

# NORTHERN IRELAND INDEX OF PRODUCTION: QUARTER 4 2007

Published 16/04/08

The Northern Ireland Index of Production is a quarterly survey of almost 600 companies and is designed to provide a general measure of change in real terms in the output of the Manufacturing, Electricity, Gas & Water and Mining & Quarrying industries. The index uses 2003 as the base year i.e. (2003 = 100).

- Results from the Index of Production for the fourth quarter of 2007 show output levels rose by 1.3% compared to the same quarter one year earlier and rose by 2.4% compared to the previous quarter.
- Northern Ireland's increased production over the year (1.3%) is greater than that recorded by the UK as a whole, which increased by 0.7% compared to the same quarter one year earlier. Production in the UK rose by 0.2% over the quarter.
- Manufacturing comprises the main element of the production index. Manufacturing output in Northern Ireland increased by 2.3% in real terms over the quarter, the UK remained steady. Over the year manufacturing output in Northern Ireland increased by 1.1%, the UK reported an annual increase of 0.2%.
- The fourth quarter results showed that manufacturing productivity increased over the quarter by 2.1% and rose by 1.1% compared to the same period last year.





Department of Enterprise,  
Trade and Investment

Northern Ireland  
Index of  
Production  
Quarter 4 2007

April 2008



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# Executive Summary

# 1

## 1. Introduction

This bulletin provides information from the Index of Production (IoP) for Northern Ireland. 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.

This booklet contains detailed results for the Production Industries i.e, the Manufacturing; Electricity, Gas & Water; and Mining & Quarrying sectors on a 2003=100 basis, giving data up to the most recent quarter (Quarter 4 2007). Disaggregated data for manufacturing subsections and by market sector are also presented. Comparative UK data are also presented where these are available.

Manufacturing comprised some 88% of Approximate Gross Value Added (GVA) in the production industries, while production accounts for some 28% of total business Approximate GVA as measured by the Annual Business Inquiry (2006 results). Manufacturing is typically the main determinant of change in the production sector.

## 2. Overall Production

Output from the overall production industries in October - December (Quarter 4) 2007 increased by 1.3% compared to one year earlier and rose by 2.4% over the quarter. Production over the last four quarters was lower (-0.5%) than that of the previous four quarters.

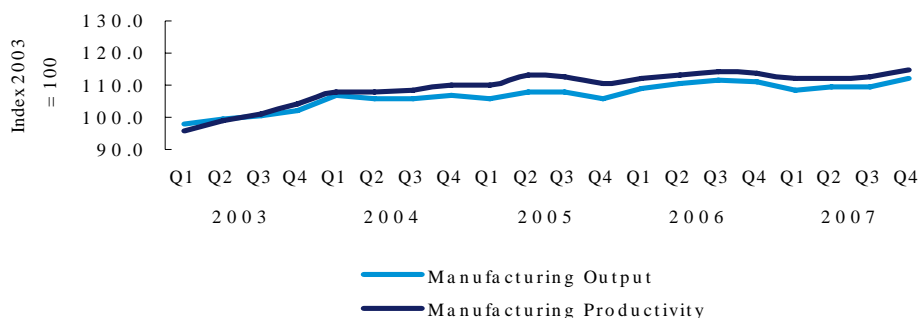
Northern Ireland's increased production over the year (1.3%) is greater than that recorded by the UK as a whole, which increased by 0.7% compared to the same quarter one year earlier. Production in the UK rose by 0.2% over the quarter.

## 3. Manufacturing

The Quarter 4 2007 estimates for the manufacturing sector (the main component of the production industries) show a rise of 2.3% on the previous quarter and an increase (1.1%) compared to the same period one year earlier. NI Manufacturing output over the last four quarters decreased by 0.6% compared to the previous period.

Manufacturing output in Northern Ireland increased by 2.3% over the quarter, the UK remained steady. Over the year manufacturing output in Northern Ireland increased by 1.1%, the UK reported an annual increase of 0.2%.

