

Statistical bulletin

# UK index of production: May 2016

Measures the volume of production at base year prices for the manufacturing, mining & quarrying, energy supply and water & waste management industries.



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# 1. Main points

The data and revisions in this release are consistent with the [Quarterly National Accounts](#) published on 30 June 2016 and data used for Blue Book 2016 due for release on 29 July 2016.

Total production output is estimated to have increased by 1.4% in May 2016 compared with May 2015. There were increases in 3 of the 4 main sectors, with the largest contribution coming from manufacturing (the largest component of production), which increased by 1.7%.

The largest contribution to the increase in manufacturing came from the manufacture of transport equipment, which increased by 6.6%.

Total production output is estimated to have decreased by 0.5% in May 2016 compared with April 2016. There were decreases in 3 of the 4 main sectors, with the largest downward movement coming from manufacturing, which decreased by 0.5% and contributed -0.3 percentage points to total production.

The largest contribution to the decrease in manufacturing came from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which decreased by 6.5%, having increased in the previous month by 9.0%.

In the 3 months to May 2016, production and manufacturing were 8.0% and 4.9% respectively below the level they reached in the pre-downturn gross domestic product (GDP) peak in Quarter 1 (Jan to Mar) 2008.

The earliest period open for revision in this release was January 1997. Revisions to Index of Production data up to Quarter 1 (Jan to Mar) 2016 are consistent with the Quarterly National Accounts publication released on 30 June 2016.

## 2. Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, May 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](#). This was updated from 14.9% in line with the annual update ( [Blue Book 2016](#)) of the weights used to construct the chained volume measures of output.

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 a monthly business survey (MBS) of approximately 6,000 businesses, covering all the territory of the UK without geographical breakdown. The total IoP estimate and various breakdowns are widely used in private and public sector institutions. Care should be taken when using the month-on-month growth rates due to their volatility. All figures contained within this release are chained volume seasonally adjusted estimates, unless otherwise stated.

This release presents:

- the most recent IoP figures
- the economic context to the IoP
- 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

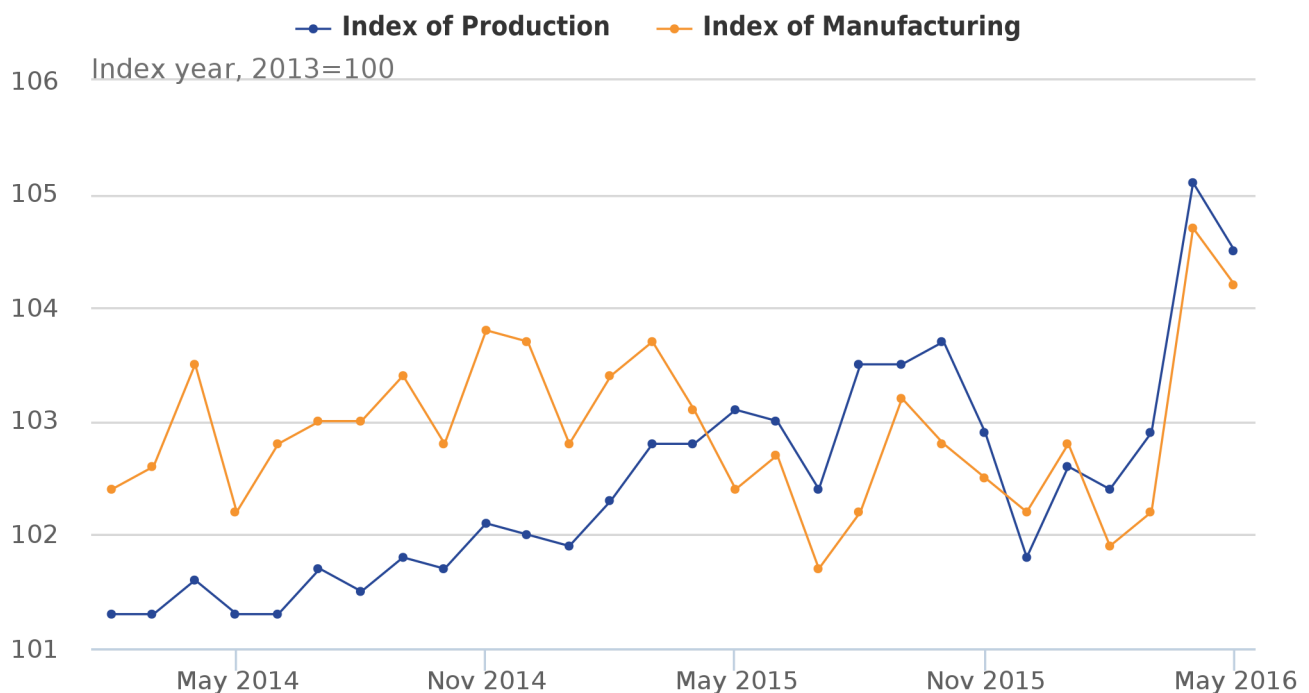
Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from February 2014 to May 2016.

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

		Percentage change			
	Index number (2013=100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Most recent month on previous month	Most recent 3 months on previous 3 months
Production	104.5	1.4	1.2	-0.5	1.9
Manufacturing	104.2	1.7	0.6	-0.5	1.3

Source: Office for National Statistics

**Figure 1: Seasonally adjusted production and manufacturing, February 2014 to May 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, still as in all survey-based estimates, by definition, its estimates are subject to statistical uncertainty or errors. These errors consist of 2 main elements: the sampling error and the non-sampling error.

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

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

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

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

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

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

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

It should be noted that care should be taken when using the month-on-month growth rates, due to their volatility. Further information on the latest quality and methodology information (QMI) for the IoP can be found in the [QMI 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 fell in May 2016, following growth in April and March 2016. Overall, the level of production in the latest month was 1.4% higher than the level in May 2015 and 3.2% above its level in May 2014. Over the quarter as a whole (Quarter 1 (Jan to Mar) 2016) production output contracted for a second consecutive quarter but remains 0.3% above its level in Quarter 1 (Jan to Mar) 2015.

Throughout the previous 12 months, manufacturing - the largest component of production - experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being 1.7% higher than those recorded in May 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

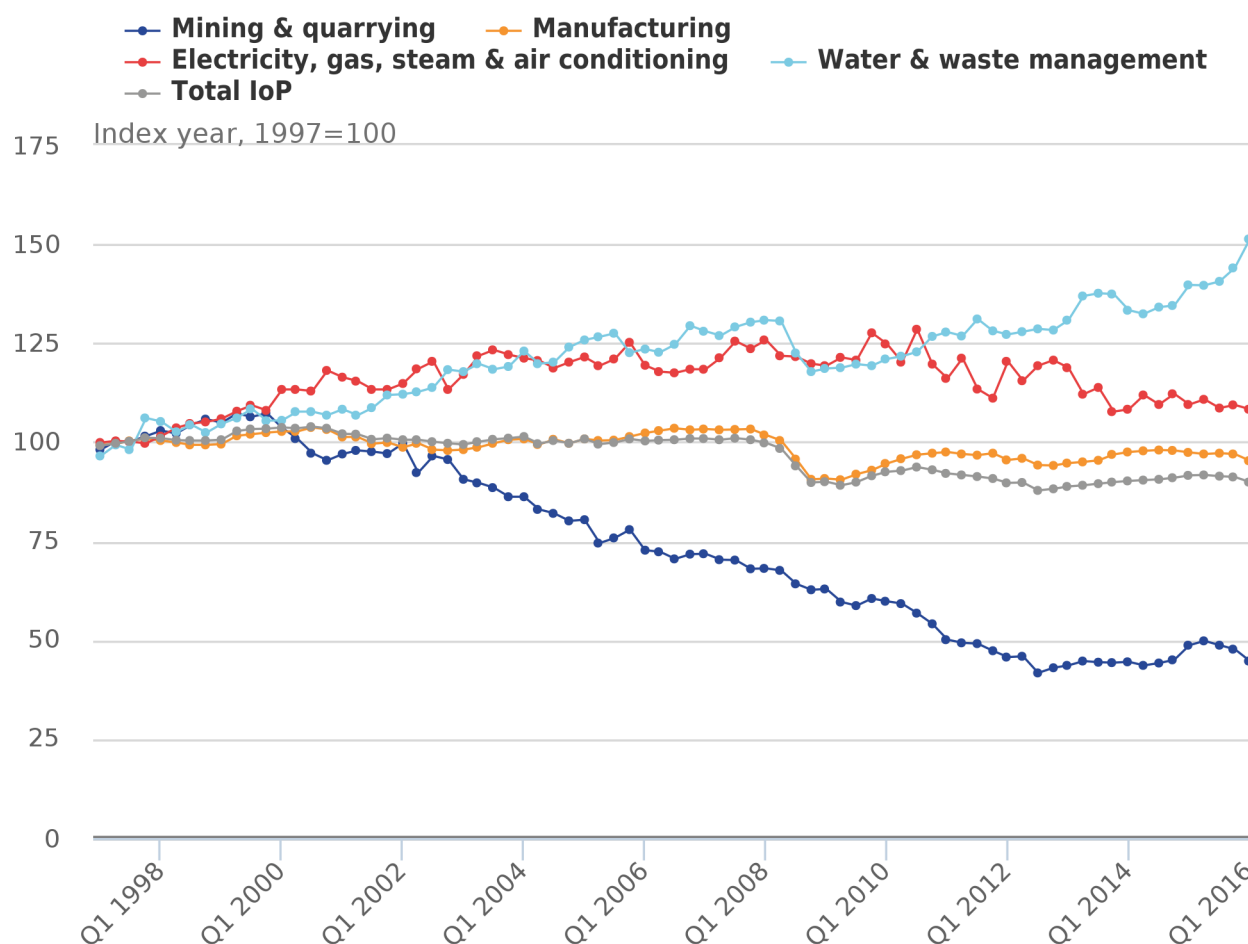
Looking over a longer-term period - from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2016 - production and its main components have followed very different paths (Figure 2). Over this period, the electricity, gas, steam & air conditioning and water supply, sewerage & waste management sectors grew at compound average growth rates of 0.1% and 0.6% per quarter respectively, while production as a whole contracted at a compound average growth rate of 0.1% per quarter. Over the same period, manufacturing and mining & quarrying contracted at compound average growth rates of 0.1% and 1.0% per quarter respectively. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

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 was broadly unaffected by 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, mining & quarrying experienced the largest contraction in output (12.5%) followed by manufacturing (11.1%), total production (10.7%), water supply, sewerage & waste management (9.2%), and electricity, gas, steam & air conditioning (3.5%). In Quarter 1 (Jan to Mar) 2016, production and manufacturing output remained below their Quarter 1 (Jan to Mar) 2008 levels by 9.9% and 6.4%, respectively. Moreover, in Quarter 1 (Jan to Mar) 2016, mining & quarrying and electricity, gas, steam & air conditioning output, which continued to decline following the downturn, were 34.4% and 13.9% below their respective values in Quarter 1 (Jan to Mar) 2008. 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 15.7%, as of Quarter 1 (Jan to Mar) 2016.

Headline gross domestic product (GDP) surpassed its pre-downturn peak in Quarter 3 (July to Sept) 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 [Quarterly National Accounts: Quarter 1 \(Jan to Mar\) 2016](#) and [UK productivity: Oct to Dec 2015](#)). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from 16.5% to 9.6% between 1997 and 2015 ([UK Labour Market: June 2016, EMP13](#)).

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices) and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by 3.9% in the year to May 2016, from a fall of 7.0% in the year to April 2016. Output prices have also experienced deflation, falling by 0.7% in the year to May 2016 (more information can be found in [UK Producer Price Inflation: May 2016](#)).

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



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

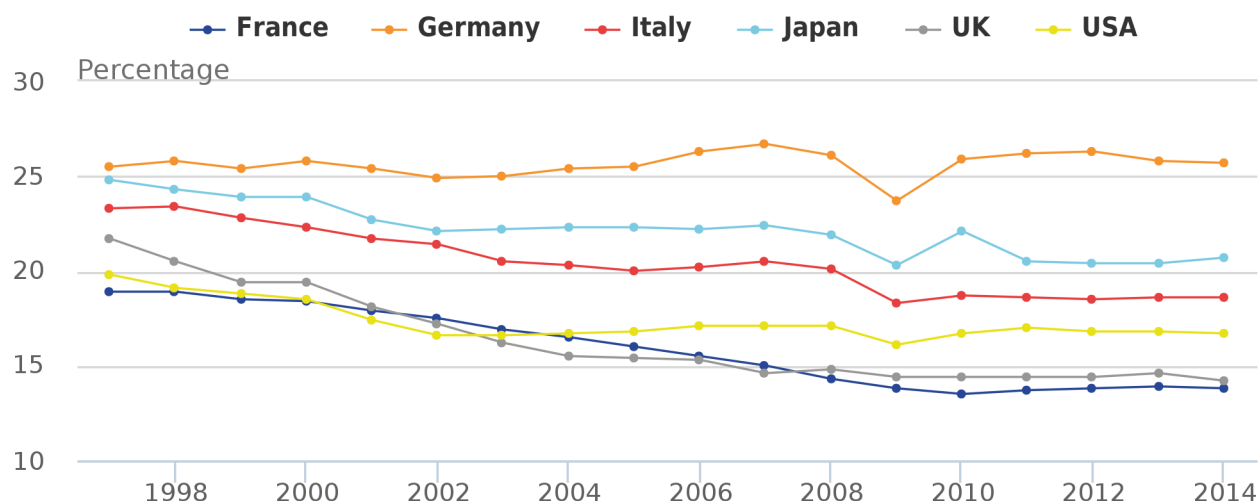
**Notes:**

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

Figure 3 shows the share of nominal gross value added (GVA) accounted for by production in the UK and a selection of other major economies (more information on data for France, Germany, Italy, Japan and the USA can be found on the [Organisation for Economic Co-operation and Development \(OECD\) website](#)). In 1997, the share of nominal GVA accounted for by production in the UK was 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 1997 are open for revision, in line with the [National Accounts revisions policy](#) and are consistent with the [Quarterly National Accounts: Quarter 1 \(Jan to Mar\) 2016 publication](#) released on 30 June 2016.

