

## NORTHERN IRELAND INDEX OF SERVICES - QUARTER 1 2014

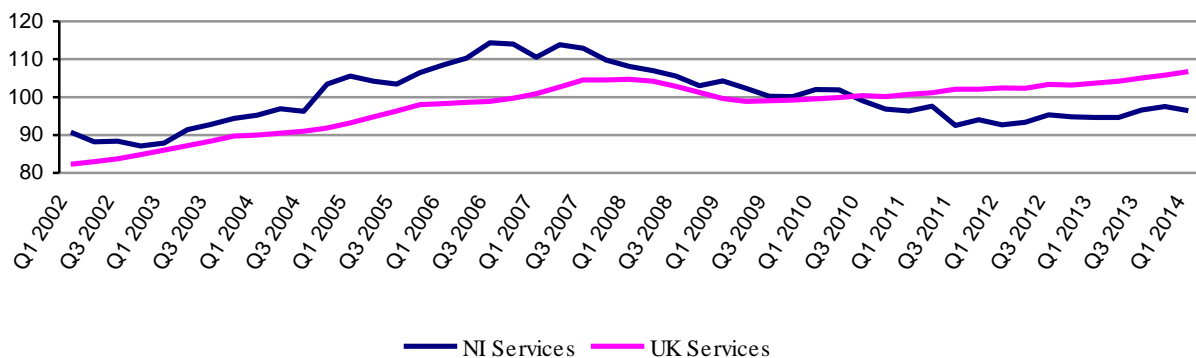
**Published 11/06/14**

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

- Provisional results from the Index of Services for the first quarter of 2014 showed that output in NI decreased by 1.1% in real terms over the quarter, compared with an increase of 0.9% reported in the UK as a whole.
- The index rose by 2.0 in Q1 2014 compared to the same period one year earlier.
- When the most recent four quarters are compared to the previous four quarters the rate of growth is 1.8% in real terms.
- The index remains some 15.6% below the peak recorded in Q3 2006, whilst the UK index increased by 7.9% in the same time period.
- The most notable change this quarter was a decrease of 1.9% (as based on order of importance of contribution to the overall index) in the Transport, storage, information & communication sector

### Index of Services in NI and UK

(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 (DETI) 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 Services (IOS) for Northern Ireland (NI). The IOS is an important short-term measure of change in the output of the private services sector 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 member of the general public with an interest in the state of the NI economy. A summary of recent uses is available on the website at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-ios.htm>

The latest Department of Enterprise, Trade and Investment (DETI) 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/deti-stats-index/deti-stats-index-4/economic\\_commentary.htm](http://www.detini.gov.uk/deti-stats-index/deti-stats-index-4/economic_commentary.htm)

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 Production (IOP) provides a general measure of changes in the output of the production industries. It is based on up-to-date information about the output and sales of the production industry. Provisional figures for Q1 2014 show that output in Northern Ireland increased by 0.8% over the quarter and 6.2% over the year. In the last four quarters there have been three quarterly increases with one quarterly decrease in output. The full bulletin can be accessed at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm>

The Index of Services is published on a Standard Industrial Classification 2007 (SIC07) basis. This has an impact on the type of businesses classified as service 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 services sector there are some new groupings of businesses. IOS data prior to Q2 2011 were collected on a SIC03 basis and have been converted to approximate the SIC07 coverage. Further detail can be found in the background notes (section 5).

The background notes (section 5) 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 results for the service sector as a whole, for Wholesale and retail trade; repair of motor vehicles and motorcycles, accommodation and food service activities, for Transport, storage, information and communication, for Business services and finance and for Other services sub sectors on a 2010=100 basis, giving data up to the most recent available quarter (Q1 2014).

The private service sector is dominated by the Business services and finance and the Wholesale and retail trade; repair of motor vehicles and motorcycles, accommodation and food service activities sub-sectors. Together these account for approximately 70% of the sector's total private services Gross Value Added (GVA) at 2011.

Comparative UK data (produced by the Office for National Statistics (ONS)) are presented where these are available. The latest ONS IOS results are available at:

<http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-21577>

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. 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 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.

## **Northern Ireland Services**

### **Revisions**

Results 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.

### **Date of Next publication**

The Northern Ireland Index of Services for Q2 2014 will be published in September 2014.

