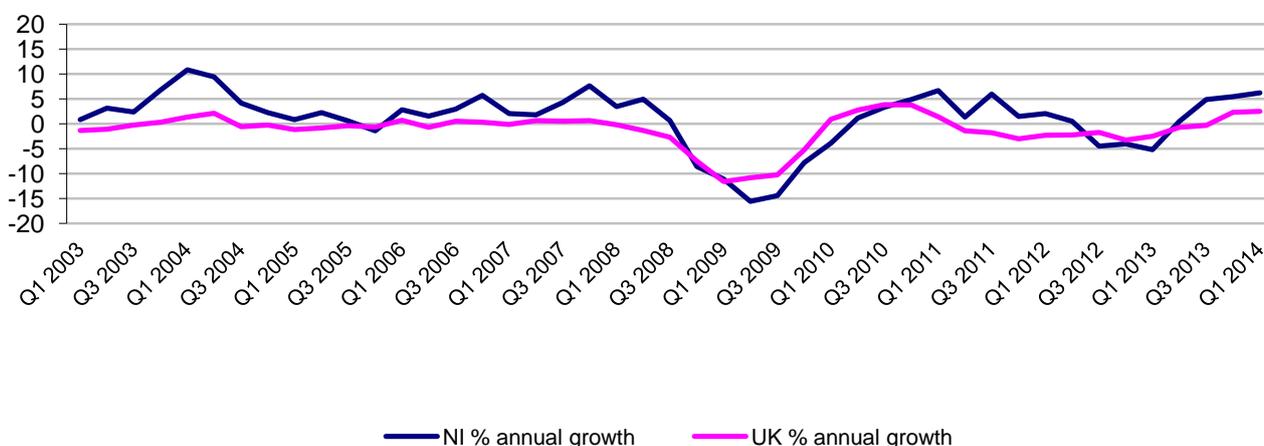


Production – growth trend

	NI	UK
Percentage change compared to previous quarter	0.8	0.6
Percentage change compared to same quarter one year ago	6.2	2.5
Percentage change for most recent four quarters compared to previous four quarters	4.3	0.9

Figure 2 illustrates the annual percentage change in output in the production sector over time. Following the noticeable low reported in Q2 2009, annual growth was reported from Q2 2010 to Q2 2012 before falling from Q3 2012 until Q1 2013. It returned to positive growth in Q2 2013 which has continued until Q1 2014 where a rise of 6.2% was reported over the year.

Figure 2: Production - % change on a year earlier in NI and UK
(2010 = 100)



Manufacturing (Seasonally Adjusted)

Manufacturing comprises the main element (86%) of the production index and therefore the manufacturing index has a similar profile to the overall production index. The manufacturing index remains below (11.2%) the peak in Q4 2007.

- Manufacturing output levels increased over the quarter by 0.7% (UK: 1.4%)
- Manufacturing output levels increased by 6.9% compared to the same quarter one year ago (UK: 3.6%)
- Manufacturing output levels rose by 4.9% over the most recent four quarters compared to the previous four quarters (UK: 1.0%)

Manufacturing Productivity (Seasonally Adjusted)

The index of manufacturing productivity (which provides a measure of the number of units of output produced per person per paid hour) recorded a fall (-0.5%) over the quarter and a rise of 2.3% over the year.

Other Production (Unadjusted)

Water supply, sewerage and waste management decreased by 3.0% over the quarter but recorded a rise of 2.3% over the year. The NI index is 14.5% below the recent peak recorded in Q1 2012, while the UK recorded a rise of 9.4% over the same time period.

The electricity, gas, steam and air conditioning supply index increased by 2.8% compared to quarter 4 2013. The NI index rose over the year by 2.5% compared to the UK which fell by 10.9%. The NI index recorded a new peak in Q1 2014 (116.9), whereas the UK recorded a new low (86.9).

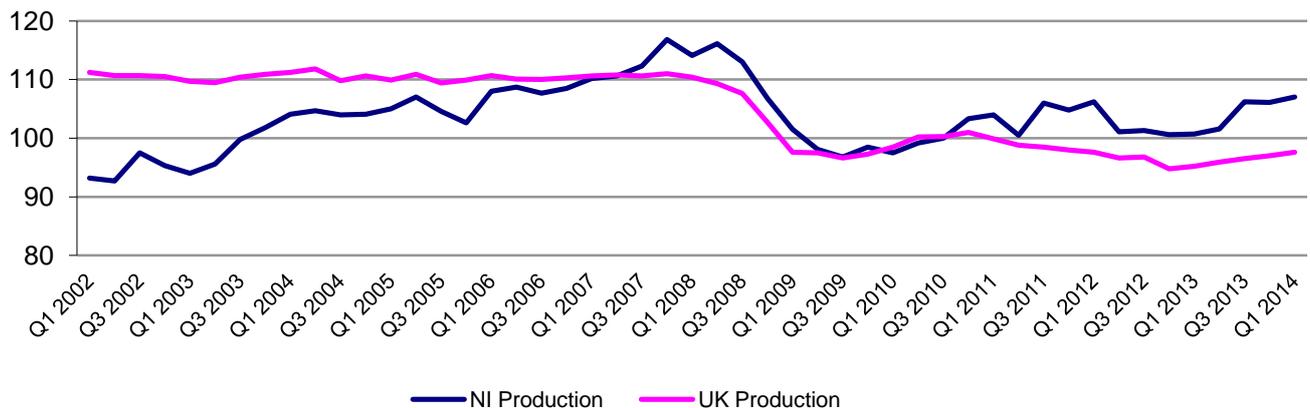
Mining and quarrying increased by 7.2% over the quarter but recorded a fall of 2.8% over the year. Recovery in this index remains slow and is some 33.7% below the peak reached in Q2 2007; however, the UK index fell even more (by 38.0%) over the same period.

Date of Next Publication

The Northern Ireland Index of Production for Quarter 2 2014 will be published on 17th September 2014.

3: Output of the Production Industries

Figure 3: Index of Production in NI and UK (Seasonally Adjusted)
(2010 = 100)



	NI	UK
Percentage change compared to previous quarter	0.8	0.6
Percentage change compared to same quarter one year ago	6.2	2.5
Percentage change for most recent four quarters compared to previous four quarters	4.3	0.9

Output from the overall production industries (seasonally adjusted) in Q1 2014 is currently 8.4% below the peak recorded in Q4 2007; the UK fell by 12.1% over the same period.

The next section focuses on the broad sectors within Production. Manufacturing is the main component of the production sector accounting for some 86% of Regional Accounts Gross Value Added (GVA) within the overall production sector.

