

Statistical bulletin

# Index of Production, UK:: June 2016

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



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# 1 . Main points

Total production output is estimated to have increased by 2.1% between Quarter 1 (Jan to Mar) 2016 and Quarter 2 (Apr to Jun) 2016. This increase was unchanged from the forecast contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#). Hence there is no impact on the previously published GDP estimate for Quarter 2 (Apr to Jun) 2016.

The largest contribution to the quarterly increase in total production came from manufacturing, which increased by 1.8%. The largest contribution to the increase in manufacturing came from the manufacture of transport equipment, which increased by 5.6%.

Total production output is estimated to have increased by 1.6% in June 2016 compared with June 2015. There were increases in all of the main sectors, with the largest contribution coming from manufacturing (the largest component of production), which increased by 0.9%.

Total production output is estimated to have increased by 0.1% in June 2016 compared with May 2016. There were increases in 3 of the 4 main sectors, with the only downward contribution coming from manufacturing, which decreased by 0.3%. There were decreases in 9 of the 13 manufacturing subsectors, with the largest contribution coming from the manufacture of transport equipment, which decreased by 1.0%.

In the 3 months to June 2016, production and manufacturing were 7.4% and 4.5% 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 April 2016.

## 2 . Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, June 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](#).

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 March 2014 to June 2016.

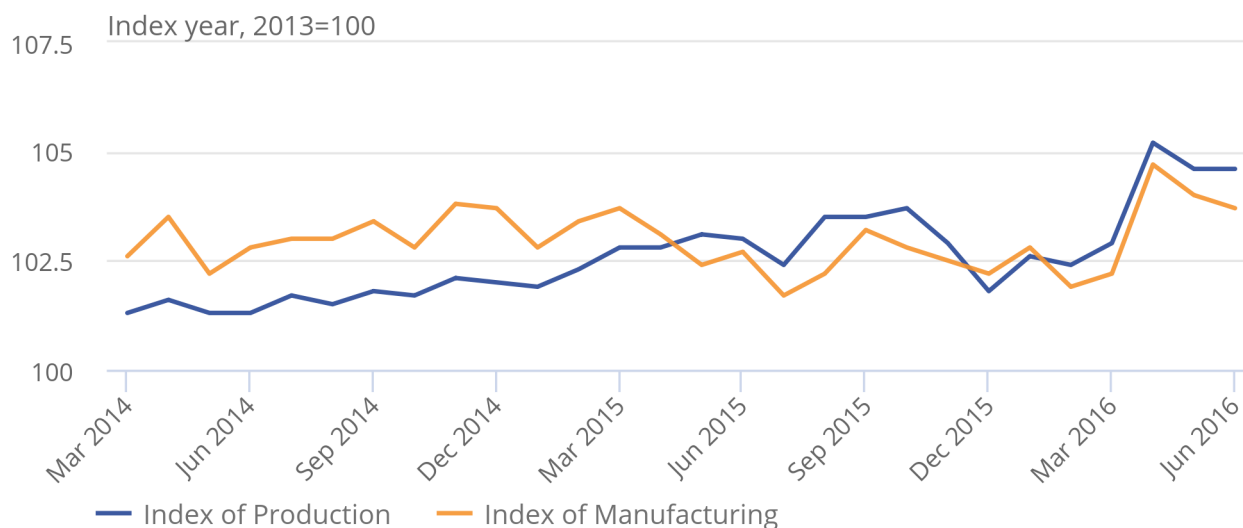
**Table 1: Index of Production main figures, June 2016, UK**

	Index number (2013=100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Percentage change	
				Most recent month on previous month	Most recent 3 months on previous 3 months
Production	104.6	1.6	1.8	0.1	2.1
Manufacturing	103.7	0.9	1.3	-0.3	1.8

Source: Office for National Statistics

**Figure 1: Seasonally adjusted production and manufacturing, March 2014 to June 2016, UK**

Figure 1: Seasonally adjusted production and manufacturing,  
March 2014 to June 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 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. We previously announced that research was under way to attempt to measure the standard error and the results of this would be published on completion. This work has been completed and published in [Survey Methodology Bulletin No.75 Spring 2016](#) using the standard errors of the growths for the year 2014. We are working on updating this for regular publication as part of this release.

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

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

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

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

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

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

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 slightly rose in June 2016, following a fall in May. Overall, the level of production in the latest month was 1.6% higher than the level in June 2015 and 3.3% above its level in June 2014. Production output increased by 2.1% in Quarter 2 (Apr to June) 2016 following 2 quarters of contraction, raising the level of production output to its highest level since Quarter 4 (Oct to Dec) 2010.

Throughout the previous 12 months, manufacturing – the largest component of production – has experienced alternating periods of expansion and contraction. As a result, manufacturing output was 0.9% higher in June 2016 than in June 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

Looking over a longer-term period – from Quarter 2 (Apr to June) 1997 to Quarter 2 (Apr to June) 2016 – production and its main components have followed very different paths (Figure 2). Over this period, the electricity, gas, steam & air conditioning and water supply, sewerage & waste management industries grew at compound average growth rates of 0.2% and 0.6% per quarter respectively, while production as a whole contracted at a compound average growth rate of 0.1% per quarter. Over the same period, mining & quarrying contracted at a compound average growth rate of 1.0% per quarter while manufacturing output is broadly unchanged. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

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

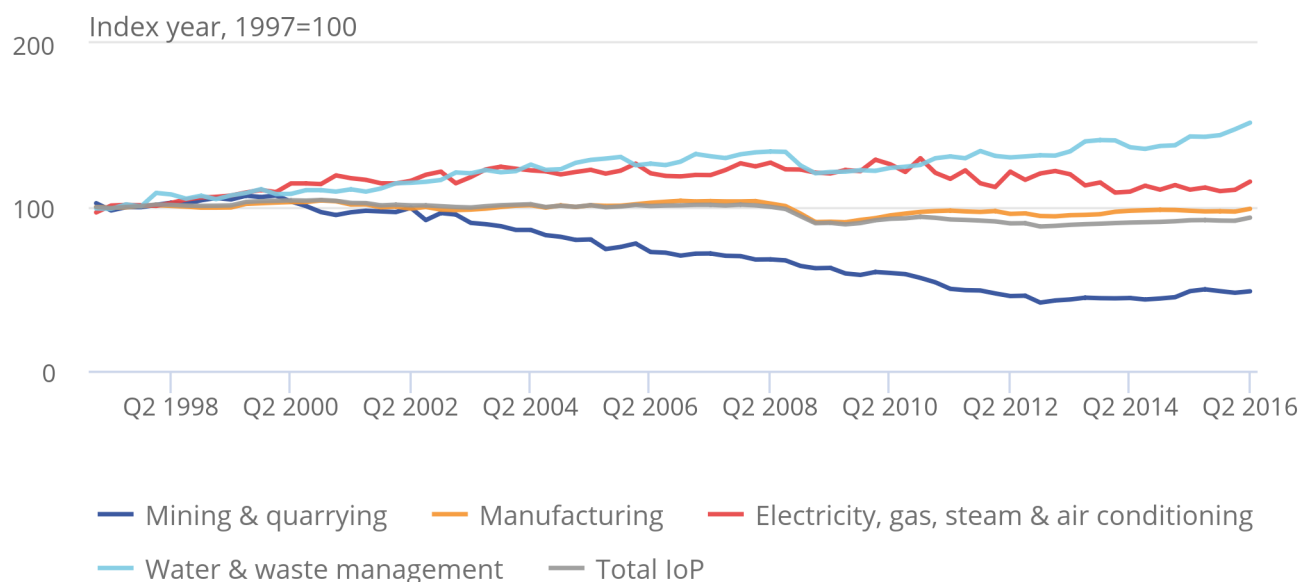
In Quarter 2 (Apr to June) 2016, production and manufacturing output remained below their Quarter 1 (Jan to Mar) 2008 levels by 7.4% and 4.5%, respectively. Moreover, in Quarter 2 (Apr to June) 2016, mining & quarrying and electricity, gas, steam & air conditioning output were also below their respective values in Quarter 1 (Jan to Mar) 2008 by 28.6% and 7.4%, respectively. In contrast, water supply, sewerage & waste management is the only main industry within production to have surpassed its value in Quarter 1 (Jan to Mar) 2008, by 13.6%, as of Quarter 2 (Apr to June) 2016.