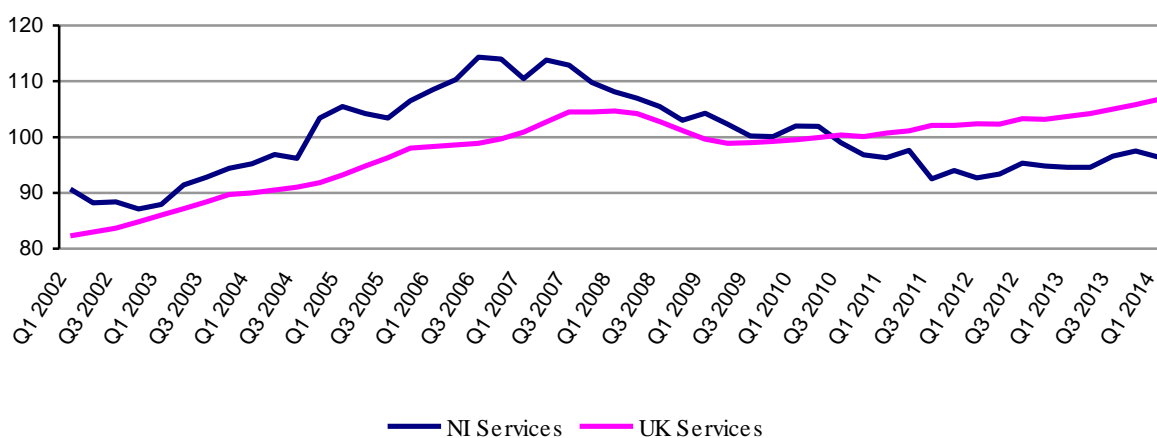
## 2: Summary and Commentary

### Provisional results for Q1 2014

Provisional results from the Index of Services for the first quarter of 2014 show that output in NI decreased by 1.1% over the quarter, compared with an increase of 0.9% reported in the UK as a whole. This is the third period of decline reported by the Northern Ireland Index in the past eight quarters, whilst the UK have experienced six periods of growth in the same time period. The Index of Production <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-index-of-production.htm> reported an increase of 0.8% over the quarter.

**Figure 1: Index of Services in NI and UK**

(2010 =100)



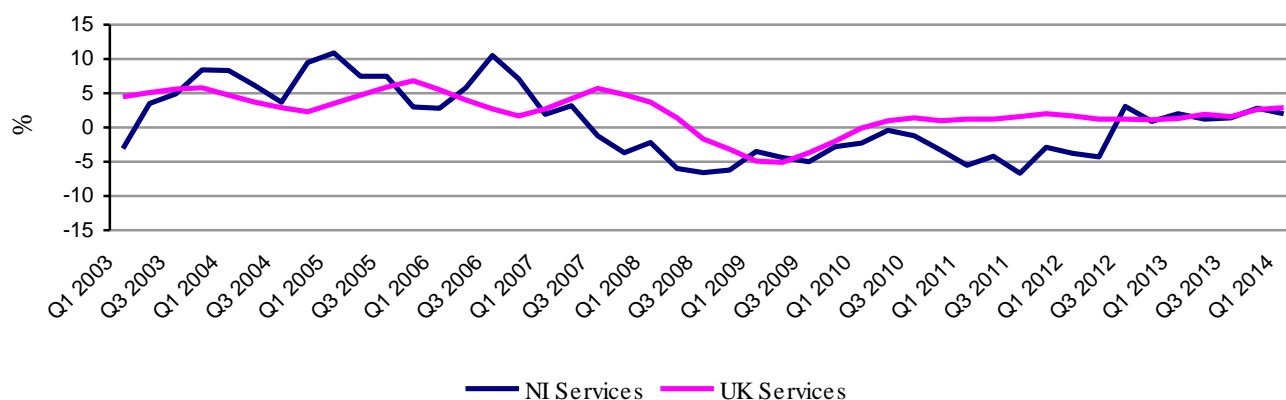
	NI	UK
Percentage change compared to previous quarter	-1.1	0.9
Percentage change compared to same quarter one year ago	2.0	2.9
Percentage change for most recent four quarters compared to previous four quarters	1.8	2.3

NI private service sector output has declined by 15.6% from the peak recorded in the third quarter of 2006, whilst the UK reported an increase of 7.9% over the same period.

### Services – year-on-year trend

Examination of year-on-year changes for each quarter provides information on the rate of growth over the last ten years. Figure 2 illustrates the annual percentage change in the service sector. Following 20 quarters of annual decline from mid 2007 to mid 2012, the most recent seven quarters have shown successive growth when compared with the same quarter a year earlier. However the UK as a whole has shown annual increase for 16 consecutive quarters.

**Figure 2: All Services - Percentage change on a year earlier**



### Services Subsections

The sub-sectors in Northern Ireland make different contributions to the changes in the overall index.

Over the quarter, the decrease in the index was driven by decreases in the Transport, storage, information & communication sector (-1.9%) and the Business services and finance sector (-0.3%); whilst an increase occurred in the Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities sector (0.1%) and there was no change in the Other services sector.

Over the year, the increase in the index was driven by increases in the Other services sector (9.0%), the Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities sector (1.3%), the Transport, storage, information & communication sector (2.4%) and the Business services and finance sector (0.7%).

Over the latest four quarters, the increase in the index was driven by the Other services sector and the Transport, storage, information & communication sector which both reported increases of 8.7% and 5.0% respectively. The Business services and finance sector (-0.9%) and The Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities sector (-0.5%) reported decreases.

