

Statistical bulletin

# Index of Production, UK: December 2015

Movements in the volume of production for the UK production industries: manufacturing, mining and quarrying, energy supply, and water and waste management. Figures are seasonally adjusted.



Contact:  
Alaa Al-Hamad  
[indexofproduction@ons.gsi.gov.uk](mailto:indexofproduction@ons.gsi.gov.uk)  
+44 (0) 1633 455648

Release date:  
10 February 2016

Next release:  
09 March 2016

## Table of contents

1. [Main points](#)
2. [Index of Production headline figures](#)
3. [Quality of the Index of Production](#)
4. [Economic context](#)
5. [Gross domestic product \(GDP\) impact and components](#)
6. [Production and sectors supplementary analysis](#)
7. [Industry spotlight: IoP and manufacturing - a review of 2015](#)
8. [Background notes](#)

# 1 . Main points

Total production output is estimated to have decreased by 0.5% between Quarter 3 (July to Sep) 2015 and Quarter 4 (Oct to Dec) 2015. This decrease was larger than the forecasted decrease of 0.2% contained within the Gross Domestic Product: Preliminary Estimate, Quarter 4 (Oct to Dec) 2015.

The largest contribution to the total production quarterly decrease came from mining & quarrying, which decreased by 2.3%, while manufacturing output remained unchanged during the same period.

Total production output is estimated to have increased by 1.0% between 2014 and 2015. Of the 4 main sectors, manufacturing output was the only one to fall, decreasing by 0.2%.

Total production output is estimated to have decreased by 0.4% in December 2015 compared with December 2014. The largest contribution to the fall came from manufacturing, which decreased by 1.7%.

Total production output is estimated to have decreased by 1.1% between November 2015 and December 2015. There were decreases in 3 of the 4 main sectors, with mining & quarrying having the largest contribution, decreasing by 4.0%.

Manufacturing output decreased by 0.2% in December 2015 compared with November 2015. The largest contribution to the decrease came from the manufacture of wood, paper products & printing, which decreased by 2.1%.

In Quarter 4 (Oct to Dec) 2015, production and manufacturing were 9.8% and 6.5% respectively below their figures reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

## 2 . Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, December 2015. The IoP is one of the earliest indicators of growth and it measures output in the manufacturing (the largest component of production), mining & quarrying, energy supply and water supply & waste management industries. The production industries account for 14.9% of the [output approach to the measurement of gross domestic product](#).

IoP values are referenced to 2012 so that the average for 2012 is equal to 100. Therefore, currently an index value of 110 would indicate that output is 10% higher than the average for 2012. The index estimates are mainly based on a monthly business survey (MBS) of approximately 6,000 businesses, covering all the territory of the UK without geographical breakdown. The total IoP estimate and various breakdowns are widely used in private and public sector institutions. Care should be taken when using the month-on-month growth rates due to their volatility. All figures contained within this release are chained volume seasonally adjusted estimates, unless otherwise stated.

This release presents:

- the most recent IoP figures
- the economic context to the IoP
- GDP impact and components
- a supplementary analysis to the IoP
- spotlight
- background notes section including an assessment of the quality of the IoP, as well as an explanation of the terms used in this bulletin

Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from September 2013 to December 2015.

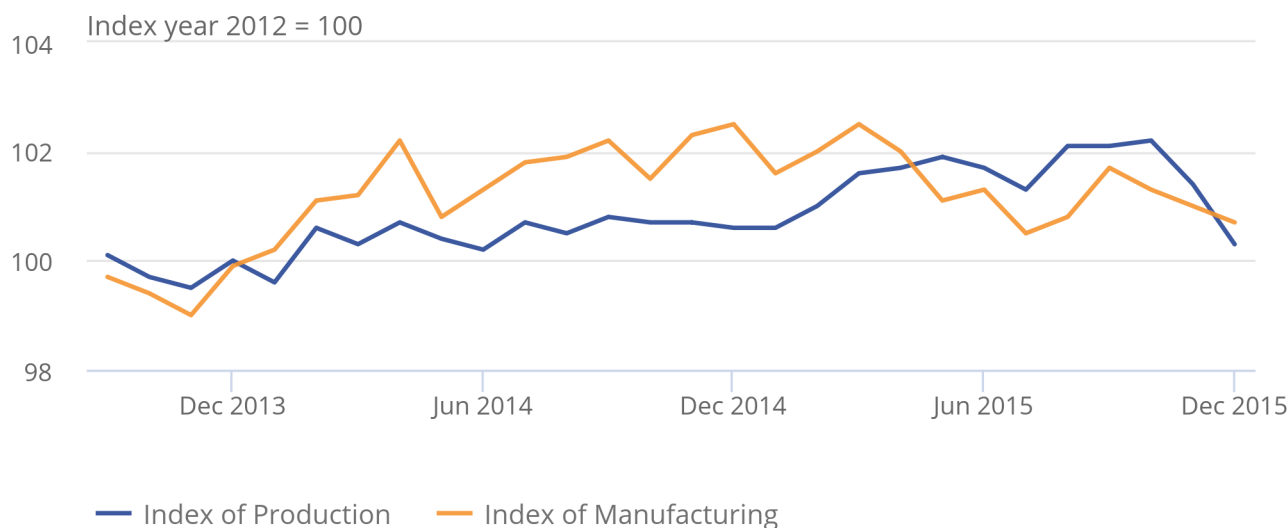
**Table 1: Index of Production main figures, December 2015, UK**

		% change			
	Index number (2012=100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Most recent month on previous month	Most recent 3 months on previous 3 months
Production	100.3	-0.4	0.6	-1.1	-0.5
Manufacturing	100.7	-1.7	-1.0	-0.2	0.0

Source: Office for National Statistics

**Figure 1: Seasonally adjusted production and manufacturing, September 2013 to December 2015, UK**

Figure 1: Seasonally adjusted production and manufacturing, September 2013 to December 2015, UK



Source: Monthly Business Survey (Production and Services) - Office for National Statistics

### 3 . Quality of the Index of Production

We have developed [guidelines for measuring statistical quality](#); these are based upon the 5 European Statistical System (ESS) quality dimensions. The IoP in its current form adheres to these requirements. One important dimension for measuring statistical quality is accuracy. That is, the extent to which the estimate measures the underlying "true" value of the output growth (of the production industries) in the UK for a particular period. Although the IoP meets its legal requirements for statistical accuracy, still as in all survey-based estimates, by definition, its estimates are subject to statistical uncertainty or errors. These errors consist of 2 main elements; the sampling error and the non-sampling error.

For many well-established statistics we measure and publish the sampling error associated with the estimate, using this as an indicator of accuracy. The IoP however, is constructed from a variety of data sources, some of which are not based on random samples. As a result, we currently do not publish a measure of the sampling error associated with the IoP underlying data, mainly the monthly business survey (MBS). However, research is currently under way to attempt to measure the standard error and the results of this will be published on completion.

Non-sampling errors are not easy to quantify but can be caused by coverage issues, measurement, processing and non-response. The response rate gives an indication of the likely impact of non-response error on the survey estimates. From January 2015, the MBS response rates for data included in the IoP publication have been published in the background notes 'methods' section of the statistical bulletin. This is to give further information of the percentages of the amount of turnover and questionnaire forms returned. We publish [MBS historical response rates back to 2010 \(34.5 Kb Excel sheet\)](#).

A further dimension of measuring accuracy is reliability, which can be measured using evidence from analyses of revisions to assess the closeness of early estimates to subsequent estimated values. Revisions are an inevitable consequence of the trade-off between timeliness and accuracy.

Figures for the most recent months are provisional and subject to revision in light of:

- late responses to surveys and administrative sources
- forecasts being replaced by actual data
- revisions to seasonal adjustment factors, which are re-estimated every month and reviewed annually

Revisions to the IoP are typically small (around 0.1 to 0.2 percentage points), with the frequency of upward and downward revisions broadly equal.

Further information on the most recent revisions analysis can be found in the revisions to IoP section and in the revision triangles section in the bulletin background note.

It should be noted that care should be taken when using the month-on-month growth rates, due to their volatility. Further information on the latest quality and methodology information (QMI) for the IoP can be found in the [QMI paper \(247.9 Kb Pdf\)](#). Furthermore, the IoP is constantly being reviewed and improved for accuracy and uncertainty as part of the GDP(O) improvement project; further details of improvements are published each year as part of a suite of Blue Book articles. A full list of the GDP(O) improvement project articles can be found on the [Improvements](#) page of our website.

## 4 . Economic context

Production output declined for a second consecutive month in December 2015, at a faster rate than in November 2015. Following positive quarterly growth in the first 3 quarters of 2015 the contraction in the last 2 months of the year led to a contraction in production output in Quarter 4 (Oct to Dec) 2015.

Throughout 2015, manufacturing experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being lower than those experienced at the beginning of the year (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

From Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2015, production and its main components followed different paths (Figure 2). Over this period, the electricity, gas, steam & air conditioning & water supply, sewerage and waste management sectors grew at compound average growth rates of 0.2% and 0.5% per quarter while production as a whole contracted at a compound average growth rate of 0.1% per quarter. Over the same period manufacturing was relatively flat at 0.0%, while mining & quarrying contracted faster than production at a negative compound average growth rate of 1.0% per quarter. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

During the UK economy's downturn (Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009), production and all of its components contracted. However, the path of mining & quarrying was broadly unaffected by the economy's downturn with its output contracting only slightly faster than prior to the downturn (Figure 2). From the economy's peak in Quarter 1 (Jan to Mar) 2008 to the economy's trough in Quarter 2 (Apr to June) 2009, manufacturing experienced the largest contraction (12.3%) followed by total production (10.6%), water supply, sewerage & waste management (8.8%), mining & quarrying (7.3%) and electricity, gas, steam & air conditioning (3.5%).

Following the economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015), total production remained broadly stable while manufacturing and water supply, sewerage & waste management returned to growth at compound average growth rates of 0.2% and 0.6% respectively. However, over the same period mining & quarrying and electricity, gas, steam & air conditioning continued to contract at compound average growth rates of 1.1% and 0.4%, per quarter.

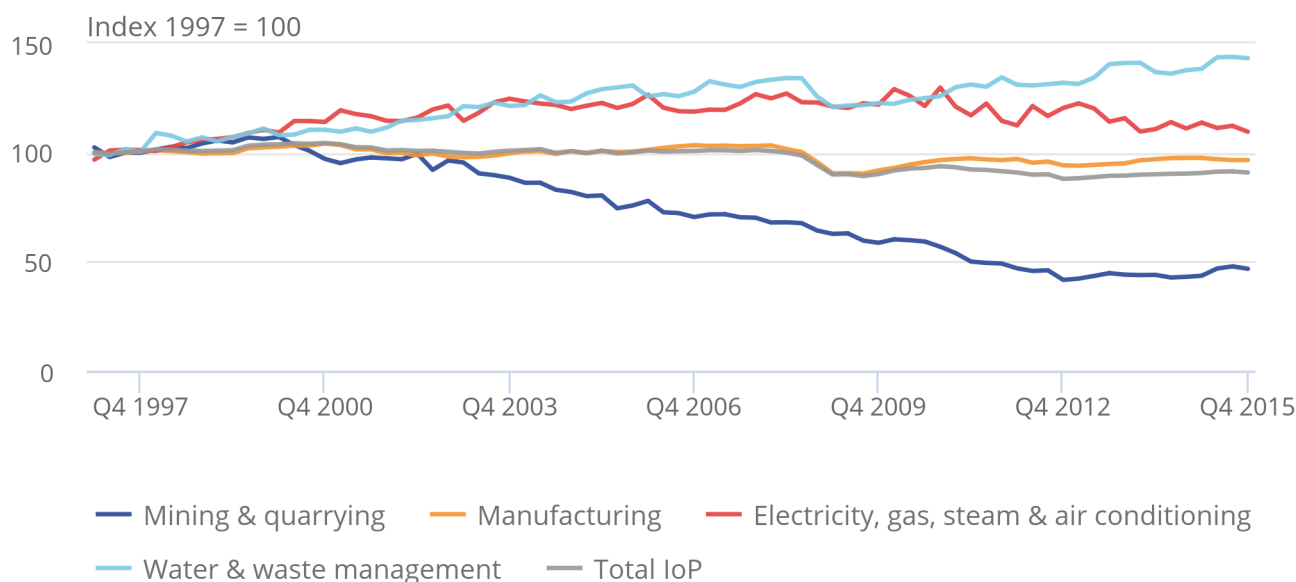
In Quarter 4 (Oct to Dec) 2015 production and manufacturing remained below their Quarter 1 (Jan to Mar) 2008 levels by 9.8% and 6.5%, respectively. Moreover, in Quarter 4 (Oct to Dec) 2015 mining & quarrying and electricity, gas, steam & air conditioning output, which continued to decline following the downturn, were 31.2% and 12.2% below their respective values in Quarter 1 (Jan to Mar) 2008. Water supply, sewerage & waste management remains the only main-sector within production to have surpassed its value in Quarter 1 (Jan to Mar) 2008, by 7.5%, as of Quarter 4 (Oct to Dec) 2015.

Headline GDP surpassed its pre-downturn peak in Quarter 2 (Apr to June) 2013 and services remains the only headline industry grouping to have achieved this. This is consistent with the historical trend of services growing at a faster rate than production and manufacturing, despite the fact that productivity in the production industries (manufacturing in particular) has on average grown at a faster rate than in the service industries since 1997 (more information can be found in [Labour Productivity, Quarter 3 \(July to Sep\) 2015](#)). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from 16.5% to 9.8% between 1997 and 2014 ([Labour Market Statistics, January 2016, reference table EMP13](#)).

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices) and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by 10.8% in the year to December 2015, from a fall of 13.1% in the year to November 2015. Output prices have also experienced deflation, falling by 1.2% in the year to December 2015. With crude oil impacting input prices, this feeds through to petroleum products, contributing to the decrease in their output prices (more information can be found in [Producer Price Index, December 2015](#)).

**Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2015, UK**

Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2015, UK



**Source:** Office for National Statistics

**Notes:**

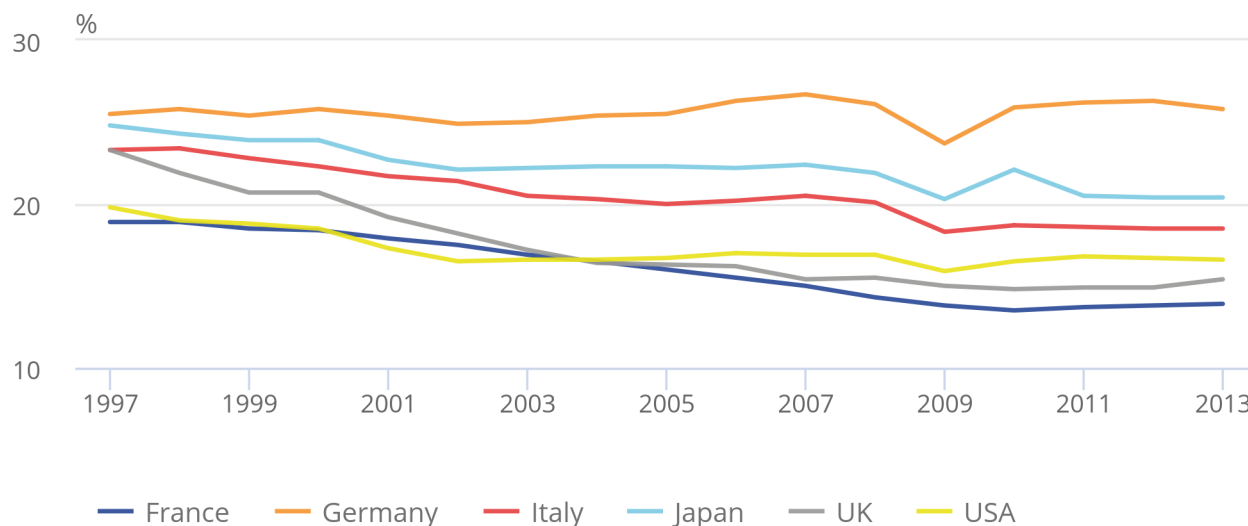
1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

Figure 3 shows the share of nominal gross value added (GVA) accounted for by production in the UK and a selection of other major economies (more information on data for France, Germany, Italy, Japan and the USA can be found on the [Organisation for Economic Co-operation and Development \(OECD\) website](#)). In 1997, the share of nominal GVA accounted for by production in the UK was 23.3%, around the middle of the range relative to the other economies. By 2013, the UK had become relatively less reliant on production, as its share fell to 15.4% of nominal GVA.

