

Statistical bulletin

# UK index of production: July 2016

Measures the volume of production at base year prices for the manufacturing, mining & quarrying, energy supply and water & waste management industries. These are seasonally adjusted figures on the index of output of the production industries.



Contact:  
Alaa Al-Hamad  
[indexofproduction@ons.gsi.gov.uk](mailto:indexofproduction@ons.gsi.gov.uk)

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# 1 . Main points

This is the first release of Index of Production (IoP) covering data post EU referendum. The release shows production is relatively flat month on month in July 2016 with a fall in manufacturing negated by a rise in oil and gas. Users should note that ONS always warns against overly interpreting one month's figures.

In July 2016, total production output was estimated to have increased by 2.1% compared with July 2015. All main sectors saw production increase with mining & quarrying providing the largest contribution to growth, increasing by 7.2%.

Manufacturing was estimated to have increased by 0.8% over the same period. Transport equipment provided the largest contribution to growth, increasing by 5.7%.

Comparing July 2016 with June 2016, production output is estimated to have increased by 0.1%.

Manufacturing was the only sector to contract from June 2016, falling by 0.9% with the largest contribution from pharmaceuticals. However, this was offset by growth in the other three sectors, particularly mining & quarrying, which increased by 4.7%.

In the 3 months to July 2016, total production and manufacturing output increased by 1.0% and 0.5% respectively on the previous 3 months.

In the 3 months to July 2016, production and manufacturing were 7.6% and 5.2% respectively below their level reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

The earliest period open for revision in this release was January 2015. There were no revisions to the IoP quarter-on-quarter growth rates greater than 0.1%, providing no change to previously published GDP growth rates.

## 2 . Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, for July 2016. 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. In this publication, the production industries weight accounts for 14.6% of the [output approach to the measurement of gross domestic product](#) (GDP).

IoP values are referenced to 2013 so that the average for 2013 is equal to 100. Therefore, an index value of 110 would indicate that output is 10% higher than the average for 2013. The index estimates are mainly based on the 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
- gross domestic product (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

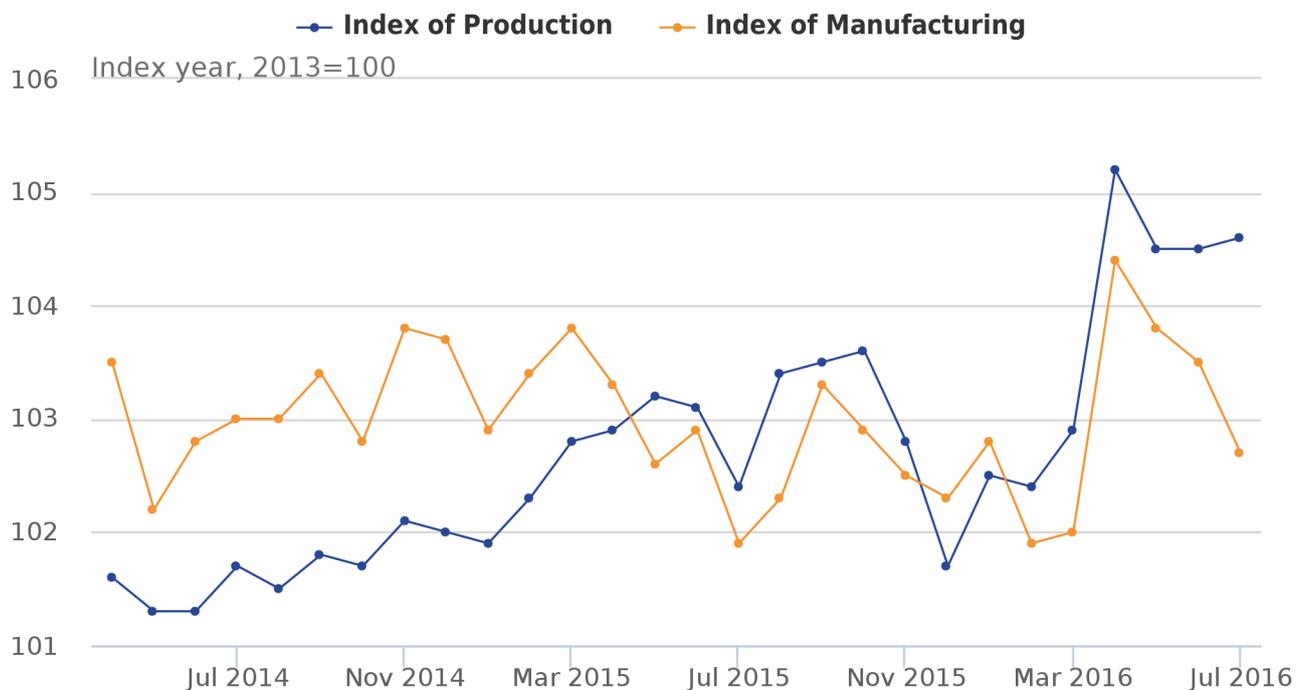
Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from April 2014 to July 2016.

**Table 1: Index of Production main figures, July 2016, UK**

	Index number (2013=100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Percentage change	
				Most recent month on previous month	Most recent 3 months on previous 3 months
Production	104.6	2.1	1.6	0.1	1.0
Manufacturing	102.7	0.8	0.8	-0.9	0.5

Source: Office for National Statistics

**Figure 1: Seasonally adjusted production and manufacturing, April 2014 to July 2016, UK**



Source: Primarily 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 Index of Production (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, all survey-based estimates, by definition, 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. However, the IoP is constructed from a variety of data sources, some of which are not based on random samples. We previously announced that research was under way to attempt to measure the standard error; this work has been completed and published in [Survey Methodology Bulletin No.75 Spring 2016](#) using the standard errors of the growths for the year 2014. We are working on updating this for regular publication as part of this release.

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 Monthly Business Survey (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](#).

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 notes.

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 [Quality and Methodology Information report](#). 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 rose slightly in July, following zero growth in June. Total production was 2.1% higher than in July 2015 and 2.9% above the level in July 2014. In the latest quarter (Quarter 2 (Apr to June) 2016), production output increased by 2.1% compared to Quarter 1 (Jan to Mar) 2016 following two quarters of contraction.

Since July 2015, manufacturing, the largest component of production, has been volatile with no obvious underlying pattern. In July 2016, manufacturing output contracted compared with June 2016 but remains 0.8% higher when compared with July 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

Looking over a longer-term period – from Quarter 2 (Apr to June) 1997 to Quarter 2 (Apr to June) 2016 – production and its main components have followed very different paths (Figure 2). Over this period, the electricity, gas, steam & air conditioning and water supply, sewerage & waste management industries grew at compound average growth rates of 0.2% and 0.5% per quarter respectively, while production as a whole contracted at a compound average growth rate of 0.1% per quarter. Over the same period, mining & quarrying contracted at a compound average growth rate of 0.9% per quarter while manufacturing output is broadly unchanged. 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.

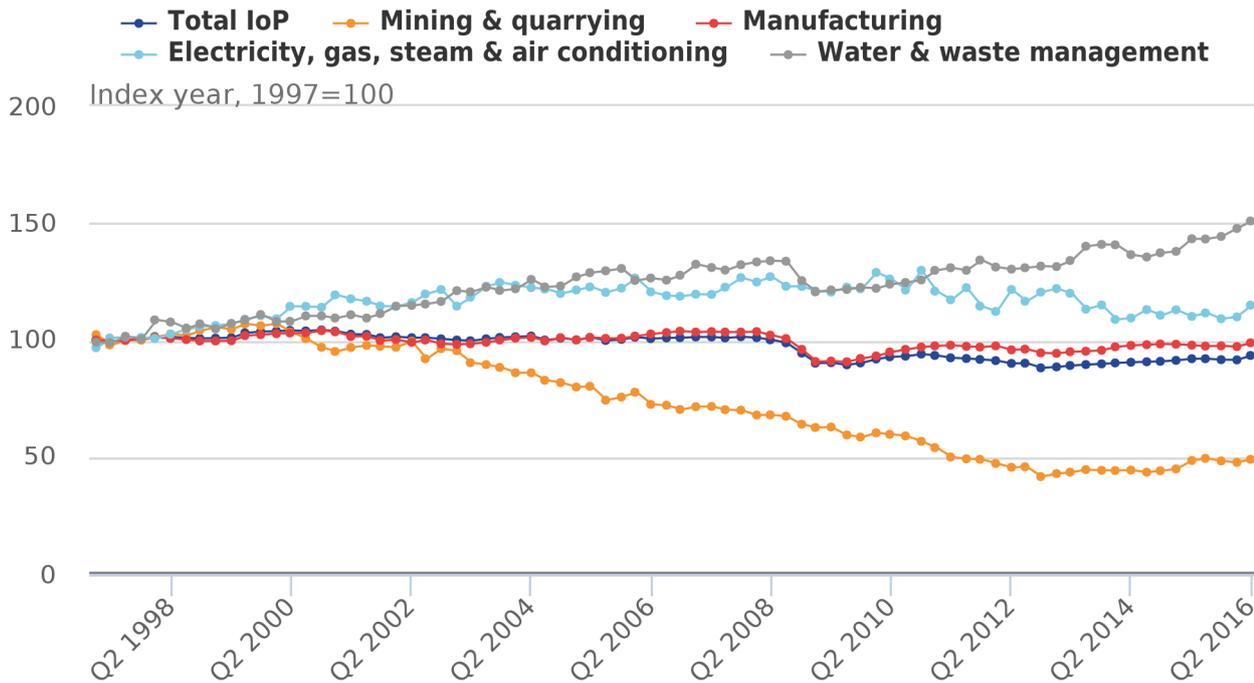
During the economy's downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009), production and all of its components contracted. However, the path of mining & quarrying shows little sign of the economy's downturn, with its output continuing to decline (Figure 2). Between the economy's peak in Quarter 1 (Jan to Mar) 2008 and the economy's trough in Quarter 2 (Apr to June) 2009, manufacturing experienced the largest contraction (12.2%) followed by total production (10.5%) water supply, sewerage & waste management (9.0%), mining & quarrying (7.5%) and electricity, gas, steam & air conditioning (3.5%).

In Quarter 2 (Apr to June) 2016, production and manufacturing output remained below their Quarter 1 (Jan to Mar) 2008 levels by 7.5% and 4.7%, respectively. Moreover, in Quarter 2 (Apr to June) 2016, mining & quarrying and electricity, gas, steam & air conditioning output were also below their respective values in Quarter 1 (Jan to Mar) 2008 by 27.8% and 7.9%, respectively. In contrast, water supply, sewerage & waste management is the only main industry within production to have surpassed its value in Quarter 1 (Jan to Mar) 2008, by 13.1%, as of Quarter 2 (Apr to June) 2016.

Headline GDP surpassed its pre-downturn peak in Quarter 3 (July to Sep) 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 [Second estimate of GDP: Quarter 2 \(Apr to June 2016\)](#) and [Labour productivity: Jan to Mar 2016](#)). 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 9.6% between 1997 and 2015 ( [UK Labour Market: August 2016, EMP13](#)).

In July 2016 the manufacturing industry experienced inflation 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 rose by 4.3% in the year to July 2016, from a fall of 0.5% in the year to June 2016. Output prices for goods produced by UK manufacturers rose by 0.3% in the year to July 2016, from a fall of 0.2% in the year to June 2016. This is the first time both input and output producer prices have been positive since mid-2014, although this is not a sudden shift: both series have been trending towards positive territory in recent months (more information can be found in [Producer Price Inflation: July 2016](#)).

**Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to Jun) 2016, UK**



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

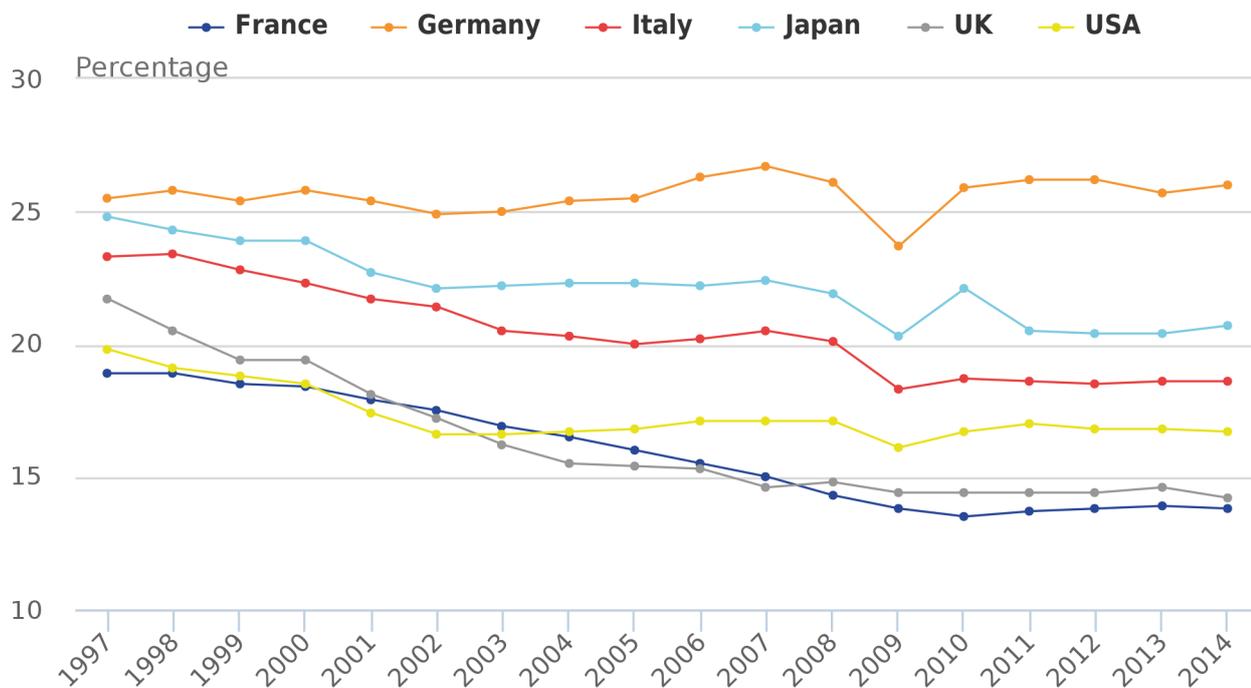
**Notes:**

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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 21.7%, around the middle of the range relative to the other economies. By 2014, the UK had become relatively less reliant on production, as its share fell to 14.2% of nominal GVA.