Headline GDP surpassed its pre-downturn peak in Quarter 3 (July to Sep) 2013 and services remains the only headline industry grouping to have achieved this. This is consistent with the historical trend of services growing at a faster rate than production and manufacturing, despite the fact that productivity in the production industries (manufacturing in particular) has on average grown at a faster rate than in the service industries since 1997 (more information can be found in [Gross domestic product, preliminary estimate: Apr to June 2016](#) and [Labour productivity: Jan to Mar 2016](#)). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from 16.5% to 9.6% between 1997 and 2015 ( [UK Labour Market: July 2016, EMP13](#) ).

Since mid-2014 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 0.5% in the year to June 2016, from a fall of 4.4% in the year to May 2016. Output prices have also experienced deflation, falling by 0.4% in the year to June 2016 (more information can be found in [Producer Price Inflation: June 2016](#) ).

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

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



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

**Notes:**

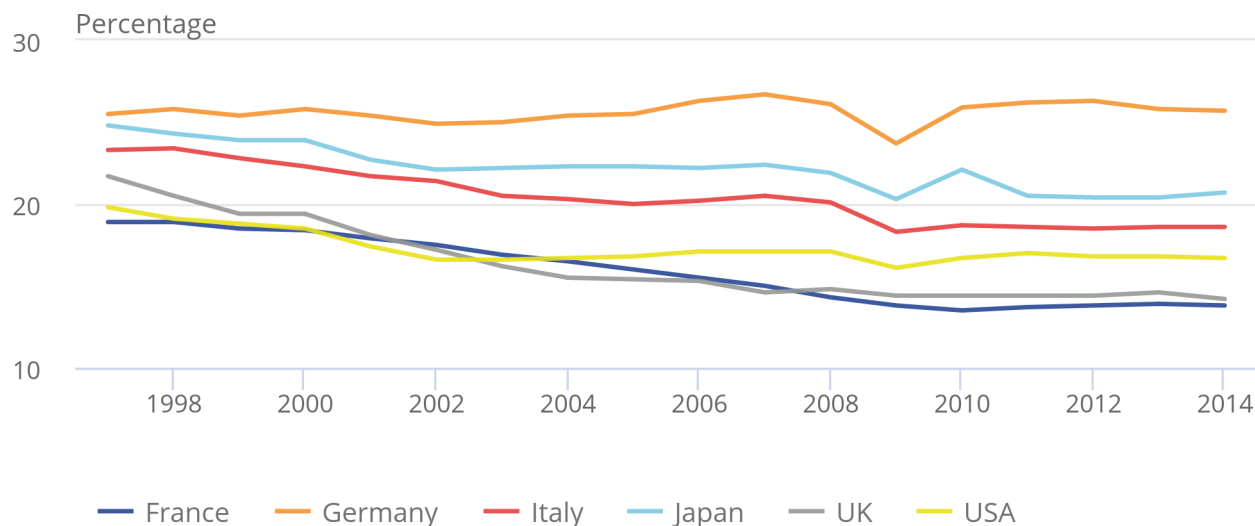
1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

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**

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 April 2016 are open for revision, in line with the [National Accounts revisions policy](#).

The [Gross domestic product, preliminary estimate: Apr to June 2016](#), published on 27 July 2016, contained a forecasted increase of 2.1% for production in Quarter 2 (Apr to June) 2016. This release also estimates that production increased by 2.1% in Quarter 2 (Apr to June) 2016; therefore there is no impact on the recently published GDP.

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 June 2016 will be published on 12 August 2016 and [services](#) output for the same period on 26 August 2016.



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

Publication	Percentage of GDP	Release date	Month or quarter of GDP <sup>2</sup>	Percentage change			
				Most recent 3 months on a year earlier	Most recent 3 months on 3 months earlier <sup>3</sup>	Most recent month on the same month a year ago <sup>3</sup>	Most recent month on the previous month
Index of	14.6	09 Aug	Jun 2016	1.8	2.1	1.6	0.1
Production <sup>1</sup>			May 2016	1.3	2.0	1.4	-0.6
Construction	5.9	15 Jul	May 2016	-1.7	-2.1	-1.9	-2.1
			Apr 2016	-0.4	-0.9	-0.6	2.8
Index of	78.8	27 Jul	May 2016	2.6	0.3	2.7	-0.1
services			Apr 2016	2.6	0.5	2.9	0.6
Retail		21 Jul	Jun 2016	4.9	1.6	4.3	-0.9
Sales			May 2016	4.5	1.4	5.7	0.9
Agriculture	0.7		Q2 2016	-0.4	-1.0	..	..

Source: office for National Statistics

Notes:

1. The data for the index of production reflects the latest revisions published as part of this release.
2. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).
3. Any apparent inconsistencies between this table and the latest GDP estimate are due to rounding.

## 6 . Production and sectors supplementary analysis

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

Description 1	% of production 2	Month on same month a year ago growth (%)	Contribution to production (% points)	Month on previous month growth (%)	Contribution to production (% points)
IoP	100.0	1.6	1.6	0.1	0.1
Sector B	12.0	1.1	0.14	1.2	0.16
Division 06	9.6	2.7	0.28	1.5	0.16
Sector C	70.0	0.9	0.66	-0.3	-0.22
Sector D	10.4	3.7	0.36	0.9	0.09
Sector E	7.5	5.5	0.42	0.5	0.04

Source: Office for National Statistics

Notes:

1: IoP Total Index of Production; Sector B Mining & quarrying; and within this, Division 06 Oil & gas extraction; Sector C Manufacturing; Sector D Electricity, gas, steam & 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, quarter on previous quarter, June 2016, UK**