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 May 2016 will be published on 15 July 2016 and [services](#) output for the same period on 27 July 2016.

**Table 2: Components of GDP, May 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 Production <sup>1</sup>	14.6	07 Jul	May 2016	1.2	1.9	1.4	-0.5
			Apr 2016	0.8	1.0	2.2	2.1
Construction	5.9	10 Jun	Apr 2016	-2.8	-2.1	-3.7	2.5
			Mar 2016	-1.9	-1.1	-4.5	-3.6
Index of services	78.8	30 Jun	Apr 2016	2.6	0.5	3.0	0.6
			Mar 2016	2.5	0.6	2.2	-0.3
Retail Sales		16 Jun	May 2016	4.8	1.5	6.0	0.9
			Apr 2016	4.3	0.9	5.2	1.9
Agriculture	0.7		Q1 2016	1.4	0.0	..	..
			Q4 2015	-1.7	0.5	..	..

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, May 2016, UK**

Description <sup>1</sup>	% of production <sup>2</sup>	Month on same month a year ago growth (%)	Contribution to production (% points)	Month on previous month growth (%)	Contribution to production (% points)
IoP	100.0	1.4	1.4	-0.5	-0.5
Sector B	12.0	-4.2	-0.56	-0.1	-0.01
Division 06	9.6	-4.2	-0.46	-0.2	-0.02
Sector C	70.0	1.7	1.18	-0.5	-0.33
Sector D	10.4	2.7	0.26	-2.9	-0.29
Sector E	7.5	6.7	0.50	1.5	0.12

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 & 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, May 2016, UK**

<b>Sector</b>	<b>Summary Description</b>	<b>Month on same month a year ago growth (Percentage)</b>	<b>Contribution to production (Percentage points)</b>
<b>IoP</b>	<b>Index of Production</b>	1.4	1.38
<b>Sector B</b>	<b>Total Mining &amp; Quarrying</b>	-4.2	-0.56
5	Coal & Lignite	-71.5	-0.05
6	Crude petroleum & Natural gas	-4.2	-0.46
789	Other mining & quarrying	-2.3	-0.06
<b>Sector C</b>	<b>Total Manufacturing</b>	1.7	1.18
CA	Food, beverages & tobacco	3.0	0.35
CB	Textiles & leather products	-12.0	-0.30
CC	Wood, paper & printing	3.4	0.17
CD	Coke & petroleum	7.2	0.06
CE	Chemical products	-1.3	-0.05
CF	Pharmaceutical products	-0.7	-0.04
CG	Rubber & plastic products	3.8	0.22
CH	Metal products	0.6	0.05
CI	Computer, electronic & optical	0.5	0.02
CJ	Electrical equipment	-7.7	-0.15
CK	Machinery & equipment	-0.3	-0.01
CL	Transport equipment	6.6	0.66
CM	Other manufacturing & repair	3.3	0.21
<b>Sector D</b>	<b>Total Electricity &amp; Gas</b>	2.7	0.26
35.1	Electric power generation, transmission & distribution	-3.2	-0.22
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	17.5	0.48
<b>Sector E</b>	<b>Total Water</b>	6.7	0.50
36	Water collection, treatment & supply	-1.0	-0.02
37	Sewerage	7.0	0.15
38	Waste collection, treatment & disposal activities; materials recovery	11.3	0.36
39	Remediation activities & other waste management services	17.3	0.01

Source: Office for National Statistics

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

<b>Sector</b>	<b>Summary Description</b>	<b>Month on previous month growth (Percentage)</b>	<b>Contribution to production (Percentage points)</b>
<b>IoP</b>	<b>Index of Production</b>	-0.5	-0.50
<b>Sector B</b>	<b>Total Mining &amp; Quarrying</b>	-0.1	-0.01
5	Coal & Lignite	-0.5	0.00
6	Crude petroleum & Natural gas	-0.2	-0.02
789	Other mining & quarrying	0.4	0.01
<b>Sector C</b>	<b>Total Manufacturing</b>	-0.5	-0.33
CA	Food, beverages & tobacco	1.4	0.16
CB	Textiles & leather products	-6.0	-0.14
CC	Wood, paper & printing	1.6	0.08
CD	Coke & petroleum	13.6	0.10
CE	Chemical products	-1.4	-0.06
CF	Pharmaceutical products	-6.5	-0.39
CG	Rubber & plastic products	-0.9	-0.05
CH	Metal products	0.7	0.05
CI	Computer, electronic & optical	2.1	0.07
CJ	Electrical equipment	-3.9	-0.07
CK	Machinery & equipment	-2.3	-0.10
CL	Transport equipment	-0.2	-0.02
CM	Other manufacturing & repair	0.4	0.03
<b>Sector D</b>	<b>Total Electricity &amp; Gas</b>	-2.9	-0.29
35.1	Electric power generation, transmission & distribution	-1.5	-0.10
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	-5.5	-0.18
<b>Sector E</b>	<b>Total Water</b>	1.5	0.12
36	Water collection, treatment & supply	1.8	0.04
37	Sewerage	0.3	0.01
38	Waste collection, treatment & disposal activities; materials recovery	2.3	0.08
39	Remediation activities & other waste management services	0.7	0.00

Source: Office for National Statistics

## Total production

Total production output in May 2016 increased by 1.4% compared with May 2015 (Table 4), the fifth consecutive increase since December 2015. This increase reflected rises in 3 of its 4 main sectors, with manufacturing (the largest component of production) having the largest contribution, increasing by 1.7% and contributing 1.2 percentage points to total production. There were also increases in water supply, sewerage & waste management of 6.7% and in electricity, gas, steam & air conditioning output of 2.7%. These increases were partially offset by a decrease in mining & quarrying, which decreased by 4.2% and contributed -0.6 percentage points to total production.

Between April 2016 and May 2016, total production decreased by 0.5% (Table 5), following a rise of 2.1% in the previous month. This decrease reflected falls in 3 of its 4 main sectors, with manufacturing having the largest downward contribution, decreasing by 0.5% and contributing -0.3 percentage points to total production. This followed an increase of 2.4% in the previous month. The decrease in manufacturing was followed by decreases in electricity, gas, steam & air conditioning output, which fell by 2.9% and contributed -0.3 percentage points to total production; and in mining & quarrying, which decreased by 0.1% with a negligible contribution to total production. These decreases were partially offset by an increase in water supply, sewerage & waste management, which increased by 1.5% and contributed 0.1 percentage points to total production.

## Manufacturing

Manufacturing output increased by 1.7% between May 2015 and May 2016, contributing 1.2 percentage points to total production. Output increased in 8 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 6.6% and contributed 0.7 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 9.5% and contributed 0.5 percentage points to total production. Anecdotal evidence suggested increased sales and exports were contributing factors.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production output was the manufacture of textiles, wearing apparel & leather products, which decreased by 12.0%, the fourth consecutive decrease since January 2016 and contributed -0.3 percentage points to total production. The largest downward contribution within this sub-sector came from the manufacture of wearing apparel, which decreased by 24.1% and contributed -0.3 percentage points to total production. Anecdotal evidence suggested a fall in exports compared with the previous year was a contributing factor.

Manufacturing output decreased by 0.5% between April 2016 and May 2016 and contributed -0.3 percentage points to total production. This followed an increase of 2.4% in the previous month. There were decreases in 7 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 6.5% and contributed -0.4 percentage points to total production. This followed an increase of 9.0% in the previous month.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production in May 2016 compared with April 2016 was the manufacture of food products, beverages & tobacco, which increased by 1.4% and contributed 0.2 percentage points to total production. This was the largest increase since February 2014. There were small positive contributions from a number of industries within this sub-sector.

## Mining & quarrying

Mining & quarrying output decreased by 4.2% in May 2016 compared with May 2015 and contributed -0.6 percentage points to total production. The sub-sector with the largest contribution to the fall was the extraction of crude petroleum & natural gas, which decreased by 4.2% and contributed -0.5 percentage points to total production (Table 4). The Department of Energy & Climate Change (DECC) advised that some partial shut downs due to maintenance were a contributing factor to the decrease in production.

Mining & quarrying output decreased by 0.1% in May 2016 compared with April 2016 and had a negligible contribution to total production. This is the third consecutive decrease since February 2016 and followed a decrease of 0.6% in the previous month. The sub-sector with the largest contribution to the fall was the extraction of crude petroleum & natural gas, which decreased by 0.2% and had a negligible contribution to total production (Table 5).

## Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output increased by 2.7% in May 2016 compared with May 2015 and contributed 0.3 percentage points to total production (Table 4). This was the third consecutive increase and having increased by 7.7% in the previous month. This increase reflected a rise in output in 1 of its 2 sub-sectors, the manufacture of gas & distribution of gaseous fuels through mains, which increased by 17.5%. This was the fifth consecutive increase since December 2015 and followed an increase of 29.1% in the previous month. Evidence from DECC 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 decreased by 2.9% in May 2016 compared with April 2016 and contributed -0.3 percentage points to total production (Table 5). The decrease in electricity, gas, steam & air conditioning output reflected falls in output in both of its sub-sectors. The sub-sector with the largest contribution was the manufacture of gas & distribution of gaseous fuels through mains, which decreased by 5.5% and contributed -0.2 percentage points to total production. This followed an increase of 12.6% in the previous month. Anecdotal evidence suggested contributing factors to the decrease in demand were the warmer than average temperature in May 2016 and an increase in the share of cheaper fuel mix at the expense of gas.

## Water & waste management

Water supply, sewerage & waste management output increased by 6.7% in May 2016 compared with May 2015 and contributed 0.5 percentage points to total production. This reflected increases in 3 of its 4 sub-sectors' output (Table 4), with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 11.3% and contributed 0.4 percentage points to total production.

Water supply, sewerage & waste management output increased by 1.5% between April 2016 and May 2016 and contributed 0.1 percentage points to total production. This increase reflected increases in all of its 4 subsectors' output, with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 2.3%, the sixth consecutive increase, and contributed 0.1 percentage points to total production.

## 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 one indication of the reliability of this important indicator. Statistical tests are performed on the average revision to test if it is statistically significantly different from zero. Further information can be found in background note 6.

In this release of data, the earliest period open for revision is January 1997, as this dataset contains the annual updates that are also included in the [Quarterly National Accounts: Quarter 1 \(Jan to Mar\) 2016](#) consistent with the Blue Book 2016 publication due to be published on 29 July 2016.

There are numerous sources of revision that have affected production in this bulletin, including but not limited to:

- the annual update of the weights used to construct the chained volume measures of output
- the annual update of seasonal adjustment models
- the published indices being re-referenced from 2012=100 to 2013=100
- methodological improvement
- updated source data

As is common for the first Index of Production publication following the annual updates, there are more and larger revisions than in an ordinary publication (see Table IOP5R which shows the revisions to IoP estimates against the previously published).

Further details of notable revisions to IoP data up to and including April 2016 and the associated [impact on previously published GDP estimates up to Quarter 1 \(Jan to Mar\) 2016](#) can be found in the [Quarterly National Accounts: Quarter 1 \(Jan to Mar\) 2016](#) released on 30 June 2016.

## 7. The impact of the Blue Book 2016 changes on the Index of Production and its components

The release of Blue Book 2016 constitutes our annual update of the National Accounts. These (methodological and data) changes are designed to ensure that official statistics reflect the changing nature of the UK and global economies, to enable fair and meaningful international comparisons and to permit analysis of current economic trends on the best available data. The most recent article [Impact of methods changes in the national accounts and economic commentary for Quarter1 \(Jan to Mar\) 2016](#), was published on our website on 30 June 2016. This article summarises the effects of methodological, classification and other changes implemented in the quarterly national accounts for the period 1997 to the first quarter of 2016.

The Blue Book 2016 revisions, which go back to January 1997, have affected the Index of Production (IoP) and its components. The main sources of the revision are the annual update of weights and seasonal adjustment models, re-referencing of the published indices from 2012 to 2013, methodological improvements and updated source data. As is common for the first IoP publication following the annual updates, there are larger revisions than in an ordinary publication.

The annual update of weights in Blue Book 2016 has decreased the production weight within total gross value added (GVA), from 148.9 parts per thousand (ppt) to 146.5ppt. The annual change in weights has also impacted all of the components of IoP. Table 4 shows that manufacturing is still the dominant industry within production, with its weight increasing from 690.8ppt in 2012 to 700.4ppt in 2013, (where the IoP weight is 1000). Electricity, gas, steam & air conditioning supply saw a rise in weight from 93.5ppt in 2012 to 104.5ppt in 2013 which was due to an increase in both of its sub-components – they both increased in weight by 5.5ppt. In contrast, mining & quarrying saw a decrease in weight from 134.6ppt in 2012 to 120.4ppt in 2013, mainly driven by the weight of extraction of crude petroleum & natural gas which fell from 106.5ppt in 2012 to 96.2ppt in 2013. Water & waste management also saw a decrease in weight from 81.1ppt in 2012 to 74.7ppt in 2013.