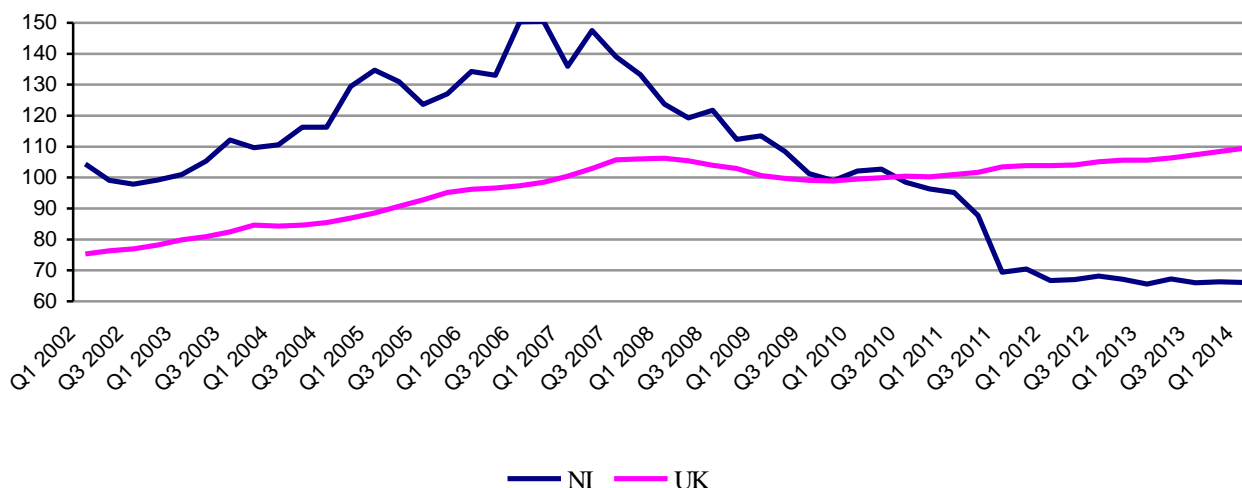
### 3: Services by Broad Industry Groups

This section focuses on performance of the overall service sector and the main industry categories of which it is comprised. The private service sector is dominated by the (i) Business services and finance and (ii) Wholesale and retail trade; repair of motor vehicles and accommodation and food service activities sub-sectors. Together these account for approximately 70% of the sector's total private services Gross Value Added at 2011. The sub-sectors are listed in order of importance of the contribution made to the quarterly change in the overall Index of Services.

#### Business services and finance – SIC07 Sections K-N (Weight = 34%)

**Figure 3: Business services and finance**

(2010 = 100)

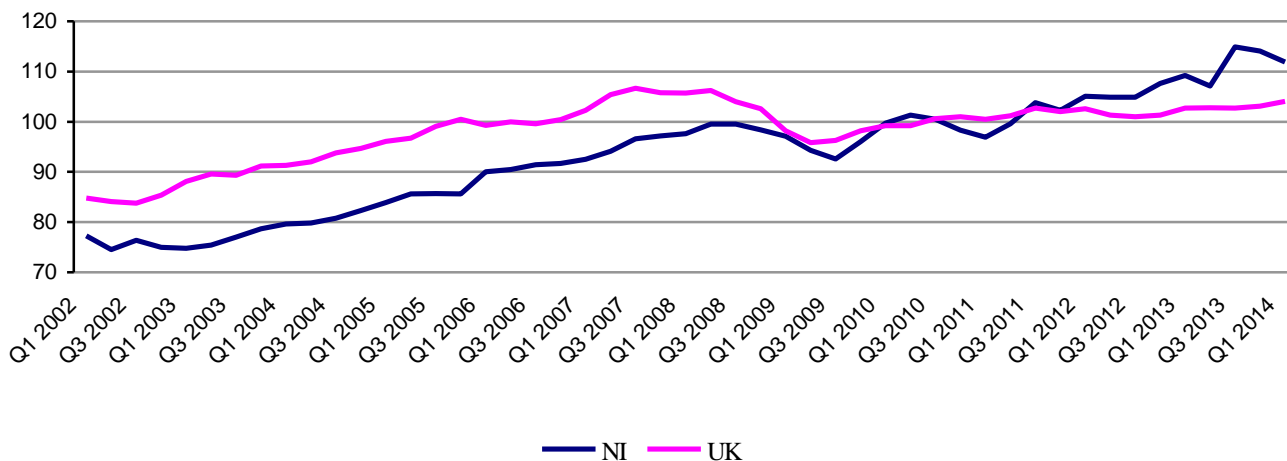


	NI	UK
Percentage change compared to previous quarter	-0.3	0.9
Percentage change compared to same quarter one year ago	0.7	3.6
Percentage change for most recent four quarters compared to previous four quarters	-0.9	2.6

Output decreased over the quarter (-0.3%) and increased over the year (0.7%). This compares with a 0.9% quarterly rise and a 3.6% annual rise for the UK. On a rolling average basis there have been 26 consecutive falls in the NI index, back to Q4 2007. The sector is 56.1% down from its Q4 2006 peak.