**Figure 1 – Comparison of manufacturing output with manufacturing productivity Q1 2003 – Q4 2007**



#### **4. Manufacturing Productivity**

The index of manufacturing productivity (which provides a measure of the number of units of output produced per person per hour) increased by 2.1% over the quarter and rose by 1.1% on the same quarter last year.

The most recent Quarterly Employment Survey seasonally adjusted figures published in March 2008 relating to December 2007 recorded a 0.2% increase in manufacturing employees (to 88,480). This is an increase of 0.7% compared to 12 months ago.

#### **5. Manufacturing Subsections**

**Over the quarter**, the index for the following industries showed increases: Basic Metals & Fabricated Metal Products (4.8%), Engineering & Allied Industries (4.1%), Food, Drink & Tobacco (2.1%) and Total Other Manufacturing (0.8%).

Over the same period, the index for the following industries showed decreases: Leather, Textiles & Textile Products (-2.7%) and Chemicals & Chemical Products (1.3%).

**Over the year**, the index for the following industries showed increases: Basic Metals & Fabricated Metal Products (19.9%), Engineering and Allied Industries (5.4%), Food, Drink & Tobacco (0.7%) and Chemicals & Chemical Products (0.7%).

Over the same period, the index for the following industries showed decreases: Leather, Textiles & Textile Products (-12.7%) and Total Other Manufacturing (-5.7%).

#### **6. Other Production**

The Electricity, Gas and Water Supply index increased by 3.5% compared to Quarter 3 2007, and rose by 2.1% compared to the same period one year earlier. Mining and Quarrying reported a decrease of 1.5% compared to the previous quarter however increased by 9.3% over the year.

#### **7. Market Sector Changes**

Between Quarter 3 2007 and Quarter 4 2007 all of the market sectors recorded increases, Investment Goods up 4.6%, Intermediate Goods up 1.6% and Consumer Goods up 1.1%.

Over the year Investment Goods showed an increase of 7.4% while Intermediate Goods decreased by 1.3% and Consumer Goods decreased by 1.1%

#### **8. Date of Next Publication**

The Northern Ireland Index of Production for Quarter 1 2008 will be published on Wednesday 14th July 2008.

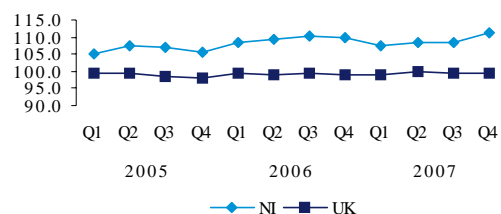
# Output of the Production Industries 2003=100, Seasonally Adjusted Chained Volume Index

# 2

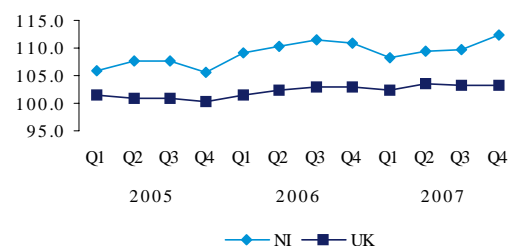
Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Notes to Editors).

	Production Industries			
	Production Industries	Manufacturing	Electricity, Gas & Water Supply	Mining & Quarrying
Sector	C+D+E	D	E	C
Weights	1000.0	883.7	101.5	14.8
2004	105.7	106.2	101.6	102.9
2005	106.2	106.8	101.7	104.8
2006	109.4	110.5	99.0	113.0
2007	108.8	109.9	96.6	128.9
Seasonally Adjusted				
2004 1	106.2	106.7	102.8	99.4
2	105.5	105.7	104.2	103.8
3	104.9	105.6	100.2	100.1
4	106.1	106.9	99.4	108.2
2005 1	105.0	105.8	99.6	91.0
2	107.6	107.8	106.5	104.7
3	107.0	107.8	100.1	106.7
4	105.3	105.7	100.4	116.8
2006 1	108.4	109.2	102.0	107.1
2	109.2	110.4	98.6	113.1
3	110.2	111.4	98.8	115.4
4	109.6	111.0	96.6	116.6
2007 1	107.4	108.2	97.7	131.1
2	108.2	109.4	94.8	127.5
3	108.5	109.6	95.3	129.4
4	111.1	112.2	98.6	127.4
Percentage change latest quarter on:				
Previous quarter				
	2.4	2.3	3.5	-1.5
Same quarter a year ago				
	1.3	1.1	2.1	9.3
Rolling annual change (%)				
	-0.5	-0.6	-2.4	14.0