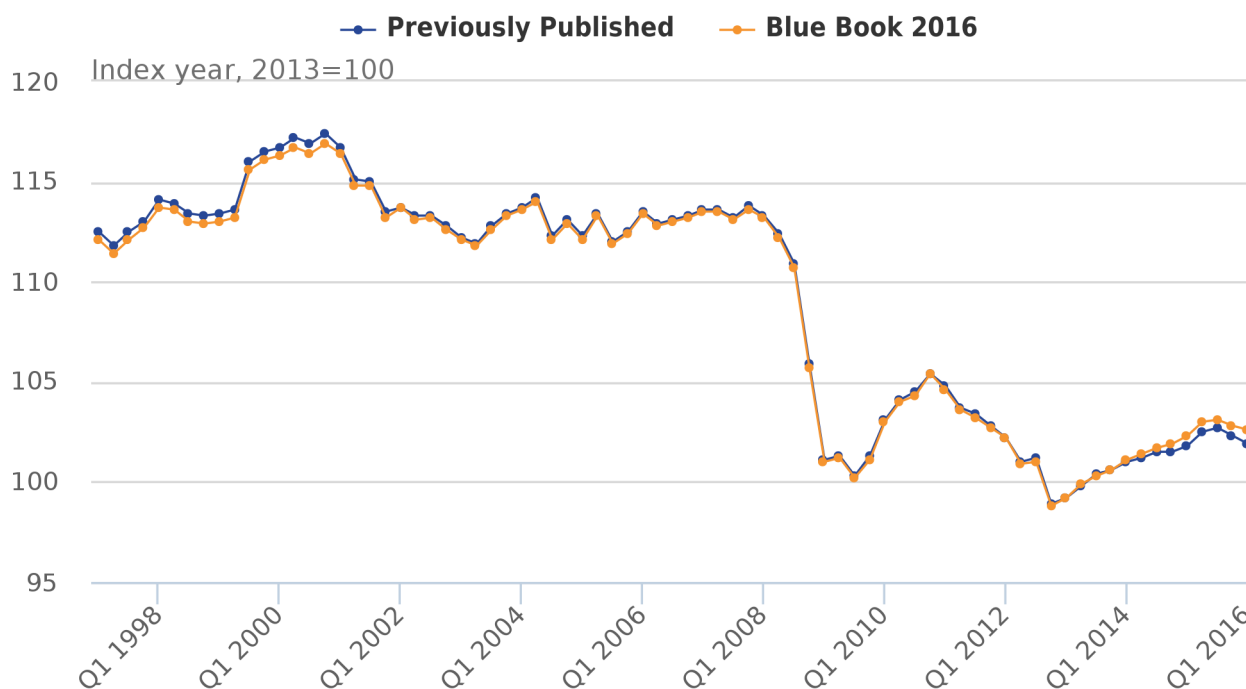
**Table 6: Changes in the weights of the main components of IoP between base year 2012=100 and 2013=100, UK**

IoP component	Previously published weights	Blue Book 2016 consistent weights
Mining & quarrying	134.6	120.4
Manufacturing	690.8	700.4
Electricity, gas, steam & air conditioning supply	93.5	104.5
Water & waste management	81.1	74.7

Source: Office for National Statistics

The Blue Book revisions to the IoP have also affected the level of output over time. However, the profile and performance of production remained broadly unchanged. Figure 4 shows the volume of production indexed to 100 in 2013. From Quarter 2 (Apr to June) 1997 to Quarter 3 (July to Sep) 2014, the Blue Book 2016 consistent estimate of the IoP contracted at broadly the same compound average growth rate (of 0.1 % per quarter) as previously published. However, from Quarter 4 (Oct to Dec) 2014 to Quarter 1 (Jan to Mar) 2016, the IoP grew at a slightly faster compound average growth rate (0.2% per quarter) than previously published estimates (0.1% per quarter). As a result of this, Quarter 1 (Jan to Mar) 2016 IoP was 9.3% below its level in Quarter 1 (Jan to Mar) 2008 revised up from 10.0% in the previously published estimate.

**Figure 4: Index of Production, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK**



Source: Office for National Statistics

**Notes:**

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

Data have also been revised for the components of production. The annual growth of manufacturing, the largest component of production, was revised slightly up in 2013, 2014 and 2015 while mining & quarrying also now shows slightly stronger recovery in the last 3 years. In contrast, the annual growth of water & waste management was revised down in 2014 and 2015.

## 8. Background notes

### 1. What's new?

The [GDP\(O\) improvement report](#) published on 1 July 2016, provides a detailed update of the implementation of improvements for Blue Book 2016, progress on industry reviews and wider cross-cutting improvements, a comprehensive timetable for the industry review project and progress on experimental statistics.

We published [Impact of changes in the national accounts and economic commentary for Quarter 1 \(Jan to Mar\) 2016](#). This article summarises the effects of methodological, classification and other changes implemented in the [Quarterly National Accounts](#) for the period 1997 to the first quarter of 2016. Additionally, information regarding the impact on historical data (pre-1997) is included in this article.

The index reference year has been updated from 2012=100 to 2013=100, along with adding an additional year of chain-linking weights for 2013.

[Economic Review: July 2016](#) was published on 6 July 2016, providing further commentary on the economy.

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 June 2016, to be published on 9 August 2016, will be open for revisions back to April 2016. Due to the recent events affecting the steel industry, we are aiming to review current seasonal adjustment for the industry. This is in line with our continuous improvement programme and we will report on results when available.

#### VAT project update

[HMRC VAT update April 2016](#) was published on 4 April 2016. This was the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts.

The next article is due to be published on 12 July 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 are listed:

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

### **Use of the data**

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

## **4. Methods**

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, IoS and GDP(O).

## Composition of the data

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

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

Approximately 70% of the IoP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 7 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 7: Monthly business survey (MBS) response rates, May 2016, UK**

			%	
	Year	Period	Turnover	Questionnaire
MBS overall	2016	May	83.8	75.0
	2016	April	95.0	82.5
	2016	Mar	95.6	83.7
	2016	Feb	96.2	85.1
MBS production only	2016	May	90.1	79.1
	2016	April	94.5	85.6
	2016	Mar	95.3	87.2
	2016	Feb	96.2	87.8

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 which allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable "errors" such as human or system failures and such mistakes are made quite clear when they 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 8 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 8 presents a summary of the differences between the first estimates published between June 2010 and May 2015 and the estimates published 12 months later.

**Table 8: Revisions, May 2016, UK**

		Percentage change	
Growth rates	Value in latest period	Revisions between first publication and estimates 12 months later	
		Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	1.9	-0.14	0.27
Manufacturing - 3 month	1.3	-0.13	0.26
Production - 1 month	-0.5	-0.10 *	0.23
Manufacturing - 1 month	-0.5	-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 8, 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 the [ONS Time Series Data service](#). Users can download the complete bulletin in a choice of zipped formats, or view and download their own selections of individual series.

We [publish revisions triangles](#) or all the main published key 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 ONS 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 would 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 to send your feedback please contact us via email: [indexofproduction@ons.gsi.gov.uk](mailto:indexofproduction@ons.gsi.gov.uk).

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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 <sup>†</sup>	115.3 <sup>†</sup>	102.5 <sup>†</sup>	101.0 <sup>†</sup>	96.0 <sup>†</sup>	126.9 <sup>†</sup>	104.0 <sup>†</sup>	104.9 <sup>†</sup>	97.7 <sup>†</sup>	100.6 <sup>†</sup>	113.7 <sup>†</sup>
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	109.4	102.7	94.8	103.9	110.0	105.8	100.9	101.7	105.3	101.5
2015 Q1	102.3 <sup>†</sup>	102.4 <sup>†</sup>	103.3 <sup>†</sup>	96.4 <sup>†</sup>	100.8 <sup>†</sup>	100.0 <sup>†</sup>	107.0 <sup>†</sup>	101.0 <sup>†</sup>	101.7 <sup>†</sup>	107.0 <sup>†</sup>	98.2 <sup>†</sup>
Q2	103.0	110.8	102.8	94.1	104.7	112.1	106.4	100.2	102.1	105.7	101.8
Q3	103.1	113.5	102.4	95.2	104.7	115.3	105.2	100.8	101.3	104.7	103.9
Q4	102.8	111.0	102.5	93.3	105.4	112.7	104.7	101.6	101.6	103.7	102.2
2016 Q1	102.6	108.6	102.3	94.0	108.0	111.0	104.7	100.8	101.7	103.5	101.1
2015 Mar	102.8 <sup>†</sup>	104.0 <sup>†</sup>	103.7 <sup>†</sup>	95.7 <sup>†</sup>	102.0 <sup>†</sup>	102.3 <sup>†</sup>	106.5 <sup>†</sup>	102.2 <sup>†</sup>	101.9 <sup>†</sup>	107.0 <sup>†</sup>	98.7 <sup>†</sup>
Apr	102.8	108.6	103.1	93.0	104.0	109.2	105.9	99.5	102.8	106.7	100.2
May	103.1	113.7	102.4	94.8	104.1	116.0	104.4	102.0	100.8	104.5	103.7
Jun	103.0	110.2	102.7	94.4	106.2	111.2	108.7	99.0	102.8	106.1	101.5
Jul	102.4	110.4	101.7	94.4	107.0	110.9	106.5	100.4	99.1	105.1	101.7
Aug	103.5	117.8	102.2	94.9	104.0	121.1	104.6	100.0	102.0	104.4	106.2
Sep	103.5	112.2	103.2	96.3	103.0	114.1	104.5	101.9	102.9	104.5	103.9
Oct	103.7	114.0	102.8	97.4	104.9	115.5	102.8	102.8	101.2	104.5	105.4
Nov	102.9	111.5	102.5	94.0	104.7	113.7	105.6	100.9	101.2	104.1	103.0
Dec	101.8	107.4	102.2	88.6	106.6	108.9	105.7	101.2	102.5	102.4	98.2
2016 Jan	102.6	106.0	102.8	93.1	107.8	107.4	106.0	100.1	103.0	104.4	99.4
Feb	102.4	110.0	101.9	93.0	107.6	112.9	104.4	101.5	100.1	103.1	101.5
Mar	102.9	109.6	102.2	95.9	108.6	112.8	103.8	100.6	101.9	102.9	102.5
Apr	105.1	109.0	104.7	100.2	109.3	111.3	105.9	104.5	104.4	104.6	103.5
May	104.5	108.9	104.2	97.3	111.0	111.1	106.8	103.3	104.2	104.2	102.7
Percentage change, latest year on previous year											
2011	-0.6	-14.3 <sup>†</sup>	2.2	-6.1	5.7	-18.4	0.3 <sup>†</sup>	-0.2	6.8 <sup>†</sup>	0.7 <sup>†</sup>	-10.6
2012	-2.7 <sup>†</sup>	-10.9	-1.4	-0.9	-0.1	-14.1	-2.6	-3.8	1.3	-	-8.9 <sup>†</sup>
2013	-0.7	-2.7	-1.0 <sup>†</sup>	-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 <sup>†</sup>	-1.1 <sup>†</sup>	6.2	0.5	3.1	5.0	-3.5
2015	1.3	8.8	-0.2	0.9	3.2	11.2	-0.4	0.4 <sup>†</sup>	-1.3	0.2	5.2
Percentage change, latest month on same month a year ago											
2014 Mar	1.9 <sup>†</sup>	8.3 <sup>†</sup>	2.7 <sup>†</sup>	-15.0 <sup>†</sup>	7.3 <sup>†</sup>	9.7 <sup>†</sup>	1.7 <sup>†</sup>	2.1 <sup>†</sup>	1.1 <sup>†</sup>	5.0 <sup>†</sup>	-3.0 <sup>†</sup>
Apr	2.2	3.5	4.2	-15.0	5.3	3.3	4.5	1.7	2.6	8.0	-5.8
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	5.7	1.1	0.4	-4.5	4.9	4.9	3.5	-1.8	1.7	2.4
Feb	0.9	-1.9	1.0	7.3	-2.5	-6.0	0.8	-1.2	1.1	3.6	0.8
Mar	1.4	0.9	1.1	5.1	0.8	-0.5	3.6	1.3	-0.4	2.5	1.6
Apr	1.2	7.6	-0.3	2.6	3.7	9.7	0.6	-2.5	-0.6	1.4	5.2
May	1.8	9.3	0.2	1.7	4.0	12.9	2.3	0.9	-0.8	-	6.0
Jun	1.7	11.2	-0.1	-1.0	6.7	15.0	4.5	-0.6	-1.5	1.6	5.5
Jul	0.7	11.3	-1.3	-3.0	7.9	14.1	0.9	0.1	-4.0	-0.4	4.6
Aug	2.0	21.0	-0.8	-2.9	5.2	27.8	-1.9	-0.9	-0.3	-1.1	10.2
Sep	1.7	10.5	-0.2	3.3	3.2	14.4	-4.7	1.3	-0.9	-1.1	7.7
Oct	2.0	10.8	-	3.9	4.0	14.0	-5.0	2.7	-1.8	-0.3	8.3
Nov	0.8	11.6	-1.3	0.8	3.1	17.1	-3.4	-0.3	-3.0	-1.6	8.0
Dec	-0.2	8.0	-1.4	-7.0	7.5	13.5	-5.9	0.4	-1.9	-3.5	2.4
2016 Jan	0.7	3.0	-	-3.0	8.5	6.7	-3.1	-0.6	2.5	-2.0	1.1
Feb	0.1	9.6	-1.4	-4.7	6.3	16.5	-0.5	1.4	-2.5	-4.1	4.0
Mar	0.1	5.4	-1.5	0.2	6.4	10.2	-2.6	-1.5	-	-3.8	3.9
Apr	2.2	0.3	1.5	7.7	5.1	1.9	-	5.1	1.6	-2.0	3.3
May	1.4	-4.2	1.7	2.7	6.7	-4.2	2.3	1.2	3.3	-0.2	-0.9