**Transport, storage, information & communication – SIC07 Sections H & J**  
(Weight = 12%)

**Figure 4: Transport, storage, information & communication**  
(2010 =100)



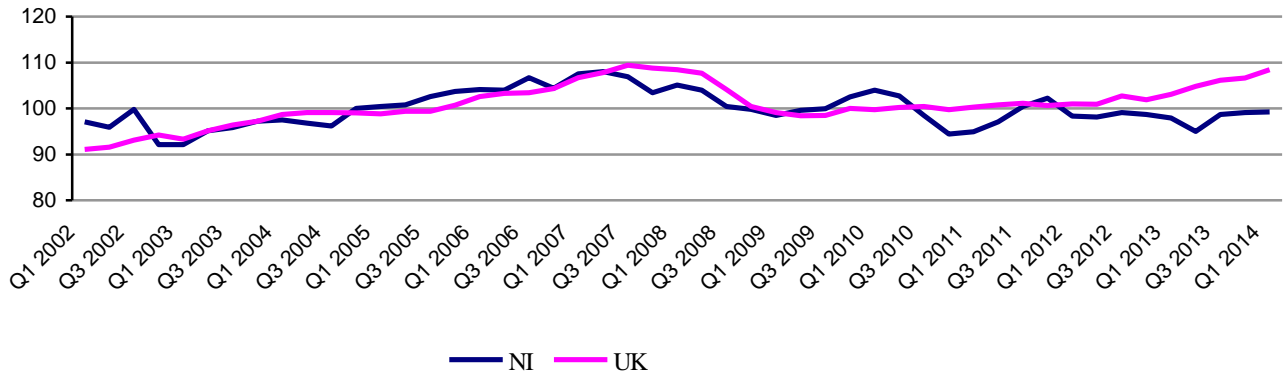
	NI	UK
Percentage change compared to previous quarter	-1.9	0.9
Percentage change compared to same quarter one year ago	2.4	1.3
Percentage change for most recent four quarters compared to previous four quarters	5.0	1.6

The index for this sector reported a decrease over the quarter of 1.9% compared with a rise of 0.9% for the UK. This is the fourth quarterly decrease in the latest eight quarters while the index for the UK as a whole reported decreases in three of the last eight quarters. The index rose by 2.4% over the year. On a rolling annual average basis the index for this sector in Northern Ireland increased by 5.0% over the last four quarters when compared with the previous four quarters compared with an increase of 1.6% for the UK as a whole.



**Wholesale and retail trade; repair of motor vehicles and motorcycles;  
Accommodation and food service activities – SIC07 Sections G&I (Weight = 34%)**

**Figure 5: Wholesale & retail trade; repair of motor vehicles and motorcycles  
Accommodation and food service activities  
(2010 =100)**

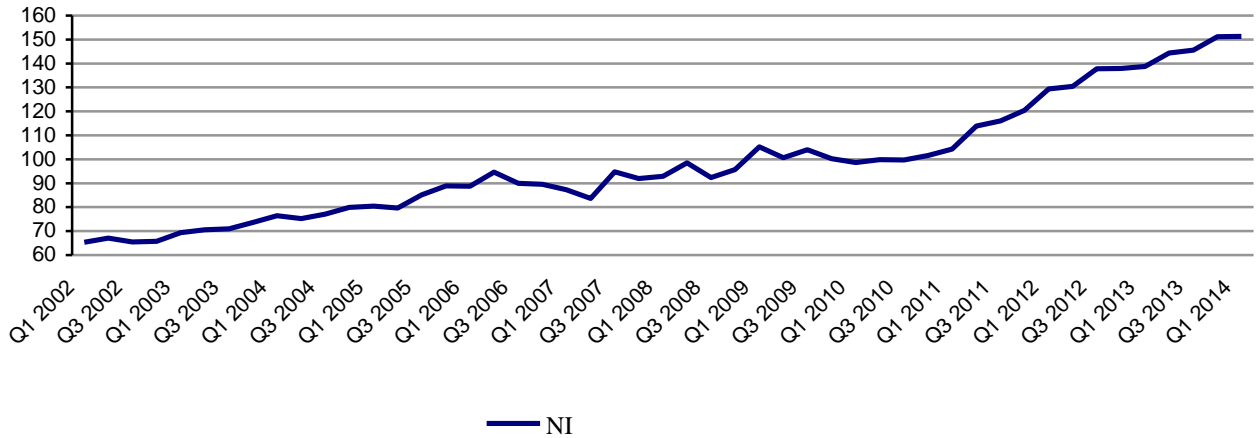


	NI	UK
Percentage change compared to previous quarter	0.1	1.8
Percentage change compared to same quarter one year ago	1.3	5.1
Percentage change for most recent four quarters compared to previous four quarters	-0.5	4.2

The latest quarterly increase in this sector (0.1%) compares to an increase of 1.8% for the UK as a whole. Output has risen by 1.3% over the year compared to a 5.1% increase in the UK. The sector has fallen by 8.1% from its peak in Q2 2007, whilst the UK is almost unchanged over the same period.

**Other services – SIC07 Sections P-S (Weight = 19%)**

**Figure 6: Other services**  
(2010 =100)



	NI
Percentage change compared to previous quarter	0.0
Percentage change compared to same quarter one year ago	9.0
Percentage change for most recent four quarters compared to previous four quarters	8.7

This sector reported no change over the quarter and increased over the year (9.0%). The index has consistently risen since Q4 2010 when the quarter is compared against the same quarter one year ago.