Table 1: Northern Ireland Index of Production (2010 = 100)

Sector	Production Industries B+C+D+E Seasonally Adjusted	Manufacturing C Seasonally Adjusted	Water & Sewerage E Unadjusted	Electricity & Gas D Unadjusted	Mining & Quarrying B Unadjusted
weights	1000	859.2	66.7	63.7	10.5
2002	95	100	69	77	76
2003	98	102	80	83	88
2004	104	109	86	87	89
2005	105	109	84	95	93
2006	108	113	83	92	106
2007	113	118	89	90	119
2008	113	116	95	99	95
2009	99	99	95	99	89
2010	100	100	100	100	100
2011	104	105	99	102	83
2012	102	103	96	104	83
2013	104	105	89	109	81

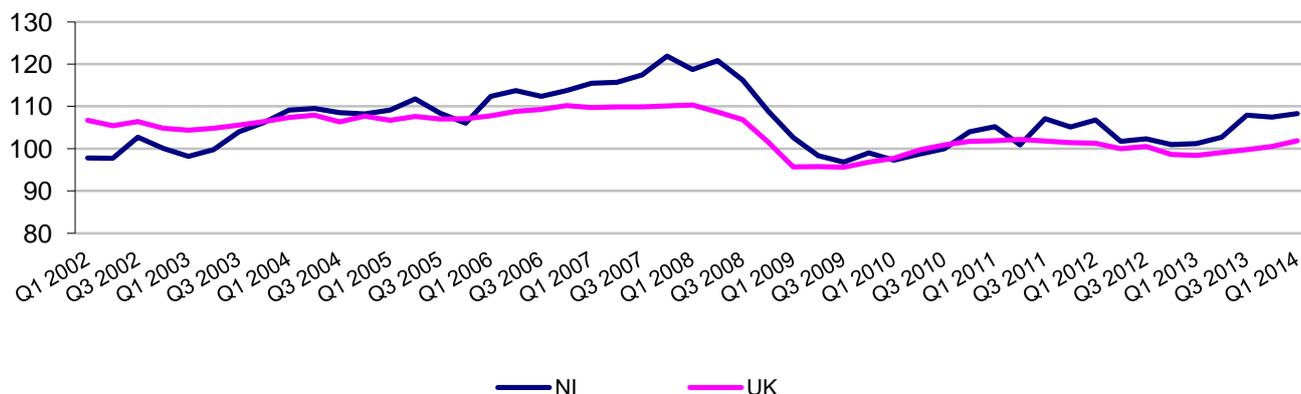
Table 1 (cont'd): Northern Ireland Index of Production (2010 = 100)

Sector	Production Industries B+C+D+E	Manufacturing C	Water & Sewerage E	Electricity & Gas D	Mining & Quarrying B
	Seasonally Adjusted	Seasonally Adjusted	Unadjusted	Unadjusted	Unadjusted
weights	1000.0	859.2	66.7	63.7	10.5
2002 1	93.2	97.8	67.1	77.1	77.1
2	92.7	97.7	67.9	76.5	73.1
3	97.5	102.7	69.0	77.0	74.9
4	95.3	100.1	71.3	78.4	80.6
2003 1	94.0	98.2	71.8	79.6	84.3
2	95.6	99.8	82.5	81.5	86.6
3	99.8	104.0	80.8	84.6	90.3
4	101.8	106.2	84.5	85.5	90.5
2004 1	104.1	109.1	81.8	85.4	87.1
2	104.7	109.5	89.3	86.2	91.3
3	104.0	108.5	84.1	87.2	87.0
4	104.1	108.2	87.2	90.7	90.9
2005 1	105.0	109.1	86.8	93.7	82.7
2	107.0	111.8	84.8	94.2	91.7
3	104.6	108.4	80.9	95.6	98.2
4	102.6	106.0	84.4	95.3	100.0
2006 1	108.0	112.4	84.9	93.6	96.4
2	108.7	113.7	83.0	92.4	106.0
3	107.7	112.4	81.3	90.9	113.3
4	108.5	113.7	80.9	89.3	109.1
2007 1	110.2	115.5	84.3	88.1	114.2
2	110.6	115.7	87.9	88.0	123.7
3	112.3	117.4	87.4	89.6	121.6
4	116.8	121.9	95.1	92.8	117.4
2008 1	114.1	118.7	90.5	96.3	104.3
2	116.1	120.8	93.9	99.6	101.3
3	113.0	116.2	97.6	100.9	89.9
4	106.8	108.9	96.4	99.9	83.9
2009 1	101.5	102.6	94.8	98.9	87.4
2	98.1	98.3	97.0	98.1	90.1
3	96.8	96.8	94.4	98.8	88.5
4	98.5	99.0	93.2	99.7	88.6
2010 1	97.5	97.3	98.1	99.7	101.6
2	99.2	98.7	101.1	100.7	111.0
3	100.0	100.0	100.3	100.2	97.3
4	103.3	104.0	100.5	99.4	90.1
2011 1	104.0	105.2	97.0	100.4	84.6
2	100.5	100.9	97.0	99.8	84.6
3	106.0	107.1	100.3	99.0	83.8
4	104.8	105.1	101.7	110.0	80.2
2012 1	106.2	106.8	103.3	107.1	84.7
2	101.1	101.7	97.4	98.1	82.8
3	101.3	102.3	92.3	100.1	82.1
4	100.6	101.0	90.0	111.4	84.0
2013 1	100.7	101.2	86.3	114.1	84.5
2	101.6	102.7	87.5	104.5	82.8
3	106.2	107.9	91.3	105.5	81.5
4	106.1	107.5	91.1	113.7	76.6
2014 1	107.0	108.3	88.3	116.9	82.1
Percentage change latest quarter on previous:					
quarter	0.8	0.7	-3.0	2.8	7.2
year	6.2	6.9	2.3	2.5	-2.8
Rolling average	4.3	4.9	-2.1	4.0	-3.1

*The change in the rolling annual average measures the change in the average of the latest four quarters against the same four quarters one year previous.

Seasonally Adjusted Manufacturing Index SIC07 Section C (weight 85.9%)

Figure 4: Manufacturing in NI and UK
(2010=100)

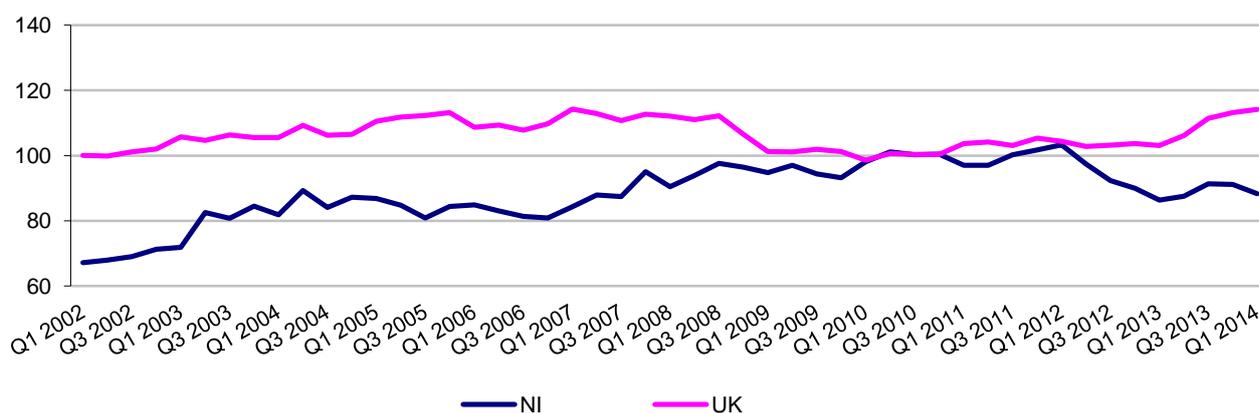


	NI	UK
Percentage change compared to previous quarter	0.7	1.4
Percentage change compared to same quarter one year ago	6.9	3.6
Percentage change for most recent four quarters compared to previous four quarters	4.9	1.0

Manufacturing comprises the main element (86%) of the production index and therefore the manufacturing index has a similar profile to the overall production index. The manufacturing index is still some 11.2% below the peak reached in Q4 2007.