Sector	Summary Description	Quarter on previous quarter growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	2.1	2.13
Sector B	Total Mining & Quarrying	1.9	0.25
5	Coal & Lignite	-10.9	0.00
6	Crude petroleum & Natural gas	2.0	0.21
789	Other mining & quarrying	1.6	0.04
Sector C	Total Manufacturing	1.8	1.24
CA	Food, beverages & tobacco	1.0	0.11
CB	Textiles & leather products	-1.5	-0.03
CC	Wood, paper & printing	2.0	0.10
CD	Coke & petroleum	2.9	0.02
CE	Chemical products	-0.3	-0.01
CF	Pharmaceutical products	6.4	0.35
CG	Rubber & plastic products	2.0	0.12
CH	Metal products	-1.5	-0.13
CI	Computer, electronic & optical	1.4	0.05
CJ	Electrical equipment	-2.4	-0.05
CK	Machinery & equipment	1.4	0.06
CL	Transport equipment	5.6	0.55
CM	Other manufacturing & repair	1.3	0.09
Sector D	Total Electricity & Gas	4.5	0.43
35.1	Electric power generation, transmission & distribution	2.1	0.14
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	10.1	0.29
Sector E	Total Water	2.7	0.22
36	Water collection, treatment & supply	-2.0	-0.04
37	Sewerage	1.1	0.03
38	Waste collection, treatment & disposal activities; materials recovery	6.8	0.23
39	Remediation activities & other waste management services	6.5	0.01

Source: Office for National Statistics



**Table 5: Growths and contributions to production, month on same month a year ago, June 2016, UK**

Sector	Summary Description	Month on same month a year ago growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	1.6	1.57
Sector B	Total Mining & Quarrying	1.1	0.14
5	Coal & Lignite	-73.5	-0.04
6	Crude petroleum & Natural gas	2.7	0.28
789	Other mining & quarrying	-3.9	-0.1
Sector C	Total Manufacturing	0.9	0.66
CA	Food, beverages & tobacco	2.8	0.32
CB	Textiles & leather products	-9.8	-0.24
CC	Wood, paper & printing	2.5	0.12
CD	Coke & petroleum	13.6	0.1
CE	Chemical products	-3.6	-0.15
CF	Pharmaceutical products	7.8	0.4
CG	Rubber & plastic products	2.8	0.17
CH	Metal products	-6	-0.51
CI	Computer, electronic & optical	-5.9	-0.22
CJ	Electrical equipment	-7.1	-0.14
CK	Machinery & equipment	-2.6	-0.12
CL	Transport equipment	5.9	0.58
CM	Other manufacturing & repair	5.3	0.35
Sector D	Total Electricity & Gas	3.7	0.36
35.1	Electric power generation, transmission & distribution	0.1	0.01
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	12.6	0.35
Sector E	Total Water	5.5	0.42
36	Water collection, treatment & supply	-4.8	-0.1
37	Sewerage	1.6	0.04
38	Waste collection, treatment & disposal activities; materials recovery	15	0.47
39	Remediation activities & other waste management services	20.7	0.01



**Table 6: Growths and contributions to production, month on previous month, June 2016, UK**

Sector	Summary Description	Month on previous month growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	0.1	0.06
Sector B	Total Mining & Quarrying	1.2	0.16
5	Coal & Lignite	-12	0
6	Crude petroleum & Natural gas	1.5	0.16
789	Other mining & quarrying	0.1	0
Sector C	Total Manufacturing	-0.3	-0.22
CA	Food, beverages & tobacco	-0.5	-0.06
CB	Textiles & leather products	4.1	0.09
CC	Wood, paper & printing	-1.3	-0.07
CD	Coke & petroleum	3.2	0.03
CE	Chemical products	-1.3	-0.05
CF	Pharmaceutical products	-1.8	-0.1
CG	Rubber & plastic products	-0.5	-0.03
CH	Metal products	-0.6	-0.05
CI	Computer, electronic & optical	-0.8	-0.03
CJ	Electrical equipment	1.3	0.02
CK	Machinery & equipment	-1.9	-0.08
CL	Transport equipment	-1	-0.11
CM	Other manufacturing & repair	3.3	0.22
Sector D	Total Electricity & Gas	0.9	0.09
35.1	Electric power generation, transmission & distribution	2.4	0.16
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	-2.4	-0.07
Sector E	Total Water	0.5	0.04
36	Water collection, treatment & supply	-4.1	-0.09
37	Sewerage	2.8	0.06
38	Waste collection, treatment & disposal activities; materials recovery	1.9	0.06
39	Remediation activities & other waste management services	1.7	0

Source: Office for National Statistics



## Total production

Total production increased by 2.1% in Quarter 2 (Apr to June) 2016 compared with Quarter 1 (Jan to Mar) 2016 (Table 4), the largest quarterly increase since Quarter 3 (July to Sep) 1999, when growth in total production increased by the same amount. This increase was the same as the estimated increase of 2.1% contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#). The quarterly increase in total production reflected rises in all of its 4 main sectors, with manufacturing (the largest component of production) having the largest contribution, increasing by 1.8% and contributing 1.2 percentage points to total production. There were also increases in electricity, gas, steam & air conditioning output of 4.5%; in mining & quarrying of 1.9% and in water supply, sewerage & waste management of 2.7%.

Total production output in June 2016 increased by 1.6% compared with June 2015 (Table 5), the sixth consecutive increase since December 2015. This increase reflected rises in all of its 4 main sectors, with manufacturing having the largest contribution, increasing by 0.9% and contributing 0.7 percentage points to total production. There were also increases in water supply, sewerage & waste management of 5.5%; in electricity, gas, steam & air conditioning output of 3.7% and in mining & quarrying, which increased by 1.1%.

Between May 2016 and June 2016, total production increased by 0.1% (Table 6), following a fall of 0.6% in the previous month. This increase was lower than the estimated increase of 0.2% contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#). This increase reflected increases in 3 of its 4 main sectors, with mining & quarrying having the largest upward contribution, increasing by 1.2% and contributing 0.2 percentage points to total production. Electricity, gas, steam & air conditioning output increased by 0.9% and contributed 0.1 percentage points to total production and water supply, sewerage & waste management increased by 0.5% with a negligible contribution to total production. These increases were partially offset by a decrease in manufacturing of 0.3% contributing -0.2 percentage points to total production. This decrease was larger than the estimated decrease of 0.2% contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#).

## Manufacturing

Manufacturing output increased by 1.8% in Quarter 2 (Apr to Jun) 2016 compared with Quarter 1 (Jan to Mar) 2016, in line with the estimate of 1.8% contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#). Output increased in 9 of the 13 manufacturing sub-sectors (Table 4). The manufacturing sub-sector with the largest upward contribution to total production output was the manufacture of transport equipment, which increased by 5.6% and contributed 0.6 percentage points to total production. This was the largest quarterly increase since Quarter 2 (Apr to Jun) 2010 of 5.8%, following a decrease of 1.2% in the previous quarter. The largest contribution within this sub-sector came from the manufacture of motor vehicles, trailers & semi-trailers, which increased by 8.4% and contributed 0.5 percentage points to total production. The quarterly increase in this industry was due to the increase in growth in the month of April 2016, during which increased sales and exports were contributing factors.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production in Quarter 2 (Apr to Jun) 2016 was the manufacture of basic metals & metal products (for further information on the characteristics of this industry see previous [spotlight](#)). This sub-sector decreased by 1.5% with a contribution of -0.1 percentage points to total production. The largest contribution to the decrease within this sub-sector came from the manufacture of weapons & ammunition, which decreased by 12.7% and contributed -0.1 percentage points to total production.