## 4: Quarterly/ Annual/ Rolling Annual Average Changes

Table 1 – Northern Ireland Index of Services – Quarterly, Annual and Rolling Annual average<sup>\*1</sup> changes by sector  
Seasonally Adjusted (2010 = 100)

2010 = 100	All Services				Wholesale, retail, repair, Accommodation & food service				Transport, storage, information and communication				Business services & finance				Other services			
	G - S				G&I				H&J				K-N				P-S			
	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)
Weights <sup>*2</sup>	1000				351				121				346				181			
2002 Q1	90.7	-	-	-	97.1	-	-	-	77.3	-	-	-	104.4	-	-	-	65.3	-	-	-
Q2	88.2	-2.8	-	-	95.9	-1.2	-	-	74.5	-3.6	-	-	99.1	-5.1	-	-	67.1	2.8	-	-
Q3	88.4	0.2	-	-	99.8	4.0	-	-	76.4	2.5	-	-	97.9	-1.2	-	-	65.5	-2.4	-	-
Q4	87.1	-1.5	-	-	92.1	-7.7	-	-	75.0	-1.8	-	-	99.2	1.3	-	-	65.8	0.4	-	-
2003 Q1	87.9	0.9	-3.1	-	92.1	0.0	-5.2	-	74.8	-0.3	-3.1	-	101.0	1.8	-3.3	-	69.3	5.3	6.1	-
Q2	91.4	3.9	3.5	-	95.1	3.3	-0.9	-	75.4	0.8	1.3	-	105.3	4.3	6.2	-	70.6	1.9	5.2	-
Q3	92.8	1.5	4.9	-	95.8	0.7	-4.0	-	77.0	2.0	0.8	-	112.1	6.5	14.5	-	70.9	0.4	8.3	-
Q4	94.4	1.7	8.4	3.4	97.2	1.5	5.6	-1.2	78.7	2.2	4.8	0.9	109.7	-2.2	10.6	6.8	73.7	3.9	12.0	7.9
2004 Q1	95.2	0.9	8.3	6.3	97.5	0.3	5.8	1.5	79.6	1.2	6.3	3.3	110.6	0.9	9.5	10.2	76.5	3.7	10.3	9.0
Q2	96.9	1.8	6.1	6.9	96.8	-0.7	1.7	2.2	79.8	0.3	5.8	4.4	116.3	5.1	10.5	11.2	75.3	-1.5	6.7	9.3
Q3	96.2	-0.7	3.7	6.6	96.2	-0.6	0.4	3.3	80.8	1.3	5.0	5.5	116.3	0.0	3.7	8.5	77.1	2.4	8.7	9.4
Q4	103.4	7.5	9.5	6.9	100.0	4.0	2.9	2.7	82.3	1.9	4.7	5.4	129.4	11.3	18.0	10.4	79.9	3.6	8.4	8.5

\*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.

\*2 The regional GVA weights relate to 2011.

Table 1 continued – Northern Ireland Index of Services – Quarterly, Annual and Rolling Annual average<sup>\*1</sup> changes by sector  
Seasonally Adjusted (2010 = 100)

2010 = 100	All Services				Wholesale, retail, repair, Accommodation & food service				Transport, storage, information and communication				Business services & finance				Other services			
	G - S				G&I				H&J				K-N				P-S			
	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)
Weights <sup>*2</sup>	1000				351				121				346				181			
2005 Q1	105.5	2.1	10.9	7.6	100.4	0.4	3.0	2.0	83.9	1.9	5.4	5.2	134.7	4.1	21.8	13.5	80.5	0.7	5.2	7.2
Q2	104.2	-1.2	7.5	7.9	100.8	0.4	4.2	2.6	85.6	2.1	7.3	5.6	131.0	-2.7	12.7	14.0	79.7	-0.9	5.8	7.0
Q3	103.4	-0.8	7.5	8.9	102.6	1.8	6.7	4.2	85.7	0.1	6.1	5.9	123.6	-5.6	6.4	14.6	85.1	6.8	10.4	7.5
Q4	106.5	2.9	3.0	7.1	103.7	1.1	3.7	4.4	85.6	-0.1	4.0	5.7	127.0	2.7	-1.9	9.3	88.9	4.4	11.2	8.2
2006 Q1	108.5	1.9	2.8	5.1	104.1	0.3	3.6	4.5	90.0	5.1	7.3	6.2	134.3	5.8	-0.3	3.9	88.8	-0.1	10.4	9.5
Q2	110.3	1.6	5.8	4.7	104.0	-0.1	3.1	4.3	90.5	0.5	5.7	5.8	133.0	-1.0	1.5	1.3	94.6	6.5	18.6	12.7
Q3	114.3	3.6	10.5	5.5	106.7	2.6	4.0	3.6	91.4	1.0	6.6	5.9	150.3	13.0	21.5	5.0	89.9	-4.9	5.6	11.4
Q4	114.0	-0.3	7.1	6.5	104.4	-2.1	0.7	2.8	91.7	0.3	7.1	6.7	150.4	0.1	18.4	10.0	89.5	-0.4	0.7	8.6
2007 Q1	110.5	-3.0	1.9	6.3	107.5	3.0	3.3	2.8	92.5	0.9	2.8	5.5	135.9	-9.6	1.2	10.4	87.3	-2.5	-1.7	5.5
Q2	113.8	3.0	3.2	5.6	108.0	0.4	3.9	3.0	94.1	1.7	4.0	5.1	147.5	8.5	10.9	12.8	83.6	-4.3	-11.6	-2.0
Q3	112.9	-0.8	-1.2	2.7	106.9	-1.0	0.2	2.0	96.6	2.6	5.6	4.9	139.0	-5.8	-7.5	5.2	94.7	13.3	5.3	-2.0
Q4	109.8	-2.7	-3.7	0.0	103.4	-3.3	-1.0	1.6	97.2	0.7	6.0	4.6	133.2	-4.1	-11.4	-2.2	91.9	-3.0	2.6	-1.5
2008 Q1	108.1	-1.5	-2.2	-1.0	105.1	1.7	-2.2	0.2	97.6	0.4	5.5	5.3	123.7	-7.1	-9.0	-4.6	92.9	1.1	6.4	0.5
Q2	107.0	-1.0	-6.0	-3.3	104.0	-1.1	-3.7	-1.7	99.5	2.0	5.7	5.7	119.3	-3.6	-19.2	-11.8	98.5	6.1	17.9	7.9
Q3	105.5	-1.4	-6.6	-4.6	100.4	-3.5	-6.1	-3.3	99.5	0.0	3.1	5.0	121.8	2.2	-12.3	-13.1	92.4	-6.2	-2.4	5.8
Q4	103.0	-2.4	-6.2	-5.3	99.8	-0.6	-3.5	-3.9	98.4	-1.1	1.2	3.9	112.3	-7.8	-15.7	-14.1	95.7	3.5	4.1	6.2