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 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
Percentage change, latest month on previous month											
2014 Mar	- <sup>†</sup>	0.7 <sup>†</sup>	0.1	0.1 <sup>†</sup>	-2.5 <sup>†</sup>	-0.3 <sup>†</sup>	-1.2 <sup>†</sup>	-0.5	0.8 <sup>†</sup>	0.7 <sup>†</sup>	0.2 <sup>†</sup>
Apr	0.3	-2.0	0.9	-0.5	-0.9	-3.2	2.5	1.1 <sup>†</sup>	1.0	-0.7	-1.9
May	-0.3	3.0	-1.2 <sup>†</sup>	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	3.5	-0.8	0.7	0.1	4.9	-2.6	-	-3.8	0.4	2.5
Feb	0.4	-2.5	0.6	1.6	1.9	-3.7	-4.1	-0.7	2.1	0.9	-0.7
Mar	0.5	3.6	0.3	-1.9	0.8	5.5	1.5	2.1	-0.7	-0.4	1.1
Apr	-	4.5	-0.5	-2.8	2.0	6.7	-0.6	-2.7	0.9	-0.3	1.5
May	0.3	4.7	-0.7	1.9	0.1	6.2	-1.4	2.6	-1.9	-2.1	3.5
Jun	-0.1	-3.0	0.3	-0.5	2.0	-4.1	4.1	-2.9	1.9	1.5	-2.2
Jul	-0.6	0.1	-1.0	-	0.8	-0.3	-2.1	1.4	-3.6	-0.9	0.3
Aug	1.1	6.8	0.5	0.6	-2.8	9.2	-1.8	-0.4	2.9	-0.7	4.4
Sep	0.1	-4.8	1.0	1.4	-1.0	-5.8	-	1.9	0.9	0.1	-2.2
Oct	0.2	1.6	-0.4	1.1	1.9	1.2	-1.6	0.8	-1.6	-	1.5
Nov	-0.8	-2.1	-0.3	-3.5	-0.2	-1.5	2.7	-1.8	-0.1	-0.4	-2.3
Dec	-1.1	-3.7	-0.3	-5.7	1.8	-4.2	0.1	0.2	1.3	-1.6	-4.7
2016 Jan	0.8	-1.3	0.6	5.1	1.1	-1.4	0.2	-1.0	0.5	1.9	1.2
Feb	-0.2	3.8	-0.9	-0.1	-0.2	5.1	-1.5	1.4	-2.8	-1.2	2.1
Mar	0.5	-0.3	0.2	3.2	0.9	-0.1	-0.6	-0.9	1.8	-0.2	1.0
Apr	2.1	-0.6	2.4	4.5	0.7	-1.4	2.0	3.9	2.5	1.6	0.9
May	-0.5	-0.1	-0.5	-2.9	1.5	-0.2	0.8	-1.2	-0.2	-0.3	-0.7
Percentage change, latest 3 months on same 3 months a year ago <sup>2</sup>											
2014 Mar	1.9 <sup>†</sup>	3.1 <sup>†</sup>	3.0 <sup>†</sup>	-10.8 <sup>†</sup>	7.1 <sup>†</sup>	2.5 <sup>†</sup>	4.0 <sup>†</sup>	0.8 <sup>†</sup>	1.9 <sup>†</sup>	6.0 <sup>†</sup>	-3.6 <sup>†</sup>
Apr	2.1	5.3	3.5	-13.9	5.7	6.3	4.8	2.0	2.1	6.0	-3.9
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	-2.7	-3.3	-1.7	8.6	2.0	2.7	2.8	-2.3
Feb	1.0	-0.3	1.6	2.4	-3.7	-3.4	6.0	0.8	1.5	2.9	-0.6
Mar	1.2	1.5	1.1	4.2	-2.1	-0.7	3.1	1.2	-0.4	2.6	1.6
Apr	1.2	2.2	0.6	5.0	0.6	0.9	1.7	-0.8	-	2.5	2.5
May	1.5	6.0	0.3	3.1	2.8	7.3	2.1	-0.1	-0.6	1.3	4.3
Jun	1.5	9.4	-0.1	1.1	4.8	12.5	2.4	-0.7	-1.0	1.0	5.6
Jul	1.4	10.6	-0.4	-0.8	6.2	14.0	2.5	0.1	-2.1	0.4	5.4
Aug	1.4	14.5	-0.7	-2.3	6.6	18.9	1.1	-0.5	-1.9	-	6.8
Sep	1.4	14.2	-0.8	-0.9	5.5	18.7	-2.0	0.2	-1.7	-0.9	7.5
Oct	1.9	14.0	-0.3	1.4	4.1	18.6	-3.9	1.0	-1.0	-0.9	8.7
Nov	1.5	11.0	-0.5	2.7	3.4	15.1	-4.4	1.2	-1.9	-1.0	8.0
Dec	0.9	10.1	-0.9	-0.8	4.8	14.9	-4.8	0.9	-2.3	-1.8	6.2
2016 Jan	0.4	7.5	-0.9	-3.1	6.3	12.3	-4.2	-0.2	-0.9	-2.4	3.8
Feb	0.2	6.8	-0.9	-4.9	7.4	12.1	-3.3	0.4	-0.7	-3.2	2.5
Mar	0.3	6.0	-1.0	-2.5	7.1	11.0	-2.1	-0.3	-	-3.3	3.0
Apr	0.8	5.0	-0.5	1.0	5.9	9.2	-1.1	1.6	-0.3	-3.3	3.7
May	1.2	0.4	0.6	3.5	6.1	2.3	-0.1	1.6	1.6	-2.0	2.1

- 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>†</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
Latest weight	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
Percentage change, latest 3 months on previous 3 months <sup>2</sup>											
2014 Mar	0.5 <sup>†</sup>	-0.2 <sup>†</sup>	1.6 <sup>†</sup>	-5.4 <sup>†</sup>	-0.1 <sup>†</sup>	- <sup>†</sup>	3.7 <sup>†</sup>	0.3 <sup>†</sup>	2.4 <sup>†</sup>	1.7 <sup>†</sup>	-2.7
Apr	0.6	1.8	1.8	-6.8	-1.6	2.2	2.4	2.5	2.1	1.2	-2.5 <sup>†</sup>
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	-0.7	2.0	0.4	-	0.7	-0.2
Feb	0.2	-0.5	-	3.1	-0.8	-1.5	-0.2	-0.1	-1.2	1.2	0.9
Mar	0.4	1.7	-0.1	2.5	0.3	1.9	-2.8	0.3	-2.2	1.3	2.1
Apr	0.6	3.5	-	0.6	2.4	5.0	-4.1	-0.4	-0.6	0.9	2.4
May	0.8	7.7	-0.2	-1.8	3.4	11.5	-3.0	0.7	-0.7	-0.6	3.7
Jun	0.7	8.2	-0.5	-2.5	3.9	12.2	-0.5	-0.9	0.4	-1.2	3.6
Jul	0.2	6.8	-1.1	-1.0	3.3	9.6	0.7	-0.1	-1.5	-1.7	3.5
Aug	-	3.7	-0.9	0.1	2.3	4.8	0.9	-1.4	-0.6	-0.8	2.3
Sep	0.1	2.4	-0.4	1.2	-0.1	2.9	-1.1	0.6	-0.8	-1.0	2.1
Oct	0.7	2.9	0.5	1.8	-1.7	3.7	-2.4	1.1	1.1	-0.7	2.8
Nov	0.4	-0.2	0.6	1.4	-1.5	-	-2.1	2.1	0.5	-0.8	0.9
Dec	-0.3	-2.2	0.2	-2.0	0.7	-2.3	-0.4	0.9	0.3	-1.0	-1.7
2016 Jan	-1.1	-5.5	-0.2	-4.5	2.3	-5.9	1.7	-0.8	0.2	-0.8	-4.7
Feb	-1.1	-4.2	-0.5	-4.5	3.0	-4.1	1.0	-0.9	0.1	-1.0	-4.2
Mar	-0.2	-2.2	-0.2	0.7	2.4	-1.5	-	-0.8	0.1	-0.2	-1.0
Apr	1.0	1.1	0.4	4.9	2.0	2.1	-1.0	1.5	-0.1	-0.1	2.3
May	1.9	1.3	1.3	6.9	2.2	1.8	0.1	1.8	1.6	0.6	3.3

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

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

<sup>†</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

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
2011	104.4 <sup>†</sup>	108.3 <sup>†</sup>	103.3 <sup>†</sup>	113.4 <sup>†</sup>	103.1 <sup>†</sup>	109.1 <sup>†</sup>
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	96.8	101.7	93.8	108.9	95.5
2015 Q1	104.5 <sup>†</sup>	95.8 <sup>†</sup>	103.2 <sup>†</sup>	90.5 <sup>†</sup>	110.2 <sup>†</sup>	94.6 <sup>†</sup>
Q2	103.0	99.6	101.2	85.5	108.5	94.6
Q3	104.3	95.5	101.0	97.3	108.9	96.0
Q4	104.8	96.4	101.7	101.8	108.2	96.8
2016 Q1	104.6	92.0	101.1	89.3	105.5	95.4
2015 Mar	104.2 <sup>†</sup>	99.1 <sup>†</sup>	102.4 <sup>†</sup>	86.7 <sup>†</sup>	110.1 <sup>†</sup>	98.1 <sup>†</sup>
Apr	102.8	97.4	102.3	85.6	111.4	92.4
May	103.3	100.4	101.0	86.0	106.4	100.5
Jun	102.9	100.9	100.3	84.7	107.7	90.9
Jul	103.4	98.2	100.2	96.7	108.8	95.7
Aug	104.2	91.2	100.8	96.2	108.7	95.0
Sep	105.1	97.0	101.9	99.0	109.2	97.3
Oct	105.0	98.3	101.1	104.3	108.5	99.9
Nov	104.8	95.8	103.0	103.8	109.7	94.7
Dec	104.7	95.1	100.8	97.2	106.4	95.9
2016 Jan	104.8	97.4	102.2	92.4	106.5	90.5
Feb	105.2	90.4	100.2	90.4	105.0	97.6
Mar	103.8	88.3	100.9	85.1	104.9	97.9
Apr	104.9	94.0	102.7	81.2	106.6	106.8
May	106.4	88.3	104.4	92.2	105.1	99.9
<b>Percentage change, latest year on previous year</b>						
2011	6.6 <sup>†</sup>	1.4 <sup>†</sup>	-5.6	1.4	6.8 <sup>†</sup>	-13.5
2012	-2.6	-3.4	-5.3	-10.1	-1.9	-5.8
2013	-1.7	-4.4	2.3 <sup>†</sup>	-1.9	-1.1	-2.6 <sup>†</sup>
2014	4.2	-2.7	1.1	-8.9 <sup>†</sup>	2.8	-5.0
2015	-	-0.5	0.7	3.0	6.0	0.5
<b>Percentage change, latest month on same month a year ago</b>						
2014 Mar	5.1 <sup>†</sup>	3.0 <sup>†</sup>	-4.4 <sup>†</sup>	-7.8 <sup>†</sup>	2.7 <sup>†</sup>	-0.1 <sup>†</sup>
Apr	6.0	4.9	0.4	-10.6	4.8	-4.9
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	-10.1	3.5	-2.7	4.9	7.1
Feb	0.7	-5.6	2.1	2.8	10.4	-5.9
Mar	0.3	-1.5	3.9	-7.3	7.2	0.9
Apr	-1.3	-4.1	2.6	-8.0	8.2	-7.2
May	0.2	-7.8	0.1	-6.0	3.3	6.5
Jun	-0.7	4.0	-0.4	-2.8	7.1	-2.2
Jul	-1.0	5.5	-0.6	9.9	5.2	-0.6
Aug	-0.5	-2.7	-2.5	8.6	8.4	-1.7
Sep	0.9	3.0	-0.8	10.7	4.7	2.6
Oct	-	6.9	-1.6	13.8	5.5	8.4
Nov	-0.3	2.6	0.9	14.7	4.6	-0.8
Dec	-1.2	6.4	0.9	2.9	2.6	0.3
2016 Jan	-	5.8	-1.8	1.2	-2.2	-3.4
Feb	0.7	-6.2	-2.7	-3.4	-5.8	6.1
Mar	-0.4	-10.9	-1.5	-1.8	-4.8	-0.1
Apr	2.0	-3.5	0.5	-5.2	-4.4	15.5
May	3.0	-12.0	3.4	7.2	-1.3	-0.7