Unadjusted Water supply, sewerage and waste management (inc. recycling) Index SIC07 Section E (weight 6.7%)

Figure 5: Water & Sewerage in NI and UK
(2010=100)

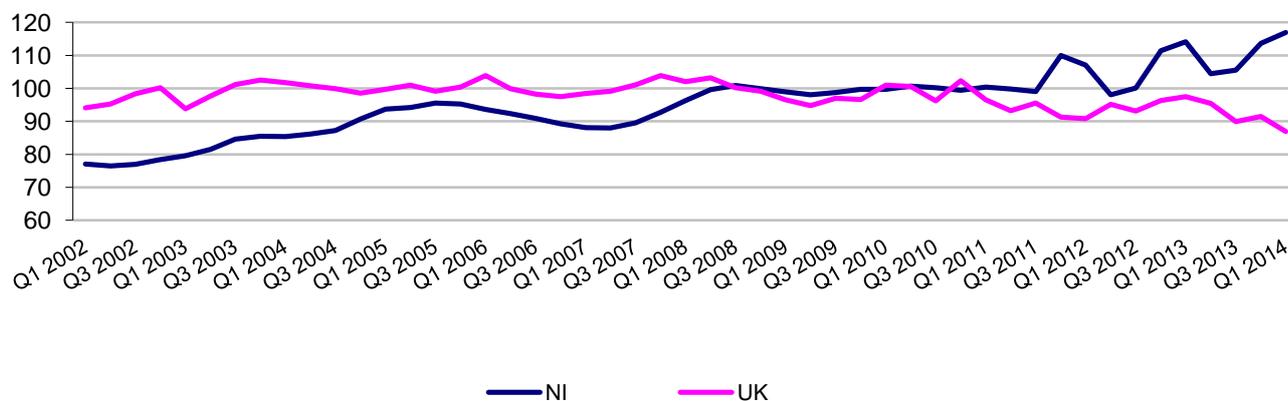


	NI	UK
Percentage change compared to previous quarter	-3.0	0.9
Percentage change compared to same quarter one year ago	2.3	10.8
Percentage change for most recent four quarters compared to previous four quarters	-2.1	7.8

This sector is currently 14.5% below the recent peak reached in Q1 2012.

Unadjusted Electricity, gas, steam and air conditioning supply Index SIC07 Section D (weight 6.4%)

Figure 6: Electricity, gas, steam and air conditioning supply in NI and UK
(2010 =100)

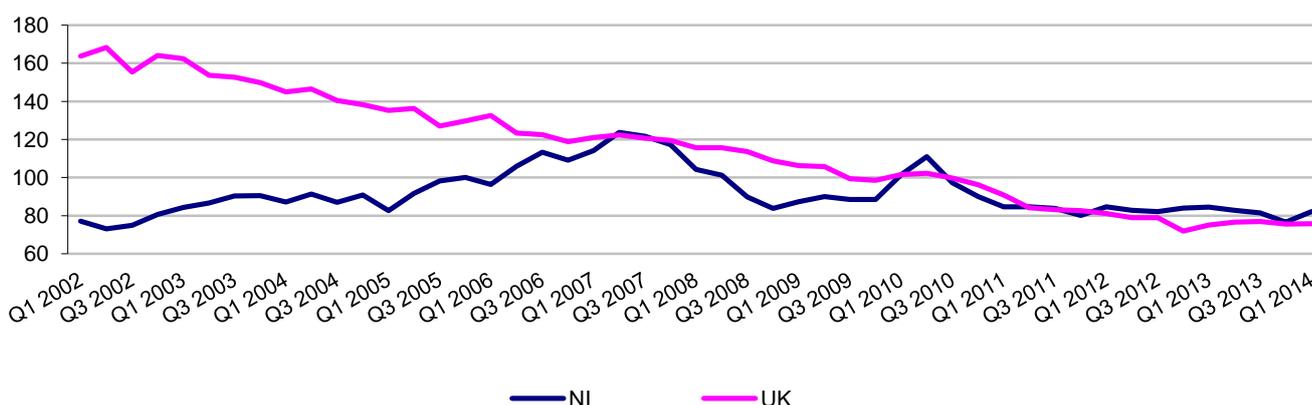


	NI	UK
Percentage change compared to previous quarter	2.8	-5.0
Percentage change compared to same quarter one year ago	2.5	-10.9
Percentage change for most recent four quarters compared to previous four quarters	4.0	-4.8

This index has recorded a peak this quarter (116.9) whereas the UK has recorded a low. The NI index has recovered 32.8% from the minimum recorded in Q2 2007.

Unadjusted Mining and Quarrying Index SIC07 Section B (weight 1.0%)

Figure 7: Mining & Quarrying in NI and UK
(2010=100)



	NI	UK
Percentage change compared to previous quarter	7.2	0.3
Percentage change compared to same quarter one year ago	-2.8	0.8
Percentage change for most recent four quarters compared to previous four quarters	-3.1	0.0

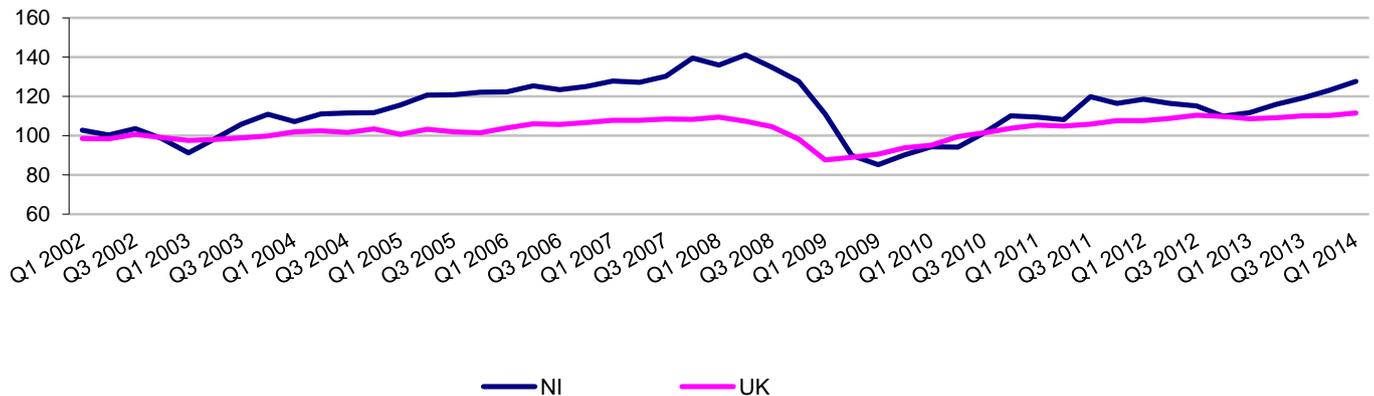
Recovery in this sector remains slow and the index is some 33.7% below the peak recorded in Q2 2007. The UK index fell even more (38.0%) over the same period.

4: Manufacturing Subsections

Full series of index numbers back to 2002 are provided for each sub-sector in tables at the end of this section.