The same trend was observed in manufacturing, where the share of nominal GVA fell from 17.1% in 1997 to 10.2% in 2014. Moreover, between 1997 and 2014, the composition of production in the UK changed, with the share of production attributed to manufacturing decreasing from 78.7% in 1997 to 71.6% in 2014.

**Figure 3: Production as a percentage of nominal GVA in comparable economies to the UK, 1997 to 2014**



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

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

In this release, periods back to January 2015 are open for revision, in line with the [National Accounts revisions policy](#).

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). 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 July 2016 will be published on 09 September 2016 and [services](#) output for the same period on 30 September 2016.

**Table 2: Components of GDP, July 2016, UK**

Publication	Percentage of GDP	Release date	Month or quarter of GDP <sup>2</sup>	Percentage change			
				Most recent 3 months on a year earlier	Most recent 3 months on 3 months earlier <sup>3</sup>	Most recent month on the same month a year ago <sup>3</sup>	Most recent month on the previous month
Index of	14.6	07 Sep	Jul 2016	1.6	1.0	2.1	0.1
Production <sup>1</sup>			Jun 2016	1.6	2.1	1.4	0.0
Construction	5.9	12 Aug	Jun 2016	-1.4	-0.7	-2.2	-0.9
			May 2016	-1.5	-1.9	-1.6	-2.0
Index of	78.8	26 Aug	Jun 2016	2.7	0.5	2.4	0.2
services			May 2016	2.6	0.3	2.7	0.0
Retail		18 Aug	Jul 2016	5.2	1.8	5.9	1.4
Sales			Jun 2016	4.9	1.6	4.3	-0.9
Agriculture	0.7		Q2 2016	0.4	-0.3	..	..
			Q1 2016	1.4	0.0	..	..

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.

## 6 . Production and sectors supplementary analysis

**Table 3: Headline growth rates and contributions for the Index of Production, July 2016, UK**

Description 1	% of production 2	Month on same month a year ago growth (%)	Contribution to production (% points)	Month on previous month growth (%)	Contribution to production (% points)
IoP	100.0	2.1	2.1	0.1	0.1
Sector B	12.0	7.2	0.94	4.7	0.61
Division 06	9.6	10.4	1.08	5.6	0.60
Sector C	70.0	0.8	0.55	-0.9	-0.60
Sector D	10.4	3.1	0.30	0.4	0.04
Sector E	7.5	4.4	0.34	0.6	0.04

Source: Office for National Statistics

Notes:

1. IoP Total Index of Production; Sector B mining & quarrying; and within this, Division 06 oil & gas extraction; Sector C manufacturing; Sector D electricity, gas, steam and air conditioning; and Sector E water supply, sewerage & waste management.

2. "% of production" column does not add up to 100 due to rounding.

**Table 4: Growths and contributions to production, month on same month a year ago, July 2016, UK**

Sector	Summary description	Month on same month a year ago growth (percentage)	Contribution to production (percentage points)
IoP	Index of production	2.1	2.13
Sector B	Total mining & quarrying	7.2	0.94
5	Coal & lignite	-48.8	-0.02
6	Crude petroleum & natural gas	10.4	1.08
789	Other mining & quarrying	-4.8	-0.12
Sector C	Total manufacturing	0.8	0.55
CA	Food, beverages & tobacco	1.8	0.21
CB	Textiles & leather products	-4.9	-0.12
CC	Wood, paper & printing	0.3	0.01
CD	Coke & petroleum	-7.2	-0.06
CE	Chemical products	-2.8	-0.12
CF	Pharmaceutical products	-5.3	-0.29
CG	Rubber & plastic products	1.2	0.07
CH	Metal products	-0.9	-0.07
CI	Computer, electronic & optical	-1.9	-0.07
CJ	Electrical equipment	-7.1	-0.14
CK	Machinery & equipment	3.5	0.15
CL	Transport equipment	5.7	0.55
CM	Other manufacturing & repair	6.5	0.42
Sector D	Total electricity & gas	3.1	0.30
35.1	Electric power generation, transmission & distribution	-1.2	-0.09
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	14.1	0.38
Sector E	Total water	4.4	0.34
36	Water collection, treatment & supply	0.1	0.00
37	Sewerage	5.2	0.12
38	Waste collection, treatment & disposal activities; materials recovery	6.7	0.22
39	Remediation activities & other waste management services	4.6	0.00

Source: Office for National Statistics

**Table 5: Growths and contributions to production, month on previous month, July 2016, UK**

Sector	Summary description	Month on previous month growth (percentage)	Contribution to production (percentage points)
IoP	Index of production	0.1	0.09
Sector B	Total mining & quarrying	4.7	0.61
5	Coal & lignite	28.9	0.01
6	Crude petroleum & natural gas	5.6	0.60
789	Other mining & quarrying	0.2	0.00
Sector C	Total manufacturing	-0.9	-0.60
CA	Food, beverages & tobacco	0.2	0.02
CB	Textiles & leather products	1.6	0.04
CC	Wood, paper & printing	-1.6	-0.08
CD	Coke & petroleum	-4.3	-0.04
CE	Chemical products	1.8	0.07
CF	Pharmaceutical products	-5.6	-0.30
CG	Rubber & plastic products	-1.1	-0.07
CH	Metal products	-0.7	-0.05
CI	Computer, electronic & optical	-1.1	-0.04
CJ	Electrical equipment	-1.3	-0.02
CK	Machinery & equipment	3.9	0.17
CL	Transport equipment	-1.6	-0.16
CM	Other manufacturing & repair	-1.9	-0.13
Sector D	Total electricity & gas	0.4	0.04
35.1	Electric power generation, transmission & distribution	1.1	0.07
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	-1.1	-0.03
Sector E	Total water	0.6	0.04
36	Water collection, treatment & supply	3.8	0.08
37	Sewerage	0.8	0.02
38	Waste collection, treatment & disposal activities; materials recovery	-1.5	-0.05
39	Remediation activities & other waste management services	-1.6	0.00

Source: Office for National Statistics

## Total production

Total production output in July 2016 increased by 2.1% compared with July 2015 (Table 4), the seventh consecutive increase since December 2015. This increase reflected rises in all of its 4 main sectors, with mining & quarrying having the largest contribution, increasing by 7.2% and contributing 0.9 percentage points to total production. There were also increases in manufacturing of 0.8%; water supply, sewerage & waste management of 4.4% and in electricity, gas, steam & air conditioning output, which increased by 3.1%.

Between June 2016 and July 2016, total production increased by 0.1% (Table 5), following a negligible rise of 0.0% (to 1 decimal place) in the previous month. This increase reflected rises in 3 of its 4 main sectors, with mining & quarrying having the largest upward contribution, increasing by 4.7% and contributing 0.6 percentage points to total production. Water supply, sewerage & waste management increased by 0.6% and electricity, gas, steam & air conditioning output increased by 0.4%, both having a negligible contribution to total production. These increases were largely offset by a decrease in manufacturing of 0.9%, which contributed -0.6 percentage points to total production.

## Manufacturing

Manufacturing output increased by 0.8% between July 2015 and July 2016, contributing 0.5 percentage points to total production. Output increased in 6 of the 13 manufacturing sub-sectors compared with a year ago (Table 4). The manufacturing sub-sector with the largest upward contribution to total production output was the manufacture of transport equipment, which increased by 5.7% and contributed 0.6 percentage points to total production. The largest contribution within this sub-sector came from the manufacture of motor vehicles, trailers & semi-trailers, which increased by 9.0% and contributed 0.5 percentage points to total production. This was the fifth consecutive increase on a year ago and anecdotal evidence suggested increased sales and exports between these periods.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production output between July 2015 and July 2016 was the manufacture of basic pharmaceutical products & pharmaceutical preparations, which decreased by 5.3% and contributed -0.3 percentage points to total production.

Manufacturing output decreased by 0.9% between June 2016 and July 2016 and contributed -0.6 percentage points to total production. This followed a decrease of 0.2% in the previous month. There were decreases in 9 of the 13 manufacturing sub-sectors (Table 5) with the largest downward contribution coming from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which decreased by 5.6% and contributed -0.3 percentage points to total production.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production in July 2016 compared with June 2016 was the manufacture of machinery & equipment not elsewhere classified, which increased by 3.9% and contributed 0.2 percentage points to total production. For more information on the characteristics of this industry see the previously published [spotlight](#).

## Mining & quarrying

Mining & quarrying output increased by 7.2% in July 2016 compared with July 2015 and contributed 0.9 percentage points to total production. The sub-sector with the largest contribution to the increase was the extraction of crude petroleum & natural gas, which increased by 10.4% and contributed 1.1 percentage points to total production (Table 4). The Department for Business, Energy & Industrial Strategy (BEIS) advised the shut-down of one of the largest terminals, Sullom Voe, due to maintenance in July 2015 was a contributing factor to the increase in production on a year ago. In addition, the delayed planned maintenance in the Buzzard oil field from July 2016 into subsequent months has also contributed to the increase on a year ago.

Mining & quarrying output increased by 4.7% in July 2016 compared with June 2016 and contributed 0.6 percentage points to total production. This followed an increase of 1.6% in the previous month. The sub-sector with the largest contribution to the increase was the extraction of crude petroleum & natural gas, which increased by 5.6% and contributed 0.6 percentage points to total production (Table 5) following an increase of 1.8% in the previous month.

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

Electricity, gas, steam & air conditioning output increased by 3.1% in July 2016 compared with July 2015 and contributed 0.3 percentage points to total production (Table 4). This was the fifth consecutive increase. This increase reflected a rise in output in 1 of its 2 sub-sectors. The manufacture of gas & distribution of gaseous fuels through mains increased by 14.1% and contributed 0.4 percentage points to total production. This was the sixth consecutive increase since January 2016, following an increase of 13.3% in the previous month. Evidence from BEIS indicated the increase was a result of a substantial increase in electricity generated from gas at the expense of coal, as a result of reduced coal generating capacity.

Electricity, gas, steam & air conditioning output increased by 0.4% in July 2016 compared with June 2016, with a negligible contribution to total production (Table 5), following a decrease of 0.5% in the previous month. The increase in electricity, gas, steam & air conditioning output reflected a rise in output in 1 of its 2 sub-sectors; electric power generation, transmission & distribution, which increased by 1.1% and contributed 0.1 percentage points to total production. This followed an increase of 0.5% in the previous month. Evidence from BEIS suggested the increase in output was due to an increase in demand and was marginally offset by a slightly more expensive fuel mix.

## **Water & waste management**

Water supply, sewerage & waste management output increased by 4.4% in July 2016 compared with July 2015 and contributed 0.3 percentage points to total production. This reflected increases in all of its 4 sub-sectors' output (Table 4), with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 6.7% and contributed 0.2 percentage points to total production.

Water supply, sewerage & waste management output increased by 0.6% between June 2016 and July 2016 with a negligible contribution to total production (Table 5). This increase reflected rises in 2 of its 4 subsectors' output, with the largest upward contribution coming from water collection, treatment & supply, which increased by 3.8%, following a decrease of 4.1% in the previous month.

## **Revisions to IoP**

Revisions to the Index of Production follow the [National Accounts Revisions policy](#). 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 an 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 earliest period open for revision was January 2015. There were no revisions to IoP month-on-month growth rates greater than 0.1 percentage points.

Further details on the revisions to IoP components can be found in the IOP5R tables, located within the [dataset section of this release](#).

