



## **NORTHERN IRELAND INDEX OF SERVICES (EXPERIMENTAL) QUARTER 4 2007**

**Published 16/04/08**

**This Northern Ireland Index of Services (IOS) is an experimental quarterly survey of almost 1,500 companies designed to provide a general measure of changes in the output of the Service sector industries in real terms. This publication contains seasonally adjusted NI Index of Services data on a 2003 = 100 basis.**

- **Provisional results from the Index of Services for the fourth quarter of 2007 show that output levels decreased by 1.5% over the quarter but increased by an estimated 0.1% compared to the same quarter one year earlier.**
- **The growth in Northern Ireland's Service sector performance over the quarter (-1.5%) was lower than that for the UK as a whole, which increased by an estimated 0.7% over the same period. The increase in Services output over the year (0.1%) was also lower than that for the UK as a whole which rose by 3.4% compared to the same quarter one year earlier.**
- **This is the second successive quarter in which the Index of Services has recorded a decline. The annual increase of 0.1% this quarter is also the lowest annual growth reported since Q3 2003.**
- **However, over the latest four quarters output increased by 2.3% compared to the same four quarters one year earlier. This is lower than the increase for the UK (3.7%) over the same period.**
- **Over the latest quarter, the Distribution – Wholesale and Retail (-1.2%), Business Services & Finance (-1.0%), Hotels & Restaurants (-3.2%) and Transport, Storage & Communication (-0.4%) sectors reported a decrease. The Other Services sector increased over the same period (0.7%).**

Department of Enterprise,  
Trade and Investment

# **Northern Ireland Index of Services (Experimental) Quarter 4 2007**

April 2008

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# Executive Summary

# 1

## Introduction

This bulletin provides information from the Index of Services (IOS) for Northern Ireland. The experimental IOS has been developed by the Department of Enterprise, Trade and Investment (DETI) to provide a turnover based quarterly measure of change in the service sector.

Private sector service activities account for some 55% of total business Gross Value Added (GVA), representing a significant component of the Northern Ireland economy (Annual Business Inquiry – ABI 2003). The IOS is one of the earliest indicators of the performance of Northern Ireland Services and is a major step towards providing, for the service industries, the periodicity, range and quality of output indicators that have existed for the production and construction industries for many years.

The IOS is a voluntary quarterly survey covering all private sector service industries and is comprised of approximately 1,500 companies in Northern Ireland. It is designed to show movements in turnover across a representative sample of service sector industries weighted to reflect their relative share of GVA in 2003 (from the ABI).

Turnover data used in the IOS survey are deflated using a range of price indices available at the national level and all changes in the index reflect movement in real terms.

The series has been developed to National Statistics standards but is designated as experimental to allow time to receive user feedback and to monitor performance of the Index. Further detail on the background and development of the index is available in section 4 of this Bulletin.

This booklet contains results for the Service Sector as a whole and the Distribution, Hotels and Restaurants, Transport and Communications, Business and Finance and Other services sub sectors. It contains results from Quarter 1 2001 to Quarter 4 2007 and uses the year 2003 as the base year against which relative change is measured. All figures contained within this publication are seasonally adjusted

## Overall Index of Services

The most recent results for Northern Ireland show that the value of total services in October - December (Quarter 4) 2007 decreased by an estimated 1.5%, while that recorded for the UK increased by 0.7%. This is the second successive quarter in which the index has reported a decrease.

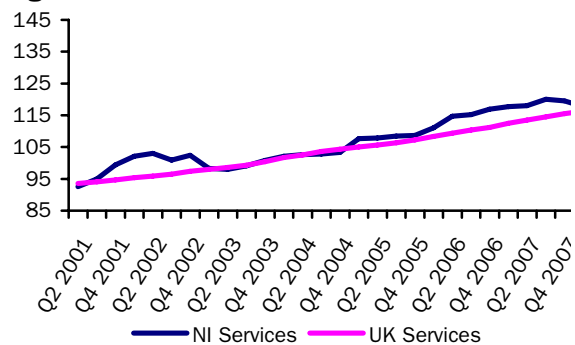
The estimated increase in the Northern Ireland Index of Services over the year of 0.1% was below that for the UK as a whole which increased by an estimated 3.4% compared to the same quarter one year earlier.