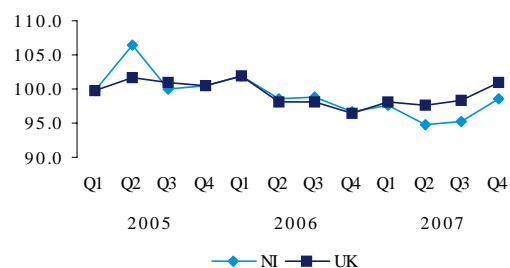
## Production



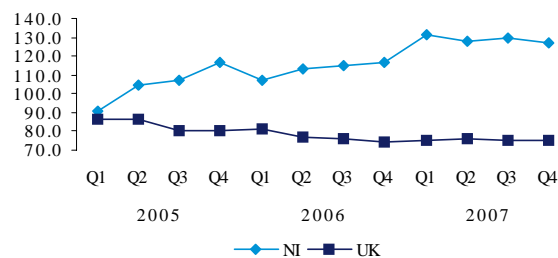
## Manufacturing



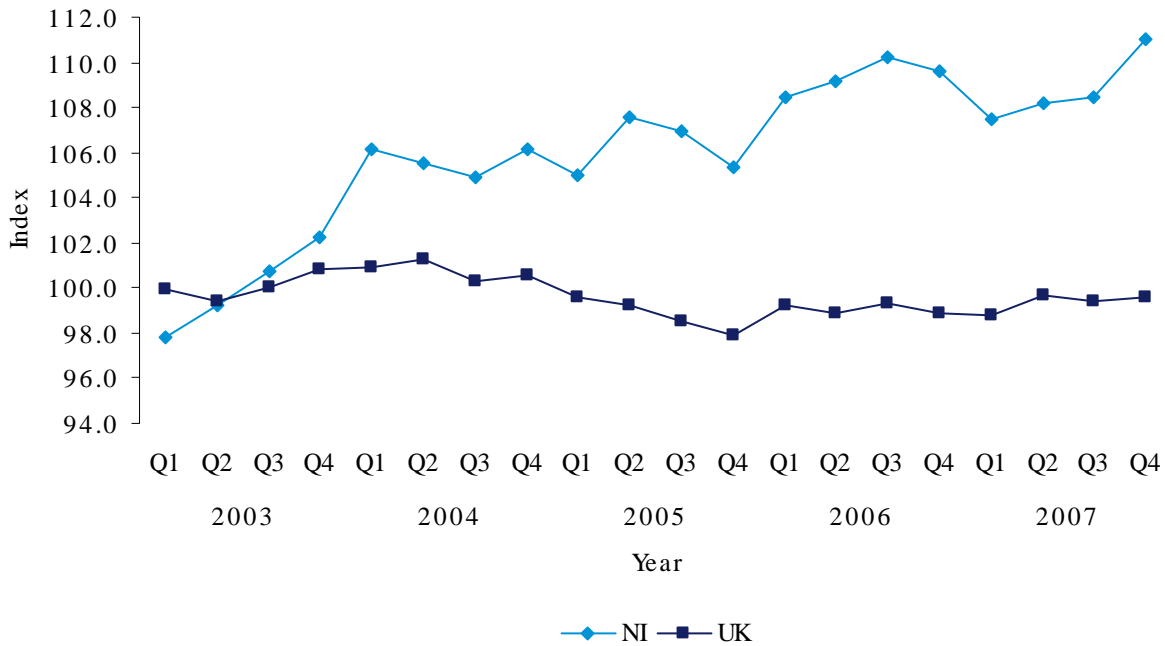
## Electricity, Gas & Water



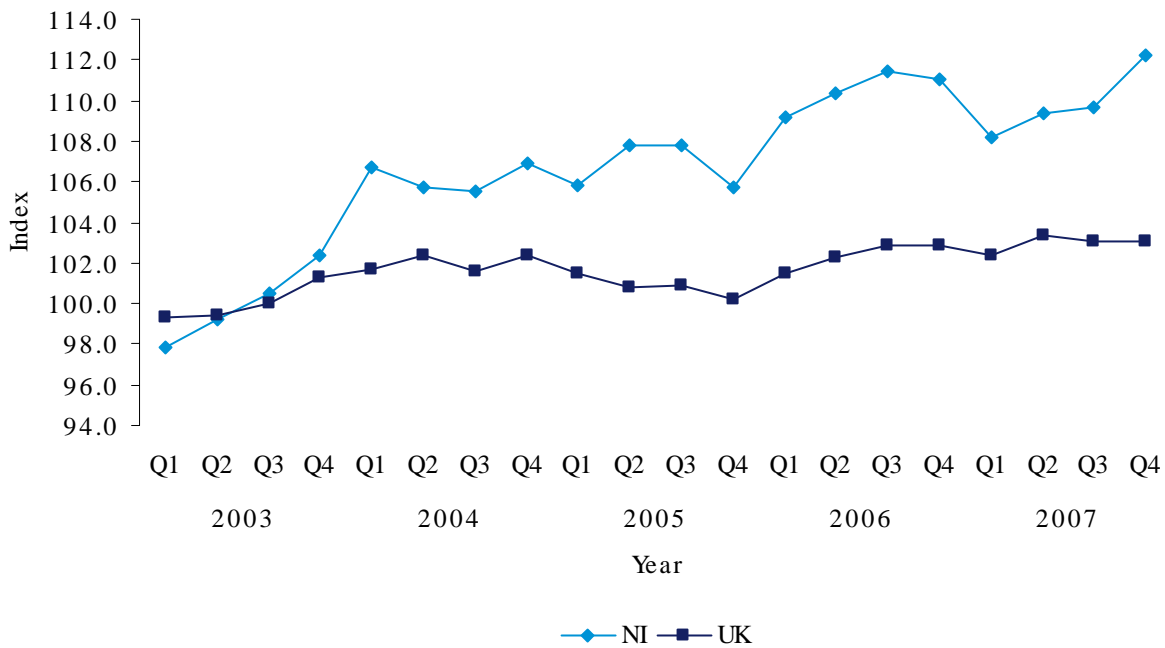
## Mining & Quarrying



## TOTAL PRODUCTION – Comparison of NI & UK Index



## MANUFACTURING OUTPUT – Comparison of NI & UK Index



# Manufacturing Subsections 2003=100 Seasonally Adjusted Chained Volume Index

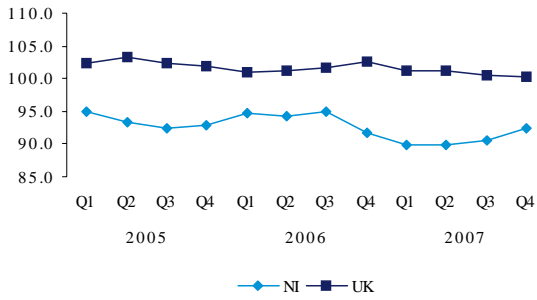
# 3

Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Notes to Editors).