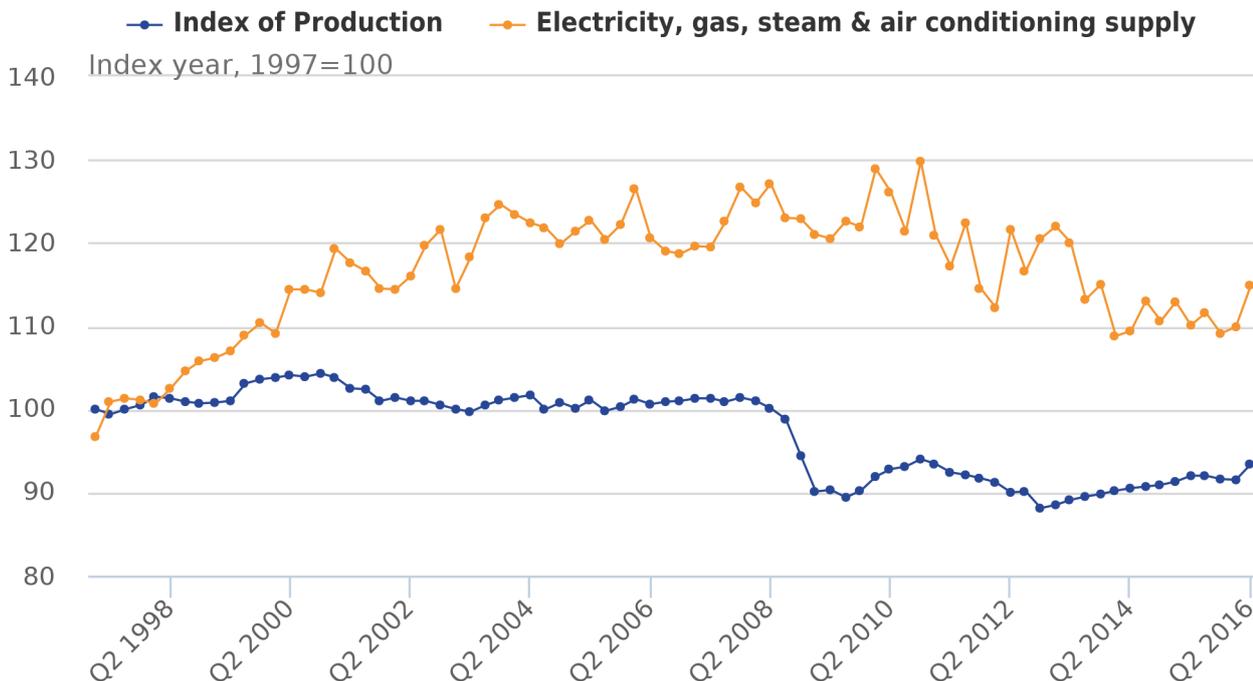
## 7 . Industry spotlight: Electricity, gas, steam & air conditioning supply

Electricity, gas, steam & air conditioning supply (Sector D) accounts for 10.4% of total production output. According to the standard industrial classification (SIC07) the industry includes the operation of electric and gas utilities, which generate, control and distribute electric power or gas. Also included are air conditioning and the provision of steam and hot water for heating purposes. The industry is divided into 2 sub-industries electric power generation, transmission & distribution (sub-industry 35.1) and manufacture of gas, distribution of gaseous fuels via mains; steam & air conditioning supply (sub-industry 35.2-3).

Figure 4 shows that electricity, gas, steam & air conditioning supply has consistently outperformed the total index of production over time, although it is much more volatile. Before the downturn, from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, the industry grew at a compound average growth rate of 0.6% per quarter, while total production's compound average growth rate was broadly zero. During the economic downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009) total production contracted by 10.5%, but electricity, gas, steam & air conditioning supply was less affected, contracting by only 3.5% over the same period.

However, since the downturn (from Quarter 3 (July to Sep) 2009 to Quarter 2 (Apr to June) 2016), electricity, gas, steam & air conditioning supply failed to recover with its output contracting at a compound average growth rate of 0.2% per quarter. In contrast, following the downturn total production grew at a compound average growth rate of 0.1% per quarter. Despite the differing growth paths following the downturn in Quarter 2 (Apr to June) 2016 both the industry and production were below their Quarter 1 (Jan to Mar) 2008 levels by 7.9% and 7.5%, respectively.

**Figure 4: Production and electricity, gas, steam and air conditioning supply, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2016**



Source: Office for National Statistics

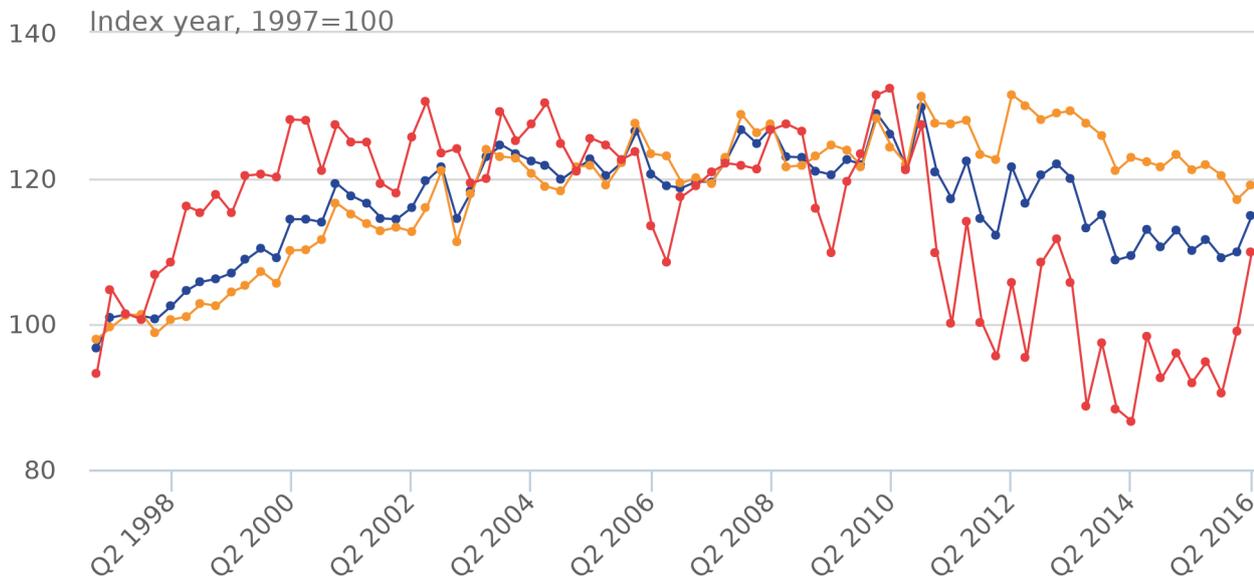
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Figure 5 shows that the quarterly performance of the two components of electricity, gas, steam & air conditioning supply have been quite volatile (particularly manufacture of gas, distribution of gaseous fuels via mains; steam & air conditioning supply). Electric power generation, transmission & distribution is the larger of the two components, accounting for around 70.7% of the industry.

**Figure 5: Electricity, gas, steam and air conditioning supply and its components, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2016**

**Electricity, gas, steam & air conditioning supply**  
**Electric power generation, transmission & distribution**  
**Manufacture of gas; distribution of gaseous fuels through mains & Steam and air conditioning sup**



**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 5 also shows 3 distinct periods in the performance of the 2 sub-industries. Between Quarter 1 (Jan to Mar) 1997 and Quarter 4 (Oct to Dec) 2005 manufacture of gas, distribution of gas fuels via mains; steam & air conditioning supply broadly outperformed electric power generation, transmission & distribution. Between Quarter 1 (Jan to Mar) 2006 and Quarter 2 (Apr to June) 2010 the 2 sub-industries were broadly tracking each other while since Quarter 3 (July to Sep) 2010, electric power generation, transmission & distribution has consistently outperformed manufacture of gas, distribution of gaseous fuels via mains; steam & air conditioning supply, although both have followed broadly downward trends.

Some of the fluctuations in these series can be explained by unusual weather patterns. For example, December 2015 was an exceptionally warm month (and November was also unusually warm), while January, February and March 2016 were much closer to their long-term average temperatures. This partially explains the rebound in the performance of gas in Quarter 1 (Jan to Mar) 2016 (growth of 9.3% compared to Quarter 4 (Oct to Dec) 2016), as households increased their gas usage.

## 8. Background notes

### 1. What's new?

[UK economic review: September 2016](#) is due to be published on 8 September 2016, providing further commentary on the economy. The UK economic review: August 2016 included a list of release dates for ONS's main economic indicators that cover periods following the 23 June, following the result of the UK's referendum on its membership of the European Union (see [Annex](#)).

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 August 2016, to be published on 7 October 2016, will contain revisions back to July 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.

The standard error for the Index of Production has been calculated based on growth rates from 2014 and published in [Survey Methodology Bulletin No.75 Spring 2016](#). We are working on updating this for regular publication as part of this release.

### VAT project update

[HMRC VAT update July 2016](#) was published on 12 July 2016. This was the fifth update 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. The next article will be published on 4 October 2016.

### 2. Special events

We previously maintained a list of candidate special events in the [special events calendar](#) up to 2014. 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 2013=100 and are classified to the [2007 Standard Industrial Classification](#) (SIC). The production industries, which accounted for 14.6% of GDP in 2013, 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:

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, HM Treasury and the Office for Budget Responsibility, to assist in informed policy and decision making.

## 4. Methods

The [Index of Production methodology](#) is published on our website within our methodology web pages. These include details on improvements, a sources catalogue detailing methods, data and weights used to compile IoP, Index of Services and output approach to gross domestic product (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 6 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](#) back to 2010.

**Table 6: Monthly business survey (MBS) response rates, July 2016, UK**

	Percentage			
	Year	Period	Turnover	Questionnaire
MBS overall	2016	Jul	88.9	75.0
	2016	Jun	95.0	82.6
	2016	May	96.3	84.5
	2016	Apr	96.5	85.5
MBS production only	2016	Jul	88.4	78.9
	2016	Jun	94.8	85.6
	2016	May	96.5	87.8
	2016	Apr	96.8	88.7

Source: Office for National Statistics

### Seasonal adjustment

The index numbers in this statistical bulletin are all seasonally adjusted in line with international best practice, 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 that 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 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 7 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 7 presents a summary of the differences between the first estimates published between August 2010 and July 2015 and the estimates published 12 months later.

**Table 7: Revisions, July 2016, UK**

		Percentage change	
		Revisions between first publication and estimates 12 months later	
Growth rates	Value in latest period	Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	1.0	-0.14	0.27
Manufacturing - 3 month	0.5	-0.13	0.27
Production - 1 month	0.1	-0.10 *	0.24
Manufacturing - 1 month	-0.9	-0.08	0.21

Source: Office for National Statistics

Datasets give [revisions triangles](#) of estimates for all months from April 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 7, 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. 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 our [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 [publish revisions triangles](#) or all the main published main indicators on our website.

## 8. Relevant links

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](#).

[A methodological note on leap year adjustments](#) was published on 29 February 2016, explaining how leap years might affect our time series and the methods used to adjust for them as part of seasonal adjustment.

## 9. 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:

- you 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](#) are now available
- you 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
- you 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](#) to the [National Statistics Quality Review of National Accounts](#)

As a reader and user of our statistics we welcome your feedback on the content of this publication, your views for improvement and on the way you use our statistics currently. If you would like to get in touch or send your feedback, please contact us.

## Index of Production Release Tables

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

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Percentage change, latest year on previous year  
Percentage change, latest month on same month a year ago
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# IOP5 Output of the Production Industries