The same trend was observed in manufacturing, where the share of nominal GVA fell from 18.4% in 1997 to 10.8% in 2013. Moreover, from 1997 to 2013 the composition of production in the UK changed slightly, with the share of production attributed to manufacturing decreasing from 78.8% in 1997 to 69.8% in 2013.

**Figure 3: Production as a percentage of nominal GVA in comparable economies to the UK, 1997 to 2013**

Figure 3: Production as a percentage of nominal GVA in comparable economies to the UK, 1997 to 2013



Source: Office for National Statistics, Organisation for Economic Co-operation and Development (OECD)

**Notes:**

1. OECD data correct at 5th February 2016.

## 5 . Gross domestic product (GDP) impact and components

In this release, the earliest period open for revision was January 2015, in line with the [National Accounts revisions policy \(41.6 Kb Pdf\)](#).

The [preliminary estimate of GDP](#), published on 28 January 2015, contained a forecasted decrease of 0.2% for production in Quarter 4 (Oct to Dec) 2015. This release of data estimates that production decreased by 0.5% between Quarter 3 (July to Sep) 2015 and Quarter 4 (Oct to Dec) 2015. The decrease in IoP was larger than forecasted primarily due to revisions in 2 sectors due to the receipt of revised data to replace early estimates submitted by the Department of Energy and Climate Change (DECC). Firstly, the fall in mining & quarrying was revised down from a decrease of 1.4% to a decrease of 2.3% due to a revision to the extraction of crude petroleum & natural gas sub-sector. Secondly, the forecasted decrease of 0.2% in the electricity, gas, steam & air conditioning sector was revised down to a decrease of 2.4%. Due to the weight of the production industries within the economy, the impact on the recently published [GDP preliminary estimate](#) is less than 0.1 percentage points.



The estimates for the production industries are generally the first of the main components for the output approach to the measurement of GDP to be published (agriculture, [construction](#) and [services](#) are the other components). A forecast for all the components are available for [Quarter 4 \(Oct to Dec\) 2015](#). Details of the data already published can be found in Table 2. The [Retail Sales Index](#) reported in Table 2 is not a direct component of the output approach to measuring GDP. It does, however, feed into estimates of GDP in 2 ways. Firstly, it feeds into the services industries when GDP is measured from the output approach. Secondly, it is a data source used to measure household final consumption expenditure which feeds into GDP estimates when measured from the expenditure approach.

Output in the construction industry for December 2015 will be published on 12 February 2016 and services output for the same period on 25 February 2016.

**Table 2: Components of GDP, December 2015, UK**

Publication	Percentage of GDP <sup>4</sup>	Release date	Month or quarter of GDP <sup>2</sup>	Most recent quarter on a year earlier <sup>3</sup>	Most recent quarter on the previous quarter	% change	
						Most recent month on the same month a year ago	Most recent month on the previous month
Index of Production <sup>1</sup>	14.9	10 Feb	Dec	..	..	-0.4	-1.1
			Q4 2015	0.6	-0.5	..	..
			Q3 2015	1.2	0.1	..	..
Construction	5.9	15 Jan	Nov	-0.1	-1.4	-1.1	-0.5
			Q3 2015	1.0	-1.9	..	..
Index of Services	78.6	28 Jan	Nov	2.3	0.6	2.3	0.2
			Q3 2015	2.4	0.6	..	..
Retail Sales		22 Jan	Dec	..	..	2.6	-1.0
			Q4 2015	3.7	1.1	..	..
			Q3 2015	4.9	0.9	..	..
Agriculture	0.7		Q4 2015	-1.8	0.6	..	..

Source: Office for National Statistics

Notes:

- 1 The data for the index of production reflects the latest revisions published as part of this release.
2. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).
3. Any apparent inconsistencies between this table and the latest GDP estimate are due to rounding.
4. 'Percentage of GDP' column may not add up to 100 due to rounding.

## 6 . Production and sectors supplementary analysis

**Table 3: Headline growth rates and contributions for the Index of Production, December 2015, UK**

Description	% of production	Month on same month a year ago growth (%)	Month on previous month growth (%)	Quarter on previous quarter growth (%)
IoP	100.0	-0.4	-1.1	-0.5
Sector B	13.5	7.4	-4.0	-2.3
Division 06	10.6	14.3	-4.6	-2.5
Sector C	69.1	-1.7	-0.2	0.0
Sector D	9.3	-6.6	-5.4	-2.4
Sector E	8.1	5.7	0.6	-0.4

Source: Office for National Statistics

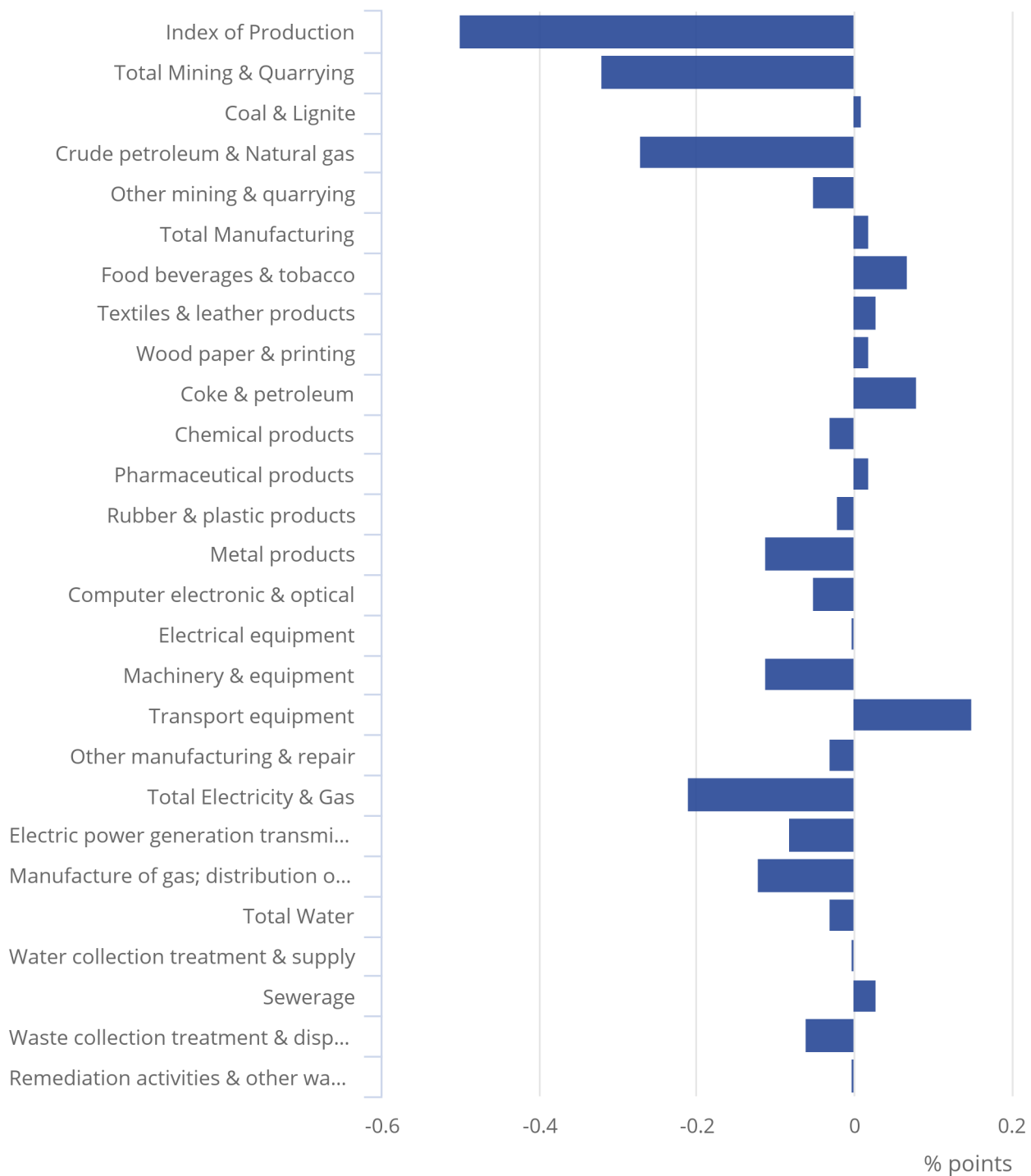
Notes:

1. Headline figures for the Index of Production are: +A10Total Index of Production; Sector B Mining & quarrying; and within this Division 06 Oil & gas extraction; Sector C Manufacturing; Sector D Electricity, gas, steam & air conditioning; and Sector E Water supply, sewerage & waste management.



**Figure 4: Contribution to production percentage growth, between Quarter 3 (July to Sep) 2015 and Quarter 4 (Oct to Dec) 2015, UK**

Figure 4: Contribution to production percentage growth, between Quarter 3 (July to Sep) 2015 and Quarter 4 (Oct to Dec) 2015, UK



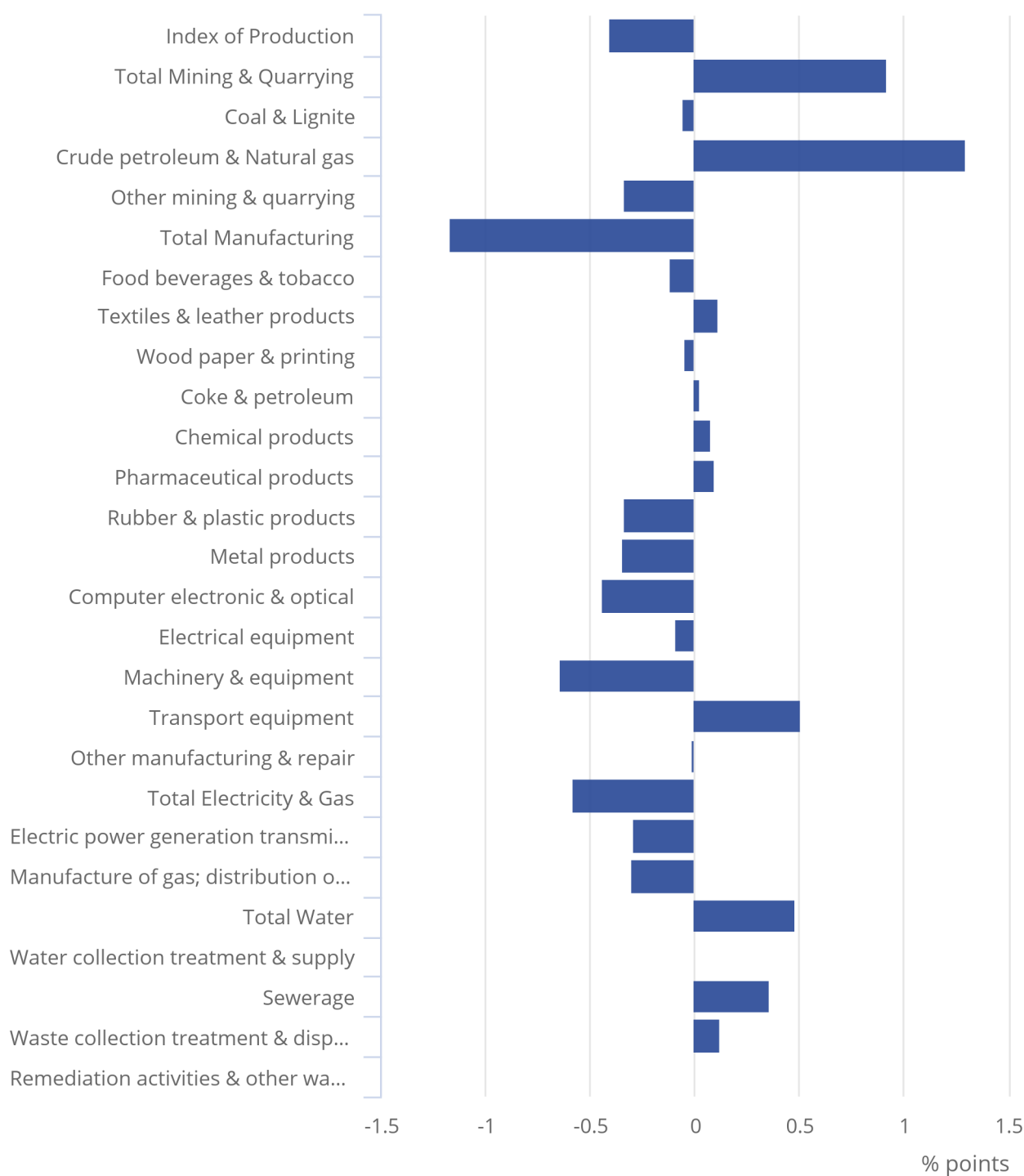
**Source: Monthly Business Survey (Production and Services) - Office for National Statistics**

**Notes:**

1. Growth rates can be found in the attached IoP 5 tables.

**Figure 5: Contribution to production percentage growth, between December 2014 and December 2015, UK**

Figure 5: Contribution to production percentage growth,  
between December 2014 and December 2015, UK



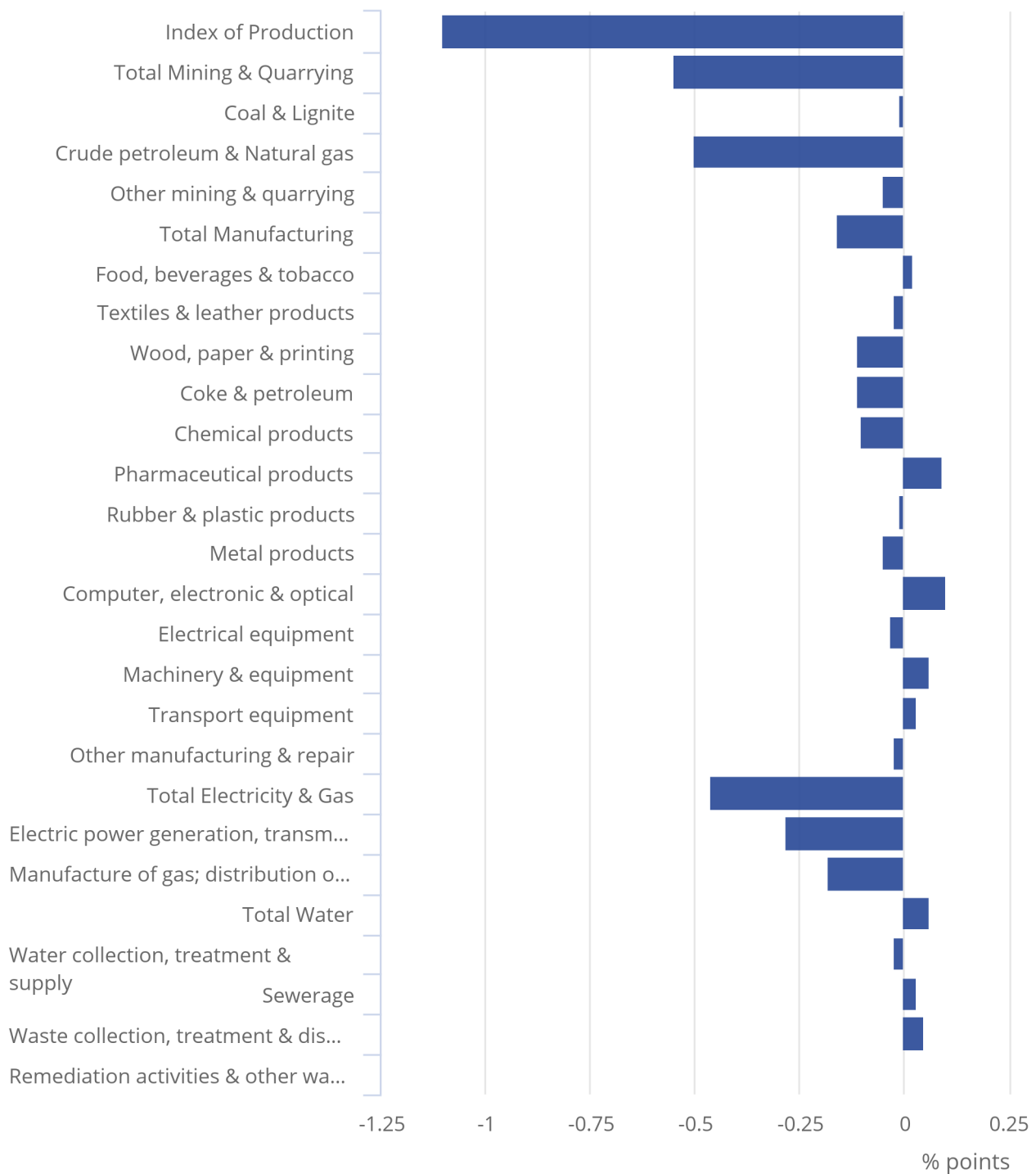
**Source: Monthly Business Survey (Production and Services) - Office for National Statistics**

**Notes:**

1. Growth rates can be found in the attached IoP 5 tables.

**Figure 6: Contribution to production percentage growth, between November 2015 and December 2015, UK**

Figure 6: Contribution to production percentage growth,  
between November 2015 and December 2015, UK





Notes:

1. Growth rates can be found in the attached IoP 5 tables.

## Total production

Total production output decreased by 0.5% in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015 (Table 3). This decrease was larger than the forecasted decrease of 0.2% contained within the recently published [Gross Domestic Product: Preliminary Estimate, Quarter 4 \(Oct to Dec\) 2015](#). This was due to downward revisions to the mining & quarrying and electricity, gas, steam & air conditioning sectors, caused by the receipt of new revised data to replace early estimates submitted by the Department of Energy and Climate Change (DECC).