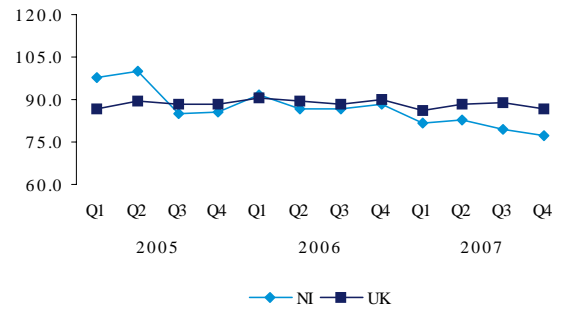
Sector	Food, Drink & Tobacco	Leather, Textiles & Textile Products	Chemicals & Chemical Products	Basic Metals & Fabricated Metal Products	Engineering and Allied Industries	Total Other Manufacturing
DA	DB+DC	DG	DJ	DK,DL,DM	DD, DE, DF, DH,DI, DN	
Weights	294.9	25.1	24.5	43.4	272.7	223.1
2004	97.9	99.9	103.1	115.6	106.6	116.0
2005	93.4	92.0	104.5	113.2	113.8	116.5
2006	93.9	88.4	111.1	120.9	114.9	127.3
2007	90.7	80.2	115.5	142.4	116.4	123.6
Seasonally Adjusted						
2004 1	98.8	104.4	107.2	119.1	106.3	115.3
2	97.6	95.9	103.6	115.3	104.5	117.4
3	97.5	97.1	102.6	115.7	106.2	114.8
4	97.7	102.4	99.2	112.4	109.2	116.4
2005 1	94.9	97.7	103.1	114.1	109.6	115.3
2	93.4	99.8	105.9	114.4	114.4	118.5
3	92.4	84.8	99.8	113.9	118.4	117.3
4	92.9	85.8	109.3	110.4	112.7	115.1
2006 1	94.7	91.6	105.8	110.4	114.8	123.5
2	94.3	86.9	110.9	124.0	116.3	124.2
3	94.9	86.9	113.7	120.4	114.7	130.0
4	91.8	88.2	113.9	128.8	113.9	131.6
2007 1	89.8	81.4	116.5	129.1	115.0	122.1
2	89.9	83.0	114.6	138.9	115.2	124.8
3	90.6	79.2	116.2	147.3	115.3	123.3
4	92.5	77.0	114.7	154.4	120.1	124.2
Percentage change latest quarter on:						
Previous quarter						
	2.1	-2.7	-1.3	4.8	4.1	0.8
Same quarter a year ago						
	0.7	-12.7	0.7	19.9	5.4	-5.7
Rolling annual* change (%)						
	-3.5	-9.3	4.0	17.8	1.3	-2.9

\* 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.

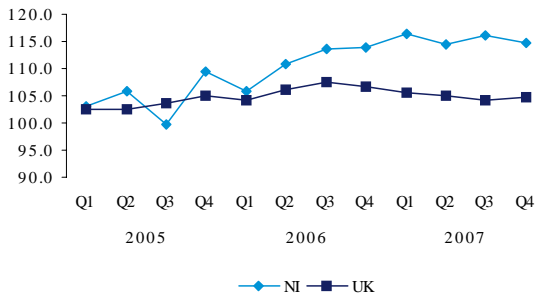
### Food, Drink & Tobacco



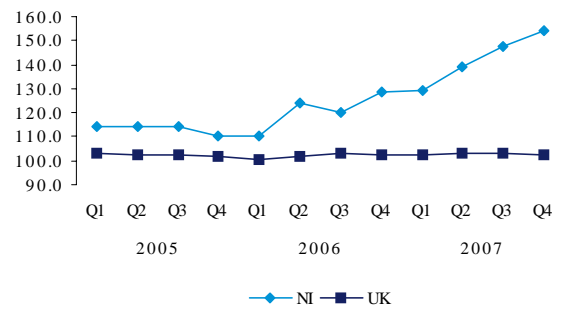
### Leather, Textiles & Textile Products