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

Seasonally adjusted 2013 = 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	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	103.5	115.3	102.5	101.0	96.0	126.9	104.0	104.9	97.7	100.6	113.7
2012	100.7	102.8	101.0	100.2	95.9	109.0	101.3	100.9	99.0	100.6	103.6
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	101.5	100.6	102.9	94.0	100.7	98.9	106.2	100.5	103.1	105.0	96.5
2015	102.8	109.1 <sup>†</sup>	102.8 <sup>†</sup>	94.4 <sup>†</sup>	104.1 <sup>†</sup>	109.7 <sup>†</sup>	106.0 <sup>†</sup>	101.0 <sup>†</sup>	101.9 <sup>†</sup>	105.3	101.2 <sup>†</sup>
2015 Q2	103.1 <sup>†</sup>	110.8	102.9 <sup>†</sup>	93.7 <sup>†</sup>	104.9 <sup>†</sup>	112.2 <sup>†</sup>	106.8 <sup>†</sup>	100.3 <sup>†</sup>	102.4 <sup>†</sup>	105.8 <sup>†</sup>	101.6 <sup>†</sup>
Q3	103.1	112.8 <sup>†</sup>	102.5	94.9	104.8	114.5	105.3	100.9	101.5	104.7	103.4
Q4	102.7	110.2	102.6	92.8	105.6	111.9	104.9	101.7	101.7	103.7	101.6
2016 Q1	102.6	108.9	102.2	93.5	108.2	111.4	104.9	100.6	101.7	103.4	101.1
Q2	104.7	111.9	103.9	97.8	110.5	114.7	106.1	102.6	104.7	103.9	104.3
2015 May	103.2 <sup>†</sup>	113.6 <sup>†</sup>	102.6 <sup>†</sup>	94.4 <sup>†</sup>	104.2 <sup>†</sup>	116.0	104.5 <sup>†</sup>	102.1 <sup>†</sup>	101.1 <sup>†</sup>	104.6 <sup>†</sup>	103.5 <sup>†</sup>
Jun	103.1	110.2	102.9	94.1	106.1	111.3 <sup>†</sup>	109.6	99.1	103.1	106.2	101.3
Jul	102.4	110.2	101.9	94.0	107.1	110.6	106.3	100.7	99.3	105.2	101.4
Aug	103.4	116.8	102.3	94.7	104.2	119.9	104.8	100.1	102.1	104.4	105.6
Sep	103.5	111.3	103.3	96.0	103.2	113.1	104.9	102.0	103.1	104.6	103.3
Oct	103.6	113.1	102.9	96.9	105.0	114.4	103.1	102.8	101.3	104.5	104.7
Nov	102.8	110.9	102.5	93.5	104.8	113.0	105.8	101.0	101.2	104.1	102.5
Dec	101.7	106.8	102.3	88.1	107.0	108.2	106.0	101.2	102.5	102.5	97.6
2016 Jan	102.5	106.0	102.8	92.3	108.1	107.5	106.0	100.0	103.0	104.3	99.1
Feb	102.4	110.3	101.9	92.3	107.7	113.3	104.5	101.4	100.2	103.1	101.4
Mar	102.9	110.3	102.0	95.7	108.7	113.6	104.1	100.4	102.0	102.8	102.8
Apr	105.2	111.8	104.4	99.8	109.3	114.7	106.1	104.0	104.4	104.3	105.0
May	104.5	111.2	103.8	97.0	111.0	113.6	106.9	102.4	104.2	103.9	103.8
Jun	104.5	112.9	103.5	96.5	111.2	115.7	105.4	101.4	105.3	103.4	104.0
Jul	104.6	118.2	102.7	96.9	111.8	122.1	106.4	99.6	103.6	103.8	107.1
<b>Percentage change, latest year on previous year</b>											
2011	-0.6	-14.3	2.2	-6.1	5.7	-18.4	0.3	-0.2	6.8	0.7	-10.6
2012	-2.7	-10.9	-1.4	-0.9	-0.1	-14.1	-2.6	-3.8	1.3	-	-8.9
2013	-0.7	-2.7	-1.0	-0.2	4.3	-8.2	-1.3	-0.9	1.0	-0.6	-3.5
2014	1.5	0.6	2.9	-6.0	0.7	-1.1	6.2	0.5	3.1	5.0	-3.5
2015	1.3	8.5 <sup>†</sup>	-0.1 <sup>†</sup>	0.4 <sup>†</sup>	3.4 <sup>†</sup>	10.9 <sup>†</sup>	-0.2 <sup>†</sup>	0.5 <sup>†</sup>	-1.2 <sup>†</sup>	0.3 <sup>†</sup>	4.9 <sup>†</sup>
<b>Percentage change, latest month on same month a year ago</b>											
2014 May	1.6	5.0	2.5	-8.6	1.8	3.8	3.1	-1.3	3.2	5.8	-2.6
Jun	0.8	-2.2	2.0	-2.3	-1.3	-2.7	3.7	-2.2	3.6	3.9	-3.2
Jul	1.4	-2.4	2.8	1.1	-3.2	-4.8	6.8	-1.2	2.6	6.9	-2.9
Aug	1.6	-3.4	3.3	2.3	-4.7	-7.1	5.2	2.4	3.0	5.1	-3.2
Sep	1.1	-1.5	2.8	-4.1	-1.9	-4.5	9.1	0.8	3.7	4.1	-4.2
Oct	1.3	2.9	2.1	-2.9	-2.1	2.3	8.8	0.8	2.8	2.0	-0.2
Nov	1.6	0.6	3.5	-8.1	-1.4	-1.2	8.4	2.5	4.7	3.3	-4.2
Dec	0.9	-4.3	2.6	-0.2	-4.0	-8.4	12.6	0.1	5.4	3.6	-4.9
2015 Jan	1.2	5.8 <sup>†</sup>	1.2 <sup>†</sup>	0.2 <sup>†</sup>	-4.4 <sup>†</sup>	5.0 <sup>†</sup>	4.9	3.6 <sup>†</sup>	-1.7 <sup>†</sup>	1.7	2.4
Feb	1.0 <sup>†</sup>	-1.5	1.0	6.8	-2.3	-5.6	0.7 <sup>†</sup>	-1.2	1.2	3.6	0.8
Mar	1.4	0.9	1.2	4.4	0.8	-0.6	3.9	1.4	-0.3	2.5	1.3 <sup>†</sup>
Apr	1.3	7.6	-0.2	1.9	4.1	9.7	0.7	-2.3	-0.4	1.5 <sup>†</sup>	4.9
May	1.8	9.3	0.4	1.3	4.1	12.9	2.4	1.0	-0.5	0.1	5.8
Jun	1.8	11.2	0.1	-1.3	6.7	15.0	5.4	-0.5	-1.2	1.7	5.4
Jul	0.7	11.1	-1.1	-3.4	8.0	13.9	0.7	0.4	-3.8	-0.3	4.3
Aug	1.9	20.0	-0.7	-3.1	5.4	26.5	-1.7	-0.8	-0.1	-1.1	9.5
Sep	1.6	9.6	-0.1	2.9	3.4	13.4	-4.3	1.4	-0.8	-1.1	7.1
Oct	1.9	9.9	0.1	3.4	4.1	12.9	-4.9	2.8	-1.8	-0.3	7.6
Nov	0.7	11.0	-1.3	0.3	3.2	16.3	-3.2	-0.3	-3.0	-1.6	7.4
Dec	-0.3	7.3	-1.3	-7.6	7.9	12.8	-5.7	0.4	-1.9	-3.5	1.8
2016 Jan	0.6	2.9	-0.1	-3.6	8.8	6.7	-3.1	-0.8	2.3	-2.1	0.9
Feb	0.1	9.5	-1.5	-4.9	6.2	16.4	-0.2	1.3	-2.5	-4.0	3.9
Mar	0.1	6.1	-1.7	0.6	6.6	11.1	-2.6	-1.8	-0.1	-3.9	4.6
Apr	2.2	2.9	1.1	8.0	4.7	5.0	-0.1	4.3	1.3	-2.3	5.1
May	1.2	-2.2	1.1	2.7	6.5	-2.0	2.3	0.3	3.0	-0.6	0.3
Jun	1.4	2.4	0.6	2.5	4.8	3.9	-3.9	2.3	2.2	-2.6	2.7
Jul	2.1	7.2	0.8	3.1	4.4	10.4	0.1	-1.0	4.4	-1.4	5.6

<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 2013 = 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	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7	
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T	
<b>Percentage change, latest month on previous month</b>												
2014	May	-0.3	3.0	-1.2	2.9	-0.2	3.2	-3.1	-0.9	-1.7	-0.7	2.7
	Jun	-	-4.7	0.5	2.3	-0.6	-5.8	1.9	-1.4	2.6	-0.1	-1.7
	Jul	0.3	0.1	0.2	2.0	-0.3	0.4	1.5	0.7	-1.1	1.1	1.1
	Aug	-0.2	-1.9	-	0.4	-0.3	-2.4	1.0	0.6	-0.9	-	-0.8
	Sep	0.4	4.3	0.4	-4.6	0.9	5.2	2.8	-0.3	1.6	0.1	0.1
	Oct	-0.1	1.3	-0.6	0.5	1.1	1.6	-1.2	-0.5	-0.7	-0.8	0.9
	Nov	0.4	-2.9	1.0	-0.5	0.6	-4.1	0.9	1.2	1.2	0.9	-1.9
	Dec	-0.1	-0.5	-0.1	2.2	-2.3	-1.2	2.8	-0.5	0.1	0.3	0.5
2015	Jan	-0.1	3.6 <sup>T</sup>	-0.8	0.6 <sup>T</sup>	0.2 <sup>T</sup>	5.0 <sup>T</sup>	-2.6	0.1 <sup>T</sup>	-3.7 <sup>T</sup>	0.4	2.5
	Feb	0.4	-2.3	0.5 <sup>T</sup>	1.4	2.0	-3.4	-4.2 <sup>T</sup>	-0.7	2.1	0.9	-0.7
	Mar	0.4 <sup>T</sup>	3.2	0.3	-2.1	0.6	5.1	2.0	2.1	-0.6	-0.4	0.7 <sup>T</sup>
	Apr	0.1	4.5	-0.5	-2.9	2.3	6.8	-0.6	-2.5	0.9	-0.2 <sup>T</sup>	1.6
	May	0.3	4.6	-0.7	2.2	-0.2	6.2	-1.5	2.4	-1.8	-2.0	3.6
	Jun	-0.1	-3.0	0.3	-0.3	1.8	-4.0	4.9	-2.8	1.9	1.5	-2.1
	Jul	-0.7	-0.1	-1.0	-0.2	0.9	-0.6	-3.0	1.6	-3.7	-0.9	0.1
	Aug	1.0	6.0	0.5	0.8	-2.7	8.4	-1.4	-0.6	2.9	-0.8	4.1
	Sep	0.1	-4.7	1.0	1.3	-1.0	-5.7	0.1	1.9	0.9	0.1	-2.2
	Oct	0.1	1.6	-0.5	1.0	1.8	1.2	-1.8	0.8	-1.7	-0.1	1.4
	Nov	-0.8	-1.9	-0.3	-3.5	-0.2	-1.2	2.7	-1.8	-0.1	-0.4	-2.1
	Dec	-1.0	-3.7	-0.2	-5.8	2.1	-4.3	0.1	0.3	1.3	-1.6	-4.7
2016	Jan	0.8	-0.7	0.5	4.8	1.0	-0.7	-	-1.2	0.5	1.8	1.5
	Feb	-0.1	4.0	-0.8	-	-0.4	5.4	-1.4	1.4	-2.7	-1.1	2.3
	Mar	0.5	-	0.1	3.6	1.0	0.3	-0.4	-1.1	1.8	-0.3	1.4
	Apr	2.3	1.3	2.3	4.3	0.5	1.0	1.9	3.6	2.4	1.5	2.1
	May	-0.7	-0.5	-0.7	-2.8	1.5	-0.9	0.8	-1.6	-0.2	-0.4	-1.2
	Jun	-	1.6	-0.2	-0.5	0.2	1.8	-1.5	-1.0	1.1	-0.5	0.3
	Jul	0.1	4.7	-0.9	0.4	0.6	5.6	1.0	-1.7	-1.6	0.4	2.9
<b>Percentage change, latest 3 months on same 3 months a year ago<sup>2</sup></b>												
2014	May	1.9	5.6	3.1	-13.0	4.8	5.5	3.1	0.8	2.3	6.3	-3.8
	Jun	1.5	2.1	2.9	-8.8	1.9	1.4	3.8	-0.6	3.1	5.9	-3.9
	Jul	1.3	0.1	2.4	-3.4	-0.9	-1.3	4.6	-1.6	3.1	5.5	-2.9
	Aug	1.3	-2.6	2.7	0.4	-3.1	-4.9	5.3	-0.4	3.1	5.3	-3.1
	Sep	1.4	-2.4	2.9	-0.2	-3.3	-5.5	7.0	0.7	3.1	5.4	-3.4
	Oct	1.4	-0.7	2.7	-1.6	-2.9	-3.2	7.7	1.3	3.2	3.8	-2.6
	Nov	1.3	0.6	2.8	-5.1	-1.8	-1.2	8.8	1.4	3.7	3.2	-2.9
	Dec	1.3	-0.3	2.8	-3.8	-2.5	-2.5	9.9	1.1	4.3	3.0	-3.2
2015	Jan	1.2	0.6	2.4	-2.8 <sup>T</sup>	-3.3	-1.7	8.6	2.1 <sup>T</sup>	2.8 <sup>T</sup>	2.8	-2.3
	Feb	1.0	-0.1 <sup>T</sup>	1.6	2.2	-3.6 <sup>T</sup>	-3.2 <sup>T</sup>	6.0	0.8	1.6	2.9	-0.6
	Mar	1.2	1.6	1.1	3.7	-2.0	-0.5	3.2 <sup>T</sup>	1.2	-0.3	2.6	1.5 <sup>T</sup>
	Apr	1.2	2.3	0.7 <sup>T</sup>	4.4	0.8	1.1	1.8	-0.7	0.2	2.5	2.3
	May	1.5	5.9	0.5	2.5	3.0	7.3	2.3	-	-0.4	1.4 <sup>T</sup>	4.0
	Jun	1.6 <sup>T</sup>	9.4	0.1	0.6	5.0	12.5	2.8	-0.6	-0.7	1.1	5.3
	Jul	1.4	10.5	-0.2	-1.2	6.3	13.9	2.8	0.3	-1.8	0.5	5.1
	Aug	1.5	14.0	-0.6	-2.6	6.7	18.4	1.4	-0.3	-1.7	0.1	6.4
	Sep	1.4	13.5	-0.6	-1.3	5.6	17.8	-1.8	0.3	-1.6	-0.8	7.0
	Oct	1.8	13.1	-0.2	1.0	4.3	17.4	-3.7	1.2	-0.9	-0.6	8.1
	Nov	1.4	10.2	-0.4	2.2	3.6	14.2	-4.1	1.3	-1.9	-1.0	7.4
	Dec	0.8	9.4	-0.8	-1.3	5.1	14.0	-4.6	1.0	-2.2	-1.8	5.6
2016	Jan	0.3	7.0	-0.9	-3.7	6.6	11.8	-4.0	-0.2	-0.9	-2.4	3.3
	Feb	0.1	6.6	-1.0	-5.4	7.6	11.9	-3.1	0.3	-0.7	-3.2	2.2
	Mar	0.2	6.1	-1.1	-2.7	7.2	11.3	-2.0	-0.5	-0.1	-3.4	3.1
	Apr	0.8	6.1	-0.7	1.1	5.8	10.6	-1.0	1.2	-0.4	-3.4	4.5
	May	1.2	2.2	0.2	3.8	5.9	4.4	-0.1	0.9	1.4	-2.3	3.3
	Jun	1.6	1.0	1.0	4.4	5.3	2.2	-0.6	2.3	2.2	-1.9	2.7
	Jul	1.6	2.5	0.8	2.8	5.2	4.0	-0.5	0.5	3.2	-1.6	2.9