\*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.

\*2 The regional GVA weights relate to 2011.

Table 1 continued – Northern Ireland Index of Services – Quarterly, Annual and Rolling Annual average<sup>\*1</sup> changes by sector  
Seasonally Adjusted (2010 = 100)

2010 = 100	All Services				Wholesale, retail, repair, Accommodation & food service				Transport, storage, information and communication				Business services & finance				Other services			
	G - S				G&I				H&J				K-N				P-S			
	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)
Weights <sup>*2</sup>	1000				351				121				346				181			
2009 Q1	104.3	1.3	-3.5	-5.6	98.5	-1.2	-6.3	-4.9	97.1	-1.4	-0.5	2.3	113.5	1.0	-8.3	-14.1	105.2	10.0	13.2	7.9
Q2	102.3	-1.9	-4.4	-5.2	99.6	1.1	-4.2	-5.0	94.3	-2.9	-5.3	-0.4	108.4	-4.5	-9.1	-11.5	100.6	-4.4	2.1	4.2
Q3	100.2	-2.0	-5.0	-4.8	99.9	0.3	-0.5	-3.7	92.6	-1.8	-7.0	-2.9	101.3	-6.5	-16.8	-12.5	104.0	3.4	12.5	7.9
Q4	100.1	-0.1	-2.8	-3.9	102.5	2.6	2.8	-2.1	96.0	3.8	-2.4	-3.8	99.0	-2.3	-11.8	-11.5	100.2	-3.6	4.8	8.0
2010 Q1	102.0	1.9	-2.3	-3.6	104.0	1.4	5.5	0.8	99.7	3.8	2.7	-3.0	102.1	3.1	-10.0	-12.0	98.7	-1.5	-6.2	3.0
Q2	101.9	-0.1	-0.4	-2.6	102.7	-1.2	3.1	2.7	101.3	1.6	7.4	0.1	102.7	0.5	-5.3	-11.2	99.9	1.2	-0.7	2.3
Q3	99.0	-2.8	-1.2	-1.7	98.5	-4.1	-1.4	2.5	100.5	-0.8	8.6	4.0	98.5	-4.1	-2.8	-7.7	99.7	-0.1	-4.1	-1.7
Q4	96.8	-2.3	-3.3	-1.8	94.4	-4.1	-7.9	-0.2	98.3	-2.2	2.4	5.2	96.3	-2.2	-2.7	-5.4	101.6	1.9	1.4	-2.4
2011 Q1	96.3	-0.5	-5.5	-2.6	94.9	0.4	-8.8	-3.8	96.9	-1.5	-2.8	3.8	95.2	-1.1	-6.7	-4.4	104.2	2.5	5.5	0.5
Q2	97.6	1.4	-4.2	-3.5	97.1	2.4	-5.5	-5.9	99.6	2.8	-1.7	1.5	87.7	-7.9	-14.5	-6.8	113.9	9.3	14.0	4.1
Q3	92.5	-5.3	-6.7	-4.9	100.4	3.4	1.9	-5.1	103.8	4.3	3.3	0.3	69.4	-20.9	-29.5	-13.3	116.0	1.8	16.3	9.3
Q4	94.0	1.7	-2.9	-4.8	102.2	1.8	8.3	-1.3	102.3	-1.5	4.0	0.7	70.4	1.5	-26.9	-19.2	120.4	3.8	18.5	13.6
2012 Q1	92.7	-1.4	-3.8	-4.4	98.3	-3.9	3.6	1.9	105.1	2.8	8.5	3.5	66.7	-5.3	-30.0	-25.1	129.4	7.5	24.2	18.3
Q2	93.4	0.8	-4.3	-4.4	98.1	-0.3	1.0	3.7	104.9	-0.2	5.3	5.3	67.0	0.5	-23.7	-27.6	130.5	0.9	14.6	18.3
Q3	95.3	2.0	3.1	-2.0	99.1	1.1	-1.3	2.8	104.9	0.0	1.0	4.6	68.2	1.9	-1.7	-21.9	137.8	5.6	18.8	18.9
Q4	94.8	-0.5	0.9	-1.1	98.7	-0.4	-3.5	-0.1	107.6	2.6	5.2	4.9	67.1	-1.7	-4.7	-16.7	137.9	0.1	14.5	17.9

\*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.