Seasonally Adjusted Engineering & Allied Industries (weight 26.3%)

Figure 8: Engineering & Allied Industries in NI and UK
(2010=100)

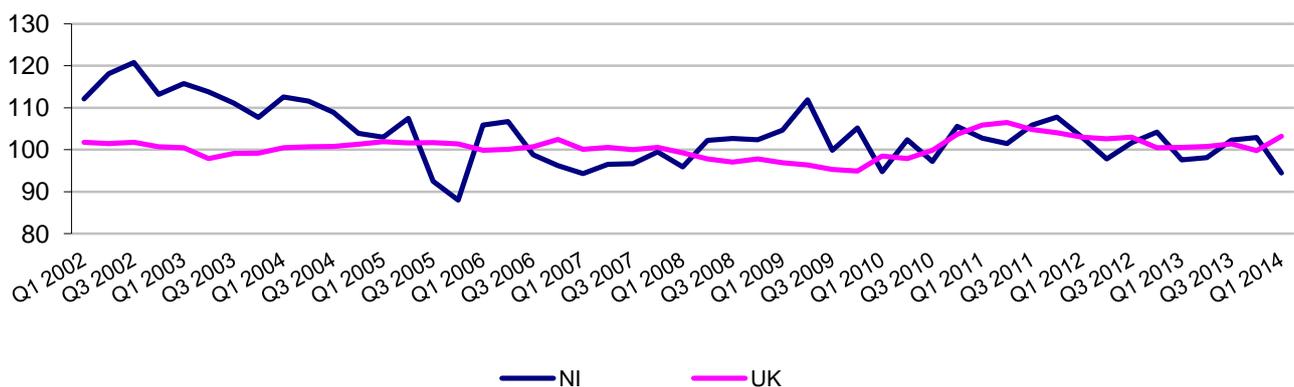


	NI	UK
Percentage change compared to previous quarter	3.7	1.3
Percentage change compared to same quarter one year ago	14.3	2.7
Percentage change for most recent four quarters compared to previous four quarters	7.2	0.8

This sector has fallen by 9.5% since its peak in Q2 2008. However, it has shown a significant recovery (49.8%) since its minimum value recorded in Q3 2009.

Unadjusted Food Products, Beverages & Tobacco (weight 23.4%)

Figure 9: Food Products, Beverages & Tobacco in NI and UK
(2010=100)

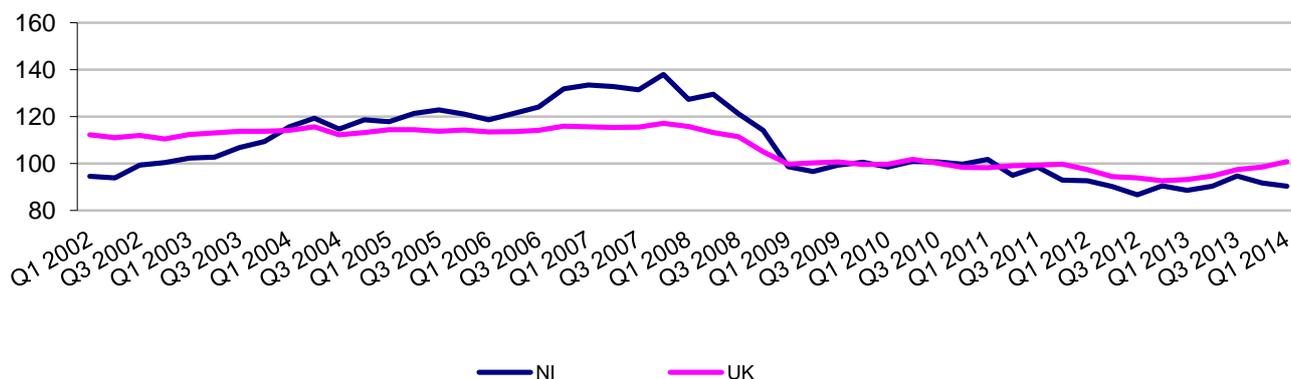


	NI	UK
Percentage change compared to previous quarter	-8.2	3.4
Percentage change compared to same quarter one year ago	-3.2	2.6
Percentage change for most recent four quarters compared to previous four quarters	-0.8	-0.4

This sector has fallen by 8.2% since the previous quarter and has fallen by 15.6% from its most recent peak reached in Q2 2009.

Seasonally Adjusted Total Other Manufacturing (weight 17.5%)

Figure 10: Total Other Manufacturing in NI and UK
(2010=100)

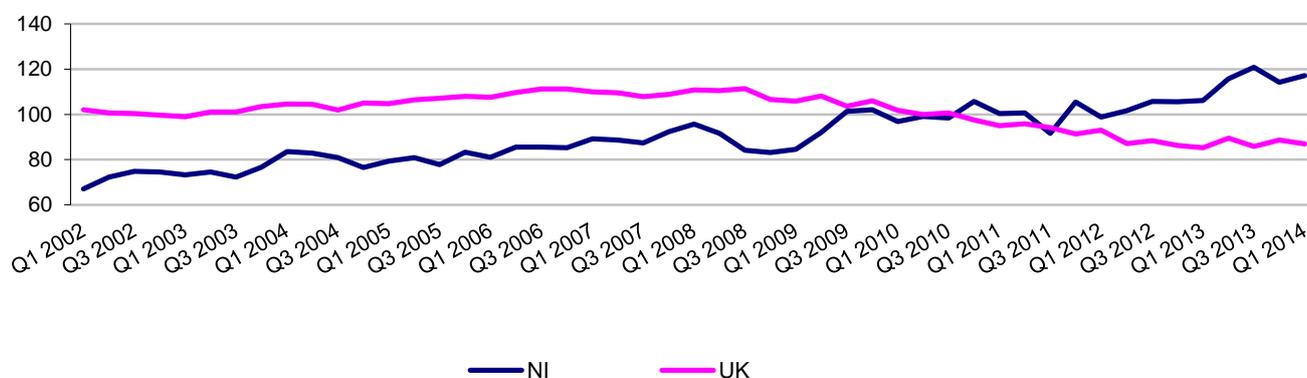


	NI	UK
Percentage change compared to previous quarter	-1.4	2.3
Percentage change compared to same quarter one year ago	2.0	8.3
Percentage change for most recent four quarters compared to previous four quarters	3.1	4.6

This sector has shown a substantial fall of approximately one third (-34.5%) since its peak in Q4 2007.

Unadjusted Manufacturing of Chemical and Pharmaceutical Products (weight 8.6%)

Figure 11: Chemical & Pharmaceutical Products in NI and UK
(2010=100)

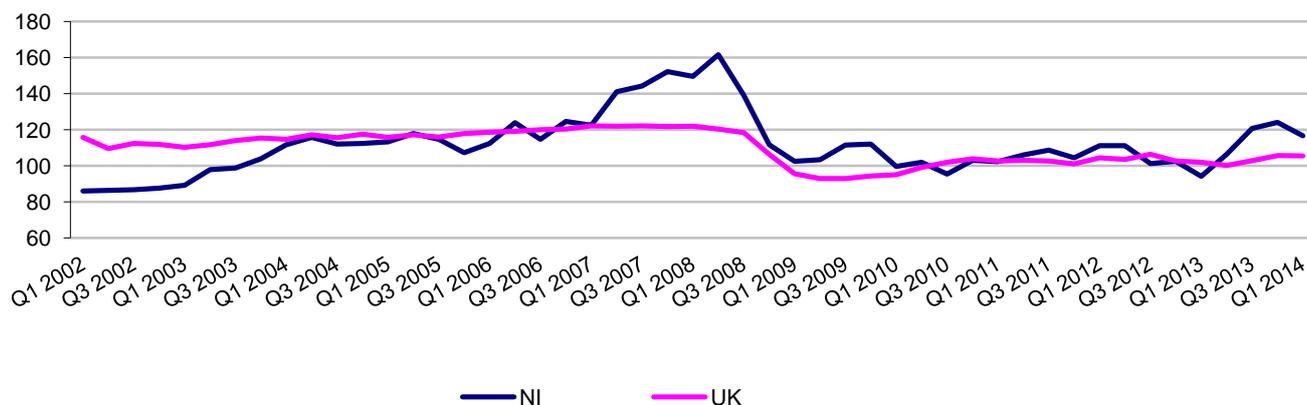


	NI	UK
Percentage change compared to previous quarter	2.6	-1.9
Percentage change compared to same quarter one year ago	10.2	2.0
Percentage change for most recent four quarters compared to previous four quarters	11.6	1.1

This index was mainly on an upward trend until Q3 2013 where it recorded a peak of 120.8. This sector has fallen slightly since this peak (3.1%).