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

2 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 2013 = 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	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months<sup>2</sup></b>											
2014											
May	0.4	1.4	1.0	-2.5	-3.1	0.4	0.7	1.5	1.4	1.0	-1.2
Jun	0.3	0.4	0.6	0.6	-3.0	-1.0	0.1	1.0	1.0	0.4	-0.2
Jul	-	-1.3	-0.1	4.9	-2.2	-2.9	-0.2	-1.1	0.6	0.3	0.7
Aug	0.1	-4.0	0.2	5.6	-1.4	-5.4	1.9	-1.0	0.7	0.4	-0.1
Sep	0.2	-2.0	0.3	3.3	-0.7	-2.5	3.3	-0.3	-	0.9	0.3
Oct	0.2	-0.2	0.4	-0.4	0.3	-0.3	4.1	0.2	-	0.5	-0.4
Nov	0.4	2.9	0.4	-3.5	1.6	3.3	3.5	0.4	0.5	0.3	-0.2
Dec	0.3	1.4	0.3	-2.1	1.3	1.0	2.5	0.1	0.8	-	-0.5
2015											
Jan	0.3	0.2	0.4	-0.1	0.2	-0.6 <sup>T</sup>	2.0	0.5 <sup>T</sup>	-0.1 <sup>T</sup>	0.8 <sup>T</sup>	-0.2
Feb	0.2	-0.4 <sup>T</sup>	-	2.9 <sup>T</sup>	-0.7 <sup>T</sup>	-1.4	-0.2	-	-1.1	1.2	0.9
Mar	0.4	1.8	-0.1	2.0	0.4	2.0	-2.7 <sup>T</sup>	0.4	-2.1	1.3	2.0 <sup>T</sup>
Apr	0.7 <sup>T</sup>	3.6	-	0.1	2.6	5.1	-4.0	-0.3	-0.5	0.9	2.2
May	0.9	7.5	-0.1 <sup>T</sup>	-2.2	3.6	11.4	-2.8	0.7	-0.5	-0.5	3.4
Jun	0.7	8.0	-0.4	-2.5	3.9	12.0	-0.2	-0.8	0.6	-1.1	3.6
Jul	0.3	6.6	-1.0	-0.7	3.1	9.4	0.9	-0.1	-1.4	-1.6	3.5
Aug	-	3.4	-0.8	0.3	2.2	4.4	1.0	-1.3	-0.6	-0.8	2.2
Sep	0.1	1.7	-0.4	1.3	-0.1	2.1	-1.4	0.6	-0.9	-1.0	1.8
Oct	0.6	2.1	0.4	1.8	-1.6	2.8	-2.4	1.0	1.0	-0.8	2.4
Nov	0.3	-0.6	0.5	1.3	-1.4	-0.4	-2.2	2.0	0.4	-0.8	0.7
Dec	-0.4	-2.2	0.1	-2.2	0.8	-2.3	-0.4	0.7	0.2	-1.0	-1.8
2016											
Jan	-1.2	-5.1	-0.3	-4.8	2.4	-5.4	1.6	-0.9	0.1	-0.8	-4.6
Feb	-1.1	-3.6	-0.6	-4.8	3.1	-3.4	0.9	-1.0	-	-1.0	-4.0
Mar	-0.1	-1.2	-0.3	0.7	2.4	-0.4	-0.1	-1.1	0.1	-0.3	-0.5
Apr	1.1	2.7	0.3	5.1	1.8	3.9	-1.0	1.2	-	-0.2	3.3
May	2.0	3.1	1.1	7.2	1.9	3.9	0.2	1.3	1.6	0.4	4.5
Jun	2.1	2.8	1.6	4.6	2.1	2.9	1.2	2.0	2.9	0.4	3.1
Jul	1.0	3.0	0.5	0.9	2.5	2.9	1.3	-0.8	2.1	0.3	1.8

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

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

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2013 = 100

Section	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
	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
2011	104.4	108.3	103.3	113.4	103.1	109.1
2012	101.7	104.6	97.8	102.0	101.1	102.7
2013	100.0	100.0	100.0	100.0	100.0	100.0
2014	104.2	97.3	101.1	91.1	102.8	95.0
2015	104.1	97.3 †	101.6 †	93.3 †	109.0 †	96.0 †
2015 Q2	103.0	100.8 †	100.9 †	84.5 †	108.5	95.1 †
Q3	104.1 †	95.8	100.9	96.7	109.0 †	96.8
Q4	104.7	96.5	101.5	101.5	108.2	97.4
2016 Q1	104.3	92.3	100.6	89.6	105.2	95.6
Q2	104.8	91.8	102.4	90.1	105.0	101.0
2015 May	103.0 †	102.2 †	100.8 †	85.1 †	106.4	100.9 †
Jun	102.9	101.7	99.8	82.9	107.8 †	91.6
Jul	103.3	99.1	100.2	96.3	108.9	96.6
Aug	104.1	91.2	100.6	95.5	108.8	95.8
Sep	105.0	97.3	101.8	98.4	109.3	97.9
Oct	104.9	98.2	100.9	103.6	108.6	100.6
Nov	104.6	95.8	102.8	103.5	109.7	95.2
Dec	104.5	95.4	100.8	97.3	106.2	96.4
2016 Jan	104.6	97.2	101.8	93.9	106.3	90.8
Feb	105.2	90.8	99.7	91.4	104.7	97.8
Mar	103.2	88.9	100.3	83.6	104.6	98.2
Apr	104.0	94.2	101.8	84.8	106.1	106.9
May	105.4	88.4	103.4	92.2	105.0	99.0
Jun	105.0	92.7	102.2	93.4	104.0	96.9
Jul	105.1	94.2	100.5	89.4	105.9	91.5
<b>Percentage change, latest year on previous year</b>						
2011	6.6	1.4	-5.6	1.4	6.8	-13.5
2012	-2.6	-3.4	-5.3	-10.1	-1.9	-5.8
2013	-1.7	-4.4	2.3	-1.9	-1.1	-2.6
2014	4.2	-2.7	1.1	-8.9	2.8	-5.0
2015	-0.1 †	- †	0.5 †	2.5 †	6.0	1.0 †
<b>Percentage change, latest month on same month a year ago</b>						
2014 May	0.9	11.6	-0.1	-8.0	1.7	-10.5
Jun	2.4	-2.7	-0.3	-18.1	-0.6	-10.5
Jul	1.4	-6.0	0.4	-12.9	5.3	-2.4
Aug	4.3	-8.9	3.3	-12.6	-0.8	4.7
Sep	6.1	-6.0	2.5	-5.2	3.1	-6.8
Oct	6.8	-10.1	3.5	2.6	2.0	-8.5
Nov	5.9	-9.1	3.7	-3.0	3.9	-2.1
Dec	5.6	-9.8	-0.8	-10.4	1.4	-5.4
2015 Jan	2.5	-9.9 †	3.2 †	-2.8 †	4.9	7.5 †
Feb	0.8 †	-5.1	1.9	3.5	10.4	-5.7
Mar	0.5	-1.1	3.9	-7.7	7.2	0.8
Apr	-1.2	-3.0	2.4	-8.3	8.2	-6.9
May	-	-6.2	-	-7.0	3.4 †	6.9
Jun	-0.6	4.9	-0.9	-4.9	7.2	-1.5
Jul	-1.1	6.4	-0.6	9.4	5.3	0.3
Aug	-0.6	-2.7	-2.6	7.9	8.5	-0.9
Sep	0.8	3.2	-0.9	10.1	4.8	3.2
Oct	-0.1	6.8	-1.8	13.1	5.6	9.1
Nov	-0.4	2.6	0.7	14.4	4.6	-0.2
Dec	-1.3	6.8	0.8	3.0	2.4	0.7
2016 Jan	-0.2	5.5	-2.0	2.9	-2.4	-3.5
Feb	0.6	-6.2	-3.1	-3.0	-6.1	6.2
Mar	-1.1	-10.7	-2.0	-3.2	-5.0	0.2
Apr	1.0	-4.4	-0.3	-0.6	-4.7	15.3
May	2.4	-13.5	2.6	8.2	-1.4	-1.8
Jun	2.0	-8.9	2.4	12.7	-3.5	5.8
Jul	1.8	-4.9	0.3	-7.2	-2.8	-5.3

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

† 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 2013 = 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	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	107.3	100.0	101.6	94.6	112.2	89.0	102.1
2012	102.8	102.9	102.1	104.9	113.4	92.9	95.6
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	113.1	101.5	103.9	96.8	104.3	103.5	105.6
2015	109.8 †	101.9	102.0 †	97.8 †	91.1 †	110.0 †	103.8 †
2015 Q2	109.7 †	103.4	103.5 †	98.7 †	92.2 †	109.6	105.2 †
Q3	109.2	100.6 †	101.9	97.5	89.6	111.0 †	102.3
Q4	109.5	99.3	100.7	97.0	88.2	112.1	102.1
2016 Q1	111.0	101.1	98.7	94.1	88.8	110.5	107.1
Q2	113.1	99.6	100.5	91.3	90.1	116.9	108.2
2015 May	109.0 †	99.9 †	100.6	98.3 †	90.4 †	110.4 †	104.0 †
Jun	109.7	105.6	107.5 †	98.6	90.5	110.1	104.8
Jul	109.9	99.8	101.7	96.6	88.5	108.1	101.9
Aug	108.0	101.7	102.1	96.4	89.5	113.0	100.4
Sep	109.6	100.2	102.0	99.5	90.8	111.7	104.5
Oct	109.7	100.1	100.5	98.4	87.7	113.3	98.5
Nov	109.1	99.3	99.7	97.0	87.6	111.6	104.0
Dec	109.6	98.6	102.0	95.7	89.3	111.4	103.9
2016 Jan	111.7	101.7	101.6	94.8	88.4	111.8	108.0
Feb	110.7	100.7	97.8	95.0	87.6	108.3	106.4
Mar	110.6	100.9	96.9	92.5	90.5	111.5	106.9
Apr	114.0	99.4	99.3	93.3	92.0	117.5	106.7
May	112.9	99.8	101.4	89.8	90.1	117.2	107.1
Jun	112.5	99.6	100.9	90.9	88.2	116.1	110.7
Jul	111.2	99.0	99.8	89.7	91.6	114.3	108.6
<b>Percentage change, latest year on previous year</b>							
2011	-0.2	4.4	-1.3	-3.8	8.6	10.2	5.4
2012	-4.2	2.9	0.5	10.9	1.1	4.4	-6.3
2013	-2.8	-2.8	-2.1	-4.7	-11.8	7.6	4.6
2014	13.1	1.5	3.9	-3.2	4.3	3.5	5.6
2015	-3.0	0.5 †	-1.9 †	1.0 †	-12.7 †	6.3 †	-1.7 †
<b>Percentage change, latest month on same month a year ago</b>							
2014 May	14.4	3.0	0.2	-8.2	10.7	3.0	6.5
Jun	12.0	5.2	-1.0	-2.0	5.0	4.6	7.2
Jul	13.0	2.0	5.7	-2.0	5.1	3.1	5.5
Aug	13.4	3.7	2.9	-7.6	3.4	0.9	7.4
Sep	12.4	-	11.0	-2.6	2.7	1.7	3.9
Oct	10.7	-2.0	8.7	-7.2	-0.3	1.7	5.9
Nov	8.6	0.9	7.6	-1.5	0.3	4.1	8.7
Dec	10.0	-0.6	15.1	2.1	-1.2	9.9	0.5
2015 Jan	0.1	1.6	-1.4 †	-0.7 †	-10.1 †	6.4 †	-0.6 †
Feb	-0.1 †	3.5 †	-0.8	2.8	-9.7	6.8	1.6
Mar	-0.5	3.7	0.8	0.6	-11.6	4.6	3.3
Apr	-3.3	3.2	-1.5	2.3	-9.3	4.3	2.1
May	-2.9	0.6	0.5	3.8	-15.0	8.3	0.8
Jun	-2.2	3.2	7.7	-3.0	-14.6	3.7	-0.3
Jul	-3.5	0.2	-0.9	-1.3	-16.7	3.3	-4.0
Aug	-6.2	-1.3	-0.2	3.5	-12.5	11.9	-8.2
Sep	-3.8	-1.6	-6.2	2.1	-13.0	7.4	-1.2
Oct	-4.3	-0.5	-4.0	7.0	-14.6	8.8	-8.4
Nov	-4.0	-3.4	-5.7	-0.2	-13.0	5.0	-4.6
Dec	-4.5	-3.4	-9.4	-3.9	-11.6	4.7	-0.1
2016 Jan	0.8	-2.1	-0.7	-1.6	-5.9	5.0	2.7
Feb	-	-4.4	-2.8	-3.2	-8.6	-	1.5
Mar	-0.5	-3.2	-5.5	-6.7	-3.8	3.7	-0.2
Apr	3.3	-5.0	-3.2	-6.0	-3.8	8.6	-0.2
May	3.5	-0.2	0.8	-8.6	-0.4	6.1	3.0
Jun	2.6	-5.6	-6.1	-7.8	-2.6	5.4	5.6
Jul	1.2	-0.9	-1.9	-7.1	3.5	5.7	6.5