Over the latest four quarters compared to the same four quarters one year earlier the Total Services sector has increased by 2.3% for Northern Ireland (vs a 3.7% increase for the UK). In historical terms, Northern Ireland Services have increased by 27.2% from Quarter 1 2001 to Quarter 4 2007 compared to an estimated increase of 24.2% for the UK as a whole over the same period.

## Index of Services in NI and UK

(2003 = 100)

Figure 1



The most recent IOS results are examined over the quarter, year and rolling four quarters. The sub sectors of the service industry are listed in the order of importance of the contribution made to the relevant change in the overall index of services.

**Over the quarter**, the sub sectors which contributed most to the decrease in the index were as follows: Distribution - Wholesale & Retail (-1.2%), Business Services & Finance (-1.0%), Hotels & Restaurants (-3.2%) and Transport, Storage & Communication (-0.4%).

Over the same period the Other Services sector (0.7%) reported an increase.

**Over the year**, the largest contribution to the positive change in the Index was driven by the following industries: Transport, Storage & Communication (5.2%), Other Services (7.3%) and Hotels & Restaurants (8.0%).

Over the same period Business Services & Finance (-4.6%) and Distribution - Wholesale & Retail (-0.3%) reported a decrease.

**Over the latest four quarters** compared to the same period one-year earlier (i.e. Q1 2006 – Q4 2006 to Q1 2007 – Q4 2007), the strongest performing sectors which showed estimated increases were: Distribution - Wholesale & Retail (3.1%), Transport, Storage and Communication (7.7%), Hotels & Restaurants (5.4%) and Business Services and Finance (0.6%).

Over the same period the Other Services sector decreased by 4.2%.

### All Services - Percentage change on a year earlier

Figure 2

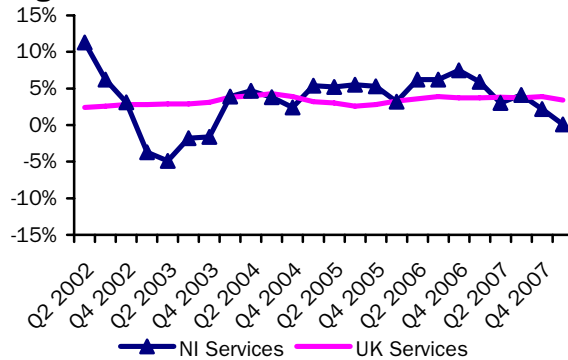


Figure 2 illustrates the annual percentage change in the service sector. In Q1 2002 the annual percentage growth in the service sector was 11%, it then declined to the lowest recorded annual change (-5%) in Q1 2003, then from Q4 2003 – Q1 2007 there has been an average year on year decline of approximately 6%. In addition, over the four quarters of 2007, growth rates have fallen from 3.0% to 0.1%.

### Date of Next publication

The Northern Ireland Index of Services for Quarter 1 2008 will be published on 16<sup>th</sup> July 2008.

**Table 1 Northern Ireland Index of Services –  
Seasonally Adjusted (2003 = 100)**

Sector	All Services	Distribution – Wholesale and Retail	Hotels & Restaurants	Transport, Storage & Communication	Business Services & Finance	Other Services
2003 = 100	<b>G - O</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J &amp; K</b>	<b>M, N &amp; O</b>
<b>Weights</b>	<b>1000</b>	<b>395.0</b>	<b>58.9</b>	<b>141.4</b>	<b>308.5</b>	<b>96.2</b>
2001 Q1	92.6	90.3	112.9	96.6	90.8	96.0
Q2	95.0	90.5	109.7	101.9	96.3	101.7
Q3	99.4	92.9	113.8	100.5	102.5	101.1
Q4	102.1	97.1	104.4	99.4	107.6	102.8
2002 Q1	103.0	97.6	112.6	103.0	105.7	110.0
Q2	100.9	96.9	108.8	106.5	100.9	112.4
Q3	102.4	100.6	105.8	105.3	95.7	115.5
Q4	98.3	96.5	101.6	97.6	98.9	97.5
2003 Q1	98.0	96.5	100.6	99.6	98.9	100.2
Q2	99.1	99.0	101.7	100.8	100.6	98.5
Q3	100.8	101.5	98.7	99.4	98.6	102.5
Q4	102.1	103.0	99.0	100.3	101.9	98.8
2004 Q1	102.6	104.1	96.5	99.8	103.4	104.6
Q2	102.8	103.0	97.7	100.3	107.7	102.9
Q3	103.3	102.4	99.3	102.2	105.2	97.2
Q4	107.7	106.8	100.7	104.5	111.6	102.4
2005 Q1	107.9	105.9	101.7	102.5	114.6	108.8
Q2	108.5	106.7	103.4	107.8	114.1	112.8
Q3	108.7	108.9	106.3	109.5	105.1	111.4
Q4	111.1	110.3	111.4	107.8	111.3	114.1
2006 Q1	114.7	110.5	108.2	111.7	121.6	120.5
Q2	115.2	111.3	104.6	110.5	122.6	131.7
Q3	116.9	112.6	113.4	114.9	122.3	112.8
Q4	117.7	114.1	102.8	117.6	126.6	109.4
2007 Q1	118.1	116.2	111.7	118.5	124.5	110.3
Q2	120.0	117.2	114.8	123.6	128.9	110.6
Q3	119.5	115.1	114.6	124.1	122.0	116.5
Q4	117.8	113.7	111.0	123.6	120.8	117.3