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	107.3 <sup>†</sup>	100.0 <sup>†</sup>	101.6 <sup>†</sup>	94.6 <sup>†</sup>	112.2 <sup>†</sup>	89.0 <sup>†</sup>	102.1 <sup>†</sup>
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	109.7	101.9	101.7	97.6	90.7	110.2	103.6
2015 Q1	111.0 <sup>†</sup>	104.6 <sup>†</sup>	101.7 <sup>†</sup>	98.1 <sup>†</sup>	94.2 <sup>†</sup>	107.5 <sup>†</sup>	105.4 <sup>†</sup>
Q2	109.5	103.4	103.0	98.4	91.4	109.6	104.9
Q3	109.0	100.3	101.7	97.0	89.2	111.1	102.2
Q4	109.4	99.2	100.4	96.8	87.8	112.6	101.9
2016 Q1	111.1	101.1	98.4	94.2	88.1	111.2	106.6
2015 Mar	111.3 <sup>†</sup>	104.4 <sup>†</sup>	102.0 <sup>†</sup>	99.5 <sup>†</sup>	93.8 <sup>†</sup>	107.5 <sup>†</sup>	106.6 <sup>†</sup>
Apr	110.3	104.6	102.1	99.4	95.1	108.3	106.4
May	108.8	100.0	100.6	97.4	89.4	110.7	103.4
Jun	109.5	105.6	106.2	98.6	89.8	110.0	105.0
Jul	109.7	99.4	101.6	95.9	88.4	108.0	102.1
Aug	107.9	101.4	101.9	96.1	89.1	113.3	100.3
Sep	109.4	100.0	101.6	99.1	90.2	112.0	104.2
Oct	109.6	100.2	100.2	98.1	87.3	113.7	98.2
Nov	109.0	99.3	99.4	96.8	87.2	112.1	103.8
Dec	109.5	98.3	101.7	95.5	88.9	112.0	103.6
2016 Jan	111.7	101.7	101.5	94.7	88.1	112.5	107.4
Feb	110.9	100.7	97.4	94.9	86.9	109.1	105.9
Mar	110.8	101.0	96.3	92.9	89.4	112.1	106.7
Apr	114.0	99.9	99.0	93.6	91.3	118.2	106.3
May	113.0	100.6	101.1	89.9	89.2	118.0	106.8

## Percentage change, latest year on previous year

2011	-0.2	4.4	-1.3 <sup>†</sup>	-3.8	8.6	10.2 <sup>†</sup>	5.4
2012	-4.2	2.9	0.5	10.9	1.1	4.4	-6.3
2013	-2.8	-2.8 <sup>†</sup>	-2.1	-4.7	-11.8 <sup>†</sup>	7.6	4.6 <sup>†</sup>
2014	13.1 <sup>†</sup>	1.5	3.9	-3.2 <sup>†</sup>	4.3	3.5	5.6
2015	-3.0	0.4	-2.2	0.8	-13.1	6.4	-1.9

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

2014 Mar	14.4 <sup>†</sup>	-1.3 <sup>†</sup>	-1.6	- <sup>†</sup>	1.3 <sup>†</sup>	3.3 <sup>†</sup>	7.3 <sup>†</sup>
Apr	19.4	0.4	-0.1 <sup>†</sup>	-2.3	8.2	6.0	6.9
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	-1.5	-0.8	-10.6	6.5	-0.7
Feb	-	3.7	-0.6	3.0	-10.1	6.9	1.4
Mar	-0.4	3.8	0.3	0.9	-11.8	4.7	2.8
Apr	-3.4	3.1	-1.8	2.5	-9.8	4.4	1.6
May	-3.1	0.7	0.4	2.9	-15.9	8.5	0.2
Jun	-2.4	3.2	6.4	-3.0	-15.3	3.6	-0.1
Jul	-3.7	-0.1	-1.0	-2.1	-16.8	3.2	-3.9
Aug	-6.2	-1.6	-0.4	3.1	-13.0	12.1	-8.3
Sep	-3.9	-1.8	-6.5	1.8	-13.5	7.7	-1.5
Oct	-4.4	-0.5	-4.2	6.7	-15.0	9.2	-8.7
Nov	-4.1	-3.4	-6.0	-0.4	-13.4	5.4	-4.8
Dec	-4.5	-3.7	-9.7	-4.0	-12.0	5.2	-0.3
2016 Jan	0.8	-2.1	-0.7	-1.6	-5.7	5.6	2.2
Feb	-	-4.6	-3.4	-3.6	-8.9	0.7	1.1
Mar	-0.4	-3.2	-5.6	-6.7	-4.6	4.2	0.1
Apr	3.3	-4.5	-3.1	-5.8	-4.0	9.1	-0.1
May	3.8	0.6	0.5	-7.7	-0.3	6.6	3.3

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 100

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		114.2	25.4	51.0	9.2	39.8	58.7
		K22B	K22P	K22T	K22X	K22Z	K239
Percentage change, latest month on previous month							
2014	Mar	0.1 <sup>†</sup>	-1.3 <sup>†</sup>	-2.4 <sup>†</sup>	2.7 <sup>†</sup>	1.6 <sup>†</sup>	-0.6 <sup>†</sup>
	Apr	0.3	0.9	1.2	-0.5	0.3	2.5
	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	-1.1	2.9	4.2	-3.4	5.0	-2.0
	Feb	-0.4	4.7	-1.1	2.6	2.4	-1.9
	Mar	-0.3	2.9	-0.6	-7.4	-1.2	6.6
	Apr	-1.3	-1.7	-0.1	-1.2	1.2	-5.8
	May	0.4	3.0	-1.3	0.5	-4.5	8.8
	Jun	-0.4	0.5	-0.6	-1.5	1.2	-9.6
	Jul	0.6	-2.7	-0.1	14.1	1.0	5.3
	Aug	0.8	-7.2	0.5	-0.5	-0.1	-0.8
	Sep	0.8	6.4	1.2	2.9	0.4	2.4
	Oct	-0.1	1.3	-0.9	5.3	-0.6	2.7
	Nov	-0.2	-2.5	1.9	-0.4	1.1	-5.2
	Dec	-0.1	-0.7	-2.1	-6.3	-3.1	1.3
2016	Jan	0.1	2.4	1.4	-5.0	0.1	-5.6
	Feb	0.4	-7.2	-1.9	-2.1	-1.4	7.8
	Mar	-1.4	-2.3	0.6	-5.9	-0.1	0.3
	Apr	1.1	6.4	1.9	-4.6	1.6	9.0
	May	1.4	-6.0	1.6	13.6	-1.4	-6.5
Percentage change, latest 3 months on same 3 months a year ago							
2014	Mar	3.6 <sup>†</sup>	1.8 <sup>†</sup>	0.2 <sup>†</sup>	-8.8 <sup>†</sup>	4.3 <sup>†</sup>	-3.9 <sup>†</sup>
	Apr	5.0	3.5	-0.8	-9.9	3.7	-1.8
	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	-9.7	2.1	-5.6	3.4	-0.5
	Feb	2.9	-8.5	1.6	-3.8	5.5	-1.8
	Mar	1.1	-5.7	3.2	-2.5	7.5	0.5
	Apr	-0.1	-3.7	2.9	-4.2	8.6	-4.1
	May	-0.3	-4.6	2.2	-7.1	6.3	-0.1
	Jun	-0.6	-2.8	0.8	-5.7	6.2	-1.1
	Jul	-0.5	0.2	-0.3	0.3	5.2	1.2
	Aug	-0.7	2.3	-1.2	5.3	6.9	-1.5
	Sep	-0.2	1.9	-1.3	9.7	6.1	0.1
	Oct	0.1	2.4	-1.6	11.1	6.2	3.0
	Nov	0.2	4.1	-0.5	13.1	5.0	3.3
	Dec	-0.5	5.3	0.1	10.4	4.3	2.6
2016	Jan	-0.5	4.9	-	6.2	1.6	-1.3
	Feb	-0.2	1.9	-1.2	0.2	-1.9	0.9
	Mar	0.1	-4.0	-2.0	-1.4	-4.3	0.8
	Apr	0.8	-6.9	-1.2	-3.5	-5.0	7.0
	May	1.5	-8.9	0.8	0.1	-3.5	4.7

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z

## Percentage change, latest month on previous month

2014	Mar	0.7 <sup>†</sup>	-1.1 <sup>†</sup>	0.2	3.2 <sup>†</sup>	0.3 <sup>†</sup>	1.3 <sup>†</sup>	0.4 <sup>†</sup>
	Apr	2.3	0.9	2.3 <sup>†</sup>	-1.7	-0.9	1.0	1.0
	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	-3.3	-7.5	-	1.0
	Feb	0.1	1.6	-1.4	2.2	2.1	1.8	-0.4
	Mar	0.4	-1.1	1.2	1.1	-1.7	-0.8	1.8
	Apr	-0.9	0.2	0.1	-0.1	1.4	0.7	-0.1
	May	-1.4	-4.4	-1.5	-2.0	-6.0	2.2	-2.8
	Jun	0.6	5.6	5.6	1.2	0.4	-0.6	1.5
	Jul	0.2	-5.8	-4.3	-2.8	-1.6	-1.8	-2.8
	Aug	-1.6	2.0	0.2	0.2	0.8	4.9	-1.8
	Sep	1.4	-1.4	-0.3	3.2	1.3	-1.2	3.9
	Oct	0.1	0.2	-1.4	-1.0	-3.3	1.5	-5.7
	Nov	-0.5	-0.9	-0.8	-1.3	-0.1	-1.4	5.7
	Dec	0.5	-1.0	2.3	-1.3	1.9	-0.1	-0.2
2016	Jan	2.0	3.4	-0.2	-0.9	-0.9	0.4	3.6
	Feb	-0.7	-0.9	-4.0	0.2	-1.4	-3.0	-1.4
	Mar	-0.1	0.3	-1.1	-2.1	2.9	2.7	0.8
	Apr	2.9	-1.1	2.7	0.7	2.1	5.4	-0.3
	May	-0.9	0.7	2.1	-3.9	-2.3	-0.2	0.4

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

2014	Mar	14.9 <sup>†</sup>	1.8 <sup>†</sup>	-0.5	-2.2 <sup>†</sup>	6.2 <sup>†</sup>	2.6 <sup>†</sup>	5.2 <sup>†</sup>
	Apr	15.9	0.8	0.5	-2.3	6.0	4.0	5.7
	May	16.0	0.6	-0.5 <sup>†</sup>	-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	-0.1	-3.9	6.8	2.8
	Feb	3.2	1.5	4.2	1.4	-7.3	7.7	0.4
	Mar	-0.1	3.0	-0.6	1.0	-10.8	6.0	1.1
	Apr	-1.3	3.5	-0.7	2.1	-10.6	5.3	1.9
	May	-2.3	2.5	-0.4	2.1	-12.5	5.9	1.6
	Jun	-3.0	2.3	1.6	0.7	-13.7	5.5	0.6
	Jul	-3.1	1.3	1.9	-0.8	-16.0	5.1	-1.3
	Aug	-4.1	0.5	1.6	-0.8	-15.1	6.2	-4.2
	Sep	-4.6	-1.2	-2.7	0.9	-14.5	7.6	-4.6
	Oct	-4.9	-1.3	-3.8	3.8	-13.8	9.6	-6.2
	Nov	-4.1	-1.9	-5.6	2.6	-14.0	7.4	-5.0
	Dec	-4.3	-2.6	-6.7	0.6	-13.5	6.6	-4.6
2016	Jan	-2.6	-3.1	-5.6	-2.0	-10.5	5.4	-1.0
	Feb	-1.3	-3.5	-4.8	-3.1	-9.0	3.8	1.0
	Mar	0.1	-3.3	-3.2	-4.0	-6.4	3.5	1.2
	Apr	1.0	-4.1	-4.0	-5.4	-5.8	4.7	0.4
	May	2.2	-2.4	-2.7	-6.7	-3.0	6.7	1.1

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2013 = 100

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		114.2	25.4	51.0	9.2	39.8	58.7
		K22B	K22P	K22T	K22X	K22Z	K239
Percentage change, latest 3 months on previous 3 months							
2014	Mar	4.1 <sup>†</sup>	0.3 <sup>†</sup>	0.5 <sup>†</sup>	-3.3 <sup>†</sup>	1.2 <sup>†</sup>	-5.6 <sup>†</sup>
	Apr	3.3	-	-0.3	-5.1	-0.1	2.9
	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	-0.8	2.5	3.3	0.4
	Feb	0.3	-0.7	-0.1	2.9	3.9	-0.4
	Mar	-0.8	4.6	1.6	-1.8	6.2	0.2
	Apr	-1.4	6.6	0.5	-3.8	4.9	-0.8
	May	-1.6	6.9	-0.5	-7.5	1.2	3.4
	Jun	-1.4	3.9	-1.9	-5.6	-1.5	-
	Jul	-0.6	2.2	-2.0	0.6	-3.1	1.7
	Aug	0.1	-2.3	-1.4	7.5	-0.8	-3.2
	Sep	1.2	-4.1	-0.2	13.8	0.3	1.5
	Oct	1.5	-4.3	0.8	12.0	1.1	1.7
	Nov	1.4	0.3	1.6	10.6	0.7	3.6
	Dec	0.5	1.0	0.7	4.6	-0.6	0.9
2016	Jan	-	0.6	0.8	-2.0	-1.2	-3.8
	Feb	-	-2.8	-0.9	-8.8	-2.9	-2.7
	Mar	-0.2	-4.5	-0.5	-12.2	-2.5	-1.5
	Apr	-0.1	-5.4	-0.7	-12.5	-1.9	7.5
	May	0.1	-4.3	1.5	-7.7	-0.4	7.2