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

† 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 2013 = 100

Section	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	
	CA	CB	CC	CD	CE	CF	
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7	
	K22B	K22P	K22T	K22X	K22Z	K239	
<b>Percentage change, latest month on previous month</b>							
2014	May	-1.1	7.2	1.2	-1.6	-	-5.2
	Jun	0.5	-10.9	-0.1	-4.8	-2.3	-1.5
	Jul	0.8	-4.0	0.1	1.0	2.8	3.6
	Aug	0.3	0.6	2.5	0.6	-3.1	0.3
	Sep	-0.5	0.6	-0.6	1.0	4.0	-1.8
	Oct	0.8	-2.4	-	2.4	-1.4	-2.9
	Nov	-	1.5	-0.6	-1.2	2.0	3.5
	Dec	0.9	-4.3	-2.1	4.4	-1.1	0.3
2015	Jan	-1.0 <sup>†</sup>	3.1 <sup>†</sup>	3.9 <sup>†</sup>	-3.4	5.0	-1.6 <sup>†</sup>
	Feb	-0.3	5.0	-1.0	3.3 <sup>†</sup>	2.4	-2.1
	Mar	-0.2	2.9	-0.5	-8.4	-1.3 <sup>†</sup>	6.3
	Apr	-1.3	-1.0	-0.3	-1.2	1.1	-5.3
	May	-	3.7	-1.3	-0.2	-4.4	8.8
	Jun	-0.1	-0.4	-1.0	-2.6	1.3	-9.2
	Jul	0.4	-2.6	0.4	16.1	1.0	5.5
	Aug	0.8	-7.9	0.4	-0.8	-0.1	-0.9
	Sep	0.8	6.7	1.2	3.1	0.4	2.3
	Oct	-0.1	1.0	-0.9	5.2	-0.6	2.7
	Nov	-0.2	-2.4	1.9	-0.1	1.0	-5.3
	Dec	-0.1	-0.4	-2.0	-6.0	-3.2	1.3
2016	Jan	-	1.8	1.0	-3.5	0.1	-5.8
	Feb	0.6	-6.6	-2.0	-2.6	-1.4	7.6
	Mar	-1.9	-2.1	0.6	-8.6	-0.1	0.4
	Apr	0.7	6.0	1.5	1.5	1.5	9.0
	May	1.4	-6.2	1.6	8.6	-1.1	-7.4
	Jun	-0.5	4.9	-1.2	1.4	-0.9	-2.2
	Jul	0.2	1.6	-1.6	-4.3	1.8	-5.6
<b>Percentage change, latest 3 months on same 3 months a year ago</b>							
2014	May	4.0	6.5	-1.4	-8.8	3.0	-5.3
	Jun	3.1	4.6	-	-12.3	1.9	-8.6
	Jul	1.6	0.9	-	-13.1	2.1	-7.9
	Aug	2.7	-5.9	1.1	-14.6	1.3	-3.0
	Sep	3.9	-7.0	2.1	-10.3	2.5	-1.7
	Oct	5.7	-8.3	3.1	-5.4	1.4	-3.8
	Nov	6.3	-8.4	3.2	-1.9	3.0	-5.8
	Dec	6.1	-9.7	2.1	-4.0	2.4	-5.4
2015	Jan	4.7	-9.6 <sup>†</sup>	2.0 <sup>†</sup>	-5.6	3.4	-0.3 <sup>†</sup>
	Feb	2.9	-8.3	1.4	-3.6 <sup>†</sup>	5.5	-1.6
	Mar	1.2 <sup>†</sup>	-5.4	3.0	-2.4	7.5	0.6
	Apr	-	-3.1	2.7	-4.2	8.6	-4.0
	May	-0.3	-3.5	2.1	-7.7	6.3	0.1
	Jun	-0.6	-1.6	0.5	-6.8	6.2	-0.6
	Jul	-0.6	1.3	-0.5	-0.9	5.3 <sup>†</sup>	1.9
	Aug	-0.8	2.9	-1.4	4.2	7.0	-0.7
	Sep	-0.3	2.3	-1.4	9.1	6.2	0.8
	Oct	-	2.4	-1.8	10.4	6.3	3.7
	Nov	0.1	4.2	-0.6	12.5	5.0	4.0
	Dec	-0.6	5.4	-0.1	10.0	4.2	3.1
2016	Jan	-0.7	4.9	-0.2	6.7	1.5	-1.0
	Feb	-0.3	1.8	-1.5	0.9	-2.1	1.1
	Mar	-0.2	-4.0	-2.4	-1.1	-4.5	0.9
	Apr	0.2	-7.1	-1.8	-2.3	-5.3	7.1
	May	0.8	-9.6	0.1	1.5	-3.7	4.3
	Jun	1.8	-9.0	1.6	6.7	-3.2	6.2
	Jul	2.1	-9.1	1.8	4.0	-2.6	-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.

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 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	55.0	83.1	36.2	20.9	50.6	92.0	64.4	
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z	
<b>Percentage change, latest month on previous month</b>								
2014	May	-1.6	-2.1	-3.7	-2.4	0.9	-1.7	-1.5
	Jun	-0.1	3.0	-0.3	7.4	-0.3	4.1	1.9
	Jul	1.5	-2.7	2.9	-3.7	0.2	-1.4	1.1
	Aug	1.0	3.5	-0.4	-4.8	-3.7	-3.5	3.0
	Sep	-1.0	-1.2	6.2	4.5	1.9	2.9	-3.3
	Oct	0.6	-1.1	-3.7	-5.6	-1.5	0.1	1.7
	Nov	-0.9	2.1	1.0	5.7	-1.9	2.1	1.4
	Dec	1.0	-0.7	6.5	2.4	0.3	0.1	-4.6
2015	Jan	-3.4	1.8	-9.2	-3.2 <sup>†</sup>	-7.1 <sup>†</sup>	-	1.1 <sup>†</sup>
	Feb	- <sup>†</sup>	1.4 <sup>†</sup>	-1.6 <sup>†</sup>	1.9	2.0	1.7 <sup>†</sup>	-0.3
	Mar	0.4	-1.0	1.8	1.0	-1.9	-0.8	2.1
	Apr	-0.7	0.4	-	-	1.7	0.7	-0.2
	May	-1.2	-4.5	-1.9	-0.9	-5.4	2.0	-2.7
	Jun	0.6	5.7	6.9	0.3	0.1	-0.3	0.7
	Jul	0.2	-5.5	-5.4	-2.1	-2.2	-1.8	-2.7
	Aug	-1.8	1.9	0.4	-0.2	1.2	4.5	-1.5
	Sep	1.5	-1.5	-0.1	3.1	1.4	-1.2	4.0
	Oct	0.1	-0.1	-1.5	-1.1	-3.4	1.5	-5.7
	Nov	-0.6	-0.9	-0.8	-1.5	-	-1.5	5.6
	Dec	0.5	-0.7	2.4	-1.3	1.9	-0.1	-0.1
2016	Jan	1.9	3.2	-0.4	-0.9	-1.1	0.3	4.0
	Feb	-0.9	-0.9	-3.7	0.2	-0.9	-3.1	-1.5
	Mar	-0.1	0.2	-0.9	-2.6	3.3	2.9	0.4
	Apr	3.1	-1.5	2.5	0.8	1.7	5.4	-0.2
	May	-1.0	0.3	2.1	-3.7	-2.1	-0.3	0.4
	Jun	-0.3	-0.1	-0.4	1.2	-2.1	-0.9	3.3
	Jul	-1.1	-0.7	-1.1	-1.3	3.9	-1.6	-1.9
<b>Percentage change, latest 3 months on same 3 months a year ago</b>								
2014	May	16.0	0.6	-0.5	-3.6	6.6	4.1	6.9
	Jun	15.2	2.8	-0.3	-4.2	7.9	4.5	6.8
	Jul	13.1	3.4	1.6	-4.1	6.9	3.5	6.4
	Aug	12.8	3.6	2.5	-3.9	4.5	2.8	6.7
	Sep	12.9	1.9	6.5	-4.1	3.8	1.9	5.6
	Oct	12.2	0.5	7.5	-5.8	1.9	1.4	5.7
	Nov	10.6	-0.4	9.1	-3.7	0.9	2.5	6.2
	Dec	9.8	-0.6	10.5	-2.2	-0.4	5.2	5.0
2015	Jan	6.1	0.6	6.9	- <sup>†</sup>	-3.8 <sup>†</sup>	6.8	2.8
	Feb	3.2	1.5	4.1 <sup>†</sup>	1.4	-7.1	7.7	0.5 <sup>†</sup>
	Mar	-0.1	2.9 <sup>†</sup>	-0.5	0.9	-10.5	6.0	1.4
	Apr	-1.3	3.5	-0.5	1.9	-10.2	5.3	2.3
	May	-2.3	2.5	-0.1	2.2	-12.0	5.8 <sup>†</sup>	2.1
	Jun	-2.8 <sup>†</sup>	2.3	2.2	1.0	-13.0	5.4	0.8
	Jul	-2.9	1.4	2.4	-0.2	-15.4	5.1	-1.2
	Aug	-4.0	0.7	2.2	-0.4	-14.6	6.2	-4.2
	Sep	-4.5	-0.9	-2.5	1.4	-14.1	7.5	-4.5
	Oct	-4.8	-1.1	-3.5	4.1	-13.4	9.3	-6.0
	Nov	-4.0	-1.9	-5.3	2.9	-13.5	7.1	-4.8
	Dec	-4.2	-2.5	-6.4	0.8	-13.1	6.2	-4.4
2016	Jan	-2.6	-3.0	-5.4	-1.9	-10.3	4.9	-0.7
	Feb	-1.3	-3.3	-4.5	-2.9	-8.7	3.2	1.4
	Mar	0.1	-3.2	-3.0	-3.9	-6.1	2.9	1.3
	Apr	0.9	-4.2	-3.8	-5.3	-5.4	4.1	0.4
	May	2.1	-2.8	-2.6	-7.1	-2.7	6.1	0.8
	Jun	3.1	-3.7	-2.9	-7.5	-2.3	6.7	2.8
	Jul	2.4	-2.3	-2.5	-7.9	0.2	5.7	5.0

<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.

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 100

Section	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	
	CA	CB	CC	CD	CE	CF	
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7	
	K22B	K22P	K22T	K22X	K22Z	K239	
<b>Percentage change, latest 3 months on previous 3 months</b>							
2014	May	1.6	2.5	-1.1	-4.2	0.5	1.6
	Jun	0.3	0.8	0.4	-2.4	-0.3	1.6
	Jul	-0.2	-1.7	1.1	-3.9	0.1	-3.7
	Aug	0.5	-8.8	2.0	-5.2	-1.4	-1.8
	Sep	0.8	-8.6	1.9	-2.1	0.5	0.3
	Oct	0.9	-6.4	2.1	1.1	0.1	-
	Nov	0.5	-1.5	0.9	3.0	2.5	-1.2
	Dec	0.8	-2.2	-0.7	4.0	1.1	-1.6
2015	Jan	0.6	-1.8	-0.9 <sup>†</sup>	2.4 <sup>†</sup>	3.3	0.6 <sup>†</sup>
	Feb	0.4 <sup>†</sup>	-0.5 <sup>†</sup>	-0.3	3.1	3.9	-0.2
	Mar	-0.7	5.0	1.4	-1.7	6.2	0.3
	Apr	-1.3	7.3	0.4	-3.7	4.9	-0.8
	May	-1.6	7.9	-0.5	-8.3	1.2	3.4
	Jun	-1.5	4.9	-2.1	-6.8	-1.5	0.4
	Jul	-0.8	2.8	-2.1	-0.6	-3.0 <sup>†</sup>	2.2
	Aug	-	-2.8	-1.5	7.0	-0.7	-2.6
	Sep	1.1	-5.0	-	14.5	0.4	1.8
	Oct	1.6	-5.4	0.9	12.6	1.1	1.8
	Nov	1.4	-0.2	1.7	11.2	0.6	3.4
	Dec	0.5	0.7	0.6	4.9	-0.8	0.6
2016	Jan	-0.1	0.6	0.7	-1.0	-1.4	-4.0
	Feb	-0.1	-2.7	-1.1	-7.5	-3.2	-2.9
	Mar	-0.3	-4.4	-0.9	-11.7	-2.7	-1.8
	Apr	-0.4	-5.1	-1.2	-11.8	-2.1	7.2
	May	-0.5	-4.2	1.1	-7.8	-0.5	6.7
	Jun	0.4	-0.5	1.8	0.6	-0.2	5.6
	Jul	1.0	0.5	1.4	5.8	-0.2	-5.1

<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.