# Services by Broad Industry Groups

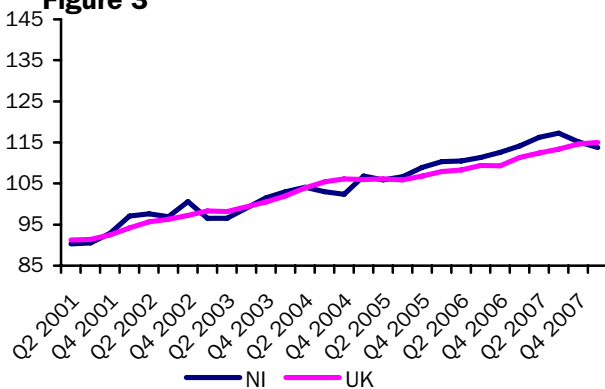
## 2

This chapter focuses on the Overall Service Sector split into individual industry categories. The Service Sector is dominated by Distribution (Wholesale and Retail) and the Business Services & Finance industries. Together these account for 70% of the sector's total Gross Value added.

### Distribution - Wholesale & Retail

(2003 =100)

Figure 3



### Distribution (Wholesale & Retail)

(Weight = 40%)

The Distribution sector reflects the activity of the Wholesale and Retail trade; Repair of Motor Vehicles and Personal and Household goods.

The Distribution sector index decreased by an estimated 1.2% over the quarter compared to an increase of 0.3% in the UK.

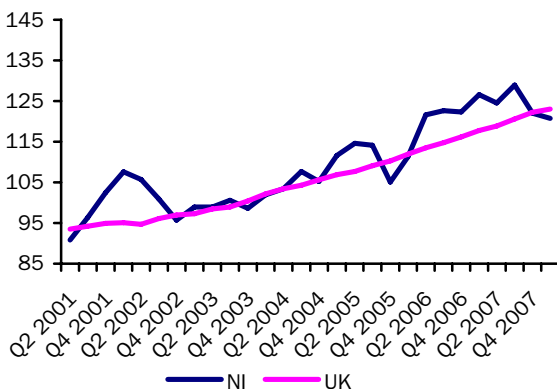
Over the year, the NI Distribution Sector decreased by 0.3% compared to an increase of 3.4% in the UK. (See figure 3).

Over the latest four quarters compared to the same period one year earlier, the sector increased by an estimated 3.1% compared to an increase of 3.9% in the UK.

### Business Services & Finance

(2003 =100)

Figure 4



### Business Services & Finance

(Weight = 31%)

The Business Services & Finance sector reflects the activity of all financial institutions and also Real Estate, Renting and other Business activities.

The Business Services & Finance index decreased by an estimated 1.0% over the quarter compared to an increase of 0.6% in the UK.