Manufacturing output increased by 0.9% between June 2015 and June 2016, contributing 0.7 percentage points to total production. Output increased in 7 of the 13 manufacturing sub-sectors compared with a year ago (Table 5). The manufacturing sub-sector with the largest upward contribution to total production output was the manufacture of transport equipment, which increased by 5.9% and contributed 0.6 percentage points to total production. The largest contribution within this sub-sector came from the manufacture of motor vehicles, trailers & semi-trailers, which increased by 7.7% and contributed 0.4 percentage points to total production.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production output was the manufacture of basic metals & metal products, which decreased by 6.0% (the 12th consecutive decrease since June 2015) and contributed -0.5 percentage points to total production. The largest downward contribution within this sub-sector came from the manufacture of basic iron & steel, which decreased by 36.4% and contributed -0.3 percentage points to total production. Evidence from the International Steel Statistics Bureau suggested the fall in crude steel production in recent months compared with the previous year was a contributing factor.

Manufacturing output decreased by 0.3% between May 2016 and June 2016 and contributed -0.2 percentage points to total production. This followed a decrease of 0.6% in the previous month. There were decreases in 9 of the 13 manufacturing sub-sectors (Table 6) with the largest downward contribution coming from the manufacture of transport equipment, which decreased by 1.0% and contributed -0.1 percentage points to total production. The largest contribution to the decrease within the manufacture of transport equipment came from the manufacture of motor vehicles, trailers & semi-trailers which decreased by 2.3% and contributed -0.1 percentage points to total production.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production in June 2016 compared with May 2016 was other manufacturing & repair, which increased by 3.3% and contributed 0.2 percentage points to total production. For more information on the characteristics of this industry see the previously published [spotlight](#). The largest upward contribution within this sub-sector came from the rest of repair & installation, which increased by 10.4% and contributed 0.2 percentage points to total production. Anecdotal evidence suggested contract related activities were a contributing factor.

## Mining & quarrying

Mining & quarrying output increased by 1.9% in Quarter 2 (Apr to Jun) 2016, contributing 0.2 percentage points to total production, compared with an estimated increase of 1.4% contained within the [Gross domestic product, preliminary estimate: Apr to June 2016](#). This was due to upward revisions to extraction of crude petroleum & natural gas estimates for April 2016 as a result of updated data from the source. The sub-sector with the largest contribution to this quarterly increase was the extraction of crude petroleum & natural gas, which increased by 2.0% and contributed 0.2 percentage points to total production (Table 4).

Mining & quarrying output increased by 1.1% in June 2016 compared with June 2015 and contributed 0.1 percentage points to total production. The sub-sector with the largest contribution to the increase was the extraction of crude petroleum & natural gas, which increased by 2.7% and contributed 0.3 percentage points to total production (Table 5). The Department for Business, Energy & Industrial Strategy (BEIS) advised the shut-down of one of the largest terminals due to maintenance in the previous year was a contributing factor to the increase in production.

Mining & quarrying output increased by 1.2% in June 2016 compared with May 2016 and contributed 0.2 percentage points to total production. This followed a decrease of 0.5% in the previous month. The sub-sector with the largest contribution to the increase was the extraction of crude petroleum & natural gas, which increased by 1.5% and contributed 0.2 percentage points to total production (Table 6) which followed a decrease of 0.6% in the previous month.

## Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output increased by 4.5% in Quarter 2 (Apr to Jun) 2016 having increased by 0.7% in the previous quarter (Table 4). This is the highest quarterly increase since Quarter 2 (Apr to June) 2012 (an increase of 8.4%). This increase was slightly less than the 4.7% increase forecasted within the recent [Gross domestic product, preliminary estimate: Apr to June 2016](#). The increase in electricity, gas, steam & air conditioning output reflected a rise in output in both of its 2 sub-sectors. The main contributor to the increase was the manufacture of gas & distribution of gaseous fuels through mains, which increased by 10.1% and contributed 0.3 percentage points to total production. This is the highest quarterly increase since Quarter 3 (July to Sep) 2014 (an increase of 13.5%). Evidence from BEIS suggested an increase in the use of gas for the purpose of generating electricity was a contributing factor to the rise in production.

Electricity, gas, steam & air conditioning output increased by 3.7% in June 2016 compared with June 2015 and contributed 0.4 percentage points to total production (Table 5). This was the fourth consecutive increase. This increase reflected a rise in output in both of its 2 sub-sectors. The main contributor to the increase was the manufacture of gas & distribution of gaseous fuels through mains, which increased by 12.6% and contributed 0.3 percentage points to total production. This was the sixth consecutive increase since December 2015, following an increase of 15.8% in the previous month. Evidence from BEIS indicated the increase was a result of a substantial increase in electricity generated from gas at the expense of coal, as a result of reduced coal generating capacity.

Electricity, gas, steam & air conditioning output increased by 0.9% in June 2016 compared with May 2016 and contributed 0.1 percentage points to total production (Table 6). This followed a decrease of 2.9% in the previous month. The increase in electricity, gas, steam & air conditioning output reflected a rise in output in 1 of its 2 sub-sectors; electric power generation, transmission & distribution, which increased by 2.4% and contributed 0.2 percentage points to total production. This followed a decrease of 1.5% in the previous month. Evidence from BEIS suggested an increase in the share of cheaper fuel mix at the expense of gas was a contributing factor to the rise.

## Water & waste management

Water supply, sewerage & waste management output increased by 2.7% in Quarter 2 (Apr to Jun) 2016 compared with Quarter 1 (Jan to Mar) 2016 and contributed 0.2 percentage points to total production (Table 4). This increase was slightly higher than the forecasted increase of 2.6% contained within the recent [Gross domestic product, preliminary estimate: Apr to June 2016](#). The largest contribution to the increase came from waste collection, treatment & disposal activities, which increased by 6.8% and contributed 0.2 percentage points to total production. Anecdotal evidence suggested an increase in some of the recycling production activities was a contributing factor.

Water supply, sewerage & waste management output increased by 5.5% in June 2016 compared with June 2015 and contributed 0.4 percentage points to total production. This reflected increases in 3 of its 4 sub-sectors' output (Table 5), with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 15.0% and contributed 0.5 percentage points to total production.

Water supply, sewerage & waste management output increased by 0.5% between May 2016 and June 2016 and had a negligible contribution to total production (Table 6). This increase reflected increases in 3 of its 4 subsectors' output, with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 1.9%, the seventh 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, periods back to April 2016 were open for revision.

In April 2016, there was an upward revision of 0.2 percentage points to the IoP month-on-month growth rate, from a rise of 2.1% to 2.3%. This was mainly attributed to an upward revision to the extraction of crude petroleum & natural gas from a fall of 1.4% to a rise of 0.4%. The Department for Business, Energy & Industrial Strategy (BEIS) advised this was as a result of updated data from the source.

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

## 7 . Industry spotlight: Manufacture of chemicals & chemical products

The manufacture of chemicals & chemical products (industry CE) is a subsector of manufacturing, the largest component of production. According to the standard industrial classification (SIC07) this industry includes the transformation of organic and inorganic raw materials by a chemical process and the formation of products. The sub-group breakdown distinguishes the production of basic chemicals from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry classes.