The quarterly decrease in total production reflected decreases of 2.3% in mining & quarrying output; 2.4% in electricity, gas, steam & air conditioning output and 0.4% in water supply, sewerage & waste management. Manufacturing growth was flat at 0.0% (Table 3).

In 2015, total production output increased by 1.0% compared with 2014. There were increases in 3 of the 4 main sectors, with the largest contribution to the increase coming from mining & quarrying, which increased by 6.6% and contributed 0.9 percentage points to total production. This was followed by increases in water supply, sewerage & waste management, which increased by 3.1%; and in electricity, gas, steam & air conditioning output, which increased by 0.3%. The only main sector to decrease was manufacturing, which decreased by 0.2% compared with 2014 and contributed 0.1 percentage points to total production. Further details about the manufacturing growth in 2015 can be found in the industry spotlight section.

Total production output decreased by 0.4% in December 2015 compared with December 2014 (Table 3). There were decreases in 2 of its 4 main sectors. The largest contribution came from manufacturing, which decreased by 1.7% and contributed 1.2 percentage points to total production. Output in the electricity, gas, steam & air conditioning sector decreased by 6.6% and contributed 0.6 percentage points to total production. These decreases were largely offset by increases in mining & quarrying, which increased by 7.4% and contributed 0.9 percentage points to total production and in water supply, sewerage & waste management, which increased by 5.7% and contributed 0.5 percentage points to total production (Figure 5).

Between November 2015 and December 2015, total production decreased by 1.1% following a fall of 0.8% in the previous month (Table 3). This decrease in total production is larger than the forecasted fall of 0.2% contained within the GDP preliminary estimate due to downward revisions to both mining & quarrying and electricity, gas, steam & air conditioning sectors.

There were decreases in 3 of the 4 main sectors, with the largest contributions coming from mining & quarrying output, which decreased by 4.0% and contributed 0.6 percentage points and electricity, gas, steam & air conditioning output, which decreased by 5.4% and contributed 0.5 percentage points to total production. This was followed by a decrease of 0.2% in manufacturing, which contributed 0.2 percentage points to total production. The only main sector to increase was water supply, sewerage & waste management, which increased by 0.6% and contributed 0.1 percentage points to total production (Figure 6).

## Manufacturing

Manufacturing growth remained unchanged at 0.0% in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015. This estimate was unchanged from the forecast contained within the recent preliminary estimate of GDP. Output increased in 6 of the 13 manufacturing subsectors. The manufacturing subsector with the largest upward contribution to total production output was the manufacture of transport equipment, which increased by 1.7% and contributed 0.2 percentage points to total production (Figure 4). This was the fifth consecutive quarterly increase since September 2014.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015 was [machinery & equipment not elsewhere classified](#). This sub-sector decreased by 2.8% with a contribution of 0.1 percentage points to total production. This is the 6th consecutive quarterly decrease since June 2014.

Manufacturing output decreased by 1.7% between December 2014 and December 2015 and provided a contribution of 1.2 percentage points to total production. Output decreased in 8 of the 13 manufacturing subsectors compared with a year ago (Figure 5). The manufacturing subsector with the largest downward contribution to total production output was the manufacture of machinery & equipment not elsewhere classified which decreased by 13.5% and contributed 0.6 percentage points to total production. This was the 13th consecutive decrease since November 2014 and anecdotal evidence suggested that there was a general decrease across the industry compared with a year ago.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production compared with a year ago was the manufacture of transport equipment. This sub-sector increased by 5.9% and contributed 0.5 percentage points to total production, the 16th consecutive increase since August 2014. The largest contribution to the growth within this sub-sector came from the manufacture of motor vehicles, trailers & semi trailers, which increased by 7.6% and contributed 0.4 percentage points to total production.

Manufacturing output decreased by 0.2% between November 2015 and December 2015, the third consecutive decrease since September 2015. There were decreases in 8 of the 13 manufacturing sub-sectors (Figure 6). The manufacturing sub-sector with the largest downward contribution to total production was the [manufacture of wood, paper products & printing](#), which decreased by 2.1% and contributed 0.1 percentage points to total production. This followed a rise of 1.8% in the previous month.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production was the manufacture of computer, electronic & optical products, which increased by 2.4% and contributed 0.1 percentage points to total production. This followed a decrease of 0.6% in the previous month. Anecdotal evidence cited increased sales and exports as contributing factors.

## Mining & quarrying

Mining & quarrying output decreased by 2.3% in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015 with a contribution of 0.3 percentage points to total production. This decrease was larger than forecasted within [the latest preliminary estimate of GDP](#). The sub-sector with the largest contribution to this quarterly decrease was the extraction of crude petroleum & natural gas, which decreased by 2.5% and contributed 0.3 percentage points to total production (Figure 4).

Mining & quarrying output increased by 7.4% between December 2014 and December 2015 and contributed 0.9 percentage points to total production. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which increased by 14.3% and contributed 1.3 percentage points to total production (Figure 4). Anecdotal evidence suggested limited maintenance to oil and gas facilities this year, in comparison with the previous year, was a contributing factor.

Mining & quarrying output decreased by 4.0% in December 2015 compared with November 2015, having decreased by 1.4% the previous month. The sub-sector with the largest contribution to the fall was the extraction of crude petroleum & natural gas, which decreased by 4.6% and contributed 0.5 percentage points to total production (Figure 5).

## **Electricity, gas, steam & air conditioning**

Electricity, gas, steam & air conditioning output decreased by 2.4% in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015, having increased by 0.9% the previous quarter (Figure 4). This decrease was larger than the forecasted decrease of 0.2% contained within the [recent preliminary estimate of GDP](#). Downward revisions to this sector's initial forecast were submitted by the Department of Energy and Climate Change (DECC), caused by the receipt of new data to replace early estimates. This fall reflected a decrease in output in both of its subsectors, with the largest contribution coming from the manufacture of gas & distribution of gaseous fuels through mains, which decreased by 5.5% and contributed 0.1 percentage points to total production. The warmer than average temperature was cited as a contributing factor to the fall in both subsectors.

Electricity, gas, steam & air conditioning output decreased by 6.6% in December 2015 compared with December 2014, contributing 0.6 percentage points to total production (Figure 5). This followed three consecutive increases since August 2015. This reflected decreases in output in both of its sub-sectors; the manufacture of gas & distribution of gaseous fuels through mains and electric power generation, transmission & distribution decreased by 13.2% and 4.4% respectively with each contributing 0.3 percentage points to total production. Evidence cited the warmer than average temperature in December 2015 as a contributing factor.

Electricity, gas, steam & air conditioning output decreased by 5.4% in December 2015 compared with November 2015 and contributed 0.5 percentage points to total production (Figure 6). This reflected a decrease in output in both of its sub-sectors; the largest contribution came from electric power generation, transmission and distribution, which decreased by 4.3% and contributed 0.3 percentage points to total production (Figure 5). Evidence suggested that the temperature in December 2015, which was 4.1 degrees Celsius warmer than the long term average (source [Met office](#)) contributed to the decrease in demand.

## **Water & waste management**

Water supply, sewerage & waste management output decreased by 0.4% in Quarter 4 (Oct to Dec) 2015 compared with Quarter 3 (July to Sep) 2015 with a negligible contribution to total production (Figure 4). This decrease was the same as the forecasted decrease contained within the [recent preliminary estimate of GDP](#). The largest contribution to the decrease came from waste collection, treatment & disposal activities, which decreased by 1.6% and contributed 0.1 percentage points to total production.

Water supply, sewerage & waste management output increased by 5.7% in December 2015 compared with December 2014 and contributed 0.5 percentage points to total production. This reflected increases in 3 of its 4 sub-sectors' output (Figure 5), with the largest contribution coming from sewerage, which increased by 16.3% and contributed 0.4 percentage points to total production.

Water supply, sewerage & waste management output increased by 0.6% between November 2015 and December 2015 and contributed 0.1 percentage points to total production. This increase reflected increases in 3 of its 4 sub-sectors. The largest contribution to the increase came from waste collection, treatment & disposal activities, which increased by 1.3% and contributed 0.1 percentage points to total production, having decreased by 2.7% in the previous month (Figure 6).

## Revisions to loP

Revisions to the Index of Production follow the [National Accounts Revisions policy \(41.6 Kb Pdf\)](#). Revisions are caused by a number of factors including, but not limited to revisions to source data due to late responses to the Monthly Business Survey (MBS), actual data replacing forecast data and revisions to seasonal factors that are re-estimated every period.

We produce revisions triangles of production and manufacturing growth to provide users with one indication of the reliability of this important indicator. Statistical tests are performed on the average revision to test if it is statistically significantly different from zero. Further information can be found in background note 6.

In this release of data, the first period open for revision was January 2015. There were no revisions to loP month-on-month growth rates greater than 0.1 percentage points. Further details on the revisions to loP components can be found in the IOP5R tables, located within the [data section](#) of this release.

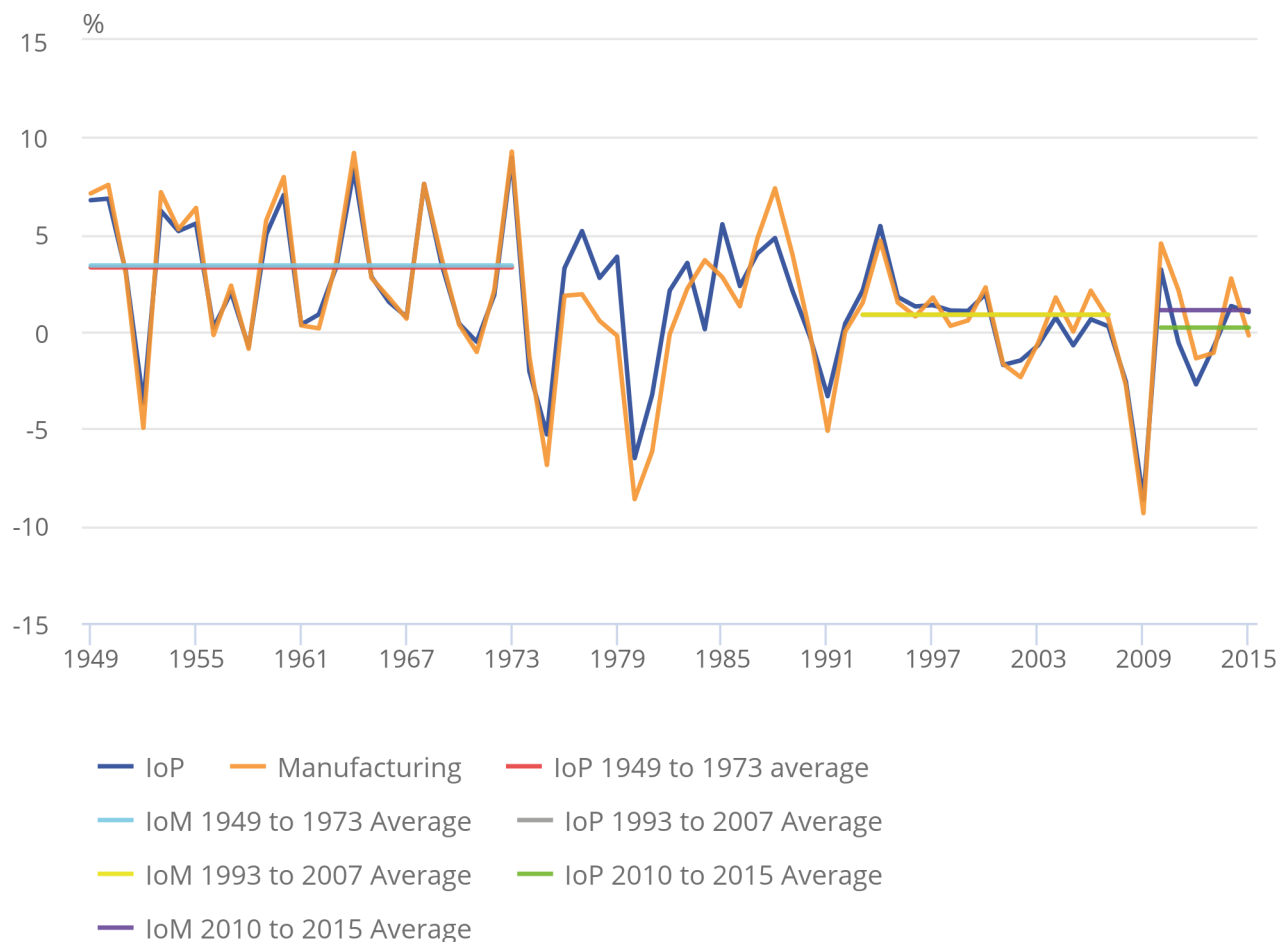
## 7 . Industry spotlight: loP and manufacturing - a review of 2015

In 2015 the index of production (loP) grew for a second consecutive year. However the growth of 1.0% in 2015 was slightly slower than the 1.3% growth seen in 2014. Despite the slight slowdown in growth, output grew faster than the compound average growth rate prior to the downturn (0.9% per year from 1993 to 2007) and following the downturn (at 0.2% per year from 2010 to 2015). Even though the loP grew in 2015, manufacturing which has the largest weight in production (69.1% as of 2012) contracted by 0.2% in 2015, following a growth of 2.7% in 2014. The contraction seen by manufacturing in 2015 is below the sector's pre-downturn and post-downturn compound average growth rates of 0.9% and 1.1% per year, respectively. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

Figure 7 plots annual growth rates of production and manufacturing since 1949, and shows that the growth of the two series has been more subdued in the decade prior to the downturn and post-downturn compared with the compound average growth rate from 1949 to 1973, when production accounted for a much higher share of total Gross Value Added (GVA) ([An International Perspective on the UK - Gross Domestic Product](#)). Production and manufacturing growth is shown to have decoupled recently; in the historical averages shown the two series were more closely aligned. There was a period of substantial divergence in the late 1970s to late 1980s which can be attributed to strong compound average growth rate in the mining & quarrying and the electricity, gas, steam & air conditioning sectors over the period.

**Figure 7: IoP and manufacturing annual growth, 1949 to 2015, UK**

Figure 7: IoP and manufacturing annual growth, 1949 to 2015, UK



**Source: Monthly Business Survey (Production and Services) - Office for National Statistics**

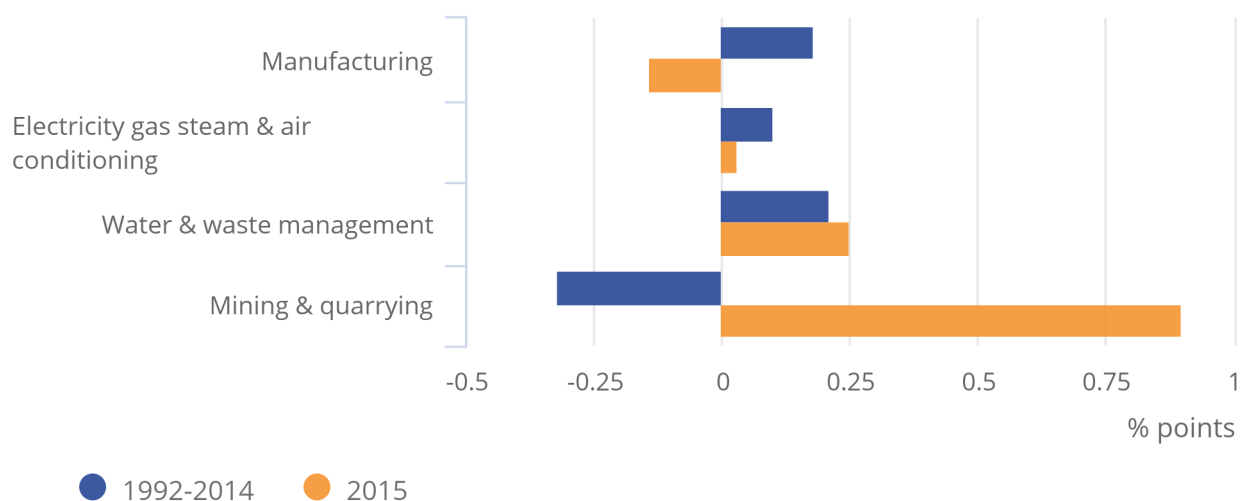
**Notes:**

1. The 1993-2007 averages for IoP and manufacturing have differences of 1 decimal place, data can be viewed by downloading the chart.