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 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
Percentage change, latest 3 months on previous 3 months							
2014 Mar	6.7 <sup>†</sup>	-0.9 <sup>†</sup>	5.0 <sup>†</sup>	-1.4 <sup>†</sup>	3.6 <sup>†</sup>	0.9 <sup>†</sup>	2.4 <sup>†</sup>
Apr	5.4	-1.0	2.5	-0.7	3.4	3.0	0.7 <sup>†</sup>
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	-4.6	3.2	-1.4
Feb	-1.7	2.0	-1.0	2.7	-5.8	2.2	-2.7
Mar	-2.9	2.7	-5.5	1.9	-7.2	1.8	-1.4
Apr	-2.0	1.9	-4.8	1.5	-3.7	1.6	-0.1
May	-1.8	-0.8	-3.4	0.7	-4.0	1.6	0.9
Jun	-1.3	-1.1	1.3	0.4	-2.9	2.0	-0.4
Jul	-1.3	-3.0	1.1	-1.9	-5.8	1.4	-2.2
Aug	-1.0	-0.8	1.6	-2.0	-4.0	1.5	-2.9
Sep	-0.5	-3.0	-1.2	-1.5	-2.4	1.3	-2.6
Oct	-0.3	-1.1	-1.6	0.5	-0.4	3.1	-2.5
Nov	0.3	-2.3	-2.8	1.2	-1.0	1.9	-0.4
Dec	0.3	-1.0	-1.3	-0.2	-1.6	1.3	-0.3
2016 Jan	1.0	-0.8	-0.4	-2.1	-0.9	-0.7	4.0
Feb	1.2	0.4	-0.2	-3.0	-0.3	-1.2	3.5
Mar	1.6	1.9	-2.0	-2.7	0.4	-1.2	4.6
Apr	1.6	0.8	-3.2	-2.0	1.3	0.9	1.3
May	1.7	0.3	-1.4	-3.1	2.3	4.4	0.9

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

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

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	



## 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	0.7	3.0	1.1	0.1	-4.1	10.5	1.7	0.9	-1.0	0.6	3.8
2012	0.7	2.8	1.0	0.2	-4.1	9.0	1.3	0.9	-1.0	0.6	3.6
2013	0.8	3.3	1.1	-0.4	-4.3	8.2	1.3	0.9	-0.6	0.8	3.4
2014	1.0	4.4	1.3	-0.6	-4.4	8.9	1.7	0.9	-0.4	1.0	3.6
2015	1.3	6.6	1.4	0.4	-5.0	10.8	2.3	1.0	-0.5	1.7	4.5
2015 Q1	1.4	5.8	1.4	0.3	-4.5	10.3	2.8	0.8	-0.7	1.6	4.7
Q2	1.3	6.8	1.4	0.2	-4.8	11.0	2.2	1.0	-0.8	1.6	4.8
Q3	1.2	7.0	1.4	0.4	-5.2	11.2	2.1	1.1	-0.4	1.7	4.5
Q4	1.3	6.8	1.5	0.6	-5.5	10.9	2.3	0.9	-	1.9	4.3
2016 Q1	1.5	6.8	1.7	0.9	-5.4	10.6	2.6	1.0	0.3	1.9	4.8
2015 Feb	1.5	5.5	1.5	0.5	-4.6	9.8	2.5	0.9	-0.3	1.9	4.5
Mar	1.3	5.9	1.4	0.1	-4.4	10.4	2.4	0.7	-0.9	1.8	4.7
Apr	1.2	6.6	1.3	-	-4.7	11.1	2.1	0.8	-0.9	1.5	4.8
May	1.3	7.3	1.4	0.1	-4.8	11.4	2.2	1.0	-0.7	1.8	4.8
Jun	1.3	6.6	1.5	0.3	-4.9	10.7	2.0	1.2	-0.8	1.8	4.7
Jul	1.1	6.4	1.3	0.2	-5.2	10.7	2.4	1.1	-0.7	1.5	4.2
Aug	1.4	7.4	1.5	0.3	-5.1	11.8	2.1	1.0	-0.2	1.7	4.6
Sep	1.3	7.0	1.5	0.7	-5.3	11.2	1.9	1.1	-0.3	1.8	4.7
Oct	1.3	7.4	1.4	0.8	-5.4	11.2	2.1	1.1	-0.2	1.9	4.5
Nov	1.3	6.5	1.5	0.6	-5.5	11.0	2.5	0.9	0.1	1.7	4.2
Dec	1.3	6.5	1.5	0.5	-5.5	10.5	2.4	0.8	0.2	1.9	4.0
2016 Jan	1.5	6.4	1.7	1.0	-5.7	10.3	2.3	0.8	0.2	1.9	4.6
Feb	1.5	6.9	1.7	1.0	-5.7	10.8	2.7	1.0	0.2	1.8	4.8
Mar	1.7	7.0	1.9	0.8	-4.9	10.8	2.8	0.9	0.3	2.0	5.1
Apr	1.9	6.7	2.0	1.5	-5.3	10.7	2.9	1.3	0.4	1.8	5.6
Percentage change, latest year on previous year											
2011	-	-0.1	-	-	-	-	0.1	-	0.2	0.1	-
2012	0.1	-	-	-	-	-	-0.4	-	-	-	0.1
2013	0.1	0.6	0.1	-0.6	-	-	-	-	0.4	0.2	-0.1
2014	0.2	1.1	0.2	-0.2	-0.1	0.9	0.3	-	0.2	0.2	0.3
2015	0.3	1.9	0.1	1.1	-0.4	1.0	0.6	0.1	-	0.6	0.8
Percentage change, latest month on same month a year ago											
2014 Feb	-	-0.8	0.4	-0.3	-0.4	-2.4	0.7	0.2	0.3	0.6	-0.9
Mar	0.2	0.1	0.4	-0.3	-0.5	-0.7	0.5	0.1	0.5	0.3	-0.4
Apr	-0.1	0.3	0.2	-1.6	-0.2	0.7	0.6	-0.3	0.2	0.2	-0.6
May	-	1.6	-0.1	-0.9	-0.1	2.2	-0.5	0.2	-0.1	-0.5	0.3
Jun	0.4	0.8	0.4	-0.4	0.1	1.2	1.0	-0.2	0.7	-	0.5
Jul	0.1	0.9	-	-0.3	0.2	0.8	0.2	-0.4	-0.3	0.1	0.4
Aug	0.4	2.4	0.2	-0.1	-0.3	2.3	0.2	-	0.3	0.2	1.2
Sep	0.4	2.5	0.3	-	-0.3	2.2	-0.3	0.2	0.3	0.3	0.8
Oct	0.3	3.1	-	0.1	-0.3	2.9	-0.2	0.1	0.1	-	1.1
Nov	0.4	1.8	0.2	0.2	-	1.8	0.2	-	0.2	0.3	0.7
Dec	0.3	1.5	-	0.6	-	1.8	-	-0.1	-0.2	0.2	1.0
2015 Jan	0.3	2.0	-0.2	0.9	-	2.2	1.7	-0.4	-0.4	0.1	1.3
Feb	0.7	3.2	0.2	0.7	-	4.2	0.8	-	0.3	0.5	2.3
Mar	0.2	0.8	-	1.5	-0.1	0.4	0.8	-0.3	-0.4	0.7	1.2
Apr	0.3	2.3	-	1.4	-0.2	1.2	0.7	-0.2	-0.4	0.6	1.5
May	0.4	3.1	-	1.2	-0.3	1.6	0.7	-0.3	-0.3	1.0	1.5
Jun	0.2	2.3	-	1.2	-0.3	0.7	-	0.5	-0.9	0.9	0.9
Jul	0.1	1.9	0.1	0.9	-0.5	0.9	0.6	0.5	-0.3	0.5	0.3
Aug	0.4	2.5	0.3	0.9	-0.5	1.0	0.2	0.4	0.4	0.7	0.5
Sep	0.4	1.3	0.3	1.6	-0.6	0.2	0.3	0.6	0.3	0.6	0.7
Oct	0.4	1.9	0.2	1.5	-0.5	0.9	0.3	0.1	0.3	0.8	0.8
Nov	-0.1	0.8	-0.1	0.9	-1.1	-0.2	0.3	-0.2	-0.1	0.6	-
Dec	-	0.2	0.3	0.3	-0.8	-1.7	0.9	-	1.0	0.5	-0.9
2016 Jan	0.1	0.2	0.4	0.6	-1.0	-1.5	-0.7	0.1	1.0	0.6	-0.4
Feb	-	1.0	0.2	0.6	-0.7	-0.5	0.1	0.1	0.5	-	0.2
Mar	0.3	0.7	0.4	0.8	-0.2	-0.7	0.3	0.3	1.2	0.3	0.2
Apr	0.6	-	0.7	1.5	-0.4	-0.7	0.8	0.5	1.3	0.3	0.7

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

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

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

Seasonally adjusted 2013 = 100

		Broad industry groups						Main industrial groupings				
		Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section		B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight		1 000.0	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	Feb	-0.4	-2.1	-0.1	0.2	-	-3.6	0.4	-0.2	-0.4	0.1	-1.4
	Mar	0.3	2.8	-	-1.2	0.3	4.1	-0.1	-	0.2	-0.2	1.2
	Apr	-0.1	-0.9	-	-	-	-0.6	-0.1	-0.1	-0.1	-0.3	-0.3
	May	-	-0.5	0.1	0.5	-	-0.8	0.1	0.3	0.1	-0.1	-0.1
	Jun	0.2	0.3	-	0.1	-0.1	0.6	0.5	-0.6	0.5	0.1	0.6
	Jul	-0.2	0.2	-0.3	0.1	-	-0.2	-0.2	-0.1	-0.5	0.1	0.1
	Aug	-	0.1	-0.1	-	-0.1	0.2	0.1	-	-0.2	-	0.1
	Sep	0.1	0.9	0.1	-0.1	-0.2	0.7	-0.4	-0.1	-	0.2	-
	Oct	-	-0.4	0.1	0.1	-0.1	-0.7	0.3	0.5	0.2	-0.1	-0.3
	Nov	0.4	0.4	0.3	0.5	0.4	0.9	0.3	0.2	0.6	-	0.6
	Dec	-	0.7	-0.3	0.6	-0.1	1.2	-0.8	-0.3	-1.1	0.3	0.8
2015	Jan	-	-0.1	0.1	0.1	-0.1	-0.2	1.5	-0.1	0.2	-0.1	0.2
	Feb	0.1	-0.4	0.3	-0.1	-0.2	-0.9	-0.4	0.1	0.3	0.5	-0.5
	Mar	-0.1	0.3	-0.1	-0.3	0.2	0.1	-0.2	-0.2	-0.5	-	0.2
	Apr	-0.1	0.5	-	-0.1	-0.1	0.1	-0.3	-	0.1	-0.3	-0.1
	May	0.1	0.4	0.1	0.1	-0.1	-0.5	0.1	0.3	0.2	0.3	-0.1
	Jun	-	-0.4	0.1	0.1	-	-0.2	-0.2	0.3	-0.1	-	-
	Jul	-0.2	-0.3	-0.2	-	-0.2	-	0.3	-0.1	0.1	-0.3	-0.4
	Aug	0.2	0.7	0.2	0.1	-0.1	0.1	-0.2	-0.1	0.5	0.2	0.2
	Sep	0.1	-0.1	-	0.4	-0.3	-	-0.1	0.1	-0.1	0.1	0.1
	Oct	-	0.3	-	-	0.1	-0.1	0.2	-	0.2	0.1	-0.2
	Nov	-	-0.6	-	-0.2	-0.1	-	0.3	-0.1	0.1	-0.2	-0.2
	Dec	-	0.2	-	-	0.1	-	-0.1	-0.2	0.1	0.2	-
2016	Jan	0.2	-	0.1	0.5	-0.2	-0.1	-0.2	-	0.1	-	0.6
	Feb	-	0.3	-	-	-	-	0.4	0.2	-	-0.1	0.1
	Mar	0.2	0.1	0.1	-0.1	0.7	-	-	-0.1	0.1	0.1	0.2
	Apr	0.1	-0.3	0.1	0.6	-0.3	-0.1	0.1	0.3	0.1	-0.3	0.4
<b>Percentage change, latest 3 months on same 3 months a year ago</b>												
2014	Feb	0.1	-0.2	0.4	-0.4	-0.2	-1.5	0.6	0.2	0.3	0.6	-0.5
	Mar	0.1	-0.6	0.4	-0.3	-0.3	-1.9	0.6	0.2	0.5	0.5	-0.6
	Apr	-	-0.1	0.3	-0.7	-0.3	-0.8	0.6	-	0.3	0.4	-0.7
	May	-	0.7	0.1	-1.0	-0.2	0.7	0.2	-	0.2	-	-0.2
	Jun	0.1	0.9	0.2	-0.9	-	1.3	0.4	-0.1	0.2	-0.1	0.1
	Jul	0.2	1.1	0.1	-0.6	0.1	1.3	0.3	-0.2	0.1	-0.2	0.4
	Aug	0.3	1.4	0.2	-0.2	-	1.4	0.5	-0.2	0.3	0.1	0.7
	Sep	0.3	2.0	0.1	-0.1	-0.2	1.7	-	-	0.1	0.3	0.8
	Oct	0.5	2.6	0.1	-	-0.3	2.4	-0.1	0.1	0.3	0.3	1.0
	Nov	0.3	2.4	0.2	0.1	-0.2	2.3	-	0.1	0.2	0.3	0.9
	Dec	0.4	2.1	0.1	0.3	-0.1	2.1	-	-	-	0.2	0.9
2015	Jan	0.3	1.8	-	0.6	-	1.9	0.7	-0.2	-0.2	0.1	1.0
	Feb	0.4	2.2	0.1	0.7	-	2.7	0.8	-0.1	-0.1	0.2	1.6
	Mar	0.4	2.0	0.1	1.0	-	2.3	1.1	-0.2	-0.2	0.4	1.6
	Apr	0.5	2.1	0.1	1.2	-0.1	2.0	0.8	-0.2	-0.2	0.6	1.7
	May	0.4	2.1	-	1.3	-0.2	1.0	0.7	-0.3	-0.4	0.8	1.4
	Jun	0.2	2.6	-	1.3	-0.3	1.2	0.4	-	-0.6	0.8	1.3
	Jul	0.2	2.5	-	1.1	-0.3	1.1	0.4	0.2	-0.5	0.8	0.9
	Aug	0.2	2.3	0.1	1.0	-0.4	0.9	0.2	0.5	-0.3	0.7	0.6
	Sep	0.2	1.9	0.2	1.2	-0.4	0.7	0.3	0.5	0.2	0.6	0.5
	Oct	0.4	1.9	0.3	1.4	-0.5	0.7	0.3	0.3	0.3	0.7	0.6
	Nov	0.2	1.4	0.1	1.4	-0.8	0.3	0.3	0.1	0.2	0.7	0.5
	Dec	0.1	0.9	0.1	0.9	-0.9	-0.3	0.5	-0.1	0.3	0.7	-0.1
2016	Jan	-	0.4	0.2	0.6	-1.0	-1.2	0.1	-0.1	0.6	0.5	-0.4
	Feb	0.1	0.4	0.4	0.5	-0.9	-1.3	0.1	-	0.8	0.4	-0.4
	Mar	0.2	0.7	0.3	0.7	-0.6	-1.0	-0.1	0.1	0.9	0.3	-
	Apr	0.3	0.6	0.4	1.0	-0.5	-0.7	0.4	0.2	1.0	0.2	0.3