Unadjusted Basic and Fabricated Metal Products (weight 6.8%)

Figure 12: Basic & Fabricated Metal Products in NI and UK
(2010=100)

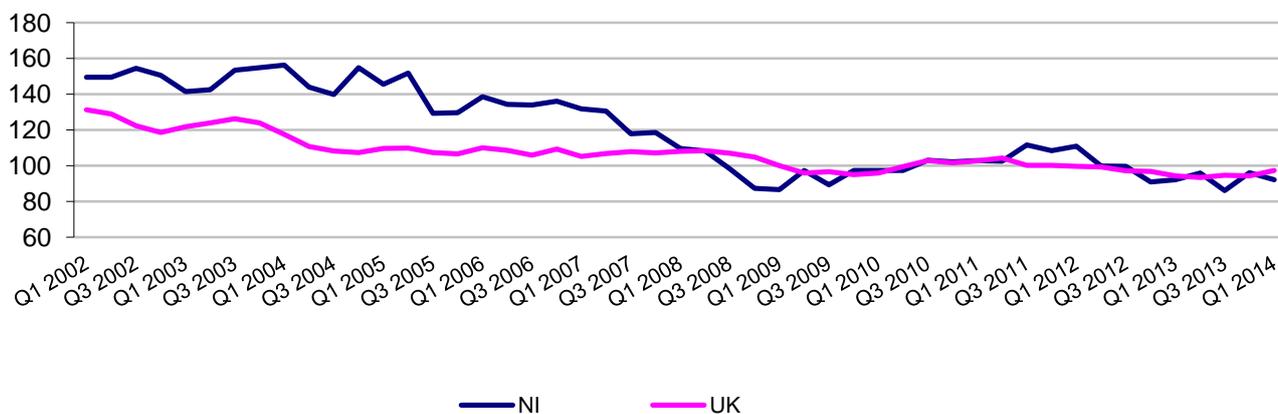


	NI	UK
Percentage change compared to previous quarter	-6.1	-0.2
Percentage change compared to same quarter one year ago	23.8	3.4
Percentage change for most recent four quarters compared to previous four quarters	14.3	-0.1

This sector has shown a considerable fall of 27.9% since its peak in Q2 2008.

Seasonally Adjusted Textiles, Leather & related products (weight 3.3%)

Figure 13: Textiles, Leather & related products in NI and UK
(2010=100)



	NI	UK
Percentage change compared to previous quarter	-4.1	3.1
Percentage change compared to same quarter one year ago	-0.2	3.1
Percentage change for most recent four quarters compared to previous four quarters	-3.3	-2.0

The downward trend in this sector started much earlier than in other sectors and the index has fallen 41.1% since its peak in Q1 2004.

Table 2: Northern Ireland Index of Production by Broad Manufacturing Subsectors

Sector	Engineering & Allied Industries (CI, CJ, CK, CL)	Food, Beverages & Tobacco (CA)	Total Other Manufacturing (CC, CD, CG, CM)	Chemical & Pharmaceutical Products (CE & CF)	Basic & Fabricated Metal Products (CH)	Textiles, Leather & related Products (CB)
	Seasonally Adjusted	Unadjusted	Seasonally Adjusted	Unadjusted	Unadjusted	Seasonally Adjusted
weights	263.0	234.1	174.7	86.0	68.0	33.4
2002 1	102.8	112.1	94.6	67.1	86.0	149.4
2	100.4	118.1	93.9	72.3	86.3	149.5
3	103.6	120.8	99.4	74.8	86.7	154.5
4	98.5	113.2	100.4	74.5	87.6	150.6
2003 1	91.3	115.8	102.3	73.2	89.1	141.4
2	98.4	113.8	102.8	74.5	97.9	142.4
3	105.8	111.1	106.8	72.3	98.8	153.4
4	110.9	107.7	109.4	76.7	103.9	154.8
2004 1	107.1	112.6	115.6	83.6	111.6	156.3
2	111.0	111.6	119.4	82.8	115.7	143.9
3	111.5	108.9	114.7	80.9	112.1	139.8
4	111.8	103.9	118.6	76.5	112.4	154.8
2005 1	115.7	103.0	117.9	79.4	113.3	145.5
2	120.6	107.5	121.4	80.9	117.9	151.9
3	120.8	92.5	122.9	77.8	114.6	129.4
4	122.1	88.0	121.1	83.3	107.2	129.6
2006 1	122.3	105.9	118.6	81.0	112.3	138.6
2	125.4	106.7	121.4	85.5	123.9	134.3
3	123.4	98.8	124.1	85.5	114.6	134.0
4	125.0	96.2	131.8	85.2	124.6	136.0
2007 1	127.8	94.3	133.5	89.2	122.5	131.9
2	127.2	96.5	132.8	88.7	141.1	130.5
3	130.2	96.7	131.4	87.4	144.3	117.8
4	139.6	99.5	137.9	92.3	152.3	118.6
2008 1	135.9	95.9	127.4	95.7	149.5	109.8
2	141.1	102.2	129.5	91.6	161.7	108.2
3	134.8	102.7	121.2	84.2	139.2	98.3
4	127.6	102.4	114.2	83.1	111.7	87.3
2009 1	111.0	104.7	98.7	84.5	102.4	86.6
2	89.9	111.9	96.6	92.0	103.4	97.3
3	85.2	99.9	99.4	101.3	111.5	89.4
4	90.2	105.2	100.6	102.1	112.1	97.3
2010 1	94.3	94.8	98.5	96.8	99.7	97.3
2	94.1	102.4	101.0	99.1	102.0	97.4
3	101.5	97.2	100.7	98.4	95.3	103.2
4	110.1	105.6	99.8	105.7	103.0	102.2
2011 1	109.5	102.8	101.8	100.4	102.2	102.9
2	108.2	101.5	95.0	100.7	106.0	102.5
3	119.8	105.9	98.5	91.6	108.7	111.7
4	116.5	107.8	92.9	105.4	104.5	108.4
2012 1	118.5	103.0	92.7	98.8	111.1	110.9
2	116.5	97.8	90.2	101.7	111.2	99.9
3	115.2	101.7	86.7	105.8	101.2	99.7
4	110.0	104.2	90.5	105.6	102.4	90.9
2013 1	111.7	97.6	88.6	106.2	94.1	92.3
2	115.9	98.1	90.4	115.8	106.3	96.0
3	119.2	102.3	94.7	120.8	120.7	86.1
4	123.1	102.9	91.7	114.2	124.1	96.1
2014 1	127.7	94.5	90.4	117.1	116.6	92.1

Table 2 cont'd : Northern Ireland Index of Production by Broad Manufacturing Subsectors

Sector	Engineering & Allied Industries (CI, CJ, CK, CL)	Food, Beverages & Tobacco (CA)	Total Other Manufacturing (CC, CD, CG, CM)	Chemical & Pharmaceutical Products (CE & CF)	Basic & Fabricated Metal Products (CH)	Textiles, Leather & related Products (CB)
	Seasonally Adjusted	Unadjusted	Seasonally Adjusted	Unadjusted	Unadjusted	Seasonally Adjusted
weights	263.0	234.1	174.7	86.0	68.0	33.4
Percentage change latest quarter on:						
previous qtr						
	3.7	-8.2	-1.4	2.6	-6.1	-4.1
previous year						
	14.3	-3.2	2.0	10.2	23.8	-0.2
rolling average*						
	7.2	-0.8	3.1	11.6	14.3	-3.3

Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Background Notes). *The change in the rolling annual average measures the change in the average of the latest four quarters against the same four quarters one year previous.