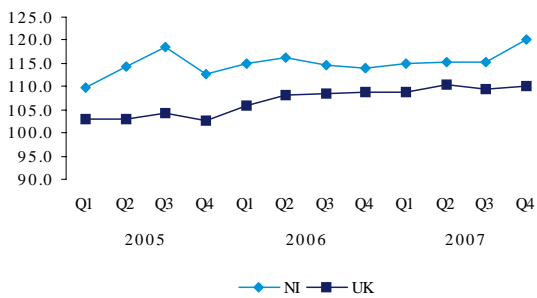
### Chemicals & Chemical Products



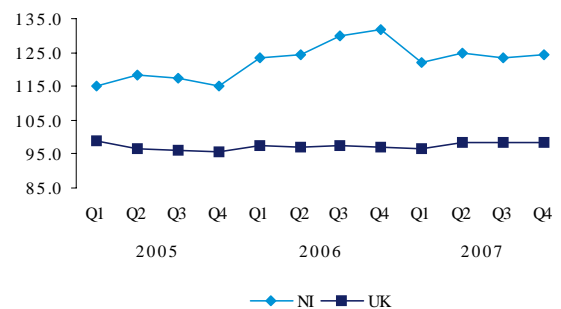
### Basic Metals & Fabricated Metal Products



### Engineering & Allied Industries



### Total Other Manufacturing



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Engineering & Allied Trades			
	Machinery & Equipment NES	Electrical & Optical Equipment	Transport Equipment
Sector	DK	DL	DM
Weights	57.4	109.2	106.0
2004	106.9	107.6	105.3
2005	116.8	124.3	101.3
2006	124.2	128.5	96.0
2007	136.9	132.3	88.9
Seasonally Adjusted			
2004 1	106.4	104.5	108.1
2	103.3	106.3	103.3
3	107.3	107.2	104.6
4	110.4	112.3	105.3
2005 1	111.7	117.2	100.7
2	122.0	121.3	103.3
3	126.7	130.4	101.5
4	107.0	128.4	99.7
2006 1	123.2	126.2	98.5
2	120.8	131.7	98.0
3	122.0	128.5	96.6
4	130.5	127.5	90.8
2007 1	132.1	131.1	89.2
2	133.5	132.9	87.0
3	138.9	130.7	86.7
4	143.2	134.4	92.8
Percentage change latest quarter on:			
Previous quarter			
	3.1	2.8	7.0
Same quarter a year ago			
	9.7	5.4	2.2
Rolling annual* change (%)			
	10.3	2.9	-7.4

Total Other Manufacturing Industries				
Wood & Wood Products	Pulp, Paper & Printing	Rubber & Plastic Products	Non-metallic Mineral Products	Other Manufacturing
DD	DE	DH	DI	DF+DN
16.9	51.5	91.3	48.7	14.6
103.7	103.0	131.6	108.0	105.0
103.2	99.0	131.1	112.8	115.5
111.6	97.1	150.7	122.2	123.2
115.7	95.2	137.9	126.2	134.9
103.3	100.8	131.8	108.5	99.0
105.0	105.6	133.6	107.3	106.3
103.9	102.2	129.6	107.3	104.0
102.6	103.3	131.3	109.0	110.8
102.0	97.7	129.6	111.4	115.8
102.0	100.8	133.6	115.3	115.7
106.9	98.7	132.7	111.8	116.9
101.7	98.7	128.3	112.7	113.8
102.9	97.4	148.2	113.7	117.2
107.2	96.0	146.2	119.1	122.3
114.7	97.1	153.4	127.9	124.8
121.6	97.8	154.9	128.3	128.3
119.3	97.9	129.8	129.7	137.4
117.5	94.4	142.0	126.5	126.6
112.2	95.0	138.7	124.5	135.6
113.7	93.3	141.0	124.3	139.8
1.4	-1.8	1.7	-0.1	3.1
-6.5	-4.6	-9.0	-3.1	9.0
3.7	-2.0	-8.5	3.3	9.5

Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Notes to Editors).

\* 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.