Figure 8 breaks down total production growth into the contributions from its main sectors, for both the latest year and the long run average (from 1992 to 2014). From 1992 to 2014 mining & quarrying, on average, made a negative contribution to production at 0.3 percentage points per year. However in 2015 the sector had the largest positive contribution to production at 0.9 percentage points, which was the first positive contribution to growth from the sector since 1999. Water supply, sewerage & waste management and electricity, gas, steam & air conditioning output also made positive contributions to production growth in 2015, continuing the trend of positive long run average contributions to growth. In 2015 manufacturing was the only main sector to have a negative contribution to the IoP at 0.1 percentage points when compared to its long run average contribution of a growth of 0.2 percentage points per year.

**Figure 8: Contributions to annual IoP growth in 2015 and contributions to annual average growth, 1992 and 2014, UK**

Figure 8: Contributions to annual IoP growth in 2015 and contributions to annual average growth, 1992 and 2014, UK

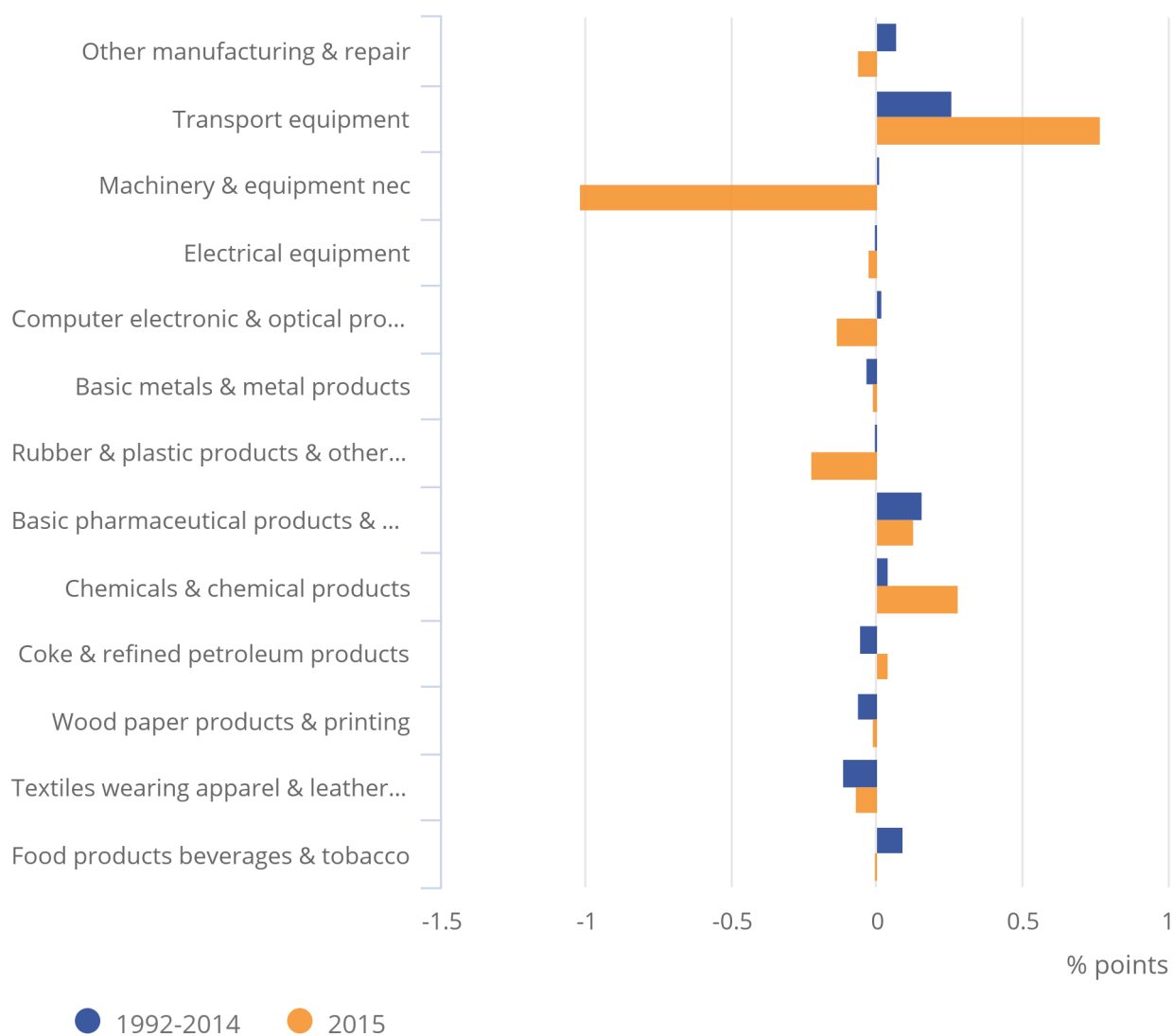


**Source: Monthly Business Survey (Production and Services) - Office for National Statistics**

Within manufacturing, there was a large variation in the performances of the different sub-sectors. Figure 9 further breaks down total manufacturing growth into the contributions from its 13 sub-sectors, for both the latest year and the long run average (from 1992 to 2014). This shows that 8 of the 13 manufacturing sub-sectors had negative contributions to growth in 2015, [with machinery and equipment not elsewhere classified](#) having the largest negative contribution at 1.0 percentage points. This compares to only 4 of the 13 manufacturing sub-sectors having negative contributions to growth on average from 1992 to 2014 of which the textile, wearing apparel & leather products sub-sector provided the largest negative contribution (0.1 percentage points per year). However, in 2015, 4 of the 13 sub-sectors of manufacturing had positive contributions to growth, notably transport equipment, chemicals & chemical products and coke & refined petroleum products, which made larger contributions to growth than their long run averages.

**Figure 9: Contributions to annual growth in manufacturing in 2015 and contributions to annual average growth, 1992 and 2014 (manufacturing sub-sectors), UK**

Figure 9: Contributions to annual growth in manufacturing in 2015 and contributions to annual average growth, 1992 and 2014 (manufacturing sub-sectors), UK



Source: Office for National Statistics



## 8. Background notes

### 1. What's new?

[Economic Review February 2016](#) was published on 3 February, providing further commentary on production and manufacturing.

The IoP is constantly being reviewed and improved, a full list of the GDP(O) improvement project articles can be found on the [Improvements page](#) of our website.

#### Upcoming changes

The Index of Production release for January 2016, to be published on Wednesday 9 March 2016, will contain revisions back to January 2015.

The coverage of our Standard Business Survey Population has been extended to include a population of solely PAYE based businesses as described in [Improving the Coverage of the Standard Business Survey Population \(150.9 Kb Pdf\)](#) published on 21 December 2015. The first Index of Production publication containing the increased sample coverage will be published on 9 March 2016.

Due to the recent events affecting the steel industry, we are aiming to review current seasonal adjustment for the industry. This is in line with our continuous improvement programme and we will report on results when available.

#### VAT Project update

An article, [HMRC VAT Project Update](#), was published on 21 December 2015. This is the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The project is exploring ways in which HM Revenue and Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys. This was the third in a series of articles; the first article was published on 14 August 2015 entitled [Feasibility study into the use of HMRC turnover data within Short-term Output Indicators and National Accounts](#) with the second published on 7 October 2015 entitled [Exploitation of HMRC VAT data](#).

### 2. Special events

We maintain a list of candidate special events in the [Special Events Calendar](#). As explained in our [Special Events policy](#), it is not possible to separate the effects of special events from other changes in the series.

### 3. Understanding the data

#### Short guide to the Index of Production

This statistical bulletin gives details of the index of output of the production industries in the UK. Index numbers of output in this statistical bulletin are on the base 2012=100 and are classified to the [2007 Standard Industrial Classification \(SIC\)](#). The production industries, which accounted for 14.9% of GDP in 2012, cover mining & quarrying (Section B), manufacturing (Section C), electricity, gas, steam & air conditioning (Section D) and water supply & sewerage (Section E).

#### Interpreting the data

The non-seasonally adjusted series contain elements relating to the impact of the standard reporting period, moving holidays and trading day activity. When making comparisons it is recommended that users focus on seasonally adjusted estimates as these have the seasonal effects and systematic calendar related components removed.

Figures for the most recent months are provisional and subject to revision in light of:

- late responses to surveys and administrative sources
- revisions to seasonal adjustment factors which are re-estimated every month and reviewed annually (changes from the latest review are included in this release)



## Definitions and explanations

Definitions found within the main statistical bulletin are listed:

- chained volume measure - an index number from a chain index of quantity; the index number for the reference period of the index may be set equal to 100 or to the estimated monetary value of the item in the reference period
- index number - a measure of the average level of prices, quantities or other measured characteristics relative to their level for a defined reference period or location; it is usually expressed as a percentage
- seasonally adjusted - seasonal adjustment aids interpretation by removing effects associated with the time of the year or the arrangement of the calendar, which could obscure movements of interest
- compound average growth - compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods. This allows the composition of growth in the recent economic recovery to be compared to the long run average

## Use of the data

The IoP is an important economic indicator and one of the earliest short-term measures of economic activity. The main output is a seasonally adjusted estimate of total production and broad sector groupings of mining & quarrying, manufacturing, energy and water supply & sewerage. The total IoP estimate and various breakdowns are widely used in private and public sector institutions, particularly the Bank of England, Her Majesty's Treasury and the Office for Budget Responsibility, to assist in informed policy and decision making.

## 4. Methods

An article about the [Index of Production methodology](#) is available on our website within our guidance and methodology web pages. These include details on improvements, a sources catalogue detailing methods, data and weights used to compile IoP, IoS and GDP(O).

## Composition of the data

The Index of Production uses a variety of different data from sources that are produced on either a quarterly or monthly basis.

Most of the series are derived using current price turnover deflated by a suitable price index. This includes the monthly business survey (MBS) data, our short-term survey of various industries in the economy. It is one of the main data sources used in the compilation of the Index of Production.

Approximately 70% of the IoP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 4 for the current month and the 3 months prior. The response rates for the historical periods are updated to reflect the current level of response, incorporating data from late returns. We have included 2 response rates: one percentage for the amount of turnover returned and the other percentage for the amount of questionnaire forms. We have also published [MBS historical production industries response rates \(34.5 Kb Excel sheet\)](#) back to 2010.

**Table 4: Monthly business survey (MBS) Response Rates, December 2015, UK**

				%
		Year Period	Turnover	Questionnaire
MBS overall	2015	Dec	86.8	73.3
		Nov	93.0	81.8
		Oct	95.3	84.5
		Sept	96.9	85.5
MBS production only	2015	Dec	87.0	76.5

Nov	94.2	85.2
Oct	95.8	87.7
Sept	97.0	88.5

Source: Office for National Statistics

## Seasonal adjustment

The index numbers in this statistical bulletin are all seasonally adjusted in line with international best practise using X-13-ARIMA-SEATS software. This aids interpretation by removing annually recurring fluctuations, for example, due to holidays or other regular seasonal patterns. Unadjusted data are also available.

Seasonal adjustment removes regular variation from a time series. Regular variation includes effects due to month lengths, different activity near particular events such as shopping activity before Christmas, and regular holidays such as the May bank holiday. Some features of the calendar are not regular each year, but are predictable if we have enough data, for example, the number of certain days of the week in a month may have an effect, or the impact of the timing of Easter. As Easter changes between March and April, we can estimate its effect on time series and allocate it between March and April depending on where Easter falls. Estimates of the effects of day of the week and Easter are used respectively to make trading day and Easter adjustments prior to seasonal adjustments.

Although leap years only happen every 4 years, they are predictable and regular and their impact can be estimated. Hence, if there is a leap year effect, it is removed as part of regular seasonal adjustment.

## Deflation

It is common for the value of a group of financial transactions to be measured in several time periods. The values measured will include both the change in the volume sold and the effect of the change of prices over that year. Deflation is the process whereby the effect of price change is removed from a set of values.

All series, unless otherwise quoted, are chained volume measures. Deflators adjust the value series to take out the effect of price change to give the volume series.

## 5. Code of Practice for Official Statistics

National Statistics are produced to high professional standards set out in the [Code of Practice for Official Statistics](#). They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

## 6. Quality

### Basic quality information

A common pitfall in interpreting data is that expectations of accuracy and reliability in early estimates are often too high. Revisions are an inevitable consequence of the trade off between timeliness and accuracy. Early estimates are based on incomplete data.

Very few statistical revisions arise as a result of "errors" in the popular sense of the word. All estimates, by definition, are subject to statistical "error" but in this context the word refers to the uncertainty inherent in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques, or the incorporation of new information which allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable "errors" such as human or system failures, and such mistakes are made quite clear when they do occur.

### Quality and methodology information report

A [quality and methodology information](#) report for this statistical bulletin is available on our website.

## Revision triangles

One indication of the reliability of the key indicators in this bulletin can be obtained by monitoring the size of revisions. Table 5 is based on the revisions which have occurred over the last 5 years. Please note that these indicators only report summary measures for revisions. The revised data may, themselves, be subject to sampling or other sources of error.

Table 5 presents a summary of the differences between the first estimates published between January 2010 and December 2014 and the estimates published 12 months later.

**Table 5: Revisions, December 2015, UK**

Growth rates	Value in latest period	% change	
		Revisions between first publication and estimates 12 months later	
		Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	-0.5	-0.15	0.28
Manufacturing - 3 month	0.0	-0.11	0.25
Production - 1 month	-1.1	-0.10 *	0.23
Manufacturing - 1 month	-0.2	-0.07	0.21

Source: Office for National Statistics

[Spreadsheets give revisions triangles \(4.91 Mb ZIP\)](#) of estimates for all months from March 1998 through to the current month.

A statistical test has been applied to the average revisions to find out if they are statistically significantly different from zero. An asterisk (\*) indicates if a figure has been found to be statistically significant from zero.

The table uses historical data for the most recent 60 months, comparing the estimate at first publication with the estimate as published 12 months later. The numbers which underpin these averages include normal changes due to late data and re-seasonal adjustment, but also significant methodological changes, the most recent being the introduction of the 2007 standard industrial classification in October 2011.

The result, presented in Table 5, suggests that the average revision for our 3 monthly estimates is not statistically significantly different from zero and that there are small downward revisions for our monthly production estimates over 12 months. In other words, the initial estimates for any given period provide a good indication of the later IoP estimates once more data have become available.

## 7. Publication policy

Details of the policy governing the release of new data are available from our media relations office. Also available is a list of those given [pre-publication access](#) to the contents of this release.

A complete set of series in the statistical bulletin are available to download free of charge on the [Data section of the Office for National Statistics website](#). Alternatively, for low-cost tailored data, call Online Services on 0845 601 3034 or email [Customer Contact Centre](#).

## 8. Accessing data

The complete run of data in the tables of this statistical bulletin is also available to view and download in electronic format free of charge using the [ONS Time Series Data](#) service. Users can download the complete bulletin in a choice of zipped formats, or view and download their own selections of individual series.

We provide an [analysis of past revisions in the IoP and other statistical bulletins \(244.6 Kb Pdf\)](#) which present time series. Details can be found on our website.

We [publish revisions triangles \(65.8 Kb Pdf\)](#) for all the main published key indicators on our website.

## 9. Relevant links

[The Assessment of Short-Term Economic Output Indicators: Preliminary Estimate of GDP, Indices of Production and Services, and Retail Sales](#) has been published on the UK Statistics Authority website. See assessment report number 278 for further details.

[Impact of quarterly employment question on monthly survey response \(110 Kb Pdf\)](#).

[Monthly Business Survey variance of change \(163.7 Kb Pdf\)](#).

In November 2014, [Government Statistical Service \(GSS\) uncertainty guidance](#) was published.

[Disclosure control policy](#)

[The UK has one of the fastest growing economies in the G7](#)

We have published a short story describing [how the pharmaceuticals industry has changed over time](#).

[Impact on National Accounts of Producer Price Index Rebasing](#)

On 22 October 2014, we published an article on the [changing shape of UK manufacturing](#).

On 6 November 2014 we published a short story looking at the changing shape of the UK aerospace manufacturing industry.

On 2 December 2015, we published a short story on the [British steel industry since the 1970s](#).