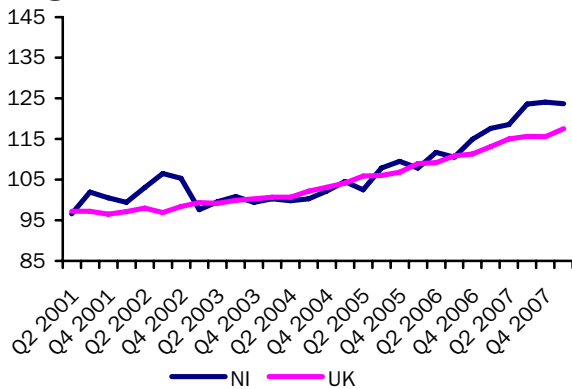
Over the year, the NI Business Services & Finance sector decreased by 4.6% compared to an increase of 4.4% in the UK. (See figure 4)

Over the latest four quarters compared to the same period one year earlier, the sector increased by an estimated 0.6% compared to an increase of 4.8% in the UK.

### Transport, Storage & Communication

(2003 =100)

Figure 5



### Transport, Storage & Communication

(Weight = 14%)

The Transport, Storage & Communication sector reflects the activity of Land, Air & Sea transport operators along with Travel Agencies and Post & Telecommunications businesses.

The Transport, Storage & Communication sector decreased by an estimated 0.4% over the quarter compared to an increase of 1.7% in the UK.

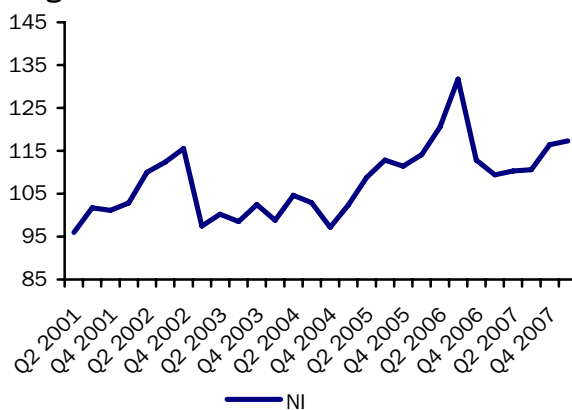
Over the year, the NI Transport, Storage & Communication sector increased by an estimated 5.2% compared to the UK which increased by 3.9%. (See figure 5)

Over the latest four quarters compared to the same period one year earlier, the sector increased by an estimated 7.7% whereas the UK figure increased by an estimated 4.3%.

### Other Services

(2003 =100)

Figure 6



### Other Services

(Weight = 10%)

The “Other Services” sector is comprised of Education, Health & Social Work and Other Community, Social and Personal Service activities.

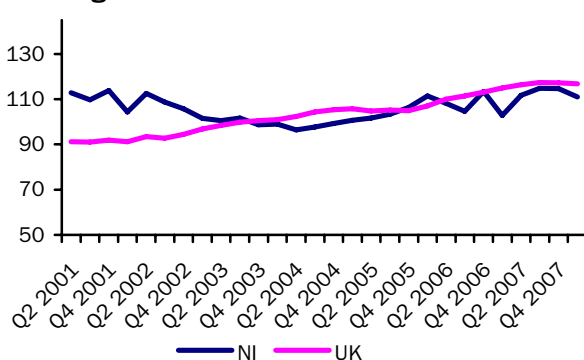
Over the quarter, the Other Services index increased by an estimated 0.7%, while over the year it increased by 7.3%. (See figure 6)

The sector decreased by an estimated 4.2% when measured over the latest four quarters compared to the same four quarters one year earlier. There are no comparable UK figures for Other Services.

### Hotels & Restaurant

(2003 =100)

Figure 7



### Hotels & Restaurants

(Weight = 6%)

Over the quarter, the Hotels & Restaurants index decreased by an estimated 3.2% in NI, this compares with the UK which decreased by 0.4% over the same period. (See figure 7)

Over the year the sector increased by an estimated 8.0% compared to an increase of 1.5% in the UK.

Over the latest four quarters compared to the same period one year earlier, the sector increased by an estimated 5.4% while the UK figure increased by an estimated 4.0%.