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2013 = 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	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest 3 months on previous 3 months</b>							
2014							
May	3.8	-1.7	0.9	-	1.7	3.4	-0.3
Jun	1.7	-0.5	-1.0	0.7	0.3	2.6	0.1
Jul	0.5	-0.9	-1.5	1.0	0.3	1.6	0.9
Aug	0.9	1.2	-0.4	0.9	-1.1	1.1	2.9
Sep	1.2	0.4	3.2	-1.6	-1.5	-0.7	2.7
Oct	1.5	1.4	4.3	-3.9	-2.9	-1.2	2.6
Nov	0.3	0.1	4.7	-2.1	-2.2	0.8	0.5
Dec	-	0.4	3.0	0.1	-2.7	2.3	-0.2
2015							
Jan	-1.3	1.1	1.6	3.7	-4.4 <sup>†</sup>	3.2	-1.4
Feb	-1.7	2.0	-1.1 <sup>†</sup>	2.6 <sup>†</sup>	-5.5	2.2	-2.6 <sup>†</sup>
Mar	-3.0 <sup>†</sup>	2.6 <sup>†</sup>	-5.4	1.8	-6.8	1.7 <sup>†</sup>	-1.1
Apr	-2.0	1.8	-4.7	1.2	-3.5	1.5	0.2
May	-1.7	-0.8	-3.1	0.9	-3.7	1.5	1.3
Jun	-1.1	-1.1	1.7	0.8	-2.5	2.1	-0.5
Jul	-1.1	-2.9	1.4	-1.0	-5.6	1.5	-2.5
Aug	-0.9	-0.6	1.9	-1.7	-4.1	1.6	-3.4
Sep	-0.5	-2.7	-1.6	-1.2	-2.8	1.2	-2.8
Oct	-0.4	-1.1	-1.7	0.3	-0.5	2.8	-2.4
Nov	0.2	-2.4	-3.0	1.1	-0.9	1.6	-0.1
Dec	0.3	-1.2	-1.2	-0.5	-1.5	1.1	-0.2
2016							
Jan	1.0	-0.8	-0.4	-2.3	-1.0	-1.0	4.1
Feb	1.1	0.5	-0.2	-3.1	-0.3	-1.5	3.7
Mar	1.4	1.8	-2.0	-3.0	0.7	-1.4	4.9
Apr	1.5	0.5	-3.1	-2.3	1.8	0.7	1.3
May	1.6	-0.3	-1.3	-3.5	2.7	4.4	0.7
Jun	1.9	-1.5	1.8	-3.0	1.4	5.8	1.0
Jul	0.4	-0.9	2.8	-3.7	-0.1	3.0	2.0

<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.

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
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Enquiries	

# IOP5R

## Output of the Production Industries

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

Seasonally adjusted 2013 = 100

Section	Broad industry groups					Main industrial groupings					
	Production industries B+C+D+E	Mining and quarrying B	Manufacturing C	Electricity, gas, steam and air conditioning D	Water supply, sewerage and waste management E	Oil and gas extraction 06	Consumer durables MIG-CD	Consumer non-durables MIG-CND	Capital goods MIG-CAG	Intermediate goods MIG-IG	Energy MG-NRG
Latest weight	1 000.0	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-0.3	0.1	-0.4	0.2	-0.3	0.2	0.1	0.2	-	-0.3
2015 Q2	0.1	-	0.1	-0.4	0.2	0.1	0.4	0.1	0.3	0.1	-0.2
Q3	-	-0.7	0.1	-0.3	0.1	-0.8	0.1	0.1	0.2	-	-0.5
Q4	-0.1	-0.8	0.1	-0.5	0.2	-0.8	0.2	0.1	0.1	-	-0.6
2016 Q1	-	0.3	-0.1	-0.5	0.2	0.4	0.2	-0.2	-	-0.1	-
Q2	-0.1	1.2	-0.2	-0.5	-0.4	1.4	0.2	-0.6	0.2	-	0.4
2015 Apr	0.1	-	0.2	-0.6	0.4	-	0.2	0.2	0.2	0.1	-0.3
May	0.1	-0.1	0.2	-0.4	0.1	-	0.1	0.1	0.3	0.1	-0.2
Jun	0.1	-	0.2	-0.3	-0.1	0.1	0.9	0.1	0.3	0.1	-0.2
Jul	-	-0.2	0.2	-0.4	0.1	-0.3	-0.2	0.3	0.2	0.1	-0.3
Aug	-0.1	-1.0	0.1	-0.2	0.2	-1.2	0.2	0.1	0.1	-	-0.6
Sep	-	-0.9	0.1	-0.3	0.2	-1.0	0.4	0.1	0.2	0.1	-0.6
Oct	-0.1	-0.9	0.1	-0.5	0.1	-1.1	0.3	-	0.1	-	-0.7
Nov	-0.1	-0.6	-	-0.5	0.1	-0.7	0.2	0.1	-	-	-0.5
Dec	-0.1	-0.6	0.1	-0.5	0.4	-0.7	0.3	-	-	0.1	-0.6
2016 Jan	-0.1	-	-	-0.8	0.3	0.1	-	-0.1	-	-0.1	-0.3
Feb	-	0.3	-	-0.7	0.1	0.4	0.1	-0.1	0.1	-	-0.1
Mar	-	0.7	-0.2	-0.2	0.1	0.8	0.3	-0.2	0.1	-0.1	0.3
Apr	-	1.2	-0.3	-0.1	-0.2	1.5	0.3	-0.4	-	-0.2	0.6
May	-0.1	1.2	-0.2	-	-0.4	1.1	0.3	-0.6	0.1	-0.2	0.6
Jun	-0.1	1.5	-0.2	-1.4	-0.8	1.5	0.1	-0.7	0.3	0.3	-0.1
<b>Percentage change, latest year on previous year</b>											
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-0.3	0.1	-0.5	0.2	-0.3	0.2	0.1	0.1	0.1	-0.3
<b>Percentage change, latest month on same month a year ago</b>											
2014 Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	0.1	0.1	-0.2	0.1	0.1	-	0.1	0.1	-	-
Feb	0.1	0.4	-	-0.5	0.2	0.4	-0.1	-	0.1	-	-
Mar	-	-	0.1	-0.7	-	-0.1	0.3	0.1	0.1	-	-0.3
Apr	0.1	-	0.1	-0.7	0.4	-	0.1	0.2	0.2	0.1	-0.3
May	-	-	0.2	-0.4	0.1	-	0.1	0.1	0.3	0.1	-0.2
Jun	0.1	-	0.2	-0.3	-	-	0.9	0.1	0.3	0.1	-0.1
Jul	-	-0.2	0.2	-0.4	0.1	-0.2	-0.2	0.3	0.2	0.1	-0.3
Aug	-0.1	-1.0	0.1	-0.2	0.2	-1.3	0.2	0.1	0.2	-	-0.7
Sep	-0.1	-0.9	0.1	-0.4	0.2	-1.0	0.4	0.1	0.1	-	-0.6
Oct	-0.1	-0.9	0.1	-0.5	0.1	-1.1	0.1	0.1	-	-	-0.7
Nov	-0.1	-0.6	-	-0.5	0.1	-0.8	0.2	-	-	-	-0.6
Dec	-0.1	-0.7	0.1	-0.6	0.4	-0.7	0.2	-	-	-	-0.6
2016 Jan	-0.1	-0.1	-0.1	-0.6	0.3	-	-	-0.2	-0.2	-0.1	-0.2
Feb	-	-0.1	-0.1	-0.2	-0.1	-0.1	0.3	-0.1	-	0.1	-0.1
Mar	-	0.7	-0.2	0.4	0.2	0.9	-	-0.3	-0.1	-0.1	0.7
Apr	-0.2	1.1	-0.4	0.6	-0.6	1.3	0.1	-0.7	-0.2	-0.2	0.9
May	-0.2	1.0	-0.4	0.4	-0.5	1.0	0.3	-0.7	-0.2	-0.2	0.7
Jun	-0.2	1.3	-0.3	-1.2	-0.7	1.2	-0.8	-0.8	-	0.2	0.1

<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.

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	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest month on previous month</b>											
2014	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-	0.1	-	-0.1	0.1	-	0.1	0.1	-	-
	Feb	-	0.2	-0.1	-0.2	0.1	0.3	-0.1	-	-	-
	Mar	-0.1	-0.4	-	-0.2	-0.2	-0.4	0.5	-	0.1	-0.4
	Apr	0.1	-	-	-0.1	0.3	0.1	-	0.2	-	0.1
	May	-	-0.1	-	0.3	-0.3	-	-0.1	-0.2	0.1	0.1
	Jun	-	-	-	0.2	-0.2	0.1	0.8	0.1	-	0.1
	Jul	-0.1	-0.2	-	-0.2	0.1	-0.3	-0.9	0.2	-0.1	-0.2
	Aug	-0.1	-0.8	-	0.2	0.1	-0.8	0.4	-0.2	-	-0.1
	Sep	-	0.1	-	-0.1	-	0.1	0.1	-	-	-
	Oct	-0.1	-	-0.1	-0.1	-0.1	-	-0.2	-	-0.1	-0.1
	Nov	-	0.2	-	-	-	0.3	-	-	-	0.2
	Dec	0.1	-	0.1	-0.1	0.3	-0.1	-	0.1	-	-
2016	Jan	-	0.6	-0.1	-0.3	-0.1	0.7	-0.2	-0.2	-	-0.1
	Feb	0.1	0.2	0.1	0.1	-0.2	0.3	0.1	-	0.1	0.2
	Mar	-	0.3	-0.1	0.4	0.1	0.4	0.2	-0.2	-	0.1
	Apr	-	0.5	-0.1	0.2	-0.3	0.6	-	-0.2	-0.1	-
	May	-0.1	-	-0.1	0.1	-0.2	-0.3	-	-0.3	0.1	-0.1
	Jun	-0.1	0.4	0.1	-1.4	-0.3	0.3	-0.3	-0.1	0.2	0.4
<b>Percentage change, latest 3 months on same 3 months a year ago</b>											
2014	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-	-	-	-0.1	-	-	-	0.1	0.1	-
	Feb	-	0.2	-	-0.2	0.1	0.2	-	-	0.1	-
	Mar	-	0.1	-	-0.5	0.1	0.2	0.1	-	0.1	-0.1
	Apr	-	0.1	0.1	-0.6	0.2	0.2	0.1	0.1	0.2	-0.2
	May	-	-0.1	0.2	-0.6	0.2	-	0.2	0.1	0.2	-0.3
	Jun	0.1	-	0.2	-0.5	0.2	-	0.4	0.1	0.3	-0.3
	Jul	-	-0.1	0.2	-0.4	0.1	-0.1	0.3	0.2	0.3	0.1
	Aug	0.1	-0.5	0.1	-0.3	0.1	-0.5	0.3	0.2	0.2	-0.4
	Sep	-	-0.7	0.2	-0.4	0.1	-0.9	0.2	0.1	0.1	-0.5
	Oct	-0.1	-0.9	0.1	-0.4	0.2	-1.2	0.2	0.2	0.1	-0.6
	Nov	-0.1	-0.8	0.1	-0.5	0.2	-0.9	0.3	0.1	-	-0.6
	Dec	-0.1	-0.7	0.1	-0.5	0.3	-0.9	0.2	0.1	0.1	-0.6
2016	Jan	-0.1	-0.5	-	-0.6	0.3	-0.5	0.2	-	-	-0.5
	Feb	-0.1	-0.2	-0.1	-0.5	0.2	-0.2	0.2	-0.1	-	-0.3
	Mar	-0.1	0.1	-0.1	-0.2	0.1	0.3	0.1	-0.2	-0.1	0.1
	Apr	-0.1	0.6	-0.2	0.2	-0.2	0.7	0.1	-0.4	-0.1	0.5
	May	-0.1	1.0	-0.3	0.5	-0.3	1.0	0.1	-0.6	-0.2	0.8
	Jun	-0.2	1.2	-0.3	-0.1	-0.6	1.2	-0.2	-0.7	-0.1	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 2013 = 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	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months</b>											
2014	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-	-	-	-	0.1	-	0.1	0.1	0.1	-
	Feb	-	0.1	-	-0.2	0.1	-	0.1	0.1	-	-
	Mar	-	0.1	-	-0.5	0.1	0.1	0.1	0.1	-	-0.1
	Apr	0.1	0.1	-	-0.5	0.2	0.1	0.1	0.1	-	-0.2
	May	0.1	-0.2	0.1	-0.4	0.2	-0.1	0.2	-	0.2	-0.3
	Jun	-	-0.2	0.1	-	-	-0.2	0.3	0.1	0.2	-
	Jul	0.1	-0.2	0.1	0.3	-0.2	0.2	-	0.1	0.1	-
	Aug	-	-0.3	0.1	0.2	-0.1	-0.4	0.1	0.1	-	-0.1
	Sep	-	-0.7	-	0.1	-	-0.8	-0.3	-	-0.1	-0.3
	Oct	-0.1	-0.8	-0.1	-	0.1	-0.9	-	-0.1	-0.1	-0.4
	Nov	-0.1	-0.4	-0.1	-0.1	0.1	-0.4	-0.1	-0.1	-0.1	-0.2
	Dec	-0.1	-	-0.1	-0.2	0.1	-	-	-0.2	-0.1	-0.1
2016	Jan	-0.1	0.4	-0.1	-0.3	0.1	0.5	-0.1	-0.1	-0.1	0.1
	Feb	-	0.6	-0.1	-0.3	0.1	0.7	-0.1	-0.1	-0.1	0.2
	Mar	0.1	1.0	-0.1	-	-	1.1	-0.1	-0.3	-	-0.1
	Apr	-	1.1	-0.1	0.3	-0.2	1.2	0.1	-0.2	0.1	0.7
	May	-	1.0	-0.2	0.6	-0.4	1.1	0.2	-0.4	0.1	0.8
	Jun	-	0.9	-0.2	0.1	-0.6	0.9	0.1	-0.4	0.1	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.