On 1 September 2015, we published an article on [the performance of the UK's motor vehicle manufacturing industry](#).

We published [Impact of Blue Book 2015 Changes on Chained Volume Measure Gross Domestic Product Estimates](#), this article details estimates of the total impact of all the improvements to chained volume measure (CVM or "real") gross domestic product (GDP) implemented in September 2015.

## 10. Customer feedback

We have received some comments from users regarding the Index of Production. These have mainly been in 3 areas and the bullet points detail the action we have taken, or plan to take, to address these concerns:

- users commented that longer time series would be useful so long run time series of data for the main IoP industries are available - furthermore, [data at 4 decimal places for IoP and the main sub-sectors \(67 Kb Excel sheet\)](#) is now available
- users would like more information on data content - from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to IoP were included

- users also raised concerns that the IoP is not benchmarked to annual data through the supply and use framework - this is being addressed as part of our [response \(875 Kb Pdf\)](#) to the [National Statistics Quality Review of National Accounts \(570.9 Kb Pdf\)](#).

As a reader and user of our statistics we would welcome your feedback on the content of this publication, your views for improvement and on the way you currently use our statistics. If you would like to get in touch or to send your feedback please contact us via email: [indexofproduction@ons.gsi.gov.uk](mailto:indexofproduction@ons.gsi.gov.uk).

#### 11. Following ONS

Follow @ONS on [Twitter](#) and receive up to date information about our statistical releases.

Like our [Facebook](#) page to receive our updates in your newsfeed and to post comments on our page.

#### 12. Next publication:

Wednesday 09 March 2016

##### **Issued by:**

Office for National Statistics  
Government Buildings  
Cardiff Road  
Newport  
NP10 8XG

##### **Media contact:**

Tel: Media Relations Office +44 (0) 845 6041858 Emergency on-call +44 (0) 7867 906553 Email: [Media Relations Office](#)

13. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

Pages 2-11	Table IoP5, index values and growth rates for industry groups and manufacturing sub-sectors
Pages 12-21	Table IoP5R, revisions to index values and growth rates for industry groups and manufacturing sub-sectors

- [Page 1](#) Output by Broad industry groups and Main industrial groupings  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 2](#) Percentage change, latest month on previous month  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 3](#) Percentage change, latest 3 months on previous 3 months
- [Page 4](#) Output by Manufacturing sub-sectors part 1  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 5](#) Output by Manufacturing sub-sectors part 2  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 6](#) Percentage change, latest month on previous month part 1  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 7](#) Percentage change, latest month on previous month part 2  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 8](#) Percentage change, latest 3 months on previous 3 months part 1
- [Page 9](#) Percentage change, latest 3 months on previous 3 months part 2
- [Enquiries](#)

# IOP5 Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	102.8	112.3	101.4	100.9	100.1	116.4	102.3	104.0	98.7	100.0	109.9
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	99.2	96.7	98.9	100.4	104.3	91.8	98.7	99.1	100.6	99.2	96.6
2014	100.5	96.2	101.6	94.6	105.1	90.0	104.5	99.6	103.5	104.0	92.9
2015	101.5	102.6	101.4	94.9	108.4	99.0	104.0	100.1	102.5	103.3	97.0
2014 Q4	100.7	95.4	102.1	94.3	104.9	88.4	108.1	99.7	104.4	104.4	92.2
2015 Q1	101.1	96.6 <sup>†</sup>	102.1	96.6 <sup>†</sup>	105.4 <sup>†</sup>	89.6 <sup>†</sup>	105.1 <sup>†</sup>	100.4 <sup>†</sup>	102.7 <sup>†</sup>	105.4 <sup>†</sup>	93.5 <sup>†</sup>
Q2	101.8 <sup>†</sup>	103.9	101.4 <sup>†</sup>	94.5	109.4	101.0	104.8	99.4	103.2	103.9	97.1
Q3	101.9	106.1	101.0	95.3	109.6	103.9	103.4	100.0	102.0	102.5	99.5
Q4	101.3	103.7	101.0	93.0	109.1	101.4	102.9	100.8	102.1	101.3	97.9
2014 Oct	100.7	97.9	101.5	94.4	105.6	92.2	106.4	99.1	103.5	103.7	93.9
Nov	100.7	94.7	102.3	93.5	105.8	87.5	107.0	100.1	104.1	104.7	91.5
Dec	100.6	93.6	102.5	95.0	103.4	85.4	110.8	99.9	105.4	104.7	91.2
2015 Jan	100.6 <sup>†</sup>	96.9 <sup>†</sup>	101.6	96.0 <sup>†</sup>	103.9 <sup>†</sup>	89.7 <sup>†</sup>	107.3 <sup>†</sup>	100.1 <sup>†</sup>	101.5 <sup>†</sup>	105.2 <sup>†</sup>	93.4 <sup>†</sup>
Feb	101.0	94.8	102.0	97.7	105.9	87.1	103.2	99.3	103.4	105.7	93.2
Mar	101.6	98.0	102.5	96.1	106.4	91.8	104.9	101.7	103.3	105.2	94.0
Apr	101.7	101.8	102.0	93.5	108.6	97.9	104.6	98.9	104.0	105.1	95.5
May	101.9	106.3	101.1 <sup>†</sup>	95.2	108.8	104.6	102.7	101.3	101.8	102.5	99.0
Jun	101.7	103.4	101.3	94.6	110.9	100.4	107.0	98.1	103.8	104.0	96.8
Jul	101.3	103.7	100.5	94.7	112.0	100.0	104.5	99.6	100.1	103.2	97.6
Aug	102.1	109.9	100.8	95.2	108.8	109.1	102.8	99.3	102.5	102.2	101.7
Sep	102.1	104.9	101.7	96.0	107.8	102.7	102.9	101.1	103.5	102.2	99.3
Oct	102.2	106.1	101.3	96.8	109.4	104.0	101.1	101.8	101.7	101.9	100.8
Nov	101.4	104.6	101.0	93.7	108.7	102.4	103.5	100.1	101.7	101.8	98.7
Dec	100.3	100.5	100.7	88.7	109.3	97.7	104.0	100.5	103.0	100.1	94.1
Percentage change, latest year on previous year											
2011	-0.6	-14.2	2.2	-6.1	5.7	-18.4	0.2	-0.2	6.6	0.6	-10.6
2012	-2.8	-10.9	-1.4	-0.9	-0.1	-14.1	-2.2	-3.8	1.3	-	-9.0
2013	-0.8	-3.3	-1.1	0.4	4.3	-8.2	-1.3	-0.9	0.6	-0.8	-3.4
2014	1.3	-0.5	2.7	-5.8	0.8	-2.0	5.9	0.5	2.9	4.8	-3.8
2015	1.0	6.6	-0.2	0.3	3.1	10.0	-0.4	0.5	-0.9	-0.7	4.4
Percentage change, latest month on same month a year ago											
2013 Oct	2.7	13.2	1.2	-6.7	8.4	11.1	-4.0	0.5	1.6	2.2	4.1
Nov	1.3	1.5	0.9	0.4	5.3	-2.5	-0.7	0.6	-0.1	2.9	-0.2
Dec	1.3	3.6	1.0	-5.1	7.0	1.0	-2.2	2.8	-2.3	2.6	0.1
2014 Jan	1.6	-1.6	2.1	-5.1	9.7	-5.0	1.4	-2.1	1.4	7.5	-4.6
Feb	2.2	4.8	3.3	-11.3	4.9	8.4	7.8	2.0	2.3	4.4	-1.9
Mar	1.7	8.2	2.3	-14.7	7.8	10.4	1.2	2.0	0.6	4.7	-2.6
Apr	2.3	3.2	4.0	-13.4	5.5	2.6	3.9	2.0	2.4	7.8	-5.2
May	1.6	3.4	2.6	-7.7	1.9	1.6	3.6	-1.5	3.3	6.3	-2.9
Jun	0.4	-3.0	1.6	-1.9	-1.4	-3.9	2.7	-2.0	2.9	3.9	-3.7
Jul	1.3	-3.3	2.8	1.4	-3.4	-5.6	6.6	-0.8	2.9	6.8	-3.3
Aug	1.2	-5.8	3.1	2.4	-4.4	-9.4	5.0	2.4	2.7	4.9	-4.4
Sep	0.7	-4.0	2.5	-4.1	-1.6	-6.7	9.4	0.6	3.4	3.8	-5.0
Oct	1.0	-0.2	2.1	-3.0	-1.8	-0.6	9.0	0.7	2.7	2.0	-1.3
Nov	1.2	-1.2	3.3	-8.3	-1.4	-3.0	8.2	2.5	4.5	3.0	-4.9
Dec	0.6	-5.8	2.6	-0.8	-4.0	-10.2	12.6	0.2	5.6	3.4	-5.9
2015 Jan	1.0 <sup>†</sup>	3.7 <sup>†</sup>	1.4	- <sup>†</sup>	-4.3	2.7 <sup>†</sup>	4.2 <sup>†</sup>	4.0 <sup>†</sup>	-1.1 <sup>†</sup>	1.6 <sup>†</sup>	1.1 <sup>†</sup>
Feb	0.3	-5.2	0.9	7.2	-2.4 <sup>†</sup>	-10.3	0.8	-1.1	1.1	3.2	-1.4
Mar	1.3	0.1	1.3	4.0	0.9	-1.0	3.5	1.9	0.4	1.8	0.4
Apr	1.0	5.2	-0.2	1.8	3.8	8.3	0.6	-2.1	0.1	0.7	3.7
May	1.5	6.1	0.3 <sup>†</sup>	1.1	4.2	11.3	2.0	1.5	-0.2	-1.2	4.7
Jun	1.5	8.7	-	-1.6	6.8	14.1	4.9	-0.8	-0.4	0.5	4.7
Jul	0.6	9.0	-1.3	-3.4	8.2	13.0	0.7	-0.1	-3.4	-1.3	4.4
Aug	1.6	18.0	-1.1	-3.2	5.4	26.5	-1.8	-1.0	-0.4	-2.3	9.8
Sep	1.3	8.9	-0.4	2.2	3.3	14.0	-4.7	1.0	-0.9	-2.2	7.1
Oct	1.5	8.4	-0.2	2.5	3.6	12.8	-5.0	2.7	-1.7	-1.8	7.4
Nov	0.7	10.5	-1.2	0.2	2.7	17.0	-3.3	-	-2.4	-2.8	7.9
Dec	-0.4	7.4	-1.7	-6.6	5.7	14.3	-6.2	0.6	-2.3	-4.4	3.2

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.



# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

		Broad industry groups						Main industrial groupings				
		Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section		B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight		1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
		K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
Percentage change, latest month on previous month												
2013	Oct	-0.4	-2.2	-0.3	-0.7	1.4	-3.9	-1.1	-1.1	-0.3	1.1	-2.6
	Nov	-0.2	-2.3	-0.4	4.7	-0.3	-2.7	1.3	-0.8	-1.1	-0.1	1.1
	Dec	0.5	3.6	0.9	-6.1	0.4	5.4	-0.5	2.1	0.1	-0.3	0.7
2014	Jan	-0.4	-5.9	0.4	0.3	0.8	-8.1	4.6	-3.5	2.9	2.2	-4.7
	Feb	1.0	7.1	0.9	-5.1	-0.1	11.1	-0.6	4.3	-0.4	-1.1	2.3
	Mar	-0.3	-2.1	0.1	1.3	-2.8	-4.4	-1.1	-0.5	0.6	0.9	-1.0
	Apr	0.4	-1.1	0.9	-0.5	-0.9	-2.6	2.6	1.2	1.1	1.0	-1.6
	May	-0.3	3.5	-1.3	2.4	-0.2	4.0	-3.2	-1.2	-1.8	-0.6	2.8
	Jun	-0.2	-5.0	0.5	2.2	-0.5	-6.4	1.4	-0.8	2.1	-0.2	-2.3
	Jul	0.5	-0.1	0.5	1.9	-0.3	0.6	1.7	0.8	-0.6	1.0	1.0
	Aug	-0.2	-2.0	0.1	0.4	-0.2	-2.6	0.9	0.6	-0.7	-	-0.9
	Sep	0.3	3.4	0.3	-4.5	1.1	4.5	3.2	-0.2	1.6	-0.1	0.1
	Oct	-0.1	1.7	-0.7	0.4	1.2	2.3	-1.5	-1.0	-0.9	-0.7	1.2
	Nov	-	-3.3	0.7	-1.0	0.2	-5.0	0.6	1.0	0.6	0.9	-2.5
	Dec	-0.1	-1.2	0.2	1.6	-2.2	-2.4	3.6	-0.2	1.2	-	-0.3
2015	Jan	-	3.5 <sup>T</sup>	-0.8	1.1 <sup>T</sup>	0.5	5.1 <sup>T</sup>	-3.2 <sup>T</sup>	0.2 <sup>T</sup>	-3.7 <sup>T</sup>	0.5 <sup>T</sup>	2.4 <sup>T</sup>
	Feb	0.3	-2.2	0.4	1.8	1.9	-3.0	-3.8	-0.8	1.8	0.5	-0.2
	Mar	0.6 <sup>T</sup>	3.3	0.5	-1.7	0.5	5.4	1.6	2.5	-0.1	-0.5	0.9
	Apr	0.1	3.9	-0.6 <sup>T</sup>	-2.6	2.0	6.6	-0.3	-2.8	0.7	-0.1	1.6
	May	0.2	4.4	-0.8	1.8	0.2	6.8	-1.8	2.4	-2.1	-2.5	3.7
	Jun	-0.2	-2.7	0.2	-0.6	2.0	-4.0	4.2	-3.2	2.0	1.5	-2.2
	Jul	-0.4	0.2	-0.8	-	1.0 <sup>T</sup>	-0.3	-2.4	1.5	-3.6	-0.7	0.7
	Aug	0.8	6.0	0.3	0.6	-2.8	9.0	-1.7	-0.3	2.4	-1.0	4.2
	Sep	-	-4.6	1.0	0.8	-0.9	-5.8	0.1	1.8	1.0	-	-2.4
	Oct	0.1	1.2	-0.4	0.8	1.5	1.3	-1.8	0.7	-1.7	-0.3	1.6
	Nov	-0.8	-1.4	-0.3	-3.1	-0.7	-1.6	2.4	-1.7	-0.1	-0.1	-2.1
	Dec	-1.1	-4.0	-0.2	-5.4	0.6	-4.6	0.5	0.4	1.3	-1.7	-4.7
Percentage change, latest 3 months on same 3 months a year ago <sup>2</sup>												
2013	Oct	0.9	4.3	-0.1	-3.4	7.9	1.5	-1.3	-0.7	0.7	0.8	0.3
	Nov	2.1	9.8	0.6	-2.4	7.7	7.8	-1.7	0.1	0.7	1.9	3.7
	Dec	1.7	5.9	1.0	-3.8	6.9	2.9	-2.3	1.3	-0.3	2.6	1.3
2014	Jan	1.4	1.2	1.3	-3.3	7.3	-2.1	-0.5	0.4	-0.3	4.3	-1.6
	Feb	1.7	2.3	2.1	-7.2	7.2	1.4	2.2	0.9	0.5	4.8	-2.1
	Mar	1.8	3.7	2.6	-10.5	7.4	4.4	3.4	0.6	1.4	5.5	-3.0
	Apr	2.1	5.4	3.2	-13.2	6.0	7.1	4.2	2.0	1.8	5.6	-3.2
	May	1.9	4.9	3.0	-12.0	5.0	4.8	2.9	0.8	2.1	6.3	-3.6
	Jun	1.4	1.2	2.7	-7.9	1.9	0.1	3.4	-0.5	2.9	6.0	-4.0
	Jul	1.1	-1.0	2.3	-2.8	-1.0	-2.6	4.3	-1.4	3.0	5.7	-3.3
	Aug	1.0	-4.0	2.5	0.6	-3.1	-6.3	4.8	-0.2	2.8	5.2	-3.8
	Sep	1.1	-4.4	2.8	-0.1	-3.1	-7.2	7.0	0.7	3.0	5.1	-4.2
	Oct	0.9	-3.3	2.6	-1.6	-2.6	-5.6	7.8	1.2	2.9	3.5	-3.6
	Nov	1.0	-1.8	2.6	-5.2	-1.6	-3.5	8.8	1.3	3.5	2.9	-3.8
	Dec	0.9	-2.4	2.7	-4.1	-2.4	-4.6	9.9	1.1	4.3	2.8	-4.1
2015	Jan	0.9 <sup>T</sup>	-1.2	2.4	-3.1 <sup>T</sup>	-3.2	-3.7	8.3	2.2	3.0 <sup>T</sup>	2.6 <sup>T</sup>	-3.3 <sup>T</sup>
	Feb	0.7	-2.6 <sup>T</sup>	1.6	2.1	-3.6 <sup>T</sup>	-6.2 <sup>T</sup>	5.8 <sup>T</sup>	1.0 <sup>T</sup>	1.9	2.7	-2.1
	Mar	0.9	-0.6	1.2	3.7	-2.0	-3.1	2.8	1.6	0.2	2.2	-
	Apr	0.9	-0.1	0.7	4.3	0.7	-1.2	1.6	-0.4	0.5	1.9	0.9
	May	1.3	3.8	0.5	2.3	3.0	6.2	2.0	0.5	0.1	0.4	2.9
	Jun	1.3	6.6	- <sup>T</sup>	0.4	4.9	11.2	2.5	-0.5	-0.1	-	4.4
	Jul	1.2	7.9	-0.3	-1.3	6.4	12.7	2.5	0.2	-1.3	-0.7	4.6
	Aug	1.3	11.8	-0.8	-2.8	6.8	17.8	1.2	-0.6	-1.4	-1.0	6.3
	Sep	1.2	11.9	-0.9	-1.5	5.6	17.7	-2.0	-	-1.6	-1.9	7.1
	Oct	1.5	11.6	-0.6	0.4	4.1	17.6	-3.9	0.9	-1.0	-2.1	8.1
	Nov	1.2	9.2	-0.6	1.6	3.2	14.6	-4.3	1.2	-1.7	-2.3	7.5
	Dec	0.6	8.7	-1.0	-1.3	4.0	14.7	-4.8	1.1	-2.1	-3.0	6.2

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>2</sup> Any apparent inconsistencies between these tables and the latest GDP estimate are due to rounding.