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

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

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

Seasonally adjusted 2013 = 100

		Broad industry groups						Main industrial groupings				
		Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section		B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight		1 000.0	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	Feb	0.2	0.9	0.2	0.4	-0.2	0.7	-0.5	0.2	-	0.3	0.4
	Mar	0.1	0.4	0.2	-0.1	-0.1	0.3	-0.2	0.1	-0.1	0.1	-
	Apr	-0.2	-0.3	-	-0.6	-0.1	-0.6	-	-0.1	-0.1	-	-0.6
	May	-	0.7	-	-0.9	0.1	1.2	-	0.1	0.1	-0.4	-
	Jun	0.1	0.1	-	-0.4	-	0.8	0.1	-0.1	0.2	-0.3	0.3
	Jul	0.1	0.2	0.1	0.2	-	0.6	0.2	-0.2	0.3	-0.2	0.6
	Aug	0.1	-0.1	-	0.5	-0.2	-0.2	0.4	-0.5	0.1	-	0.5
	Sep	-	0.6	-0.2	0.4	-0.2	0.3	0.1	-0.4	-0.3	0.3	0.5
	Oct	-0.1	0.9	-0.2	0.1	-0.2	0.4	-	-0.2	-0.3	0.2	0.1
	Nov	0.1	0.9	0.1	0.2	-	0.6	-	0.3	-	0.2	-
	Dec	0.3	0.8	0.2	0.5	0.1	0.9	-	0.4	0.1	0.2	0.3
2015	Jan	0.3	0.9	0.2	0.9	0.3	1.4	0.4	0.2	-	0.1	0.9
	Feb	0.3	0.7	-	1.1	0.1	1.2	0.4	-	-0.4	0.4	1.0
	Mar	0.2	0.4	0.1	0.6	-0.1	0.5	0.8	-0.2	-0.3	0.4	0.7
	Apr	-0.1	0.1	0.1	-	-0.2	-0.5	0.2	-0.2	-0.2	0.5	-
	May	-0.1	0.3	-	-0.3	-0.1	-0.8	-0.1	-	-0.2	0.2	-0.1
	Jun	-	0.6	-	-0.2	-0.1	-0.5	-0.5	0.1	-0.2	-	-0.2
	Jul	-0.1	0.3	-	-	-0.2	-0.5	-0.2	0.3	-	-	-0.2
	Aug	-0.1	-0.1	-	0.2	-0.3	-0.4	-0.1	0.3	0.2	-	-0.3
	Sep	-0.1	-	-	0.3	-0.4	-0.1	-	0.1	0.4	-	-0.4
	Oct	0.1	0.3	0.1	0.4	-0.4	-	-0.1	-	0.5	0.2	-0.1
	Nov	0.1	0.2	-	0.5	-0.4	-	0.1	-0.1	0.4	0.2	-0.1
	Dec	0.1	-	0.1	0.2	-0.2	-	0.2	-0.1	0.4	0.1	-0.2
2016	Jan	-	-0.3	0.1	0.1	-0.1	-0.1	0.3	-0.2	0.4	-	-
	Feb	0.1	-	0.2	0.2	-	-0.1	0.3	-0.1	0.4	0.1	0.2
	Mar	0.2	0.1	0.2	0.3	0.1	-0.1	0.2	-	0.3	0.1	0.7
	Apr	0.3	0.3	0.3	0.4	0.3	-0.1	0.4	0.3	0.2	-	0.8

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

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

## Output of the Production Industries

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

Seasonally adjusted 2013 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
2011	1.8	4.8	-2.3	2.1	1.1	2.9
2012	1.7	4.6	-2.2	2.0	1.1	2.7
2013	1.7	4.5	-2.2	1.9	1.1	2.7
2014	1.4	5.2	-2.1	1.1	1.4	2.6
2015	1.4	6.9	-1.7	1.9	2.0	2.4
2015 Q1	1.4	7.1	-1.8	1.4	2.3	2.1
Q2	1.5	7.6	-1.8	1.6	2.2	2.0
Q3	1.5	6.7	-1.6	2.0	1.9	2.5
Q4	1.2	6.4	-1.5	2.4	1.8	2.9
2016 Q1	1.6	4.6	-1.8	1.9	1.6	3.2
2015 Feb	1.2	7.1	-1.5	1.5	2.5	2.3
Mar	1.6	8.2	-2.0	1.5	2.3	1.6
Apr	1.4	7.2	-1.8	1.6	2.0	1.6
May	1.5	7.8	-1.7	1.5	2.2	2.0
Jun	1.5	7.6	-1.8	1.5	2.3	2.3
Jul	1.5	7.2	-1.6	1.8	1.9	2.3
Aug	1.5	6.2	-1.5	1.8	2.0	2.5
Sep	1.4	6.6	-1.8	2.5	1.9	2.8
Oct	1.3	6.8	-1.7	2.4	1.7	3.0
Nov	1.3	6.1	-1.5	2.6	1.9	2.9
Dec	1.1	6.2	-1.6	2.1	1.7	2.9
2016 Jan	1.4	5.4	-2.0	2.0	1.7	2.4
Feb	1.6	4.8	-1.7	2.3	1.3	3.2
Mar	1.6	3.8	-1.7	1.5	1.7	3.8
Apr	1.6	4.8	-1.8	0.7	1.8	4.6

### Percentage change, latest year on previous year

2011	0.1	0.1	-	-	0.2	-
2012	-0.1	-	-	-	0.1	-
2013	-	0.1	0.1	-	-	0.1
2014	-0.4	0.9	0.2	-0.6	0.2	0.1
2015	-	1.9	0.4	0.8	0.6	-0.3

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

2014 Feb	0.1	0.6	0.3	-0.4	0.4	-
Mar	-0.3	1.4	0.3	-0.8	0.6	-0.4
Apr	-0.8	2.4	0.5	-1.3	0.7	-0.9
May	-0.6	3.2	-	-2.3	-0.2	-0.2
Jun	-0.3	0.8	0.3	-1.8	-0.1	-0.7
Jul	-0.4	0.1	-	-0.6	0.1	-0.5
Aug	-0.5	-	0.3	-0.8	-	1.1
Sep	-0.4	0.4	0.2	-0.4	0.3	0.9
Oct	-0.7	0.7	-	1.1	-0.1	1.3
Nov	-0.4	1.2	0.1	-0.3	0.1	0.2
Dec	-0.7	0.2	-0.1	-	0.3	0.9
2015 Jan	-0.3	1.4	0.2	-	0.5	-0.2
Feb	-0.2	1.9	0.8	-2.0	1.2	-0.2
Mar	0.1	3.0	-	0.1	0.7	-1.3
Apr	0.1	1.5	0.1	0.3	0.3	-0.8
May	0.1	0.9	0.2	0.4	0.7	-0.7
Jun	0.2	2.7	0.3	0.8	1.4	0.1
Jul	0.1	3.4	0.4	0.8	0.4	-
Aug	0.2	2.1	0.3	1.1	0.6	0.2
Sep	0.3	2.3	0.3	2.2	0.2	0.5
Oct	-	1.6	0.4	1.9	0.4	-0.6
Nov	-0.3	0.3	0.7	3.1	0.7	-0.5
Dec	-0.3	1.2	0.8	1.0	-0.1	-0.4
2016 Jan	-	-1.1	-0.1	0.8	-0.2	0.3
Feb	0.3	-2.1	-0.2	0.9	-0.9	0.9
Mar	-	-3.8	0.2	-	-0.6	2.3
Apr	0.2	-2.4	0.2	-1.0	-0.2	3.0

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

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

## Output of the Production Industries

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

Seasonally adjusted 2013 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	3.0	2.8	2.1	4.4	13.3	-6.9	-4.7
2012	2.8	2.9	2.1	4.9	13.4	-7.1	-4.4
2013	2.8	2.9	2.0	4.7	11.9	-7.6	-4.4
2014	3.4	2.3	2.0	4.3	12.1	-7.1	-4.1
2015	2.9	2.6	2.6	4.9	10.7	-7.7	-4.9
2015 Q1	3.2	2.2	2.9	5.0	11.0	-7.8	-5.2
Q2	2.5	2.4	2.7	5.0	10.0	-8.0	-5.1
Q3	2.8	2.6	2.5	4.9	10.5	-7.7	-4.7
Q4	3.0	3.0	2.5	4.6	11.2	-7.4	-4.6
2016 Q1	3.0	3.3	2.5	4.6	11.4	-7.1	-5.1
2015 Feb	3.3	2.5	3.1	5.0	11.2	-7.7	-5.0
Mar	3.0	2.4	2.9	5.4	10.8	-8.2	-5.5
Apr	2.3	2.5	2.6	5.1	10.3	-7.9	-5.3
May	2.6	2.3	2.6	5.0	9.8	-7.8	-5.0
Jun	2.8	2.4	2.7	5.1	10.1	-8.0	-4.9
Jul	2.8	2.2	2.5	4.9	10.3	-7.9	-4.8
Aug	2.9	2.5	2.6	4.9	10.5	-7.5	-4.4
Sep	2.9	3.1	2.4	4.8	10.9	-7.8	-4.8
Oct	2.9	3.1	2.5	4.8	10.8	-7.6	-4.8
Nov	2.8	3.1	2.2	4.5	11.3	-7.4	-4.5
Dec	3.1	2.9	2.7	4.4	11.5	-7.2	-4.6
2016 Jan	3.0	3.4	2.6	4.5	11.4	-6.8	-5.2
Feb	2.8	3.5	2.5	4.5	11.3	-7.1	-5.0
Mar	3.2	3.0	2.5	4.8	11.6	-7.3	-5.0
Apr	3.2	2.6	2.8	4.3	11.8	-6.8	-5.4
<b>Percentage change, latest year on previous year</b>							
2011	-	-	-0.1	-	-	0.1	-
2012	-	-	-0.1	-	-	0.1	-
2013	-	0.1	-0.1	-	0.1	-	0.2
2014	0.2	-0.6	-0.1	-0.2	-0.3	0.7	0.5
2015	-0.4	0.3	0.6	0.6	0.2	-0.2	-0.8
<b>Percentage change, latest month on same month a year ago</b>							
2014 Feb	0.4	-0.3	-	0.3	0.3	0.7	0.3
Mar	0.2	-0.7	-	0.4	0.2	0.8	1.1
Apr	0.5	-1.4	0.1	-0.1	-	1.2	0.7
May	-0.2	-1.6	-1.1	-0.6	-1.6	1.2	0.4
Jun	0.1	-	0.2	0.4	-0.2	0.7	1.1
Jul	0.3	-1.8	-0.3	-0.8	-0.9	0.9	0.3
Aug	-	-0.4	-0.1	-1.2	-1.3	1.7	-0.2
Sep	0.3	-0.6	-	0.3	-0.1	0.6	1.1
Oct	0.1	-0.7	-0.1	-1.1	-0.8	0.6	0.7
Nov	0.3	0.1	0.2	-0.9	-0.5	0.6	0.7
Dec	0.1	0.4	0.5	0.4	0.2	-0.3	-
2015 Jan	-	-0.9	0.8	0.4	-	-0.5	-1.0
Feb	0.1	-	1.1	0.6	0.2	-0.2	-0.1
Mar	-0.4	-	0.9	1.0	-0.2	-0.5	-1.3
Apr	-0.8	-	0.8	0.8	-0.7	-0.5	-0.9
May	-0.6	0.2	0.9	0.9	-0.7	-0.6	-0.7
Jun	-0.5	-0.6	0.7	-0.1	-0.2	-0.8	-0.9
Jul	-0.5	0.5	0.6	0.9	0.3	-0.6	-0.9
Aug	-0.4	0.6	0.7	1.3	0.6	0.4	-0.6
Sep	-0.4	1.1	0.6	-0.3	0.2	0.1	-1.0
Oct	-0.4	1.1	0.5	1.5	0.8	0.7	-1.6
Nov	-0.7	0.8	-0.3	0.9	0.7	-0.3	-0.9
Dec	-	0.4	0.5	-0.5	1.2	0.7	-
2016 Jan	-0.2	1.6	-0.1	0.1	1.4	1.0	-0.4
Feb	-0.5	1.0	-0.6	-0.4	1.3	0.6	-
Mar	0.3	0.8	-0.3	-0.3	1.7	1.0	0.5
Apr	0.6	0.3	0.2	-0.5	2.3	1.5	-