\*2 The regional GVA weights relate to 2011.

Table 1 continued – Northern Ireland Index of Services – Quarterly, Annual and Rolling Annual average<sup>\*1</sup> changes by sector  
Seasonally Adjusted (2010 = 100)

2010 = 100	All Services				Wholesale, retail, repair, Accommodation & food service				Transport, storage, information and communication				Business services & finance				Other services			
	G - S				G&I				H&J				K-N				P-S			
	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual Change (%)
Weights <sup>*2</sup>	1000				351				121				346				181			
2013 Q1	94.6	-0.3	2.0	0.3	97.9	-0.7	-0.4	-1.1	109.2	1.5	3.9	3.8	65.6	-2.2	-1.6	-8.9	138.8	0.7	7.3	13.6
Q2	94.6	0.0	1.2	1.8	95.0	-3.0	-3.1	-2.1	107.1	-1.9	2.1	3.0	67.2	2.5	0.4	-1.9	144.3	3.9	10.5	12.6
Q3	96.6	2.2	1.4	1.4	98.7	3.9	-0.5	-1.9	114.9	7.3	9.6	5.2	66.0	-1.9	-3.3	-2.3	145.6	0.9	5.7	9.4
Q4	97.5	0.9	2.8	1.9	99.1	0.5	0.5	-0.9	114.1	-0.7	6.0	5.4	66.3	0.5	-1.2	-1.4	151.2	3.8	9.7	8.3
2014 Q1	96.4	-1.1	2.0	1.8	99.2	0.1	1.3	-0.5	111.9	-1.9	2.4	5.0	66.1	-0.3	0.7	-0.9	151.3	0.0	9.0	8.7

\*<sup>1</sup> 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.

\*<sup>2</sup> The regional GVA weights relate to 2011.

## 5: Background Notes

### Background

The experimental Index of Services (IOS) was first published in Northern Ireland on 18 May 2005. Following assessment by the UK Statistics Authority the Index of Services was designated as a National Statistic on 5 August 2011. It is published quarterly and is designed to provide a general measure of changes in the output of the private sector service industries in Northern Ireland. (This is defined as Standard Industrial Classification 2007 (SIC07) sections G to S. In 2011 these private sector service industries accounted for 61% of all service sector Regional Gross Value Added (GVA). See link to Regional GVA information

<http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2013/stb-regional-gva-2012.html>

### 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 Services is to provide a reliable indicator of short-term changes in the output of the service sector. Index numbers are a very good way of communicating this message. For example, the Index of Services Q1 2014 value of 96.4 means that the level of output then was 3.6% lower than in 2010 which had a base year value of 100. The NI IOS 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 IOS sample was selected in Q2 2011 and was drawn on a SIC07 basis. It is approximately 20% larger than before with approximately 1,900 companies. Due, in part, to the significant number of companies which fall into the census element, approximately 50% of businesses in the new sample were also in the old sample. As a statutory survey the response rate is now over 80%. The sample of service 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 100 or more employees and those employing 0 to 99 employees and having a turnover of £20 million or more. It is desirable to include these

low employment high turnover companies in the sample in order to provide a more comprehensive picture of the overall economy.

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

For company non-returns, the data are imputed using a methodology that takes account of previous returned data and also the performance of similar sized businesses engaged in the same activities. More specifically, the imputed data are calculated using all returned turnover in the quarter for each 2 digit SIC/ employment size band and also the associated employment in each category. This enables a full series of turnover per employee ratios to be created for each 2 digit SIC/ employee size band.

The ratio is then factored up dependent on the number of employees in the non-responding company to generate a total turnover for imputation.

The employee figures used are taken where possible from the NI Quarterly Employment Survey (QES) and are matched with IOS by IDBR Reporting Unit reference. If no employee figure is available from the QES then the selected IDBR employee figure is used instead.

The overall Index of Services is calculated by weighting together industry level indices that describe the activity of an industry sector using the Standard Industrial Classification. This is done using relative shares of regional GVA on an annual basis. The annual weights from regional GVA are more up to date and their use is in line with recommendations from the Office for National Statistics (ONS).

The Northern Ireland Index of Services 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 private sector 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/elmr/economic-trends--discontinued-/no--630--may-2006/methodological-note--annual-chain-linking.pdf>

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:

$(Q2\ 2011\ sample\ estimate * IDBR\ Q1\ 2011\ value) / (Q1\ 2011\ sample\ estimate * IDBR\ Q2\ 2011\ value)$



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 (2010 = 100). 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/articles/deflation-improvements-in-the-uk-national-accounts.pdf>

## **Seasonal adjustment**

The index numbers in this statistical bulletin are all seasonally adjusted. This aids interpretation by removing annually recurring fluctuations, for example due to holidays or other regular seasonal patterns. From Quarter 2 2010 we have moved from using X-11 ARIMA to X-12 ARIMA as our seasonal adjustment package. A comparison of results using both X-11 and X-12 showed that the underlying trend had remained the same. 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/index.html>

## **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**

A summary quality report for this publication can be found on the IOS Quality and Revisions page of the website at [http://www.detini.gov.uk/deti-stats-index/economic\\_output\\_statistics/stats-ios/stats\\_ios\\_quality\\_and\\_revisions.htm](http://www.detini.gov.uk/deti-stats-index/economic_output_statistics/stats-ios/stats_ios_quality_and_revisions.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 Index of Production and IOS 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**

Figures in this publication of IOS reflect the move to using 2011 GVA which became available on 11 December 2013.