5: Market Sector Analysis

Market sector analysis classifies production under one of three headings which are derived from the main SIC classification groups.

Investment Goods – also known as Capital Goods – are the plant, equipment and inventories used to produce goods for consumption. Companies will invest further in these kinds of goods when they are looking to expand their production or upgrade existing equipment.

Intermediate Goods are those purchased by industry as inputs into the final production of goods. This category would include the materials (such as cement, rubber, plastic, chemicals and electronics) which will ultimately be used to produce a good for consumption.

Consumer Goods are the final goods produced by industry which are intended for purchase by private consumers. These goods are consumed by the mass market rather than used in the production of another good, and are therefore closely linked to consumer demand and the factors which influence this.

It should be noted that these groups are for illustrative purposes as there can be overlap where manufacturer goods could be used as capital to produce another good but will also be used for consumption (e.g. motor vehicles).

Table 3: Index of Production by Market Sector Goods

Sector	Consumer Goods	Intermediate Goods	Investment Goods
	Unadjusted	Seasonally Adjusted	Unadjusted
weights	450.7	386.9	162.4
2002	115	84	112
2003	111	93	107
2004	108	103	112
2005	98	106	121
2006	102	108	126
2007	97	114	134
2008	101	113	133
2009	105	97	95
2010	100	100	100
2011	105	99	115
2012	102	96	117
2013	100	96	125

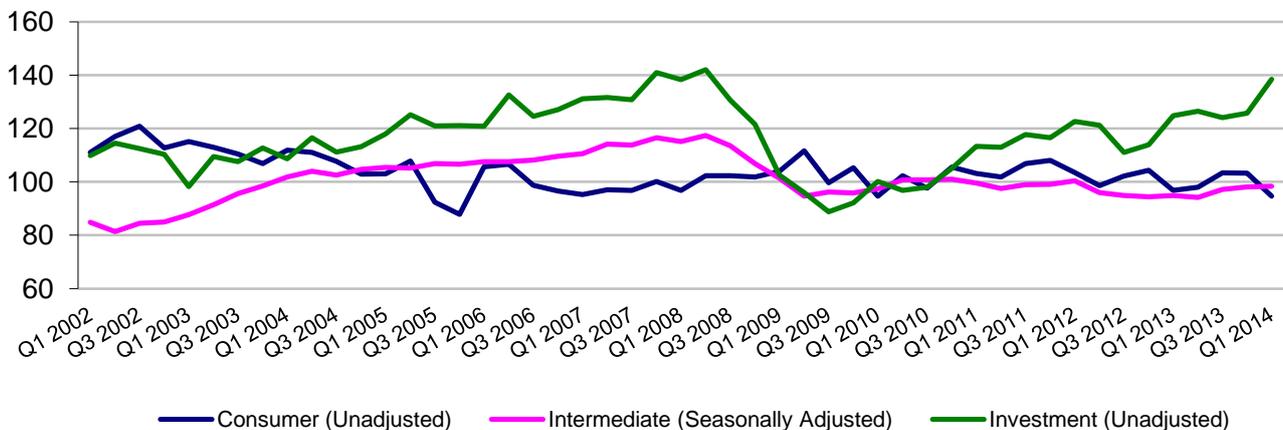
Table 3: Index of Production by Market Sector Goods continued

Sector	Consumer Goods	Intermediate Goods	Investment Goods
	Unadjusted	Seasonally Adjusted	Unadjusted
weights	450.7	386.9	162.4
2002 1	111.1	84.9	109.9
2	117.0	81.4	114.5
3	120.8	84.5	112.5
4	112.7	85.0	110.3
2003 1	115.1	87.7	98.2
2	113.0	91.4	109.5
3	110.4	95.6	107.6
4	106.9	98.5	112.7
2004 1	111.9	101.8	108.7
2	111.1	104.0	116.5
3	107.7	102.5	111.2
4	102.9	104.7	113.2
2005 1	103.0	105.4	118.0
2	107.8	105.2	125.2
3	92.4	106.8	121.0
4	87.8	106.6	121.1
2006 1	105.7	107.6	120.9
2	106.6	107.6	132.6
3	98.7	108.2	124.5
4	96.6	109.6	127.1
2007 1	95.3	110.6	131.1
2	97.1	114.1	131.6
3	96.8	113.8	130.8
4	100.2	116.6	141.0
2008 1	96.8	115.1	138.3
2	102.3	117.4	142.0
3	102.3	113.5	130.7
4	101.8	106.8	121.6
2009 1	104.0	101.4	102.6
2	111.6	94.7	96.0
3	99.7	96.2	88.8
4	105.3	95.9	92.1
2010 1	94.6	97.4	100.1
2	102.3	100.8	96.8
3	97.6	100.8	98.0
4	105.5	101.0	105.1
2011 1	103.1	99.6	113.3
2	101.8	97.5	112.9
3	106.8	99.0	117.7
4	108.1	99.1	116.5
2012 1	103.5	100.4	122.7
2	98.6	96.0	121.2
3	102.2	94.9	111.1
4	104.3	94.4	113.9
2013 1	96.8	94.9	124.8
2	98.0	94.2	126.5
3	103.4	97.2	124.1
4	103.3	98.1	125.8
2014 1	94.6	98.4	138.4

Sector	Consumer Goods	Intermediate Goods	Investment Goods
	Unadjusted	Seasonally Adjusted	Unadjusted
weights	450.7	386.9	162.4
previous quarter	-8.4	0.3	10.0
previous year	-2.2	3.8	10.9
Rolling average*	-0.7	2.1	9.3

Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Background Notes). * The change in the rolling annual average measures the change in the average of the latest four quarters against the same four quarters one year previous.

Figure 14: Market Sector Goods
(2010 =100)



Unadjusted Consumer Goods (weight 45.1%)

This category has been relatively stable during the recession with the index for 2011 remaining above the base year 2010. However, consumers have recently faced significant inflationary pressures and wage constraints; these constraints on consumer demand led to a slight decline in output of consumer goods in 2012 and the first quarter of 2013 before gradually increasing for the remainder of 2013. In Q1 2014 there was a decline in output of consumer goods.

Seasonally Adjusted Intermediate Goods (weight 38.7%)

After experiencing a sharp fall between 2008 and 2009, this category has remained steady with Q1 2014 reporting a slight increase of 0.3% over the quarter.

Unadjusted Investment Goods (weight 16.2%)

The significant falls in output experienced from 2008 where the index fell 37.5% between Q2 2008 and Q3 2009 reflect the impact of the global recession on businesses, with many companies looking to survive as the economy contracted. The recent rises in output can be interpreted as firms recovering from the recession and investing to grow from 2011. In Q1 2014 Investment goods have seen an increase of 10.0% from the previous quarter and 10.9% from the same period one year earlier.