<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

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		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	Feb	-0.2	0.4	-0.3	2.0	-0.2	-
	Mar	-0.1	0.1	0.1	-2.0	0.2	0.2
	Apr	-0.1	0.5	0.1	-	0.1	-0.3
	May	0.1	1.1	-	-0.1	-0.1	0.1
	Jun	-0.1	-1.7	-	-0.5	-0.5	-0.2
	Jul	-	-0.8	-	0.2	0.5	-0.1
	Aug	-	0.4	0.1	-0.3	-0.2	-0.1
	Sep	-0.2	0.1	-0.2	-0.3	0.3	0.1
	Oct	0.2	0.8	-	-	-0.3	1.1
	Nov	0.2	0.5	-0.1	-0.8	-0.2	-0.1
	Dec	-0.1	-0.7	-0.2	1.5	0.7	0.1
2015	Jan	-	1.1	0.6	0.2	0.2	-1.1
	Feb	-0.2	1.0	0.3	0.3	0.4	0.1
	Mar	0.2	1.0	-0.5	0.1	-0.1	-1.0
	Apr	-0.2	-0.9	0.2	0.2	-0.3	-
	May	0.1	0.3	0.1	-0.1	0.3	0.4
	Jun	-	-0.2	0.1	-	0.1	0.4
	Jul	0.1	-0.2	0.1	-	-0.4	-0.1
	Aug	-	-0.6	-	0.1	0.1	0.2
	Sep	-0.1	0.1	-0.1	0.6	-0.2	0.3
	Oct	-0.1	0.1	-	-0.2	-	0.1
	Nov	-	-0.6	0.2	0.2	0.1	0.1
	Dec	-0.3	0.2	-	-0.3	-0.2	-
2016	Jan	0.3	-1.1	-0.3	-0.1	-	-0.3
	Feb	0.2	-0.2	0.3	0.5	-0.4	0.6
	Mar	-	-1.0	-0.1	-0.8	0.3	0.5
	Apr	-	0.7	0.1	-0.9	0.1	0.4
<b>Percentage change, latest 3 months on same 3 months a year ago</b>							
2014	Feb	-	0.4	0.3	-0.1	0.3	-
	Mar	-0.1	0.8	0.4	-0.3	0.5	-0.2
	Apr	-0.3	1.5	0.3	-0.9	0.6	-0.4
	May	-0.5	2.3	0.3	-1.5	0.3	-0.5
	Jun	-0.5	2.2	0.3	-1.8	0.1	-0.6
	Jul	-0.4	1.4	0.1	-1.5	-0.1	-0.4
	Aug	-0.4	0.3	0.2	-1.1	-	-0.1
	Sep	-0.4	0.1	0.2	-0.5	0.1	0.5
	Oct	-0.6	0.4	0.2	-0.1	-	1.1
	Nov	-0.5	0.8	0.1	0.2	0.1	0.9
	Dec	-0.6	0.7	-	0.2	0.1	0.8
2015	Jan	-0.4	0.9	-	-0.1	0.3	0.3
	Feb	-0.4	1.2	0.3	-0.6	0.6	0.1
	Mar	-0.2	2.2	0.4	-0.6	0.8	-0.5
	Apr	-	2.2	0.3	-0.5	0.8	-0.8
	May	-	1.7	0.1	0.3	0.7	-1.0
	Jun	0.1	1.7	0.2	0.4	0.8	-0.5
	Jul	0.1	2.2	0.3	0.7	0.9	-0.2
	Aug	0.2	2.8	0.3	1.0	0.9	0.1
	Sep	0.2	2.6	0.3	1.3	0.4	0.3
	Oct	0.2	2.1	0.4	1.8	0.4	0.1
	Nov	-	1.4	0.5	2.4	0.5	-0.2
	Dec	-0.2	1.1	0.7	2.0	0.4	-0.5
2016	Jan	-0.2	0.1	0.5	1.6	0.1	-0.2
	Feb	-	-0.7	0.2	0.9	-0.4	0.2
	Mar	0.1	-2.4	-	0.5	-0.6	1.2
	Apr	0.2	-2.8	0.1	-	-0.6	2.0

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## Output of the Production Industries

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

Seasonally adjusted 2013 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.0	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	Feb	0.1	-0.2	0.2	0.2	-0.2	-0.3	-1.1
	Mar	0.1	-0.1	-	-0.1	0.2	-0.1	0.7
	Apr	-	0.1	-0.2	-0.1	-0.1	0.3	-0.2
	May	-	-0.3	-0.1	-0.1	0.3	0.2	-
	Jun	0.1	0.8	0.2	1.1	-0.3	-	0.4
	Jul	-	-1.1	0.1	-1.1	-0.2	-0.1	-
	Aug	-	0.1	-0.1	-0.3	-0.3	-0.4	-
	Sep	-	0.1	-0.2	1.2	0.9	-	0.2
	Oct	-	-	0.4	-1.6	-0.3	-0.3	0.4
	Nov	0.2	0.3	0.5	0.3	0.8	0.9	-0.1
	Dec	-0.4	0.3	-0.5	1.4	-0.6	-0.8	-0.9
2015	Jan	0.1	-0.9	0.5	-0.4	-	-	-0.2
	Feb	0.1	0.8	0.5	0.4	0.1	-	-0.3
	Mar	-0.3	-0.2	-0.2	0.4	-0.4	-0.5	-0.4
	Apr	-0.6	0.1	-0.3	-0.3	-0.7	0.2	0.2
	May	0.2	-0.1	-	-	0.1	0.2	0.2
	Jun	0.2	-	-0.1	-	0.3	-0.2	0.1
	Jul	-	-	-0.1	-0.1	0.4	-	-0.1
	Aug	0.1	0.2	-	-	0.1	0.6	0.2
	Sep	-	0.6	-0.2	-0.3	0.4	-0.3	-0.2
	Oct	-	-	0.1	0.1	0.3	0.3	-0.2
	Nov	-	-	-0.2	-0.2	0.6	-	0.6
	Dec	0.3	-0.1	0.5	-0.1	-0.1	0.2	-0.1
2016	Jan	-0.1	0.3	-0.2	0.1	-	0.4	-0.5
	Feb	-0.1	0.3	0.1	-	-	-0.4	0.1
	Mar	0.3	-0.5	0.1	0.5	-	-	0.1
	Apr	-0.1	-0.4	0.1	-0.7	-0.1	0.7	-0.3
<b>Percentage change, latest 3 months on same 3 months a year ago</b>								
2014	Feb	0.3	-0.3	-0.1	0.2	0.4	0.6	0.4
	Mar	0.4	-0.6	-	0.3	0.5	0.7	0.7
	Apr	0.4	-0.8	-	0.2	0.1	0.9	0.7
	May	0.1	-1.3	-0.3	-0.1	-0.4	1.1	0.7
	Jun	0.1	-1.1	-0.3	-0.1	-0.6	1.0	0.7
	Jul	0.1	-1.2	-0.4	-0.3	-0.8	0.9	0.6
	Aug	0.1	-0.8	-0.1	-0.6	-0.8	1.0	0.4
	Sep	0.2	-0.9	-0.2	-0.6	-0.7	1.0	0.4
	Oct	0.2	-0.6	-0.1	-0.7	-0.7	0.9	0.5
	Nov	0.3	-0.4	-	-0.5	-0.5	0.6	0.9
	Dec	0.2	-0.1	0.2	-0.5	-0.4	0.4	0.5
2015	Jan	0.1	-0.2	0.5	-0.1	-0.1	-0.1	-0.1
	Feb	-	-0.3	0.8	0.4	0.2	-0.4	-0.4
	Mar	-0.1	-0.4	0.9	0.7	-	-0.4	-0.9
	Apr	-0.4	-	0.9	0.8	-0.3	-0.4	-0.8
	May	-0.6	-	0.8	0.9	-0.5	-0.5	-0.9
	Jun	-0.7	-0.2	0.8	0.5	-0.6	-0.6	-0.8
	Jul	-0.5	0.1	0.7	0.5	-0.2	-0.6	-0.8
	Aug	-0.4	0.2	0.7	0.6	0.2	-0.4	-0.8
	Sep	-0.4	0.7	0.7	0.6	0.3	-0.1	-0.8
	Oct	-0.5	0.9	0.6	0.8	0.6	0.3	-1.1
	Nov	-0.5	1.0	0.3	0.7	0.5	0.1	-1.2
	Dec	-0.3	0.7	0.2	0.6	0.9	0.4	-0.8
2016	Jan	-0.3	0.9	0.1	0.2	1.1	0.5	-0.4
	Feb	-0.3	1.0	-	-0.3	1.2	0.8	-0.1
	Mar	-0.2	1.1	-0.3	-0.2	1.4	0.9	0.2
	Apr	0.2	0.7	-0.2	-0.4	1.8	1.1	0.2

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		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		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	Feb	-	0.6	0.2	1.8	0.2	0.4
	Mar	-0.3	0.4	0.1	1.8	0.2	0.1
	Apr	-0.4	0.6	-	1.3	0.1	-0.1
	May	-0.3	0.9	0.1	-0.4	0.1	-
	Jun	-0.2	0.7	0.1	-0.8	-0.1	-0.2
	Jul	-	-0.1	0.1	-1.0	-0.2	-0.2
	Aug	-0.1	-1.4	0.1	-0.6	-0.3	-0.3
	Sep	-0.2	-1.4	-	-0.5	0.2	-0.2
	Oct	-0.2	-0.5	-	-0.5	0.1	0.2
	Nov	-	0.8	-0.1	-0.7	0.1	0.7
	Dec	0.1	1.2	-0.2	-0.3	-0.1	1.1
2015	Jan	0.2	1.0	-	0.1	0.2	0.4
	Feb	-	1.0	0.3	1.1	0.8	-0.4
	Mar	-	1.9	0.5	1.1	0.9	-1.3
	Apr	-	2.0	0.3	0.9	0.5	-1.2
	May	0.1	1.6	-	0.5	0.1	-1.1
	Jun	0.1	0.2	-	0.3	-0.1	-0.1
	Jul	0.1	-0.2	0.1	0.1	-0.1	0.4
	Aug	-	-0.6	0.2	0.1	-	0.7
	Sep	-	-0.6	0.1	0.2	-0.3	0.6
	Oct	-0.1	-0.7	0.1	0.5	-0.3	0.5
	Nov	-0.2	-0.6	-	0.6	-0.2	0.4
	Dec	-0.3	-0.4	0.1	0.3	-0.1	0.4
2016	Jan	-0.1	-0.8	0.1	-	-0.1	0.1
	Feb	0.1	-1.0	-0.1	-0.1	-0.2	0.1
	Mar	0.3	-1.5	-0.2	-0.1	-0.1	0.3
	Apr	0.4	-1.2	-	-0.4	-0.2	1.0

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## Output of the Production Industries

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		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.0	83.1	36.2	20.9	50.6	92.0	64.4
		K23B	K23G	K23N	K23P	K23R	K23T	K23Z
Percentage change, latest 3 months on previous 3 months								
2014	Feb	-	-	-0.3	-0.1	-0.9	0.7	-
	Mar	0.1	0.1	-0.1	-0.3	-0.7	0.4	-
	Apr	0.1	-	-	-0.1	-0.5	-0.1	-0.2
	May	0.1	-0.2	-0.1	-0.2	0.1	-	0.1
	Jun	0.1	-	-0.2	0.2	-	0.3	0.1
	Jul	-	-0.2	-0.2	0.1	-	0.3	0.3
	Aug	0.1	-0.1	-	0.2	-0.4	-	0.2
	Sep	-	-0.6	-	-0.2	-0.1	-0.3	0.3
	Oct	-	-0.4	0.1	-0.3	-	-0.6	0.3
	Nov	0.1	-0.1	0.3	-0.3	0.6	-0.2	0.4
	Dec	-	0.4	0.5	-0.2	0.4	-0.1	0.1
2015	Jan	-0.1	0.3	0.6	0.3	0.4	0.2	-0.5
	Feb	-0.2	0.2	0.6	0.9	-0.2	-0.2	-1.2
	Mar	-0.2	-0.1	0.7	1.0	-0.2	-0.2	-1.3
	Apr	-0.5	0.2	0.5	0.8	-0.6	-0.4	-0.9
	May	-0.6	-	0.2	0.3	-0.7	-0.2	-0.4
	Jun	-0.5	0.2	-0.3	-	-0.6	-	0.1
	Jul	-0.1	-0.1	-0.4	-0.2	-	0.1	0.3
	Aug	0.2	0.1	-0.2	-0.2	0.5	0.3	0.3
	Sep	0.2	0.3	-0.1	-0.2	0.9	0.3	0.2
	Oct	0.2	0.6	-0.1	-0.2	0.9	0.4	0.1
	Nov	0.1	0.7	-0.2	-0.3	1.0	0.3	-
	Dec	0.1	0.4	-	-0.3	1.0	0.3	0.1
2016	Jan	0.1	0.2	-	-0.2	0.9	0.4	0.1
	Feb	-	0.2	0.2	-0.1	0.5	0.4	-
	Mar	-	0.3	0.1	0.2	0.3	0.2	-0.3
	Apr	-	-	0.2	0.2	0.1	0.2	-0.3

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

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

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