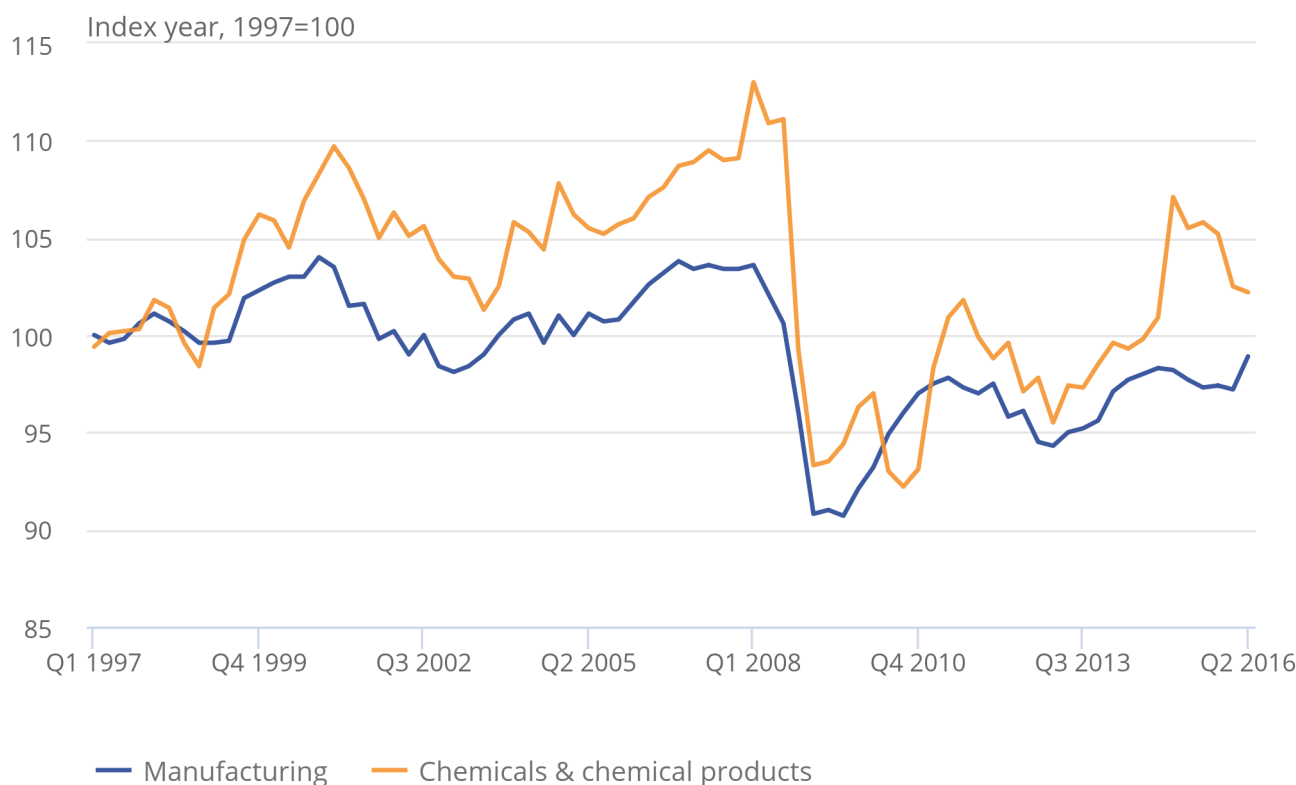
In 2013, chemicals & chemical products accounts for around 5.7% of total manufacturing output (and 4.0% of total production output). The chemicals & chemical products sector can be broken down into six smaller groups: industrial gases, inorganics & fertilizers (industry 20A), petrochemicals (20B), dyestuffs & agro-chemicals (20C), paints, varnishes & similar coatings (20.3), soaps, detergents & cleanings products (20.4) and other chemical products (20.5). Soaps, detergents & cleanings products is the largest group (23.7%) and dyestuffs & agro-chemicals is the smallest (8.8%) of chemicals & chemical products.

Figure 4 shows that chemicals & chemical products has generally outperformed manufacturing over time, although it has experienced slightly more volatility. Before the downturn, from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, manufacturing output grew at a compound average growth rate of 0.1% per quarter, whilst chemicals & chemical products grew at a faster rate of 0.3% per quarter. However, the economic downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009) affected manufacturing severely and chemicals & chemical products even more so. Manufacturing output contracted by 12.2% while the output of chemicals & chemical products contracted by 17.3% over the same period.

Following the downturn (from Quarter 3 (July to Sep) 2009 to Quarter 2 (Apr to June) 2016) manufacturing has recovered somewhat but remains 4.5% below its level in Quarter 1 (Jan to Mar) 2008. Chemicals & chemical products has also somewhat recovered (at a compound average growth rate of 0.3% per quarter) but the industry remains 9.6% below its Quarter 1 (Jan to Mar) 2008 level.

**Figure 4: Quarterly output of manufacturing and chemicals & chemical products, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to Jun) 2016**

Figure 4: Quarterly output of manufacturing and chemicals & chemical products, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to Jun) 2016



**Source: Office for National Statistics**

**Notes:**

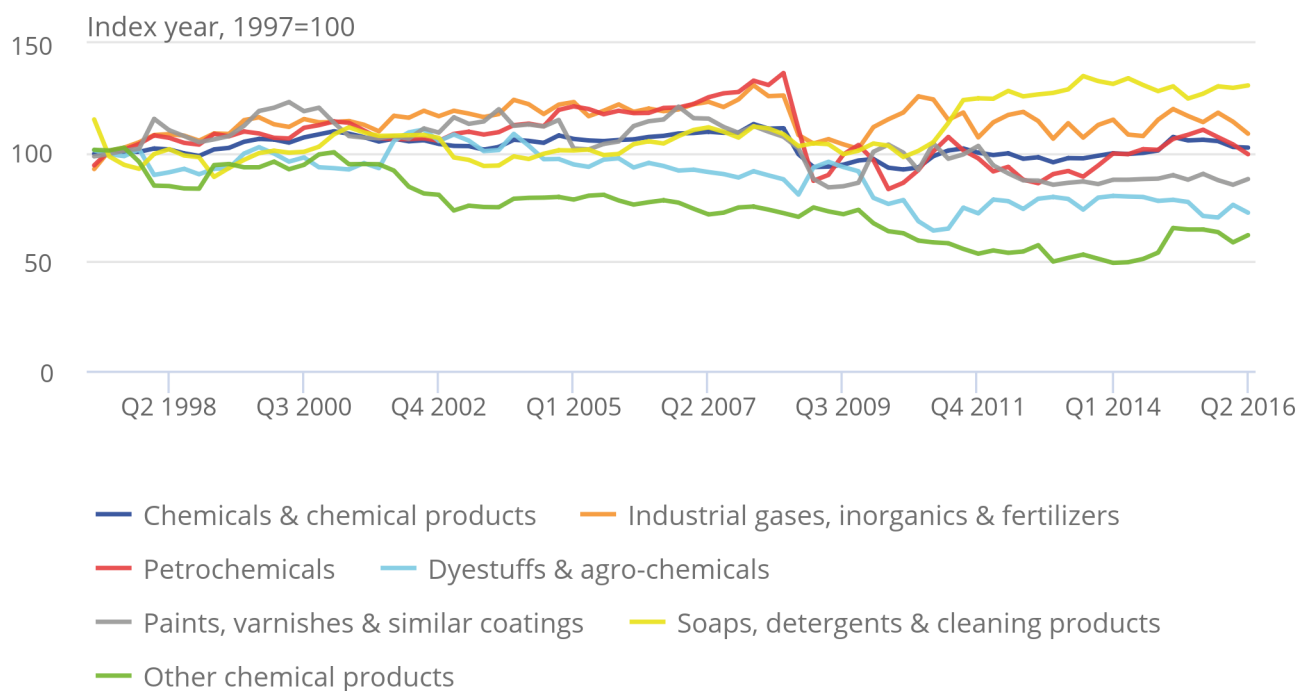
1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

Figure 5 shows that the quarterly performance of the individual components of chemicals & chemical products has been quite volatile.