# Annual/Quarterly/ Rolling Annual Average Changes

## 3

**Table 2 – Northern Ireland Index of Services – Annual and Rolling Annual average\* changes by sector  
Seasonally Adjusted (2003 = 100)**

2003 = 100	All Services				Distribution – Wholesale and Retail				Hotels & Restaurants				Transport, Storage & Communication				Business Services & Finance				Other Services			
	G - O				G				H				I				J & K				M,N & O			
	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 (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual* Change (%)
Weights	1000				395.0				58.9				141.4				308.5				96.2			
2001 Q1	92.6	-	-	-	90.3	-	-	-	112.9	-	-	-	96.6	-	-	-	90.8	-	-	-	96.0	-	-	-
Q2	95.0	2.6%	-	-	90.5	0.2%	-	-	109.7	-2.9%	-	-	101.9	5.5%	-	-	96.3	6.1%	-	-	101.7	5.9%	-	-
Q3	99.4	4.6%	-	-	92.9	2.6%	-	-	113.8	3.8%	-	-	100.5	-1.4%	-	-	102.5	6.4%	-	-	101.1	-0.5%	-	-
Q4	102.1	2.7%	-	-	97.1	4.6%	-	-	104.4	-8.3%	-	-	99.4	-1.2%	-	-	107.6	5.0%	-	-	102.8	1.6%	-	-
2002 Q1	103.0	1.0%	11.3%	-	97.6	0.5%	8.1%	-	112.6	7.9%	-0.2%	-	103.0	3.6%	6.6%	-	105.7	-1.7%	16.5%	-	110.0	7.0%	14.6%	-
Q2	100.9	-2.0%	6.2%	-	96.9	-0.8%	7.0%	-	108.8	-3.4%	-0.8%	-	106.5	3.4%	4.5%	-	100.9	-4.6%	4.8%	-	112.4	2.2%	10.6%	-
Q3	102.4	1.5%	3.1%	-	100.6	3.9%	8.3%	-	105.8	-2.8%	-7.1%	-	105.3	-1.1%	4.8%	-	95.7	-5.2%	-6.6%	-	115.5	2.7%	14.2%	-
Q4	98.3	-4.1%	-3.7%	4.0%	96.5	-4.1%	-0.6%	5.6%	101.6	-3.9%	-2.6%	-2.7%	97.6	-7.3%	-1.8%	3.5%	98.9	3.4%	-8.0%	1.1%	97.5	-15.5%	-5.1%	8.4%
2003 Q1	98.0	-0.3%	-4.9%	0.0%	96.5	0.0%	-1.2%	3.3%	100.6	-1.0%	-10.7%	-5.4%	99.6	2.0%	-3.3%	1.0%	98.9	-0.1%	-6.5%	-4.3%	100.2	2.8%	-8.9%	2.4%

\* 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.

**Table 2 continued – Northern Ireland Index of Services – Annual and Rolling Annual average\* changes by sector  
Seasonally Adjusted (2003 = 100)**