<sup>T</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
Percentage change, latest 3 months on previous 3 months <sup>2</sup>											
2013 Oct	0.4	1.4	0.4	-1.8	2.1	2.4	0.8	-2.3	0.5	2.4	-0.2
Nov	0.3	-0.4	0.2	2.3	0.1	-0.3	-0.4	-1.3	-0.2	2.3	-0.2
Dec	0.2	-1.4	0.3	1.5	0.4	-2.6	-0.3	-0.7	-0.6	2.1	-1.0
2014 Jan	-	-2.9	0.4	0.7	0.6	-4.1	1.4	-0.8	-	1.5	-1.4
Feb	0.3	-0.5	1.0	-4.9	1.3	-	2.9	0.3	1.0	1.1	-1.8
Mar	0.4	-0.6	1.4	-5.3	-	-0.3	3.9	0.2	2.5	1.6	-2.7
Apr	0.8	2.1	1.8	-6.2	-1.5	2.8	2.4	2.6	2.2	1.2	-1.9
May	0.4	0.7	1.0	-1.6	-3.2	-0.8	0.7	1.4	1.3	1.4	-1.2
Jun	0.2	0.3	0.6	1.0	-3.0	-1.8	-	1.1	0.8	0.7	-0.5
Jul	-0.1	-1.5	-0.2	4.7	-2.2	-3.5	-0.4	-0.9	0.3	0.5	0.1
Aug	-	-3.9	0.2	5.1	-1.2	-5.2	1.5	-0.5	0.6	0.4	-0.6
Sep	0.2	-2.6	0.5	2.9	-0.5	-2.8	3.2	0.1	0.3	0.6	-0.2
Oct	0.3	-1.1	0.6	-0.5	0.5	-0.7	4.1	0.4	0.3	0.3	-0.5
Nov	0.3	2.0	0.3	-3.7	1.6	2.7	3.5	0.1	0.5	0.1	-0.2
Dec	-	0.6	0.1	-2.6	1.2	0.1	2.5	-0.3	0.7	-0.2	-0.8
2015 Jan	-	-0.8	0.2	-0.8 <sup>T</sup>	-	-2.2	1.9 <sup>T</sup>	0.2	0.1 <sup>T</sup>	0.6 <sup>T</sup>	-1.1 <sup>T</sup>
Feb	-	-1.3 <sup>T</sup>	-	2.4	-0.8	-2.8 <sup>T</sup>	-	- <sup>T</sup>	-0.6	0.9	-0.1
Mar	0.4	1.2	-	2.4	0.5	1.3	-2.7	0.7	-1.6	1.0	1.4
Apr	0.8	3.3	0.1	1.0	2.5 <sup>T</sup>	5.4	-3.9	-0.1	-0.1	0.5	2.4
May	1.0	7.3	-0.2	-1.3	3.3	12.2	-2.9	0.9	-0.4	-0.9	3.9
Jun	0.7	7.6	-0.6	-2.2	3.8	12.7	-0.3	-0.9	0.5	-1.4	3.9
Jul	0.2 <sup>T</sup>	6.4	-1.2 <sup>T</sup>	-1.0	3.3	10.2	0.5	-0.3	-1.6	-2.0	3.8
Aug	-	3.5	-1.0	-0.1	2.5	5.1	0.7	-1.6	-0.9	-1.1	2.6
Sep	0.1	2.2	-0.4	0.9	0.1	3.0	-1.3	0.6	-1.2	-1.3	2.5
Oct	0.5	2.4	0.3	1.2	-1.7	3.6	-2.4	1.0	0.7	-1.1	2.9
Nov	0.2	-0.4	0.5	0.7	-1.8	-0.1	-2.2	2.0	0.2	-1.2	0.9
Dec	-0.5	-2.3	-	-2.4	-0.4	-2.5	-0.5	0.8	0.1	-1.3	-1.6

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>2</sup> Any apparent inconsistencies between these tables and the latest GDP estimate are due to rounding.

<sup>T</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
2011	102.6	103.5	105.6	111.3	102.0	106.2
2012	100.0	100.0	100.0	100.0	100.0	100.0
2013	98.3	95.5	102.2	98.1	98.9	97.3
2014	102.8	92.1	103.2	90.0	101.4	92.4
2015	102.8	90.2	103.0	91.4	106.5	93.8
2014 Q4	103.9	86.4	103.8	91.7	102.4	91.1
2015 Q1	103.3 <sup>†</sup>	89.1 <sup>†</sup>	105.0 <sup>†</sup>	88.1 <sup>†</sup>	107.6 <sup>†</sup>	92.6 <sup>†</sup>
Q2	101.6	92.3	102.6	83.3	106.0	93.3
Q3	102.8	89.0	102.0	94.9	106.5	94.4
Q4	103.5	90.4	102.4	99.2	105.7	94.7
2014 Oct	103.7	86.9	104.9	91.1	101.6	88.9
Nov	103.5	87.7	104.3	90.7	103.8	92.1
Dec	104.6	84.6	102.3	93.4	101.9	92.3
2015 Jan	103.6 <sup>†</sup>	86.5 <sup>†</sup>	106.0 <sup>†</sup>	88.6 <sup>†</sup>	106.7 <sup>†</sup>	91.3 <sup>†</sup>
Feb	103.4	89.6	104.6	91.2	108.7	89.5
Mar	102.8	91.3	104.5	84.5	107.5	96.9
Apr	101.5	90.6	103.8	83.4	109.0	91.4
May	101.9	92.9	102.2	83.9	104.0	99.2
Jun	101.5	93.6	101.6	82.7	105.0	89.4
Jul	102.0	91.2	101.3	94.6	106.5	94.4
Aug	102.8	85.2	101.7	94.0	106.3	93.5
Sep	103.7	90.5	103.0	96.3	106.8	95.4
Oct	103.5	91.5	101.9	101.6	106.2	97.8
Nov	103.4	90.3	103.7	100.9	106.7	92.5
Dec	103.5	89.3	101.5	95.2	104.1	93.9

## Percentage change, latest year on previous year

2011	6.5	1.3	-5.6	1.4	6.6	-13.5
2012	-2.5	-3.4	-5.3	-10.1	-2.0	-5.8
2013	-1.7	-4.5	2.2	-1.9	-1.1	-2.7
2014	4.6	-3.6	0.9	-8.3	2.6	-5.1
2015	-	-2.1	-0.2	1.6	5.0	1.5

## Percentage change, latest month on same month a year ago

2013 Oct	-2.1	-3.0	3.0	12.4	1.0	2.2
Nov	-0.8	0.4	2.2	3.9	1.4	-1.3
Dec	0.6	-4.6	7.0	18.5	-0.6	2.3
2014 Jan	1.9	-0.7	2.9	-7.9	6.2	-11.2
Feb	3.9	2.0	1.4	-10.7	3.2	-0.2
Mar	5.4	1.6	-4.7	-7.0	2.1	0.3
Apr	6.8	2.5	-0.1	-9.3	4.1	-4.0
May	1.5	8.4	-0.1	-5.7	1.9	-10.3
Jun	2.7	-3.5	-0.6	-16.3	-0.5	-9.8
Jul	1.8	-6.1	0.4	-12.3	5.2	-1.9
Aug	4.8	-8.9	3.0	-11.8	-0.8	3.6
Sep	6.5	-6.4	2.3	-4.8	2.8	-7.7
Oct	7.5	-10.8	3.5	1.5	2.1	-9.8
Nov	6.3	-10.3	3.6	-2.7	3.8	-2.3
Dec	6.3	-10.0	-0.7	-10.4	1.1	-6.3
2015 Jan	3.0 <sup>†</sup>	-11.1 <sup>†</sup>	3.4 <sup>†</sup>	-4.2 <sup>†</sup>	4.3 <sup>†</sup>	7.1 <sup>†</sup>
Feb	1.1	-7.1	1.5	3.8	8.9	-5.9
Mar	0.4	-4.1	3.9	-8.1	6.2	2.7
Apr	-1.3	-5.3	2.2	-8.9	7.5	-5.9
May	0.3	-8.4	-0.6	-7.0	2.3	8.0
Jun	-0.7	1.6	-1.1	-4.1	5.3	-1.4
Jul	-1.1	2.3	-1.5	8.7	4.4	0.4
Aug	-0.7	-4.6	-3.4	7.1	7.3	-0.9
Sep	0.6	0.8	-1.8	8.2	4.0	3.0
Oct	-0.2	5.3	-2.9	11.6	4.5	10.0
Nov	-0.2	2.9	-0.6	11.2	2.8	0.4
Dec	-1.0	5.6	-0.7	1.9	2.1	1.7

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.6	77.6	43.0	21.1	53.6	77.3	60.9
		K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011		104.3	97.2	99.5	90.2	98.9	95.9	106.8
2012		100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013		97.2	97.1	98.0	95.3	88.1	107.6	104.4
2014		109.7	99.2	101.9	92.5	92.2	110.6	109.7
2015		106.7	99.1	99.8	92.0	80.1	118.2	108.9
2014	Q4	110.8	99.5	105.3	92.2	89.5	113.0	110.7
2015	Q1	108.1	102.3 <sup>†</sup>	99.9 <sup>†</sup>	92.6 <sup>†</sup>	83.5 <sup>†</sup>	115.1 <sup>†</sup>	111.2 <sup>†</sup>
	Q2	107.0 <sup>†</sup>	100.9	101.0	92.8	81.6	117.5	110.5
	Q3	106.1	97.3	99.7	91.5	78.8	119.1	107.2
	Q4	105.8	95.8	98.6	91.4	76.6	121.1	106.7
2014	Oct	111.1	98.7	102.5	88.7	90.8	111.7	111.0
	Nov	109.9	100.5	103.0	93.5	88.4	113.1	112.6
	Dec	111.4	99.4	110.2	94.4	89.2	114.1	108.5
2015	Jan	107.9 <sup>†</sup>	101.9 <sup>†</sup>	100.8 <sup>†</sup>	90.9 <sup>†</sup>	82.6 <sup>†</sup>	113.8 <sup>†</sup>	110.4 <sup>†</sup>
	Feb	107.8	103.1	98.7	93.0	84.6	115.9	110.3
	Mar	108.5	102.1	100.1	93.7	83.4	115.6	112.8
	Apr	108.1	102.1	100.5	93.7	85.1	116.0	112.4
	May	106.3	97.6	98.6	91.7	79.9	118.5	108.8
	Jun	106.8	102.9	104.0	92.9	79.8	118.1	110.2
	Jul	106.9	96.9	99.7	90.4	78.2	115.9	107.3
	Aug	105.0	98.5	99.8	90.5	78.6	121.2	105.1
	Sep	106.4	96.5	99.7	93.5	79.4	120.1	109.2
	Oct	106.3	96.7	98.1	92.3	76.5	122.0	103.3
	Nov	105.6	95.7	97.6	91.6	76.0	120.5	108.7
	Dec	105.5	95.0	99.9	90.2	77.2	120.8	108.3
<b>Percentage change, latest year on previous year</b>								
2011		-0.2	4.4	-1.2	-3.8	8.6	10.1	5.4
2012		-4.2	2.9	0.6	10.9	1.1	4.3	-6.3
2013		-2.8	-2.9	-2.0	-4.7	-11.9	7.6	4.4
2014		12.9	2.1	4.0	-3.0	4.6	2.8	5.1
2015		-2.7	-0.1	-2.1	-0.5	-13.1	6.8	-0.7
<b>Percentage change, latest month on same month a year ago</b>								
2013	Oct	2.7	-0.9	-9.1	-6.2	-5.2	12.7	5.7
	Nov	1.9	2.0	-5.3	0.1	-11.2	8.9	6.4
	Dec	3.2	4.1	-5.8	-5.1	-10.3	-0.5	8.0
2014	Jan	15.8	4.1	-3.1	-2.5	7.7	1.2	4.7
	Feb	13.6	3.7	3.5	-4.7	8.7	2.1	2.7
	Mar	14.2	-0.6	-1.6	-0.4	1.1	2.5	6.2
	Apr	18.9	1.8	-0.2	-2.2	8.2	4.8	6.2
	May	14.6	4.6	1.3	-7.6	12.3	1.8	6.1
	Jun	11.9	5.2	-1.2	-2.4	5.2	3.9	6.1
	Jul	12.7	3.8	6.0	-1.2	6.0	2.2	5.2
	Aug	13.4	4.1	3.0	-6.4	4.7	-0.8	7.6
	Sep	12.1	0.6	11.0	-2.9	2.8	1.1	2.8
	Oct	10.6	-1.3	8.8	-6.1	0.5	1.1	5.2
	Nov	8.3	0.8	7.4	-0.6	0.8	3.5	8.0
	Dec	9.9	-1.0	14.6	1.7	-1.4	10.2	0.5
2015	Jan	0.4 <sup>†</sup>	2.3 <sup>†</sup>	-1.0 <sup>†</sup>	-2.1 <sup>†</sup>	-10.5 <sup>†</sup>	6.8 <sup>†</sup>	0.8 <sup>†</sup>
	Feb	0.1	3.9	-0.6	2.0	-9.9	6.9	2.1
	Mar	0.2	3.8	0.5	-0.5	-11.2	5.1	4.7
	Apr	-2.5	3.1	-1.6	1.0	-8.7	4.7	3.1
	May	-2.5	0.4	0.1	1.2	-14.8	9.1	1.3
	Jun	-1.9	3.5	6.2	-3.5	-15.0	4.5	1.1
	Jul	-3.3	-0.9	-1.1	-3.5	-17.0	3.9	-2.6
	Aug	-5.9	-2.6	-0.7	1.2	-13.6	12.0	-7.4
	Sep	-3.7	-3.3	-6.7	1.1	-13.6	7.9	-0.3
	Oct	-4.3	-2.1	-4.2	4.1	-15.7	9.2	-6.9
	Nov	-3.9	-4.7	-5.3	-2.0	-14.0	6.5	-3.5
	Dec	-5.4	-4.4	-9.4	-4.5	-13.5	5.9	-0.2