Petrochemicals saw the sharpest fall in output during the downturn (Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June)), and despite some growth since then, in Quarter 2 (Apr to June) 2016 it remains 27.3% below its peak in Quarter 3 (July to Sep) 2008. In contrast, soaps, detergents & cleanings products was much more modestly impacted by the downturn and has performed very strongly since Quarter 3 (July to Sep) 2010, with a compound average growth rate of 1.3% per quarter.

**Figure 5: Quarterly output of chemicals & chemical products and its components, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2016**

Figure 5: Quarterly output of chemicals & chemical products and its components, Quarter 1 (Jan to Mar) 1997 to Quarter 2 (Apr to June) 2016



**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).

## 8 . Quality and methodology

The [Index of Production Quality and Methodology Information](#) document contains important information on:

- the strengths and limitations of the data
- the quality of the output: including the accuracy of the data, how it compares with related data
- uses and users
- how the output was create



## 9. Background notes

### 1. What's new?

[UK economic review: Aug 2016](#) was published on 3 August 2016, providing further commentary on the economy. This includes a list of release dates for ONS's main economic indicators that cover periods following the 23 June, following the result of the UK's referendum on its membership of the European Union (see [Annex](#)).

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

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 July 2016, to be published on 7 September 2016, will contain revisions back to January 2015.

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 July 2016](#) was published on 12 July 2016. This was the fifth update on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The project is exploring ways in which HM Revenue and Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys.

### 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, June 2016, UK**

	Percentage			
	Year	Period	Turnover	Questionnaire
MBS overall	2016	Jun	87.3	73.6
	2016	May	95.0	82.6
	2016	Apr	96.1	84.6
	2016	Mar	96.5	84.8
MBS production only	2016	Jun	86.5	76.4
	2016	May	95.7	86.1
	2016	Apr	96.2	87.8
	2016	Mar	96.0	88.5

Source: Office for National Statistics

## Seasonal adjustment

The index numbers in this statistical bulletin are all seasonally adjusted in line with international best 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 July 2010 and June 2015 and the estimates published 12 months later.

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

			Percentage change
		Revisions between first publication and estimates 12 months later	
Growth rates	Value in latest period	Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	2.1	-0.14	0.27
Manufacturing - 3 month	1.8	-0.13	0.26
Production - 1 month	0.1	-0.09 *	0.23
Manufacturing - 1 month	-0.3	-0.07	0.20

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 loP industries are available - furthermore, [data at 4 decimal places for loP 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 loP were included
- you also raised concerns that the loP 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).

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

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

# IOP5 Output of the Production Industries

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

Seasonally adjusted 2013 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	103.5	115.3	102.5	101.0	96.0	126.9	104.0	104.9	97.7	100.6	113.7
2012	100.7	102.8	101.0	100.2	95.9	109.0	101.3	100.9	99.0	100.6	103.6
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	101.5	100.6	102.9	94.0	100.7	98.9	106.2	100.5	103.1	105.0	96.5
2015	102.8	109.4	102.7	94.8	103.9	110.0	105.8	100.9	101.7	105.3	101.5
2015 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
Q2	104.8	110.7	104.1	98.3	110.9	113.3	105.9	103.2	104.5	103.9	103.9
2015 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	105.2 <sup>T</sup>	110.6 <sup>T</sup>	104.7	99.9 <sup>T</sup>	109.5 <sup>T</sup>	113.2 <sup>T</sup>	105.8 <sup>T</sup>	104.4 <sup>T</sup>	104.4	104.5 <sup>T</sup>	104.4 <sup>T</sup>
May	104.6	110.0	104.0 <sup>T</sup>	97.0	111.4	112.5	106.6	103.0	104.1 <sup>T</sup>	104.1	103.2
Jun	104.6	111.4	103.7	97.9	112.0	114.2	105.3	102.1	105.0	103.1	104.1
Percentage change, latest year on previous year											
2011	-0.6	-14.3	2.2	-6.1	5.7	-18.4	0.3	-0.2	6.8	0.7	-10.6
2012	-2.7	-10.9	-1.4	-0.9	-0.1	-14.1	-2.6	-3.8	1.3	-	-8.9
2013	-0.7	-2.7	-1.0	-0.2	4.3	-8.2	-1.3	-0.9	1.0	-0.6	-3.5
2014	1.5	0.6	2.9	-6.0	0.7	-1.1	6.2	0.5	3.1	5.0	-3.5
2015	1.3	8.8	-0.2	0.9	3.2	11.2	-0.4	0.4	-1.3	0.2	5.2
Percentage change, latest month on same month a year ago											
2014 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	2.4 <sup>T</sup>	1.8 <sup>T</sup>	1.5	7.4 <sup>T</sup>	5.3 <sup>T</sup>	3.7 <sup>T</sup>	-0.2 <sup>T</sup>	5.0 <sup>T</sup>	1.5 <sup>T</sup>	-2.1 <sup>T</sup>	4.2 <sup>T</sup>
May	1.4	-3.2	1.5 <sup>T</sup>	2.3	7.0	-3.0	2.0	1.0	3.2	-0.4	-0.4
Jun	1.6	1.1	0.9	3.7	5.5	2.7	-3.1	3.1	2.2	-2.8	2.6

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

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

# 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 Apr	0.3	-2.0	0.9	-0.5	-0.9	-3.2	2.5	1.1	1.0	0.7	-1.9
May	-0.3	3.0	-1.2	2.9	-0.2	3.2	-3.1	-0.9	-1.7	-0.7	2.7
Jun	-	-4.7	0.5	2.3	-0.6	-5.8	1.9	-1.4	2.6	-0.1	-1.7
Jul	0.3	0.1	0.2	2.0	-0.3	0.4	1.5	0.7	-1.1	1.1	1.1
Aug	-0.2	-1.9	-	0.4	-0.3	-2.4	1.0	0.6	-0.9	-	-0.8
Sep	0.4	4.3	0.4	-4.6	0.9	5.2	2.8	-0.3	1.6	0.1	0.1
Oct	-0.1	1.3	-0.6	0.5	1.1	1.6	-1.2	-0.5	-0.7	-0.8	0.9
Nov	0.4	-2.9	1.0	-0.5	0.6	-4.1	0.9	1.2	1.2	0.9	-1.9
Dec	-0.1	-0.5	-0.1	2.2	-2.3	-1.2	2.8	-0.5	0.1	0.3	0.5
2015 Jan	-0.1	3.5	-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	2.3 <sup>†</sup>	0.8 <sup>†</sup>	2.4	4.1 <sup>†</sup>	0.8 <sup>†</sup>	0.4 <sup>†</sup>	1.9 <sup>†</sup>	3.8 <sup>†</sup>	2.5	1.5 <sup>†</sup>	1.8 <sup>†</sup>
May	-0.6	-0.5	-0.6 <sup>†</sup>	-2.9	1.7	-0.6	0.8	-1.3	-0.3 <sup>†</sup>	-0.4	-1.1
Jun	0.1	1.2	-0.3	0.9	0.5	1.5	-1.2	-0.9	0.9	-0.9	0.8
Percentage change, latest 3 months on same 3 months a year ago <sup>2</sup>											
2014 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	0.9 <sup>†</sup>	5.5 <sup>†</sup>	-0.5	0.9 <sup>†</sup>	6.0 <sup>†</sup>	9.9 <sup>†</sup>	-1.1	1.6	-0.3	-3.3	4.0 <sup>†</sup>
May	1.3	1.2	0.5 <sup>†</sup>	3.3	6.2	3.4	-0.2 <sup>†</sup>	1.5 <sup>†</sup>	1.6	-2.1 <sup>†</sup>	2.5
Jun	1.8	-0.2	1.3	4.5	5.9	1.0	-0.4	3.0	2.3	-1.7	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
	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 3 months on previous 3 months <sup>2</sup>											
2014 Apr	0.6	1.8	1.8	-6.8	-1.6	2.2	2.4	2.5	2.1	1.2	-2.5
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	1.1 <sup>†</sup>	1.6 <sup>†</sup>	0.4	4.8 <sup>†</sup>	2.0	2.7 <sup>†</sup>	-1.1 <sup>†</sup>	1.4 <sup>†</sup>	-0.1	-0.1	2.6 <sup>†</sup>
May	2.0	2.1	1.3	6.6	2.3 <sup>†</sup>	2.8	-	1.7	1.5 <sup>†</sup>	0.5 <sup>†</sup>	3.7
Jun	2.1	1.9	1.8	4.5	2.7	2.0	1.1	2.4	2.8	0.4	2.7