6: Seasonally Adjusted Index of Manufacturing Productivity

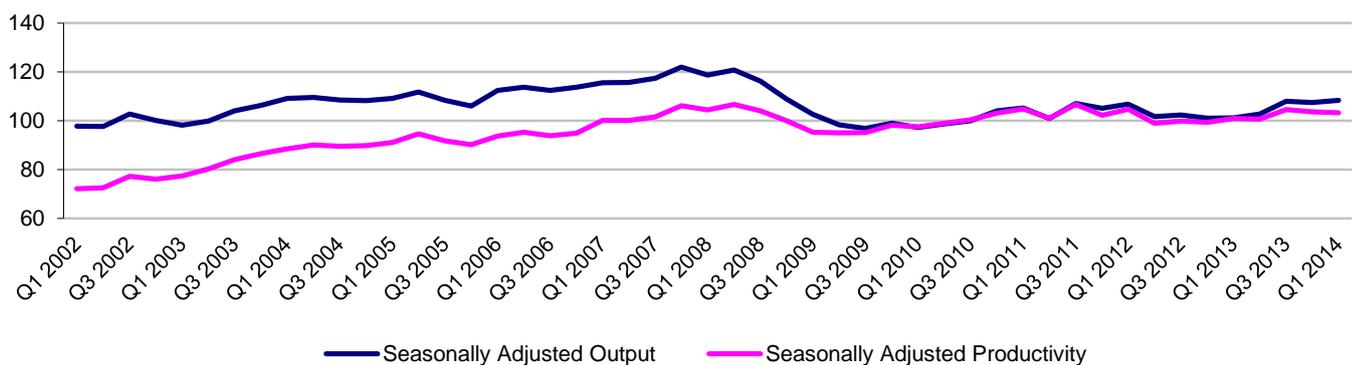
Manufacturing Productivity

The seasonally adjusted index of manufacturing productivity provides a measure of the number of units of output produced per person per paid hour. The index includes seasonally adjusted employees in employment, the seasonally adjusted manufacturing index and average weekly hours (based on hours worked for full-time adult manufacturing workers including overtime from the Annual Survey of Hours and Earnings).

The index of manufacturing productivity decreased over the quarter by 0.5% but increased over the year by 2.3%. The index increased by 3.2% over the latest four quarters compared to the previous four quarters. Since mid-2009, output and productivity have been very similar.

Figure 15: Manufacturing Output & Productivity in NI

(2010 =100)



The most recently published Quarterly Employment Survey seasonally adjusted figures for March 2014 (based on the 2007 Standard Industrial Classification) reported an increase of 1.2% over the quarter in employee jobs in the manufacturing sector and a rise of 4.5% over the year.

Seasonally Adjusted Manufacturing Productivity Index									
Annual Averages		Quarterly series		Quarterly series		Quarterly series		Quarterly series	
2002	75	2002 1	72.1	2005 1	91.1	2008 1	104.4	2011 1	104.8
2003	82	2	72.5	2	94.7	2	106.7	2	101.0
2004	89	3	77.3	3	91.7	3	104.1	3	106.6
2005	92	4	76.1	4	90.2	4	100.0	4	102.2
2006	94	2003 1	77.4	2006 1	93.7	2009 1	95.3	2012 1	104.7
2007	102	2	80.2	2	95.3	2	95.0	2	99.0
2008	104	3	84.0	3	93.9	3	95.1	3	99.9
2009	96	4	86.6	4	94.9	4	98.1	4	99.4
2010	100	2004 1	88.5	2007 1	100.1	2010 1	97.5	2013 1	100.9
2011	104	2	90.1	2	100.1	2	99.0	2	100.7
2012	101	3	89.6	3	101.6	3	100.4	3	104.6
2013	102	4	89.8	4	106.1	4	103.1	4	103.7
								2014 1	103.2
								% change latest qtr on:	
								Previous qtr	
									-0.5
								Same qtr 1 yr ago	
									2.3
								Rolling average	
									3.2

7: Background Notes

Background

The Northern Ireland Index of Production (IOP) has been produced since 1949 and figures are available in the current format back to 2002. It is published quarterly and is designed to provide a general measure of changes in the output of the production industries in Northern Ireland. (This is defined as Standard Industrial Classification 2007 sections B, C, D and E.) In 2011 these industries accounted for approximately 15% of regional Gross Value Added (GVA). See link to Regional GVA information.

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Regional+GVA>

Index numbers

An index number is a convenient form of expressing a series in a way that makes it easier to see changes in that series. The numbers in the series are expressed relatively, with one number in that series chosen to be the 'base' (usually expressed as 100) and other numbers being measured relative to that base. Index numbers have the advantage that they allow different types of data to be combined on a consistent basis, e.g. deflated current price data with volume data. The aim of the Index of Production is to provide a reliable indicator of short-term changes in the output of the production sector. Index numbers are a very good way of communicating this message. For example, the Index of Production Q1 2014 value of 107.0 means that the level of output was 7.0% higher than in 2010 which had a base year value of 100. The NI IOP is a Laspeyres volume index. The UK economic accounts are based on the European System of Accounts (ESA), which in turn is based on the UN System of Accounts (SNA). The ESA-preferred type of output indicator is one that measures deflated gross output (or turnover) for an industry. These use an approximate price change estimator to remove the effects of inflation. For this reason we, and the ONS, use a Laspeyres volume index (as opposed to Paasche, Lowe or Fisher indices). The ONS paper, link following, on the Methodology of the Monthly Index of Services (Annex A: Mathematical Formulation of the Index of Services) gives a good explanation of Index numbers theory.

<http://www.ons.gov.uk/ons/guide-method/user-guidance/index-of-services-methodology/index-construction/index.html>

Index sample

The IOP sample was refreshed for Q2 2011 and was drawn on a SIC07 basis. It is now approximately 650 companies. Due, in part, to the significant number of companies which fall into the census element, nearly 60% of businesses in the new sample were also in the old sample. As a statutory survey the response rate is around 90%. The sample of production industries is selected directly from the Inter Departmental Business Register (IDBR), by stratifying companies by industry and company size. The sample consists of a census of dominant companies and a Neyman stratified random sample of the remaining companies. The census element consists of all companies employing 40 or more employees and those employing 0 to 39 employees and having a turnover of £20 million or more. This sample has been designed to give sufficiently accurate results, yet keep the total costs to businesses to a minimum.

Data collection, validation and Index calculation

The survey forms are issued quarterly, immediately after the period to which they relate. For example, forms are issued in October asking for information relating to July to September. Companies are asked to provide their turnover and exports. Historically a number of companies provided volume information rather than turnover data (e.g. litres of product rather than the turnover value of the product). From quarter 2, 2010 these companies were asked to also provide turnover data. From the Q2 2011 publication onwards we have been using their turnover data. In response to user demand we now ask for information on the value of exports. We will need to collect a sufficient time series of exports information before we are in a position to publish this.

Data validation is carried out ensuring that data fall within the expected limits, contacting the company where appropriate for clarification.

The overall Index of Production is calculated by weighting together industry level indices using relative shares of Accounts Gross Value Added (GVA) data from the most recent Regional Accounts, which is currently 2011. The IOP relative weights used to produce the aggregated industries are derived from the Regional GVA estimate, published annually by ONS. Figures in the IOP publication from Q3 2013 onwards reflect the move to using 2011 GVA, including a new ONS methodology for calculating sub-sectoral breakdowns of the GVA for Manufacturing, which became available on 11 December 2013.

Further information on the impact of the move to the 2011 GVA and the sub-sectoral breakdown of Manufacturing Sector can be found in a methodological note published at http://www.detini.gov.uk/deti-stats-index/economic_output_statistics/stats-index-of-production/stats_iop_background_information.htm.

For practically all series, the value of sales, deflated to allow for price changes, is used as the indicator. In the remaining cases, changes in the volume of production or the number of employees are used as a proxy measure.