Section	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
	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	0.5	-0.1	-0.5	0.1	0.5
2015 Q2	-	1.2	-0.3	-1.0	-	0.5
Q3	-0.2	0.3	-0.1	-0.6	0.1	0.8
Q4	-0.1	0.1	-0.2	-0.3	-	0.6
2016 Q1	-0.3	0.3	-0.5	0.3	-0.3	0.2
Q2	-0.8	1.1	-0.7	-1.8	-0.1	-0.5
2015 Apr	0.2	1.1	-0.2	-0.3	-	0.4
May	-0.3	1.8	-0.2	-0.9	-	0.4
Jun	-	0.8	-0.5	-1.8	0.1	0.7
Jul	-0.1	0.9	-	-0.4	0.1	0.9
Aug	-0.1	-	-0.2	-0.7	0.1	0.8
Sep	-0.1	0.3	-0.1	-0.6	0.1	0.6
Oct	-0.1	-0.1	-0.2	-0.7	0.1	0.7
Nov	-0.2	-	-0.2	-0.3	-	0.5
Dec	-0.2	0.3	-	0.1	-0.2	0.5
2016 Jan	-0.2	-0.2	-0.4	1.5	-0.2	0.3
Feb	-	0.4	-0.5	1.0	-0.3	0.2
Mar	-0.6	0.6	-0.6	-1.5	-0.3	0.3
Apr	-0.8	0.6	-0.6	-1.3	-0.4	0.1
May	-0.9	1.0	-0.7	-1.1	-0.1	-0.8
Jun	-0.7	1.7	-0.6	-2.9	0.2	-1.1
<b>Percentage change, latest year on previous year</b>						
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-0.1	0.5	-0.2	-0.5	-	0.5
<b>Percentage change, latest month on same month a year ago</b>						
2014 Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	0.2	-0.3	-0.1	-	0.4
Feb	0.1	0.5	-0.2	0.7	-	0.2
Mar	0.2	0.4	-	-0.4	-	-0.1
Apr	0.1	1.1	-0.2	-0.3	-	0.3
May	-0.2	1.6	-0.1	-1.0	0.1	0.4
Jun	0.1	0.9	-0.5	-2.1	0.1	0.7
Jul	-0.1	0.9	-	-0.5	0.1	0.9
Aug	-0.1	-	-0.1	-0.7	0.1	0.8
Sep	-0.1	0.2	-0.1	-0.6	0.1	0.6
Oct	-0.1	-0.1	-0.2	-0.7	0.1	0.7
Nov	-0.1	-	-0.2	-0.3	-	0.6
Dec	-0.1	0.4	-0.1	0.1	-0.2	0.4
2016 Jan	-0.2	-0.3	-0.2	1.7	-0.2	-0.1
Feb	-0.1	-	-0.4	0.4	-0.3	0.1
Mar	-0.7	0.2	-0.5	-1.4	-0.2	0.3
Apr	-0.9	-0.4	-0.4	-1.2	-0.3	-0.3
May	-0.5	-0.6	-0.6	-0.2	-0.2	-1.1
Jun	-0.8	0.9	-0.1	-0.9	0.1	-2.0

<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.

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	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	0.1	-	0.3	0.2	0.4	-0.2	0.2
2015 Q2	0.2	-	0.5	0.3	0.8	-	0.3
Q3	0.2	0.3	0.2	0.5	0.4	-0.1	0.1
Q4	0.1	0.1	0.3	0.2	0.4	-0.5	0.2
2016 Q1	-0.1	-	0.3	-0.1	0.7	-0.7	0.5
Q2	-0.2	-	0.7	-0.6	0.8	-0.5	0.2
2015 Apr	0.1	0.1	0.4	-0.2	0.5	-0.1	0.5
May	0.2	-0.1	-	0.9	1.0	-0.3	0.6
Jun	0.2	-	1.3	-	0.7	0.1	-0.2
Jul	0.2	0.4	0.1	0.7	0.1	0.1	-0.2
Aug	0.1	0.3	0.2	0.3	0.4	-0.3	0.1
Sep	0.2	0.2	0.4	0.4	0.6	-0.3	0.3
Oct	0.1	-0.1	0.3	0.3	0.4	-0.4	0.3
Nov	0.1	-	0.3	0.2	0.4	-0.5	0.2
Dec	0.1	0.3	0.3	0.2	0.4	-0.6	0.3
2016 Jan	-	-	0.1	0.1	0.3	-0.7	0.6
Feb	-0.2	-	0.4	0.1	0.7	-0.8	0.5
Mar	-0.2	-0.1	0.6	-0.4	1.1	-0.6	0.2
Apr	-0.3	-0.2	0.6	-0.5	0.6	-0.6	0.2
May	-0.3	-0.1	0.7	-0.6	1.0	-0.5	0.1
Jun	-0.1	0.3	1.0	-0.7	0.8	-0.4	0.1
<b>Percentage change, latest year on previous year</b>							
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	0.1	0.3	0.2	0.4	-0.1	0.2
<b>Percentage change, latest month on same month a year ago</b>							
2014 Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	0.1	0.1	0.5	-0.1	0.1
Feb	-0.1	-0.2	-0.2	-0.2	0.4	-0.1	0.2
Mar	-0.1	-0.1	0.5	-0.3	0.2	-0.1	0.5
Apr	0.1	0.1	0.3	-0.2	0.5	-0.1	0.5
May	0.2	-0.1	0.1	0.9	0.9	-0.2	0.6
Jun	0.2	-	1.3	-	0.7	0.1	-0.2
Jul	0.2	0.3	0.1	0.8	0.1	0.1	-0.1
Aug	-	0.3	0.2	0.4	0.5	-0.2	0.1
Sep	0.1	0.2	0.3	0.3	0.5	-0.3	0.3
Oct	0.1	-	0.2	0.3	0.4	-0.4	0.3
Nov	0.1	-	0.3	0.2	0.4	-0.4	0.2
Dec	-	0.3	0.3	0.1	0.4	-0.5	0.2
2016 Jan	-	-	-	-	-0.2	-0.6	0.5
Feb	-	0.2	0.6	0.4	0.3	-0.7	0.4
Mar	-0.1	-	0.1	-	0.8	-0.5	-0.3
Apr	-0.3	-0.2	0.1	-0.3	0.1	-0.5	-0.3
May	-0.5	-	0.6	-1.4	-0.1	-0.2	-0.5
Jun	-0.2	0.4	-0.2	-0.7	-	-0.5	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.

Section	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
	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest month on previous month</b>						
2014	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	0.1	0.2	-0.3	-	0.4
	Feb	0.1	0.3	0.1	0.7	-0.2
	Mar	0.1	-	0.1	-1.0	-0.3
	Apr	-	0.7	-0.2	-	0.5
	May	-0.4	0.7	-	-0.7	0.1
	Jun	0.3	-0.9	-0.4	-1.1	0.1
	Jul	-0.2	0.1	0.5	2.0	-
	Aug	-	-0.7	-0.1	-0.3	-
	Sep	-	0.3	-	0.2	-
	Oct	-	-0.3	-	-0.1	-
	Nov	-	0.1	-	0.3	-0.1
	Dec	-	0.3	0.1	0.3	-0.1
2016	Jan	-0.1	-0.6	-0.4	1.5	-
	Feb	0.2	0.6	-0.1	-0.5	-
	Mar	-0.5	0.2	-	-2.7	0.1
	Apr	-0.3	-	-	0.3	-0.1
	May	-	0.4	-0.1	0.3	0.2
	Jun	-	0.8	0.1	-1.8	0.4
<b>Percentage change, latest 3 months on same 3 months a year ago</b>						
2014	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	-	0.1	-0.1	-	0.2
	Feb	-	0.2	-0.2	0.2	0.2
	Mar	0.1	0.3	-0.2	0.1	0.1
	Apr	0.1	0.6	-0.2	-	0.1
	May	-	1.1	-0.1	-0.6	0.2
	Jun	-	1.2	-0.3	-1.1	0.5
	Jul	-0.1	1.1	-0.2	-1.2	0.7
	Aug	-0.1	0.6	-0.2	-1.1	0.8
	Sep	-0.1	0.4	-0.1	-0.6	0.7
	Oct	-0.1	-	-0.2	-0.7	0.7
	Nov	-0.1	0.1	-0.1	-0.6	0.7
	Dec	-0.1	0.1	-0.2	-0.4	0.5
2016	Jan	-0.2	-	-0.2	0.5	-0.1
	Feb	-0.1	-0.1	-0.3	0.7	-0.2
	Mar	-0.3	-	-0.4	0.3	-0.2
	Apr	-0.6	-0.1	-0.4	-0.7	-0.3
	May	-0.7	-0.3	-0.5	-0.9	-0.2
	Jun	-0.7	-0.1	-0.3	-0.8	-0.1

<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 2013 = 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	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest month on previous month</b>							
2014	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-	-	0.1	0.4	0.1
	Feb	-0.1	-0.2	-0.2	-0.3	-0.1	0.1
	Mar	-	0.1	0.6	-0.1	-0.2	0.3
	Apr	0.2	0.2	-0.1	0.1	0.3	-0.1
	May	0.2	-0.1	-0.4	1.1	0.6	0.1
	Jun	-	0.1	1.3	-0.9	-0.3	-0.8
	Jul	-	0.3	-1.1	0.7	-0.6	0.1
	Aug	-0.2	-0.1	0.2	-0.4	0.4	0.3
	Sep	0.1	-0.1	0.2	-0.1	0.1	0.1
	Oct	-	-0.3	-0.1	-0.1	-0.1	-
	Nov	-0.1	-	-	-0.2	0.1	-0.1
	Dec	-	0.3	0.1	-	-	0.1
2016	Jan	-0.1	-0.2	-0.2	-	-0.2	0.4
	Feb	-0.2	-	0.3	-	0.5	-0.1
	Mar	-	-0.1	0.2	-0.5	0.4	-0.4
	Apr	-	-0.1	-	-0.1	-0.5	-
	May	-0.1	-	0.1	-0.1	0.4	-0.1
	Jun	0.2	0.5	0.4	-0.1	-0.2	-
<b>Percentage change, latest 3 months on same 3 months a year ago</b>							
2014	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-	-	0.1	0.1	-
	Feb	-	-	-0.1	-	0.2	0.1
	Mar	-	-0.1	0.1	-0.1	0.3	0.3
	Apr	-	-	0.2	-0.2	0.4	0.4
	May	-	-	0.3	0.1	0.5	0.5
	Jun	0.2	-	0.6	0.3	0.7	0.2
	Jul	0.2	0.1	0.5	0.6	0.6	0.1
	Aug	0.1	0.2	0.6	0.4	0.5	-
	Sep	0.1	0.3	0.2	0.5	0.4	0.1
	Oct	0.1	0.2	0.3	0.3	0.4	0.2
	Nov	0.1	-	0.3	0.3	0.5	0.2
	Dec	0.1	0.1	0.3	0.2	0.4	0.2
2016	Jan	-	0.1	0.2	0.1	0.2	0.3
	Feb	-	0.2	0.3	0.2	0.3	0.4
	Mar	-	0.1	0.2	0.1	0.3	0.1
	Apr	-0.1	-	0.3	-	0.4	-
	May	-0.3	-0.1	0.3	-0.6	0.3	-0.4
	Jun	-0.4	-	0.2	-0.9	-	-0.1

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Section	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
	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest 3 months on previous 3 months</b>						
2014	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	-	-0.1	-0.1	-	0.2
	Feb	0.1	0.2	-0.2	0.2	0.2
	Mar	0.1	0.4	-0.2	0.1	0.1
	Apr	0.1	0.7	-0.1	0.1	-
	May	-	1.0	-	-0.8	-
	Jun	-0.1	1.0	-0.2	-1.2	0.4
	Jul	-0.2	0.6	-0.1	-1.2	0.1
	Aug	-0.1	-0.5	-0.1	-0.5	0.1
	Sep	-0.1	-0.9	0.2	0.7	0.1
	Oct	0.1	-1.1	0.1	0.6	-
	Nov	-	-0.5	0.1	0.6	-0.1
	Dec	-	-0.3	-0.1	0.3	-0.2
2016	Jan	-0.1	-	-0.1	1.0	-0.2
	Feb	-0.1	0.1	-0.2	1.3	-0.3
	Mar	-0.1	0.1	-0.4	0.5	-0.2
	Apr	-0.3	0.4	-0.3	-1.0	-0.2
	May	-0.6	0.6	-0.3	-2.2	-0.1
	Jun	-0.6	1.0	-0.2	-2.3	0.1

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	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest 3 months on previous 3 months</b>							
2014							
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015							
Jan	-	-	-	-	0.2	-	-
Feb	-	-	-0.1	-0.1	0.3	-	0.1
Mar	-0.1	-0.1	0.1	-0.1	0.4	-0.1	0.3
Apr	-	-0.1	0.1	-0.3	0.2	-0.1	0.3
May	0.1	-	0.3	0.2	0.3	-0.1	0.4
Jun	0.2	-	0.4	0.4	0.4	0.1	-0.1
Jul	0.2	0.1	0.3	0.9	0.2	0.1	-0.3
Aug	0.1	0.2	0.3	0.3	-0.1	0.1	-0.5
Sep	-	0.3	-0.4	0.3	-0.4	-0.1	-0.2
Oct	-0.1	-	-0.1	-0.2	-0.1	-0.3	0.1
Nov	-0.1	-0.1	-0.2	-0.1	0.1	-0.3	0.3
Dec	-	-0.2	0.1	-0.3	0.1	-0.2	0.1
2016							
Jan	-	-	-	-0.2	-0.1	-0.3	0.1
Feb	-0.1	0.1	-	-0.1	-	-0.3	0.2
Mar	-0.2	-0.1	-	-0.3	0.3	-0.2	0.3
Apr	-0.2	-0.2	0.2	-0.4	0.5	-0.1	-
May	-0.3	-0.2	0.3	-0.7	0.4	0.1	-0.3
Jun	-0.1	-	0.4	-0.6	-	0.2	-0.3

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**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)