<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

Section	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
	CA	CB	CC	CD	CE	CF
Latest weight	114.2	25.4	51.0	9.2	39.8	58.7
	K22B	K22P	K22T	K22X	K22Z	K239
2011	104.4	108.3	103.3	113.4	103.1	109.1
2012	101.7	104.6	97.8	102.0	101.1	102.7
2013	100.0	100.0	100.0	100.0	100.0	100.0
2014	104.2	97.3	101.1	91.1	102.8	95.0
2015	104.1	96.8	101.7	93.8	108.9	95.5
2015 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
Q2	105.6	90.7	103.1	91.9	105.1	101.5
2015 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	104.8 <sup>†</sup>	93.6 <sup>†</sup>	102.4 <sup>†</sup>	86.1 <sup>†</sup>	106.5 <sup>†</sup>	106.8
May	106.3	87.4	104.1	93.3	105.1	99.8 <sup>†</sup>
Jun	105.7	91.0	102.8	96.3	103.8	98.0
<b>Percentage change, latest year on previous year</b>						
2011	6.6	1.4	-5.6	1.4	6.8	-13.5
2012	-2.6	-3.4	-5.3	-10.1	-1.9	-5.8
2013	-1.7	-4.4	2.3	-1.9	-1.1	-2.6
2014	4.2	-2.7	1.1	-8.9	2.8	-5.0
2015	-	-0.5	0.7	3.0	6.0	0.5
<b>Percentage change, latest month on same month a year ago</b>						
2014 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	1.9 <sup>†</sup>	-4.0 <sup>†</sup>	0.1 <sup>†</sup>	0.6 <sup>†</sup>	-4.4	15.6 <sup>†</sup>
May	2.9	-12.9	3.2	8.4	-1.2 <sup>†</sup>	-0.7
Jun	2.8	-9.8	2.5	13.6	-3.6	7.8

<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.

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2013 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	107.3	100.0	101.6	94.6	112.2	89.0	102.1
2012	102.8	102.9	102.1	104.9	113.4	92.9	95.6
2013	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2014	113.1	101.5	103.9	96.8	104.3	103.5	105.6
2015	109.7	101.9	101.7	97.6	90.7	110.2	103.6
2015 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
Q2	113.3	99.6	99.8	91.9	89.3	117.4	108.0
2015 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	114.3 <sup>†</sup>	99.6 <sup>†</sup>	98.7 <sup>†</sup>	93.8 <sup>†</sup>	91.4 <sup>†</sup>	118.1 <sup>†</sup>	106.5 <sup>†</sup>
May	113.2	99.9	100.7	90.4	89.1	117.7	107.0
Jun	112.6	99.3	99.9	91.6	87.4	116.5	110.6

## Percentage change, latest year on previous year

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

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

2014 Apr	19.4	0.4	-0.1	-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	3.6 <sup>†</sup>	-4.8 <sup>†</sup>	-3.3 <sup>†</sup>	-5.7 <sup>†</sup>	-3.9 <sup>†</sup>	9.1	0.1 <sup>†</sup>
May	4.0	-0.2	0.2	-7.2	-0.3	6.3 <sup>†</sup>	3.5
Jun	2.8	-6.0	-5.9	-7.1	-2.6	5.9	5.3

<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	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	1.0 <sup>†</sup>	6.0 <sup>†</sup>	1.5 <sup>†</sup>	1.2 <sup>†</sup>	1.6	9.0
	May	1.4	-6.6	1.7	8.3	-1.3 <sup>†</sup>	-6.5
	Jun	-0.5	4.1	-1.3	3.2	-1.3	-1.8
Percentage change, latest 3 months on same 3 months a year ago							
2014	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	-7.0 <sup>†</sup>	-1.4 <sup>†</sup>	-1.6 <sup>†</sup>	-5.0	7.0
	May	1.5	-9.3	0.6	2.4	-3.5	4.7
	Jun	2.5	-8.9	1.9	7.5	-3.1	7.3

<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

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.0	83.1	36.2	20.9	50.6	92.0	64.4
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest month on previous month</b>							
2014 Apr	2.3	0.9	2.3	-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	3.1 <sup>†</sup>	-1.4 <sup>†</sup>	2.5 <sup>†</sup>	0.9 <sup>†</sup>	2.2 <sup>†</sup>	5.4	-0.2 <sup>†</sup>
May	-0.9	0.3	2.0	-3.6	-2.5	-0.4 <sup>†</sup>	0.5
Jun	-0.5	-0.6	-0.8	1.3	-1.9	-1.0	3.3
<b>Percentage change, latest 3 months on same 3 months a year ago</b>							
2014 Apr	15.9	0.8	0.5	-2.3	6.0	4.0	5.7
May	16.0	0.6	-0.5	-3.6	6.6	4.1	6.9
Jun	15.2	2.8	-0.3	-4.2	7.9	4.5	6.8
Jul	13.1	3.4	1.6	-4.1	6.9	3.5	6.4
Aug	12.8	3.6	2.5	-3.9	4.5	2.8	6.7
Sep	12.9	1.9	6.5	-4.1	3.8	1.9	5.6
Oct	12.2	0.5	7.5	-5.8	1.9	1.4	5.7
Nov	10.6	-0.4	9.1	-3.7	0.9	2.5	6.2
Dec	9.8	-0.6	10.5	-2.2	-0.4	5.2	5.0
2015 Jan	6.1	0.6	6.9	-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	-4.2 <sup>†</sup>	-4.1 <sup>†</sup>	-5.3 <sup>†</sup>	-5.8	4.7	0.4
May	2.4 <sup>†</sup>	-2.7	-2.9	-6.5	-3.0	6.6 <sup>†</sup>	1.2 <sup>†</sup>
Jun	3.5	-3.7	-3.1	-6.6	-2.3	7.1	2.9