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		109.7	22.5	51.3	19.4	38.1	60.6
		K22B	K22P	K22T	K22X	K22Z	K239
Percentage change, latest month on previous month							
2013	Oct	-0.4	1.6	-1.2	-4.0	-0.4	-1.7
	Nov	1.0	0.4	-0.6	4.0	0.5	-4.3
	Dec	1.0	-3.9	2.2	11.7	0.9	4.5
2014	Jan	2.2	3.5	-0.4	-11.1	1.4	-13.5
	Feb	1.7	-0.7	0.6	-5.0	-2.5	11.6
	Mar	0.2	-1.4	-2.5	4.7	1.4	-0.8
	Apr	0.4	0.4	1.1	-0.5	0.2	2.8
	May	-1.2	6.1	1.2	-1.5	0.1	-5.3
	Jun	0.6	-9.2	-0.1	-4.3	-1.8	-1.3
	Jul	0.8	-3.2	0.1	0.8	2.3	3.7
	Aug	0.3	0.2	2.4	0.9	-2.9	0.4
	Sep	-0.3	0.5	-0.4	1.3	3.7	-1.9
	Oct	0.6	-3.2	-	2.4	-1.1	-4.0
	Nov	-0.2	1.0	-0.5	-0.4	2.2	3.6
	Dec	1.0	-3.6	-1.9	2.9	-1.8	0.2
2015	Jan	-1.0	2.2 <sup>†</sup>	3.7 <sup>†</sup>	-5.1 <sup>†</sup>	4.6 <sup>†</sup>	-1.1 <sup>†</sup>
	Feb	-0.2	3.7	-1.3	2.9	1.9	-1.9
	Mar	-0.6 <sup>†</sup>	1.8	-0.2	-7.4	-1.1	8.2
	Apr	-1.2	-0.8	-0.6	-1.4	1.4	-5.7
	May	0.4	2.6	-1.5	0.7	-4.7	8.6
	Jun	-0.4	0.7	-0.6	-1.4	1.0	-9.9
	Jul	0.5	-2.5	-0.3	14.3	1.5	5.5
	Aug	0.8	-6.6	0.4	-0.6	-0.3	-0.9
	Sep	0.9	6.3	1.3	2.4	0.5	2.0
	Oct	-0.2	1.1	-1.1	5.6	-0.6	2.5
	Nov	-0.2	-1.3	1.8	-0.8	0.5	-5.5
	Dec	0.2	-1.1	-2.1	-5.7	-2.5	1.6
Percentage change, latest 3 months on same 3 months a year ago							
2013	Oct	-2.4	-2.9	3.5	2.8	1.5	-1.9
	Nov	-2.0	-2.1	3.3	3.2	1.4	-0.2
	Dec	-0.7	-2.4	4.0	11.5	0.6	1.1
2014	Jan	0.6	-1.6	4.0	4.3	2.3	-3.4
	Feb	2.1	-1.1	3.7	-0.8	2.9	-3.0
	Mar	3.7	1.0	-0.2	-8.5	3.8	-3.7
	Apr	5.3	2.0	-1.1	-9.0	3.1	-1.4
	May	4.5	4.2	-1.7	-7.3	2.7	-4.8
	Jun	3.6	2.4	-0.3	-10.5	1.8	-8.0
	Jul	2.0	-0.5	-0.1	-11.6	2.2	-7.5
	Aug	3.1	-6.2	0.9	-13.5	1.3	-2.9
	Sep	4.3	-7.1	1.9	-9.8	2.4	-2.2
	Oct	6.3	-8.7	2.9	-5.3	1.4	-4.9
	Nov	6.8	-9.2	3.1	-2.1	2.9	-6.7
	Dec	6.7	-10.4	2.1	-4.2	2.3	-6.2
2015	Jan	5.1	-10.5 <sup>†</sup>	2.1 <sup>†</sup>	-6.0 <sup>†</sup>	3.1 <sup>†</sup>	-0.8 <sup>†</sup>
	Feb	3.4	-9.4	1.4	-4.0	4.7	-2.1
	Mar	1.5 <sup>†</sup>	-7.5	2.9	-3.0	6.4	1.1
	Apr	0.1	-5.5	2.5	-4.5	7.5	-3.0
	May	-0.2	-6.0	1.8	-8.0	5.3	1.5
	Jun	-0.6	-4.2	0.1	-6.7	5.0	0.1
	Jul	-0.5	-1.8	-1.1	-0.9	4.0	2.3
	Aug	-0.8	-0.2	-2.0	3.9	5.6	-0.6
	Sep	-0.4	-0.5	-2.2	8.0	5.2	0.8
	Oct	-0.1	0.5	-2.7	9.0	5.2	3.9
	Nov	0.1	3.0	-1.7	10.3	3.8	4.4
	Dec	-0.5	4.6	-1.4	8.2	3.2	3.9

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.6	77.6	43.0	21.1	53.6	77.3	60.9
		K23B	K23G	K23N	K23P	K23R	K23T	K23Z
Percentage change, latest month on previous month								
2013	Oct	2.0	0.8	-2.2	-0.8	1.1	0.4	-1.0
	Nov	1.0	-0.4	1.9	-0.4	-3.0	-1.1	-1.1
	Dec	-0.1	0.7	0.2	-1.3	3.2	-5.2	3.5
2014	Jan	6.0	-0.8	5.9	-	2.0	2.9	1.4
	Feb	0.1	-0.3	-2.4	-1.7	1.7	1.7	-1.3
	Mar	0.6	-1.0	0.2	3.3	0.1	1.4	-0.3
	Apr	2.3	0.8	2.5	-1.6	-0.8	0.7	1.2
	May	-1.6	-1.8	-3.6	-2.3	0.6	-1.9	-1.5
	Jun	-0.2	2.2	-0.5	6.3	-	4.1	1.5
	Jul	1.5	-1.6	2.8	-2.6	0.4	-1.3	1.1
	Aug	1.0	3.4	-0.3	-4.5	-3.4	-3.1	3.0
	Sep	-1.0	-1.3	6.4	3.3	1.0	2.9	-3.5
	Oct	0.6	-1.1	-4.1	-4.0	-1.2	0.4	1.3
	Nov	-1.1	1.8	0.5	5.4	-2.7	1.2	1.5
	Dec	1.4	-1.0	7.0	1.0	0.9	0.9	-3.7
2015	Jan	-3.1 <sup>†</sup>	2.4 <sup>†</sup>	-8.5 <sup>†</sup>	-3.7 <sup>†</sup>	-7.4 <sup>†</sup>	-0.2 <sup>†</sup>	1.7 <sup>†</sup>
	Feb	-0.1	1.2	-2.1	2.3	2.4	1.8	-0.1
	Mar	0.7	-1.0	1.4	0.8	-1.3	-0.2	2.3
	Apr	-0.4	0.1	0.4	-0.1	2.0	0.4	-0.3
	May	-1.6	-4.4	-1.9	-2.1	-6.1	2.1	-3.2
	Jun	0.4	5.5	5.5	1.3	-0.1	-0.3	1.3
	Jul	0.1	-5.9	-4.2	-2.6	-2.0	-1.8	-2.6
	Aug	-1.8	1.7	0.1	0.1	0.6	4.5	-2.1
	Sep	1.3	-2.0	-0.1	3.3	1.0	-0.9	3.9
	Oct	-0.1	0.2	-1.6	-1.3	-3.6	1.6	-5.4
	Nov	-0.6	-1.0	-0.6	-0.8	-0.7	-1.2	5.2
	Dec	-0.1	-0.7	2.4	-1.6	1.5	0.3	-0.3
Percentage change, latest 3 months on same 3 months a year ago								
2013	Oct	0.4	-2.8	-5.3	-6.4	-8.0	10.3	5.3
	Nov	1.2	-0.6	-6.3	-4.2	-7.1	9.8	6.1
	Dec	2.6	1.7	-6.8	-3.8	-9.0	6.9	6.7
2014	Jan	6.8	3.4	-4.7	-2.5	-5.2	3.1	6.4
	Feb	10.7	3.9	-1.9	-4.1	1.3	0.9	5.1
	Mar	14.5	2.4	-0.5	-2.5	5.7	1.9	4.5
	Apr	15.5	1.6	0.5	-2.5	5.9	3.1	5.0
	May	15.9	1.9	-0.2	-3.5	7.0	3.0	6.2
	Jun	15.1	3.9	-	-4.1	8.5	3.5	6.1
	Jul	13.0	4.6	2.0	-3.8	7.7	2.6	5.8
	Aug	12.7	4.4	2.6	-3.3	5.3	1.8	6.3
	Sep	12.7	2.8	6.7	-3.5	4.5	0.9	5.2
	Oct	12.0	1.1	7.6	-5.1	2.6	0.5	5.2
	Nov	10.3	-	9.1	-3.2	1.4	1.9	5.3
	Dec	9.6	-0.5	10.3	-1.7	-	4.8	4.5
2015	Jan	6.1	0.7 <sup>†</sup>	6.9 <sup>†</sup>	-0.3 <sup>†</sup>	-3.8	6.8 <sup>†</sup>	3.0 <sup>†</sup>
	Feb	3.4	1.7	4.2	0.5	-7.3 <sup>†</sup>	7.9	1.1
	Mar	0.2 <sup>†</sup>	3.3	-0.4	-0.2	-10.5	6.3	2.5
	Apr	-0.7	3.6	-0.6	0.8	-9.9	5.6	3.3
	May	-1.6	2.4	-0.4	0.6	-11.6	6.3	3.1
	Jun	-2.3	2.3	1.5	-0.5	-12.8	6.0	1.8
	Jul	-2.6	1.0	1.7	-2.0	-15.6	5.8	-0.1
	Aug	-3.7	-	1.4	-2.0	-15.2	6.7	-3.0
	Sep	-4.3	-2.3	-2.9	-0.4	-14.7	7.9	-3.5
	Oct	-4.6	-2.6	-3.9	2.1	-14.3	9.7	-4.9
	Nov	-4.0	-3.4	-5.4	1.0	-14.4	7.9	-3.6
	Dec	-4.5	-3.7	-6.4	-0.9	-14.4	7.2	-3.6

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest 3 months on previous 3 months</b>						
2013 Oct	-3.0	2.6	-0.9	-5.1	0.8	-3.0
Nov	-3.0	1.0	-1.1	-8.4	0.8	2.0
Dec	-1.5	0.1	-0.7	-1.8	1.2	1.5
2014 Jan	1.5	-0.8	-	2.6	1.3	-4.1
Feb	3.6	-1.2	1.3	3.0	1.2	-4.9
Mar	4.4	-0.1	0.4	-5.1	1.0	-5.7
Apr	3.7	-0.6	-0.3	-6.4	-0.2	3.0
May	1.9	1.6	-1.2	-3.8	0.4	1.6
Jun	0.5	0.1	0.3	-1.6	-0.2	1.8
Jul	-0.2	-1.6	1.0	-2.9	0.3	-3.5
Aug	0.6	-7.4	1.9	-4.6	-1.1	-1.5
Sep	1.0	-7.2	1.9	-1.6	0.3	0.5
Oct	1.1	-5.9	2.1	1.6	-	-0.2
Nov	0.5	-2.3	1.0	3.7	2.4	-1.9
Dec	0.7	-3.4	-0.5	4.3	1.2	-2.7
2015 Jan	0.4	-2.7 <sup>†</sup>	-0.8 <sup>†</sup>	1.8 <sup>†</sup>	3.0 <sup>†</sup>	- <sup>†</sup>
Feb	0.4 <sup>†</sup>	-1.4	-0.4	0.9	3.0	-0.2
Mar	-0.7	3.2	1.2	-3.9	5.1	1.6
Apr	-1.3	4.9	0.1	-5.0	4.1	0.7
May	-1.7	5.4	-0.8	-7.9	1.0	5.2
Jun	-1.6	3.6	-2.4	-5.4	-1.5	0.8
Jul	-0.8	2.3	-2.5	0.8	-3.0	1.9
Aug	-	-1.8	-1.9	7.8	-0.9	-3.6
Sep	1.2	-3.7	-0.5	13.9	0.5	1.2
Oct	1.5	-3.8	0.5	11.7	1.2	1.3
Nov	1.4	0.9	1.3	10.1	0.6	3.0
Dec	0.6	1.6	0.4	4.5	-0.8	0.3

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

continued

Seasonally adjusted 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest 3 months on previous 3 months</b>							
2013 Oct	2.4	5.2	-1.2	-2.2	1.9	1.5	2.9
Nov	2.3	4.6	-1.8	-1.9	1.0	0.8	1.1
Dec	2.9	3.3	-0.9	-1.5	1.3	-1.5	0.3
2014 Jan	4.4	1.1	2.1	-1.9	1.4	-3.1	1.3
Feb	5.3	0.1	3.9	-2.4	3.4	-3.4	2.9
Mar	6.6	-1.0	5.1	-1.1	4.3	0.5	2.4
Apr	5.3	-1.0	2.5	-0.6	3.9	3.1	0.9
May	3.7	-1.5	1.0	0.2	1.6	3.4	-0.4
Jun	1.6	-0.5	-0.8	0.5	0.3	2.3	-
Jul	0.5	-0.7	-1.3	0.9	0.3	1.3	0.6
Aug	0.8	1.3	-0.4	0.7	-0.7	1.1	2.7
Sep	1.2	1.0	3.2	-1.4	-1.4	-0.4	2.4
Oct	1.5	1.8	4.2	-3.6	-2.9	-0.6	2.3
Nov	0.2	0.2	4.4	-1.8	-2.8	1.0	0.1
Dec	-	-	2.5	0.3	-3.1	2.4	-0.3
2015 Jan	-1.1	0.7	1.4 <sup>†</sup>	3.0 <sup>†</sup>	-5.0	3.0 <sup>†</sup>	-0.7 <sup>†</sup>
Feb	-1.3	1.8 <sup>†</sup>	-0.8	1.4	-5.4 <sup>†</sup>	2.3	-1.2
Mar	-2.5	2.8	-5.1	0.4	-6.6	1.9	0.4
Apr	-1.5 <sup>†</sup>	1.8	-4.7	0.6	-2.7	1.9	1.2
May	-1.3	-0.8	-3.4	0.3	-3.1	1.8	1.5
Jun	-0.9	-1.4	1.1	0.2	-2.3	2.1	-0.6
Jul	-1.4	-3.2	1.0	-1.9	-6.0	1.4	-2.8
Aug	-1.3	-1.1	1.4	-1.9	-4.8	1.5	-3.4
Sep	-0.9	-3.6	-1.3	-1.4	-3.5	1.3	-2.9
Oct	-0.7	-1.9	-1.5	0.5	-1.4	3.0	-2.7
Nov	-0.1	-3.2	-2.6	1.3	-1.9	2.1	-0.5
Dec	-0.3	-1.5	-1.2	-0.2	-2.8	1.7	-0.4

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.



- [Page 1](#) Output by Broad industry groups and Main industrial groupings  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 2](#) Percentage change, latest month on previous month  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 3](#) Percentage change, latest 3 months on previous 3 months
- [Page 4](#) Output by Manufacturing sub-sectors part 1  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 5](#) Output by Manufacturing sub-sectors part 2  
Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
- [Page 6](#) Percentage change, latest month on previous month part 1  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 7](#) Percentage change, latest month on previous month part 2  
Percentage change, latest 3 months on same 3 months a year ago
- [Page 8](#) Percentage change, latest 3 months on previous 3 months part 1
- [Page 9](#) Percentage change, latest 3 months on previous 3 months part 2
- [Enquiries](#)

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-	-	-	-	-	-
2014 Q4	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-	0.2	-	-0.8	-0.1	0.2	-0.3	0.1	0.3	-0.3	-0.3
2015 Q2	-0.1	0.1	-0.1	-0.9	-0.2	0.1	-0.3	-	0.4	-0.3	-0.5
2015 Q3	-0.2	-0.3	-0.1	-1.0	-0.3	-	-0.2	0.1	0.3	-0.7	-0.5
2014 Sep	-	-	-	-	-	-	-	-	-	-	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
2014 Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-0.1	0.2	-	-0.7	-0.1	0.2	-0.2	0.1	0.2	-0.3	-0.2
2015 Feb	-	0.2	-	-0.8	-0.1	0.2	-0.4	0.1	0.3	-0.3	-0.2
2015 Mar	-0.1	0.1	-	-0.8	-0.1	-0.1	-0.2	0.1	0.4	-0.3	-0.4
2015 Apr	-0.1	0.1	-	-0.9	-0.1	-	-0.3	-	0.4	-0.3	-0.4
2015 May	-0.1	0.2	-0.1	-0.9	-0.1	0.2	-0.3	0.1	0.3	-0.3	-0.4
2015 Jun	-0.2	-0.1	-	-1.0	-0.2	0.1	-0.4	-	0.4	-0.4	-0.6
2015 Jul	-0.2	-0.1	-	-1.0	-0.3	-	-0.2	0.1	0.3	-0.6	-0.4
2015 Aug	-0.3	-0.2	-0.1	-1.0	-0.5	0.3	-0.2	-	0.3	-0.7	-0.4
2015 Sep	-0.2	-0.4	-0.1	-1.1	-0.2	-0.1	-0.2	0.1	0.3	-0.6	-0.6
2015 Oct	-0.2	-0.3	-0.1	-1.0	-0.2	0.1	-0.3	0.3	0.2	-0.7	-0.5
2015 Nov	-0.3	-0.1	-	-2.1	-0.3	0.4	-0.3	0.3	0.3	-0.7	-0.8
Percentage change, latest year on previous year											
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago											
2013 Sep	-	-	-	-	-	-	-	-	-	-	-
2013 Oct	-	-	-	-	-	-	-	-	-	-	-
2013 Nov	-	-	-	-	-	-	-	-	-	-	-
2013 Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
2014 Feb	-	-	-	-	-	-	-	-	-	-	-
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
2014 Apr	-	-	-	-	-	-	-	-	-	-	-
2014 May	-	-	-	-	-	-	-	-	-	-	-
2014 Jun	-	-	-	-	-	-	-	-	-	-	-
2014 Jul	-	-	-	-	-	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-	-	-	-	-	-
2014 Sep	-	-	-	-	-	-	-	-	-	-	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
2014 Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-0.1	0.2	-	-0.8	-	0.2	-0.2	0.1	0.2	-0.3	-0.2
2015 Feb	-0.1	0.2	-	-0.8	-0.1	0.2	-0.4	0.1	0.2	-0.2	-0.2
2015 Mar	-0.1	0.2	-	-0.9	-0.1	-	-0.2	0.1	0.3	-0.2	-0.5
2015 Apr	-0.1	0.2	-	-0.9	-0.1	-	-0.3	-	0.4	-0.3	-0.5
2015 May	-0.1	0.2	-0.1	-1.0	-0.1	0.2	-0.4	0.1	0.3	-0.3	-0.3
2015 Jun	-0.2	-	-	-1.0	-0.1	-	-0.3	0.1	0.4	-0.4	-0.6
2015 Jul	-0.2	-0.2	-0.1	-1.0	-0.3	-	-0.2	0.1	0.3	-0.5	-0.5
2015 Aug	-0.3	-0.2	-0.1	-1.0	-0.4	0.3	-0.2	-	0.3	-0.7	-0.5
2015 Sep	-0.2	-0.4	-	-1.1	-0.2	-0.1	-0.1	0.1	0.3	-0.6	-0.7
2015 Oct	-0.2	-0.3	-	-1.1	-0.2	0.1	-0.3	0.3	0.3	-0.7	-0.5
2015 Nov	-0.2	-	-	-2.2	-0.3	0.5	-0.2	0.4	0.3	-0.7	-0.8