2003 = 100	All Services				Distribution – Wholesale and Retail				Hotels & Restaurants				Transport, Storage & Communication				Business Services & Finance				Other Services			
	G - O				G				H				I				J & K				M,N & O			
	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 (%)	Index	Quarter Change (%)	Annual Change (%)	Rolling Annual* Change (%)
Weights	1000				395.0				58.9				141.4				308.5				96.2			
Q2	99.1	1.1%	-1.8%	-1.9%	99.0	2.6%	2.2%	2.1%	101.7	1.1%	-6.5%	-6.8%	100.8	1.2%	-5.3%	-1.5%	100.6	1.8%	-0.3%	-5.4%	98.5	-1.7%	-12.4%	-3.4%
Q3	100.8	1.8%	-1.6%	-3.0%	101.5	2.5%	0.9%	0.3%	98.7	-3.0%	-6.7%	-6.7%	99.4	-1.4%	-5.7%	-4.1%	98.6	-2.0%	3.0%	-3.1%	102.5	4.1%	-11.2%	-9.5%
Q4	102.1	1.3%	3.9%	-1.2%	103.0	1.4%	6.7%	2.2%	99.0	0.4%	-2.6%	-6.7%	100.3	0.9%	2.8%	-3.0%	101.9	3.4%	3.0%	-0.3%	98.8	-3.7%	1.3%	-8.1%
2004 Q1	102.6	0.4%	4.7%	1.2%	104.1	1.1%	7.9%	4.4%	96.5	-2.6%	-4.1%	-5.0%	99.8	-0.5%	0.3%	-2.1%	103.4	1.5%	4.6%	2.6%	104.6	6.0%	4.4%	-5.0%
Q2	102.8	0.3%	3.8%	2.7%	103.0	-1.1%	4.0%	4.8%	97.7	1.2%	-4.0%	-4.4%	100.3	0.5%	-0.5%	-0.9%	107.7	4.1%	7.0%	4.4%	102.9	-1.7%	4.5%	-0.7%
Q3	103.3	0.4%	2.4%	3.7%	102.4	-0.6%	0.9%	4.8%	99.3	1.6%	0.6%	-2.5%	102.2	1.9%	2.8%	1.3%	105.2	-2.3%	6.7%	5.3%	97.2	-5.5%	-5.2%	1.2%
Q4	107.7	4.3%	5.4%	4.1%	106.8	4.3%	3.8%	4.1%	100.7	1.5%	1.7%	-1.5%	104.5	2.3%	4.2%	1.7%	111.6	6.1%	9.5%	7.0%	102.4	5.3%	3.7%	1.8%
2005 Q1	107.9	0.2%	5.2%	4.2%	105.9	-0.9%	1.7%	2.6%	101.7	0.9%	5.4%	0.9%	102.5	-1.9%	2.7%	2.3%	114.6	2.7%	10.8%	8.5%	108.8	6.3%	4.0%	1.7%
Q2	108.5	0.5%	5.5%	4.7%	106.7	0.8%	3.6%	2.5%	103.4	1.7%	5.9%	3.4%	107.8	5.1%	7.4%	4.3%	114.1	-0.4%	6.0%	8.2%	112.8	3.7%	9.7%	3.0%
Q3	108.7	0.2%	5.3%	5.4%	108.9	2.0%	6.3%	3.8%	106.3	2.8%	7.1%	5.0%	109.5	1.6%	7.2%	5.4%	105.1	-7.9%	0.0%	6.5%	111.4	-1.3%	14.6%	7.9%
Q4	111.1	2.2%	3.2%	4.8%	110.3	1.3%	3.3%	3.7%	111.4	4.8%	10.6%	7.2%	107.8	-1.5%	3.2%	5.1%	111.3	5.9%	-0.2%	4.1%	114.1	2.4%	11.4%	9.8%
2006 Q1	114.7	3.2%	6.2%	5.1%	110.5	0.1%	4.3%	4.4%	108.2	-2.9%	6.4%	7.5%	111.7	3.6%	9.0%	6.7%	121.6	9.2%	6.1%	3.0%	120.5	5.6%	10.8%	11.6%
Q2	115.2	0.5%	6.2%	5.2%	111.3	0.8%	4.3%	4.5%	104.6	-3.3%	1.2%	6.3%	110.5	-1.0%	2.6%	5.4%	122.6	0.8%	7.5%	3.4%	131.7	9.3%	16.7%	13.4%
Q3	116.9	1.5%	7.5%	5.8%	112.6	1.2%	3.4%	3.8%	113.4	8.4%	6.7%	6.2%	114.9	4.0%	5.0%	4.9%	122.3	-0.3%	16.3%	7.3%	112.8	-14.3%	1.3%	10.1%
Q4	117.7	0.6%	5.9%	6.5%	114.1	1.3%	3.4%	3.9%	102.8	-9.3%	-7.7%	1.5%	117.6	2.3%	9.0%	6.3%	126.6	3.5%	13.7%	10.8%	109.4	-3.1%	-4.1%	6.1%
2007 Q1	118.1	0.3%	3.0%	5.6%	116.2	1.9%	5.2%	4.1%	111.7	8.7%	3.3%	0.8%	118.5	0.8%	6.2%	5.7%	124.5	-1.6%	2.4%	9.7%	110.3	0.9%	-8.5%	1.2%
Q2	120.0	1.6%	4.1%	5.1%	117.2	0.9%	5.3%	4.3%	114.8	2.8%	9.8%	2.9%	123.6	4.3%	11.8%	8.0%	128.9	3.6%	5.1%	9.0%	110.6	0.3%	-16.0%	-7.2%
Q3	119.5	-0.4%	2.2%	3.8%	115.1	-1.8%	2.2%	4.0%	114.6	-0.2%	1.1%	1.5%	124.1	0.4%	8.0%	8.7%	122.0	-5.4%	-0.2%	5.1%	116.5	5.3%	3.2%	-6.8%
Q4	117.8	-1.5%	0.1%	2.3%	113.7	-1.2%	-0.3%	3.1%	111.0	-3.2%	8.0%	5.4%	123.6	-0.4%	5.2%	7.7%	120.8	-1.0%	-4.6%	0.6%	117.3	0.7%	7.3%	-4.2%

\* 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.