<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

		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	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	-5.5 <sup>†</sup>	-0.9 <sup>†</sup>	-10.8 <sup>†</sup>	-1.9	7.5
	May	0.1	-4.8	1.4	-5.6	-0.4	7.2
	Jun	1.0	-1.5	2.0	2.9	-0.3	6.4

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

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

# 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 3 months on previous 3 months								
2014	Apr	5.4	-1.0	2.5	-0.7	3.4	3.0	0.7
	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	1.7 <sup>†</sup>	0.7 <sup>†</sup>	-3.3 <sup>†</sup>	-1.9 <sup>†</sup>	1.3	0.8 <sup>†</sup>	1.3
	May	1.9	-0.1	-1.6	-2.8	2.3	4.3	1.0 <sup>†</sup>
	Jun	2.0	-1.5	1.4	-2.4	1.4	5.6	1.3

<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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## 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	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-	-	-	-	-
2015 Q2	-	-	-	-	-	-	-	-	-	-	-
2015 Q3	-	-	-	-	-	-	-	-	-	-	-
2015 Q4	-	-	-	-	-	-	-	-	-	-	-
2016 Q1	-	-	-	-	-	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-	-	-	-	-	-
2015 Apr	-	-	-	-	-	-	-	-	-	-	-
2015 May	-	-	-	-	-	-	-	-	-	-	-
2015 Jun	-	-	-	-	-	-	-	-	-	-	-
2015 Jul	-	-	-	-	-	-	-	-	-	-	-
2015 Aug	-	-	-	-	-	-	-	-	-	-	-
2015 Sep	-	-	-	-	-	-	-	-	-	-	-
2015 Oct	-	-	-	-	-	-	-	-	-	-	-
2015 Nov	-	-	-	-	-	-	-	-	-	-	-
2015 Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
2016 Feb	-	-	-	-	-	-	-	-	-	-	-
2016 Mar	-	-	-	-	-	-	-	-	-	-	-
2016 Apr	0.1	1.6	-	-0.3	0.2	1.9	-0.1	-0.1	-	-0.1	0.9
2016 May	0.1	1.1	-0.2	-0.3	0.4	1.4	-0.2	-0.3	-0.1	-0.1	0.5
Percentage change, latest year on previous year											
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago											
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
2014 Apr	-	-	-	-	-	-	-	-	-	-	-
2014 May	-	-	-	-	-	-	-	-	-	-	-
2014 Jun	-	-	-	-	-	-	-	-	-	-	-
2014 Jul	-	-	-	-	-	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-	-	-	-	-	-
2014 Sep	-	-	-	-	-	-	-	-	-	-	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
2014 Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
2015 Feb	-	-	-	-	-	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-	-	-	-	-	-
2015 Apr	-	-	-	-	-	-	-	-	-	-	-
2015 May	-	-	-	-	-	-	-	-	-	-	-
2015 Jun	-	-	-	-	-	-	-	-	-	-	-
2015 Jul	-	-	-	-	-	-	-	-	-	-	-
2015 Aug	-	-	-	-	-	-	-	-	-	-	-
2015 Sep	-	-	-	-	-	-	-	-	-	-	-
2015 Oct	-	-	-	-	-	-	-	-	-	-	-
2015 Nov	-	-	-	-	-	-	-	-	-	-	-
2015 Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
2016 Feb	-	-	-	-	-	-	-	-	-	-	-
2016 Mar	-	-	-	-	-	-	-	-	-	-	-
2016 Apr	0.2	1.5	-	-0.3	0.2	1.8	-0.2	-0.1	-0.1	-0.1	0.9
2016 May	-	1.0	-0.2	-0.4	0.3	1.2	-0.3	-0.2	-0.1	-0.2	0.5

<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

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest month on previous month</b>											
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	0.2	1.4	-	-0.4	0.1	1.8	-0.1	-0.1	-	-0.1	0.9
May	-0.1	-0.4	-0.1	-	0.2	-0.4	-	-0.1	-0.1	-0.1	-0.4
<b>Percentage change, latest 3 months on same 3 months a year ago</b>											
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	0.1	0.5	-	-0.1	0.1	0.7	-	-	-	-	0.3
May	0.1	0.8	-0.1	-0.2	0.1	1.1	-0.1	-0.1	-	-0.1	0.4

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

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

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

Seasonally adjusted 2013 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	120.4	700.4	104.5	74.7	96.2	52.1	208.2	235.8	254.6	232.7
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months</b>											
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	0.1	0.5	-	-0.1	-	0.6	-0.1	-0.1	-	-	0.3
May	0.1	0.8	-	-0.3	0.1	1.0	-0.1	-0.1	-0.1	-0.1	0.4

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

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

## 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	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-
Q2	-	-	-	-	-	-
Q3	-	-	-	-	-	-
Q4	-	-	-	-	-	-
2016 Q1	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-0.1	-0.4	-0.3	4.9	-0.1	-
May	-0.1	-0.9	-0.3	1.1	-	-0.1

### Percentage change, latest year on previous year

2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-	-	-	-	-

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

2014 Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-0.1	-0.5	-0.4	5.8	-	0.1
May	-0.1	-0.9	-0.2	1.2	0.1	-

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

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

## Output of the Production Industries

Chained volume indices of gross value added<sup>†</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	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-
2016 Q1	-	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	0.3	-0.3	-0.3	0.2	0.1	-0.1	0.2
May	0.2	-0.7	-0.4	0.5	-0.1	-0.3	0.2

### Percentage change, latest year on previous year

2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-

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

2014 Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	0.3	-0.3	-0.2	0.1	0.1	-	0.2
May	0.2	-0.8	-0.3	0.5	-	-0.3	0.2

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

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

## Output of the Production Industries

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

Seasonally adjusted 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	-	-	-	-	-
	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	-	-	-	-	-
	Feb	-	-	-	-	-
	Mar	-	-	-	-	-
	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2016	Jan	-	-	-	-	-
	Feb	-	-	-	-	-
	Mar	-	-	-	-	-
	Apr	-0.1	-0.4	-0.4	5.8	-
	May	-	-0.6	0.1	-5.3	0.1

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

2014	Mar	-	-	-	-	-
	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	-	-	-	-	-
	Feb	-	-	-	-	-
	Mar	-	-	-	-	-
	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2016	Jan	-	-	-	-	-
	Feb	-	-	-	-	-
	Mar	-	-	-	-	-
	Apr	-	-0.1	-0.2	1.9	-
	May	-	-0.4	-0.2	2.3	-

<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

	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	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2016	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	0.2	-0.3	-0.2	0.2	0.1	0.1
	May	-	-0.4	-0.1	0.3	-0.2	0.1

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

2014	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2016	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-0.1	-0.1	0.1	-	-
	May	0.2	-0.3	-0.2	0.2	-0.1	0.1

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

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

## Output of the Production Industries

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

Seasonally adjusted 2013 = 100

	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 Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-0.1	-0.2	1.7	-	-
May	-	-0.5	-0.1	2.1	-	-

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

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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 3 months on previous 3 months</b>								
2014	Mar	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2015	Jan	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2016	Jan	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
	Apr	0.1	-0.1	-0.1	0.1	-	-0.1	-
	May	0.2	-0.4	-0.2	0.3	-	-0.1	0.1

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

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

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