Following advice from a Quality Improvement Fund project we reviewed the sectors/businesses that were being smoothed and as a result from Q2 2011 smoothing has been applied to minimal companies with particularly volatile results, which would have unduly distorted the indices in some quarters.

It is also possible to aggregate all individual series to give indices by final use of goods produced. This is known as a market sector analysis and estimates are given in Section 5 of this bulletin. It distinguishes between unadjusted Consumer, unadjusted Investment and seasonally adjusted Intermediate Goods. The latter are described as intermediate because they include materials used to produce goods for consumption.

The Productivity index provides a measure of the number of units of output produced per person per paid hour. The productivity index is based on the seasonally adjusted manufacturing index, seasonally adjusted employees in employment and average weekly hours (based on hours worked for full-time adult manufacturing workers including overtime from the Annual Survey of Hours and Earnings). An index of total employee hours is calculated based on the number of employees in employment and average weekly hours. The seasonally adjusted index of manufacturing is divided by the index of total employee hours to produce the Index of Productivity.

The seasonally adjusted Northern Ireland Index of Production is annually chain-linked (chain-linking involves the linking of growth estimates between different time periods in order to produce a continuous time series) using GVA estimates derived from regional accounts using the fourth quarter of the preceding year as the link period. Inaccuracies caused by the assumption of a stable relationship between GVA and turnover are reduced using this methodology. When annual weights are used the assumption only has to be maintained from one year to the next year. A paper on annual chain-linking from ONS is available at <http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2010/stb-regional-gva-dec-2011.html>

The standard method for linking two series (for example one based on a SIC03 sample and one based on SIC07 sample) is to calculate the index under the old and new circumstances over some link period, and then apply the growth of the subsequent new series to the old series. As the relationship of both samples to the IDBR was known, the IDBR was used to provide the link period. Thus the ratio of the IDBR turnover for Q1 2011 and Q2 2011 is known. We have the Q2 2011 value (SIC07) and the Q1 2011 value (converted from SIC03 to SIC07). We can therefore create the following link factor:

$$\text{link factor} = \frac{(\text{Q2 2011 sample estimate} * \text{IDBR Q1 2011 value})}{(\text{Q1 2011 sample estimate} * \text{IDBR Q2 2011 value})}$$

This can then be applied to the converted back series, thus retaining the previous growth rates.

Deflation

All series, unless otherwise quoted, are measured at constant market price. Deflators adjust the value series to take out the effect of price change to give the volume series. Details on the changes to the ONS deflators methodology can be found at the following link

<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/national-accounts/methodology-and-articles/2011-present/index.html>

Seasonal adjustment

The index numbers in this statistical bulletin are seasonally adjusted, where appropriate. This aids interpretation by removing annually recurring fluctuations, for example due to holidays or other regular seasonal patterns. Unadjusted data are also available. The figures presented in this publication are calculated using the X-12 ARIMA method of seasonal adjustment. The following is a link to detailed documentation on X-12 ARIMA

<http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/time-series-analysis/guide-to-seasonal-adjustment.pdf>

Quality reporting

One indicator of the reliability of the figures in this bulletin can be obtained by monitoring the size of revisions. Previous revisions triangles are based on SIC03 data. With the move to SIC07 it is not possible to update the current revisions triangles with the data published on a SIC07 basis. Further information on the construction of SIC07 revisions triangles will be announced in due course.

Summary quality report

The latest summary quality report for this publication can be found on the IOP Quality and Revisions page of the website at

<http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production/stats-newpage-4.htm>

Publication of results on a SIC07 basis

A Standard Industrial Classification (SIC) was first introduced into the UK in 1948 for use in classifying business establishments by the type of economic activity in which they are engaged. The UK is required by European legislation to revise the SIC in parallel with NACE (the statistical classification of economic activities in the European Communities) so that both systems are identical down to and including the four digit class level. This new SIC07 provides greater detail on the services sector, reflecting its growing importance in the economy. The new classification has a small impact on total IOP and Index of Services and a slightly bigger impact on manufacturing. In the new classification, sewerage and waste disposal have been moved from services to production and publishing has moved in the opposite direction. The changes also lead to differences in the behaviour of the IOP and IOS over time as the industries moving between the two sectors behave in quite different ways. There has also been a switch within the production sector between manufacturing caused by the new treatment of recycling, which moves out of manufacturing into the new section E – this reduces the size of manufacturing though production as a whole is unchanged. More information on SIC07 can be found at the following links:

<http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/standard-industrial-classification/index.html>

<http://www.ons.gov.uk/ons/rel/naa2/second-estimate-of-gdp/q2-2011/art---bb11-improvements-to-gdp--ios--iop.html>

Status of figures in current bulletin

Results are published on a SIC07 basis in this bulletin.

Turnover from newly registered businesses on IDBR from Q2 2011 to Q1 2014 have been included in the results.

All figures are published to one decimal place. Figures for annual averages and percentage changes over the previous quarter and year are based on unrounded figures and may not agree with the published constituent parts.

Results, particularly for the latest quarter, are provisional and subject to revision as more up to date information becomes available.

The overall IOP index has been produced using X-12 ARIMA seasonal adjustment. Some of the sectors and sub-sectors have also been seasonally adjusted, and those identified throughout the bulletin.

Comparisons between the Index of Production and the Annual Business Inquiry (ABI) may not necessarily match because of definitional and coverage differences.

Planned future revisions

The IOP revisions policy can be found at

<http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production/stats-newpage-4.htm>

Publications policy

All Economic and Labour Market Statistics Branch statistical publications are available to download free of charge from the website

<http://www.detini.gov.uk/deti-stats-index.htm>

The IOP bulletin is available at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm>

The tables from the current publication, which include data back to 2002, are available in Excel format to download free of charge from the IOP website at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm>

The IOP is published on the same day as the Index of Services (IOS) each quarter and the latest edition of the IOS can be accessed at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-ios.html>

The Economic and Labour Market Statistics Branch statistics publication schedule is available at <http://www.detini.gov.uk/deti-stats-index.htm>

The list of people given pre-release access to this publication is available at http://www.detini.gov.uk/lmr_pre-release_list_-_january_2014.pdf

SIC 2007 Definitional Changes

Manufacturing – SIC07 Section C (weight 85.9%)

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurred. As a general rule, the activities in the manufacturing section involve the transformation of materials into new products. Their output is a new product.

SIC03 Division 37 (Recycling) within the SIC03 Manufacturing Section has moved to the SIC07 Section E. The publishing part of SIC03 Division 22 (Publishing, printing and reproduction of recorded media) within the SIC03 Manufacturing Section has moved to the new SIC07 Section J (Information and Communication).

Water supply, sewerage and waste management (inc. recycling) – SIC07 Section E (weight 6.7%)

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 majority of SIC03 Division 90 (Sewage and refuse disposal) within the SIC03 Section O (Other Community Services) has moved to SIC07 Section E. SIC03 Division 37 (Recycling) within the SIC03 Manufacturing Section has moved to SIC07 Section E.

Electricity, gas, steam and air conditioning supply – SIC07 Section D (weight 6.4%)

This section 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. This therefore includes the operation of electric and gas utilities.

In SIC03 Section E covered Electricity, gas and water supply. Water supply is now in the SIC07 Section E along with sewerage and refuse disposal and recycling.

Mining and Quarrying – SIC07 Section B (weight 1.0%)

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.

There are no significant changes between SIC03 Section C (Mining and Quarrying) and SIC07 Section B.

Next publication

The next bulletin will be published on 17th September 2014.

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