Results are published on a SIC07 basis.

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 are subject to revision as more up to date information becomes available.

Significant revisions to previous quarters' figures are highlighted in the main text of the bulletin.

The index has been produced using X-12 ARIMA seasonal adjustment from the Quarter 3 2010 bulletin.

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

On 6 September 2010 the IOS became a statutory survey. As a result, the survey forms issued for the period July to September 2010 were the first collected under statute and the change increased overall response rates from around 63% to over 80%. The January 2011 bulletin was the first to publish such data.

### **Planned future revisions**

The IOS revisions policy can be found at [http://www.detini.gov.uk/deti-stats-index/economic\\_output\\_statistics/stats-ios/stats\\_ios\\_quality\\_and\\_revisions.htm](http://www.detini.gov.uk/deti-stats-index/economic_output_statistics/stats-ios/stats_ios_quality_and_revisions.htm)

In line with ONS the base year of the Northern Ireland Index of Services (IOS) has changed to 2010=100.

The SIC 47 code of retail is scheduled to be constructed as a separate series and it is planned to publish this series in the near future.

The Index of Services sample was refreshed in Q1 2014 and will continue to have a quarterly refresh going forward. The sample size has doubled to approximately 3,500. This will provide more robust Index of Service estimates in the future.

## **Publications policy**

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

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

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

The tables from the current publication, which includes all the data from the start of the series in 2002, are available in Excel format to download free of charge from the IOS website at <http://www.detini.gov.uk/deti-stats-index/stats-surveys/stats-ios.htm>

Future IOS publications are due to be published on the same day as the Index of Production and the Quarterly Employment Survey in March, June, September and December of each year.

The Economic and Labour Market 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/deti-stats-index/statistical\\_protocols\\_and\\_compliance.htm](http://www.detini.gov.uk/deti-stats-index/statistical_protocols_and_compliance.htm)

## **SIC 2007 Definitions**

### **Wholesale and retail trade; repair of motor vehicles and motorcycles; Accommodation and food service activities – SIC07 Sections G&I (Weight = 34%)**

This sector includes wholesale and retail sale and the supply of services incidental to the sale of merchandise as well as the repair of motor vehicles and motorcycles. This sector also includes the provision of short-stay accommodation for visitors and the provision of complete meals and drinks fit for immediate consumption.

The repair and maintenance of personal and household goods has moved from SIC03 Section G (wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods) to SIC07 Section S (other service activities).

There are no significant changes between SIC03 Section H (hotels and restaurants) and SIC07 Section I.

## **Transport, storage, information & communication – SIC07 Sections H & J** (Weight = 12%)

This sector includes the provision of passenger or freight transport and associated activities, postal and courier activities, the production and distribution of information and cultural products, as well as data or communications, information technology activities and the processing of data and other information service activities.

SIC03 Section I (transport, storage and communication) has been replaced by SIC07 Section H (transport and storage) and SIC07 Section J (information and communication).

Section J (information and communication) under SIC07 is a major new section - the main components of this section are publishing activities, including software publishing (SIC07 Division 58), motion picture and sound recording activities (SIC07 Division 59), radio and TV broadcasting and programming activities (SIC07 Division 60), telecommunications activities (SIC07 Division 61) and information technology activities (SIC07 Division 62) and other information service activities (SIC07 Division 63). These activities were included in SIC03 Sections D (manufacturing), I (transport, storage and communications), K (real estate, renting and business activities) and O (other community, social and personal service activities), therefore having a strong impact on comparability across the SIC versions. However, this new treatment of information and communication activities provides a more consistent approach (based on the character of the activities carried out) than the SIC03 version.

## **Business services and finance – SIC07 Sections K-N** (Weight = 34%)

This sector includes financial service activities, real estate activities, specialised professional, scientific and technical activities and a variety of activities that support general business operations.

The development and selling of real estate has moved from SIC03 Section J to SIC07 Section F (construction). SIC03 Division 72 (computer and related activities) is no longer part of this section. Computer repair activities have been grouped with repair of household goods in SIC07 Section S (other service activities), while software publishing and IT activities have been grouped in the new SIC07 Section J (information and communication). While SIC07 Section N (administrative and support service activities) covers activities that support general business operations - this pulls in units from many parts of SIC03, for example: employment services, call centres, travel arrangements and reservation services, investigation and security services. Veterinary services have moved from SIC03 Section N (health and social work) to SIC07 Section M (professional, scientific and technical services).

## **Other services – SIC07 Sections P-S** (Weight = 19%)

This sector includes other activities not covered elsewhere - education, health & social work, arts, entertainment and recreation and other services. There are no comparable UK figures for other services.

SIC07 Section P (education) has broadened to include specialised sport, cultural and other educational services and also specialised support services. Formerly these types of services would have fallen under other service sections e.g. SIC03 Section O (other community, social and personal services). Substantial components of SIC03 Section O

(other community, social and personal service activities) have been moved to SIC07 Section E (water supply; sewerage, waste management and remediation activities) and SIC07 Section J (information and communication).

### **Next publication**

The next bulletin will be published in September 2014.

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