# Market Sector Analysis 2003=100

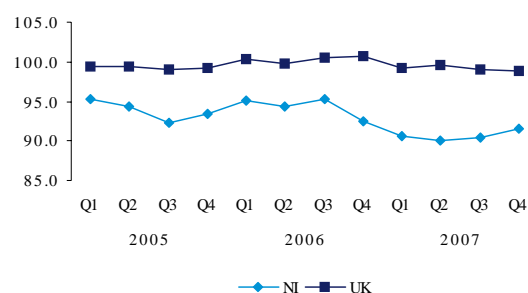
## Seasonally Adjusted Chained Volume Index

# 4

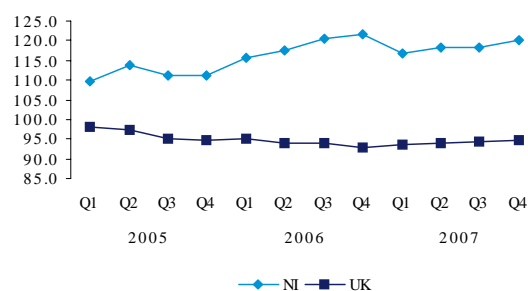
Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Notes to Editors).

Sector Weights	Market Sectors		
	Consumer Goods 338.7	Intermediate Goods 378.0	Investment Goods 283.3
2004	98.6	110.9	107.3
2005	93.9	111.5	114.0
2006	94.3	118.8	114.7
2007	90.6	118.3	117.8
Seasonally Adjusted			
2004 1	99.8	111.1	107.3
2	98.6	112.0	105.2
3	97.6	110.0	107.0
4	98.3	110.4	109.8
2005 1	95.4	109.7	110.2
2	94.4	113.9	115.0
3	92.4	111.3	118.6
4	93.3	111.1	112.1
2006 1	95.1	115.8	114.5
2	94.4	117.5	115.9
3	95.2	120.4	114.5
4	92.5	121.7	114.0
2007 1	90.6	116.7	115.3
2	90.1	118.4	116.2
3	90.5	118.1	117.1
4	91.5	120.0	122.5
Percentage change latest quarter on:			
Previous quarter	1.1	1.6	4.6
Same quarter a year ago	-1.1	-1.3	7.4
Rolling annual* change (%)	-3.9	-0.4	2.7

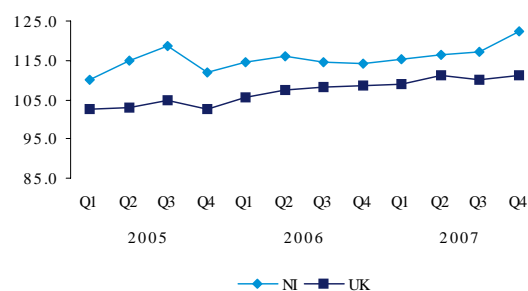
### Consumer Goods



### Intermediate Goods



### Investment Goods



\* 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.

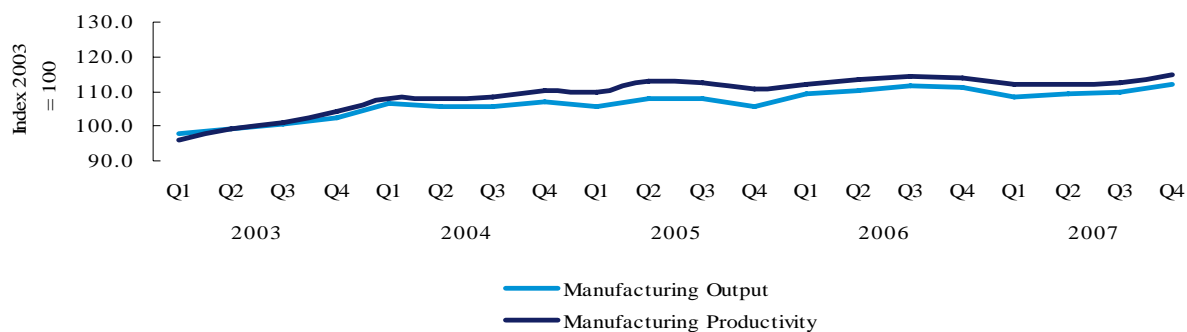
# Index of Manufacturing Productivity 2003=100

## Seasonally Adjusted Chained Volume Index

# 5

Figures are provisional and subject to revision to take account of more recent information and more up-to-date seasonal factors (see Notes to Editors).