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

### Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
Percentage change, latest month on previous month											
2013 Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	0.2	-	-0.8	-	0.3	-0.1	0.1	0.2	-0.3	-0.2
Feb	-	-	-	-	-	-0.1	-0.2	-	-	0.1	-
Mar	-0.1	-0.1	-	-0.1	-	-0.3	0.2	-	0.1	-	-0.1
Apr	-	-	-0.1	-0.1	-	-	-0.2	-0.1	-	-	-
May	-	0.1	-	-	-	0.1	-	-	-0.1	-0.1	0.1
Jun	-0.1	-0.3	0.1	-0.1	-	-0.1	-	-0.1	0.2	-0.1	-0.2
Jul	-	-0.1	-0.1	-	-0.1	-	0.1	-	-0.1	-0.1	-
Aug	-0.1	-	-	-	-0.1	0.2	-0.1	-	-	-0.1	-
Sep	-	-0.3	0.1	-0.1	0.2	-0.3	-	0.1	-	0.1	-0.2
Oct	0.1	0.2	-	0.1	0.1	0.3	-0.2	0.2	-	-0.1	0.2
Nov	-0.1	0.2	0.1	-1.0	-0.2	0.2	0.1	-	-	-	-0.3
Percentage change, latest 3 months on same 3 months a year ago											
2013 Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-0.1	-	-	-0.2	-	-	-	-	0.1	-0.1	-0.1
Feb	-	0.1	-	-0.5	-0.1	0.1	-0.2	0.1	0.2	-0.2	-0.1
Mar	-0.1	0.2	-	-0.8	-0.1	0.1	-0.3	0.1	0.3	-0.2	-0.3
Apr	-0.1	0.1	-	-0.9	-0.1	0.1	-0.3	0.1	0.3	-0.2	-0.4
May	-	0.2	-	-1.0	-0.1	0.1	-0.3	0.1	0.3	-0.3	-0.5
Jun	-0.1	0.1	-0.1	-1.0	-0.2	0.1	-0.3	-	0.4	-0.3	-0.4
Jul	-0.2	-	-	-1.0	-0.2	-	-0.3	0.1	0.3	-0.4	-0.5
Aug	-0.2	-0.2	-0.1	-1.1	-0.3	0.1	-0.2	0.1	0.3	-0.5	-0.5
Sep	-0.2	-0.3	-	-1.0	-0.3	-	-0.2	0.1	0.3	-0.6	-0.6
Oct	-0.2	-0.4	-0.1	-1.1	-0.2	0.1	-0.2	0.1	0.3	-0.7	-0.6
Nov	-0.2	-0.3	-	-1.5	-0.2	0.2	-0.2	0.2	0.3	-0.7	-0.6

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

**Output of the Production Industries**  
**Chained volume indices of gross value added<sup>1</sup>**

Seasonally adjusted 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months</b>											
2013 Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-0.2	-	-	-0.1	-	0.1	-0.1	-0.1
Feb	-	0.1	-	-0.5	-	0.2	-0.2	0.1	0.2	-0.2	-0.2
Mar	-	0.2	-	-0.9	-	0.1	-0.2	0.2	0.3	-0.2	-0.4
Apr	-	0.1	-	-0.6	-0.1	-	-0.3	-	0.3	-0.1	-0.3
May	-	-	-	-0.4	-0.1	-0.1	-0.1	-	0.2	-0.1	-0.2
Jun	-	-	-	-0.2	-0.1	-0.1	-	-	0.1	-	-0.1
Jul	-0.1	-0.1	-0.1	-0.2	-0.2	-	-	-	-	-0.2	-0.1
Aug	-0.1	-0.3	-0.1	-0.1	-0.1	-	0.1	-	-	-0.3	-0.1
Sep	-0.1	-0.4	-	-0.1	-0.2	-	0.2	-	-0.1	-0.3	-
Oct	-0.1	-0.3	-	-0.1	-0.1	0.1	-	-	-	-0.2	-
Nov	-	-0.1	-	-0.4	-	0.1	-	0.2	-	-0.2	-0.2

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-
Q4	-	-	-	-	-	-
2015 Q1	0.1	-0.3	-0.3	-0.6	-0.5	0.3
Q2	-	-0.3	-0.2	-0.8	-0.4	0.1
Q3	0.1	-	-0.3	-1.0	-0.5	-
2014 Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	0.1	-0.3	-0.3	-0.7	-0.3	0.2
Feb	0.1	-0.3	-0.3	-0.4	-0.6	0.2
Mar	-	-0.3	-0.2	-0.7	-0.5	0.3
Apr	-	-0.4	-0.3	-0.6	-0.5	0.2
May	0.1	-0.3	-0.2	-0.7	-0.3	0.2
Jun	0.1	-0.2	-0.2	-1.0	-0.5	0.1
Jul	0.1	-0.1	-0.3	-0.7	-0.4	0.1
Aug	-	-	-0.3	-1.0	-0.4	-
Sep	0.3	-0.1	-0.3	-1.1	-0.5	-0.1
Oct	0.3	0.6	-0.1	-0.9	-0.7	-0.1
Nov	0.5	1.0	0.3	-0.6	-0.6	-0.6

### Percentage change, latest year on previous year

2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-

### Percentage change, latest month on same month a year ago

2013 Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	0.1	-0.3	-0.3	-0.7	-0.3	0.2
Feb	0.1	-0.2	-0.2	-0.4	-0.6	0.2
Mar	0.1	-0.3	-0.2	-0.7	-0.4	0.3
Apr	-	-0.5	-0.2	-0.7	-0.4	0.1
May	0.1	-0.3	-0.1	-0.8	-0.4	0.2
Jun	0.1	-0.2	-0.2	-1.0	-0.4	0.1
Jul	0.1	-0.1	-0.3	-0.9	-0.4	0.1
Aug	-	-0.1	-0.3	-1.1	-0.4	-
Sep	0.3	-0.1	-0.3	-1.3	-0.5	-0.1
Oct	0.3	0.7	-0.2	-1.0	-0.8	-0.1
Nov	0.4	1.0	0.3	-0.7	-0.6	-0.6

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

Chained volume indices of gross value added<sup>†</sup>

Seasonally adjusted 2012 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-
2015 Q1	-	-0.2	-0.3	-0.3	0.2	0.2	0.6
Q2	-0.1	-0.4	-0.5	-0.1	0.3	0.1	0.8
Q3	-0.1	-0.5	-0.2	-0.4	-	-0.2	0.9
2014 Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.2	-0.1	-0.3	-0.6	0.1	0.1	0.6
Feb	0.1	-0.1	-0.5	-0.2	0.3	0.2	0.5
Mar	-	-0.2	-0.3	-0.2	0.3	0.2	0.6
Apr	-	-0.4	-0.5	-0.1	0.5	0.1	0.7
May	-	-0.6	-0.4	-0.2	0.2	0.1	0.7
Jun	-	-0.3	-0.5	-0.2	0.2	0.1	0.8
Jul	0.1	-0.7	-0.2	-0.3	0.1	-0.2	0.7
Aug	-0.2	-0.5	-0.2	-0.3	-	-0.3	1.0
Sep	-0.3	-0.2	-0.2	-0.6	-0.2	-0.2	1.1
Oct	-0.6	-0.1	-0.4	-0.5	-0.3	-	1.0
Nov	-0.5	-0.6	-0.5	-0.4	-0.3	0.2	1.3

### Percentage change, latest year on previous year

2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-

### Percentage change, latest month on same month a year ago

2013 Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.1	-0.1	-0.2	-0.6	0.1	0.1	0.6
Feb	-	-0.1	-0.4	-0.2	0.2	0.2	0.5
Mar	-	-0.3	-0.2	-0.2	0.4	0.1	0.5
Apr	-	-0.3	-0.4	-0.2	0.5	0.1	0.7
May	-0.1	-0.5	-0.5	-0.2	0.3	0.2	0.6
Jun	-	-0.3	-0.4	-0.2	0.2	0.1	0.8
Jul	0.1	-0.7	-0.2	-0.2	0.1	-0.1	0.7
Aug	-0.2	-0.5	-0.3	-0.3	-	-0.3	0.8
Sep	-0.4	-0.3	-0.2	-0.7	-0.1	-0.2	1.0
Oct	-0.5	-0.2	-0.3	-0.5	-0.3	-	0.9
Nov	-0.4	-0.5	-0.5	-0.3	-0.3	0.1	1.1

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

### Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest month on previous month</b>						
2013 Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-0.4	-0.2	-0.7	-0.4	0.3
Feb	-	0.1	-	0.3	-0.2	-
Mar	-0.1	-0.1	-	-0.4	0.1	-
Apr	0.1	-0.1	-	-	-	-0.1
May	0.1	0.2	0.1	-	-	-
Jun	-0.1	0.1	-0.1	-0.3	-0.1	-0.1
Jul	0.1	0.2	-	0.4	0.1	-
Aug	-0.1	-	-0.1	-0.2	-0.1	-
Sep	0.3	-	-	-0.1	-0.1	-0.1
Oct	-	0.8	0.2	0.3	-0.2	-
Nov	0.1	0.4	0.4	0.2	0.1	-0.6
<b>Percentage change, latest 3 months on same 3 months a year ago</b>						
2013 Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-0.1	-0.1	-0.3	-0.1	0.1
Feb	-	-0.2	-0.2	-0.4	-0.3	0.1
Mar	0.1	-0.3	-0.3	-0.7	-0.5	0.3
Apr	0.1	-0.3	-0.3	-0.6	-0.5	0.3
May	0.1	-0.4	-0.2	-0.7	-0.4	0.2
Jun	0.1	-0.3	-0.3	-0.8	-0.4	0.1
Jul	0.1	-0.2	-0.2	-0.9	-0.4	0.1
Aug	0.1	-0.1	-0.3	-1.0	-0.5	0.1
Sep	0.1	-0.1	-0.3	-1.1	-0.4	-
Oct	0.2	0.2	-0.3	-1.1	-0.6	-0.1
Nov	0.4	0.5	-	-1.0	-0.6	-0.3

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z

### Percentage change, latest month on previous month

2013	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-0.1	-0.2	-0.2	-0.6	0.1	0.6
	Feb	0.2	-	-0.2	0.4	0.2	-0.2
	Mar	-	-0.1	0.2	0.1	0.2	0.1
	Apr	-	-0.1	-0.2	-	0.1	0.2
	May	-	-0.2	-	-	-0.3	-
	Jun	-	0.4	-	-	0.1	0.1
	Jul	0.1	-0.5	0.2	-	-0.2	-
	Aug	-0.3	0.3	-	-	-0.2	0.2
	Sep	-0.2	0.2	-	-0.3	-0.2	0.1
	Oct	-0.2	0.1	-0.2	0.1	-0.2	-
	Nov	0.2	-0.4	-0.2	0.1	-	0.2

### Percentage change, latest 3 months on same 3 months a year ago

2013	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-0.1	-0.1	-0.2	-	0.2
	Feb	-	-0.1	-0.2	-0.3	0.1	0.3
	Mar	-0.1	-0.2	-0.3	-0.3	0.3	0.5
	Apr	0.1	-0.2	-0.4	-0.2	0.4	0.6
	May	-	-0.4	-0.4	-0.2	0.4	0.7
	Jun	-	-0.4	-0.5	-0.2	0.4	0.7
	Jul	-	-0.5	-0.4	-0.2	0.2	0.7
	Aug	-	-0.5	-0.3	-0.2	0.1	0.8
	Sep	-0.1	-0.5	-0.2	-0.4	-	0.8
	Oct	-0.3	-0.2	-0.2	-0.5	-0.1	0.9
	Nov	-0.4	-0.4	-0.3	-0.5	-0.2	1.0

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.



## Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest 3 months on previous 3 months</b>						
2013 Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-0.1	-0.1	-0.3	-0.1	0.1
Feb	0.1	-0.2	-0.2	-0.4	-0.3	0.1
Mar	-	-0.3	-0.2	-0.6	-0.4	0.3
Apr	-	-0.3	-0.1	-0.4	-0.4	0.1
May	-	-0.2	-0.1	-0.4	-0.1	-
Jun	-	-	-	-0.2	-	-0.1
Jul	-	0.2	-	-0.3	0.1	-0.1
Aug	-	0.2	-0.1	-0.2	-0.1	-0.2
Sep	0.1	0.2	-	-0.2	-	-0.1
Oct	0.1	0.3	-	-0.2	-0.1	-0.2
Nov	0.3	0.7	0.2	0.1	-0.2	-0.3

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

## Output of the Production Industries

Chained volume indices of gross value added<sup>1</sup>

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.6	77.6	43.0	21.1	53.6	77.3	60.9
		K23B	K23G	K23N	K23P	K23R	K23T	K23Z
Percentage change, latest 3 months on previous 3 months								
2013	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2015	Jan	-	-	-0.1	-0.3	-	0.1	0.2
	Feb	-	-0.1	-0.2	-0.3	0.2	0.1	0.3
	Mar	-	-0.2	-0.3	-0.3	0.3	0.2	0.5
	Apr	0.1	-0.2	-0.3	-	0.4	0.1	0.4
	May	-	-0.2	-0.1	0.1	0.3	-	0.3
	Jun	-	-0.2	-0.2	0.2	0.1	-0.1	0.2
	Jul	-0.1	-0.3	-	-	-0.2	-0.2	0.1
	Aug	-	-	0.1	-0.1	-0.3	-0.2	0.2
	Sep	-0.1	-0.1	0.2	-0.2	-0.4	-0.3	0.2
	Oct	-0.3	0.3	0.2	-0.2	-0.4	-0.2	0.2
	Nov	-0.4	0.1	-	-0.2	-0.4	0.1	0.2

<sup>1</sup> Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding

<sup>†</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

**Next publication:** Wednesday 09 March 2016  
**Issued by:** Office for National Statistics, Government Buildings, Cardiff Road, Newport NP10 8XG

**Media contact:**  
Tel: Media Relations Office +44 (0) 845 6041858  
Emergency on-call +44 (0) 7867 906553  
Email: [press.office@ons.gsi.gov.uk](mailto:press.office@ons.gsi.gov.uk)

**Statistical contact:**  
Name: Alaa Al-Hamad  
Tel: Alaa Al-Hamad +44 (0) 1633 455648  
Email: [indexofproduction@ons.gsi.gov.uk](mailto:indexofproduction@ons.gsi.gov.uk)

**Contact us:**  
Tel: +44 (0) 845 601 3034  
Email: [info@ons.gsi.gov.uk](mailto:info@ons.gsi.gov.uk)  
Website: [www.statistics.gov.uk](http://www.statistics.gov.uk)  
Twitter: [www.twitter.com/statisticsONS](http://www.twitter.com/statisticsONS)