# Background Notes

## 4

### Background

1. There has been increasing demand from economic decision makers and commentators for better short-term measures of the performance of the service sector in Northern Ireland. Leading economic centres, the Northern Ireland business community, economists and other academic professionals have expressed an interest in the development of an IOS. Users have expressed a need for an IOS to accompany the existing Index of Production (IOP) to provide an estimate of short-term change in the Service sector Industry.
2. The sector has grown in importance in recent years and the sector's share of approximate Gross Value Added (GVA) has risen from 49% in 1999 to 55% in 2003, whereas that of Manufacturing has declined from 37% to 29% over the same period.
3. Accordingly, DETI has developed an experimental Index of Services (IOS), which the Department released on its website for the first time on 18 May 2005. The introduction of the IOS is a major step towards providing, for the service industries, the periodicity, range and quality of output indicators that have existed for the production industries for many years.
4. The IOS series is an experimental index referenced to 2003=100, in line with the UK IOS. The IOS is released as an experimental statistic and not a National Statistic, but it is hoped that the IOS data set will eventually become a National Statistic. This method is consistent with the National Statistic protocol on the release of data and mirrors the approach adopted during the launch of the UK Index of Services and the Welsh Index of Distribution. The IOS shows the quarterly movements in the turnover of the selected panel of 1,500 service sector companies.
5. The IOS is a voluntary quarterly survey covering all private sector service industries and is comprised of approximately 1,500 companies in Northern Ireland. The IOS is designed to show movements in turnover weighted to gross value added of the service industries (Standard Industrial Classification - section G to O).

These consist of the distribution industries (section G), hotels and restaurants (section H), transport and communications (section I), business services and finance (sections J and K) and other services (sections M to O). Together with public administration, services account for approximately 72% of the total Northern Ireland gross value added (GVA) in 2003. Turnover data used in the IOS survey is deflated to allow for price changes over time using a range of price indices available at the national level and further details on the methodology used can be obtained from DETI Statistics Research Branch.
6. The IOS sample is selected directly from the Inter Departmental Business Register (IDBR). The sample consists of a census of dominant companies and a Neymann stratified random sample of remaining companies. As a sample survey estimates from the IOS are subject to variation reflecting the sample design of the index. The census element consists of all companies employing more than 100 employees and those employing between 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.
7. Timing of IOS releases are consistent with IOP and are scheduled to be published in January, April, July and October of each year. The IOS uses 2003 as the base year and deflates the returned turnover figures using deflators from Office of National Statistics (ONS).
8. The forms are issued by and returned to Statistics Research Branch where data validation is carried out ensuring that data falls within the expected limits, contacting the company where appropriate for clarification. For company non-returns, the data is 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 is 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 employees 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.

9. 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 GVA in a given base year from the Annual Business Inquiry (ABI). The annual weights from the ABI are more up to date and are therefore more relevant, reflecting changes in the structure of the economy when they happen. The Northern Ireland Index of Services will be 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 the ABI 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.
10. Statistics Research Branch has used an exponential smoothing technique when processing results from particularly volatile industrial sectors. Real Estate, Renting and Business Activities (SIC 70) is currently the most volatile of all the 2 digit SIC series which make up the index and as a result is exponentially smoothed using a methodology consistent with ONS processes and procedures.

11. All indices in this Statistics Bulletin are adjusted for seasonality. The Branch has seasonally adjusted the Index of Services series using the X11 ARIMA software package and published for the first time in April 2007. Seasonal adjustment aids interpretation by removing annually recurring variations due, for example, to the incidence of holidays and other regular seasonal patterns of behaviour or demand. Unadjusted data are available on request.
12. 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.
13. Results, particularly for the latest quarter, are provisional and subject to revision as more up to date information becomes available. Data can be revised back for up to four quarters and finalised once comparisons have been made with the current year ABI returns.
14. In addition, comparisons between the Index of Services and the Annual Business Inquiry (ABI) may not necessarily match because of definitional and coverage differences. For example the Index of Services covers the dominant business activity and the ABI covers workplace activity.

**For Further Information:**

**AN ELECTRONIC VERSION OF THIS DOCUMENT IS AVAILABLE ON THE INDEX OF SERVICES PAGE OF THE BRANCH WEBSITE AT:**

[www.statistics.detini.gov.uk](http://www.statistics.detini.gov.uk)

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