Annual Averages		Quarterly Series	
<b>2003</b>	100.0	<b>2003 Q1</b>	96.0
		<b>Q2</b>	99.1
<b>2004</b>	108.5	<b>Q3</b>	100.9
		<b>Q4</b>	104.1
<b>2005</b>	111.6		
		<b>2004 Q1</b>	107.8
<b>2006</b>	113.3	<b>Q2</b>	107.9
		<b>Q3</b>	108.2
<b>2007</b>	112.9	<b>Q4</b>	110.0
		<b>2005 Q1</b>	110.0
		<b>Q2</b>	113.1
		<b>Q3</b>	112.5
		<b>Q4</b>	110.8
		<b>2006 Q1</b>	112.2
		<b>Q2</b>	113.2
		<b>Q3</b>	114.2
		<b>Q4</b>	113.7
		<b>2007 Q1</b>	111.9
		<b>Q2</b>	112.0
		<b>Q3</b>	112.6
		<b>Q4</b>	115.0



# Background Notes

## 6

**1.** The Northern Ireland Index of Production is designed to provide a general measure of changes in the output of the production industries. The Index is a weighted average of individual series. The overall production index is calculated by weighting together 160 class indices that describe the activity of an industry using the Standard Industrial Classification (SIC). Changes in output are not, however, available on a regular basis and proxy indicators have to be used. For most 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 sales or production, or the number employed are used.

**2.** The Index of Production for Northern Ireland has been rebased to 2003=100 and is now a chained volume index, in line with developments in the UK, Scotland and Wales.

The main changes in the 2003=100 series are:

- Each series has been rebased so that the average quarterly output in 2003 is equal to 100.

- The relative weights used to produce the aggregated industries are derived from Gross Value Added data collected from the 2003 Northern Ireland Annual Business Inquiry. Updated weights will more closely reflect current industry structure. Previous weights were derived from the 2002 Annual Business Inquiry.

- All indices were recalculated back to the first quarter of 2001 using the revised weights and data from the new sample. Also, all of the sales-based indicators have been deflated to constant 2003 prices using rebased Producer Price Indices.

- The survey remains a sample-based survey.

The sample amounts to almost 600 currently live contributors.

- The sample was obtained by stratifying companies by company size. All companies in the production sector with 40 or more employees are automatically chosen with a random sample of companies with less than 40 employees making up the remainder of the sample. It is proposed to continue to regularly update the sample to capture new firms and to allow for rotation of contributors.

- The underlying trend remains the same in the 2002=100 series as the 2003=100 series.

**3.** The aggregated production and manufacturing indices are weighted averages of the output indices for the component industrial sectors. The industrial sectors in the first table of Section 2 are calculated by weighting together 25 2-digit SIC divisions, which are in turn weighted averages of 57 group indices.

**4.** 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 seasonally adjusted estimates are given in Section 4 of this bulletin. It distinguishes between Consumer, Investment and Intermediate goods. The latter are described as 'intermediate' because they require further processing, perhaps by another industrial sector.

**5.** The Productivity index provides a measure of the number of units of output produced each man hour. The productivity index includes seasonally adjusted employees in employment, the 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). An index of man hours is calculated based on the number of employees in employment and average weekly hours. The index of manufacturing is divided by the index of man hours to produce the index of productivity.

**6.** All indices in this Statistics Bulletin are all seasonally adjusted chained volume indices. 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. In line with the UK and other UK regional indices, the NI indices are seasonally adjusted using X11 ARIMA software. Unadjusted data are available on request. Further details on the chain-linking methodology are available on the Statistics Research Branch web-site at [www.statistics.detini.gov.uk](http://www.statistics.detini.gov.uk).

**7.** 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.

**8.** Results, particularly for the latest quarter, are provisional and subject to revision as fuller information become available.

**9.** For Further Information:

AN ELECTRONIC VERSION OF THIS DOCUMENT IS AVAILABLE ON THE BRANCH WEBSITE AT:

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

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