

## Statistical bulletin:

# Index of Production: January 2016

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



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## Table of contents

1. Main points
2. Index of Production headline figures
3. Quality of the Index of Production
4. Economic context
5. Gross domestic product (GDP) impact and components
6. Production and sectors supplementary analysis
7. Industry spotlight: Mining & quarrying, a review of 2015
8. Background notes

# 1. Main points

Total production is estimated to have increased by 0.3% between December 2015 and January 2016. There were increases in 3 of the 4 main sectors, with manufacturing (the largest component of production), having the largest positive contribution, increasing by 0.7%.

The largest contribution to the increase in manufacturing, between December 2015 and January 2016, came from other manufacturing & repair, which increased by 4.8%. This industry includes the manufacture of furniture, other manufacturing & repair and installation of machinery & equipment.

Total production output is estimated to have increased by 0.2% in January 2016 compared with the same month a year ago. The only main sector to rise was water supply, sewerage & waste management, which increased by 9.3%.

Manufacturing output is estimated to have decreased by 0.1% in January 2016 compared with January 2015. Output decreased in 7 of the 13 manufacturing sub-sectors compared with a year ago.

In the 3 months to January 2016, production and manufacturing were 10.2% and 6.4% respectively below their figures reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

In this release, periods back to January 2015 are open for revision, in line with the National Accounts revisions policy. The impact of IoP revisions on previously published estimates of GDP are minimal.

## 2. Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, January 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. The production industries account for 14.9% of the output approach to the measurement of gross domestic product (<http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-national-accounts/the-blue-book--2012-edition/art---balancing-the-three-approaches-to-measuring-gdp.html>).

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

This release presents:

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

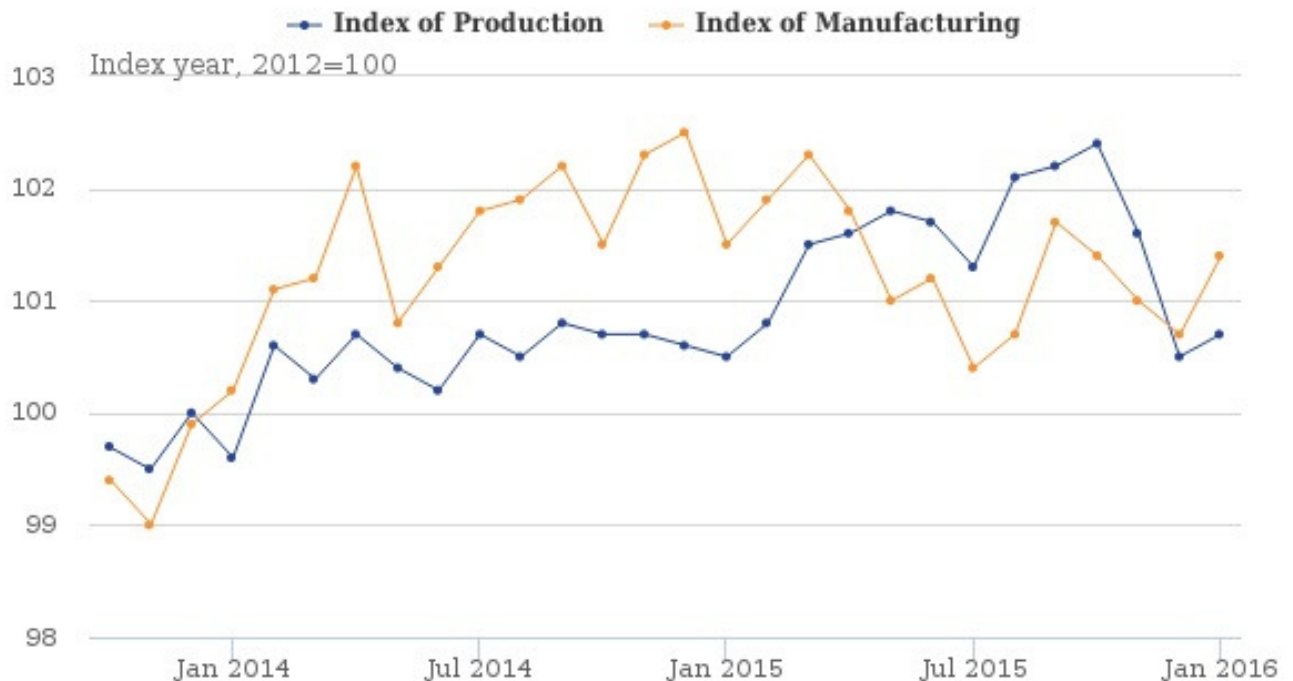
Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from October 2013 to January 2016.

## Table 1: Index of Production main figures, January 2016, UK

	Index number (2012 = 100)	Percentage change			
		Most recent month on a year earlier	Most recent 3 months on a year earlier	Most recent month on previous month	Most recent 3 months on previous 3 months
Production	100.7	0.2	0.3	0.3	-1.3
Manufacturing	101.4	-0.1	-1.0	0.7	-0.2

Source: Office for National Statistics

**Figure 1: Seasonally adjusted production and manufacturing, October 2013 to January 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](http://www.ons.gov.uk/ons/guide-method/method-quality/quality/guidelines-for-measuring-statistical-quality/index.html) (<http://www.ons.gov.uk/ons/guide-method/method-quality/quality/guidelines-for-measuring-statistical-quality/index.html>); these are based upon the 5 European Statistical System (ESS) quality dimensions. The IoP in its current form adheres to these requirements. One important dimension for measuring statistical quality is accuracy. That is, the extent to which the estimate measures the underlying "true" value of the output growth (of the production industries) in the UK for a particular period. Although the IoP meets its legal requirements for statistical accuracy, still as in all survey-based estimates, by definition, its estimates are subject to statistical uncertainty or errors. These errors consist of 2 main elements; the sampling error and the non-sampling error.

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

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

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

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

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

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

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

It should be noted that care should be taken when using the month-on-month growth rates, due to their volatility. Further information on the latest quality and methodology information (QMI) for the IoP can be found in the [QMI paper](http://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/qmis/indexofproductionqmi) (<http://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/qmis/indexofproductionqmi>). 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](http://www.ons.gov.uk/economy/grossdomesticproductgdp/methodologies/outputapproachtogrossdomesticproductgdp#improvements) (<http://www.ons.gov.uk/economy/grossdomesticproductgdp/methodologies/outputapproachtogrossdomesticproductgdp#improvements>).

## 4. Economic context

After 2 consecutive months of falling output at the end of 2015, production output experienced modest growth in January 2016. Overall, the level of production in the latest month is higher than January 2015 by 0.2%. This results from positive growth in the first 3 quarters of 2015, followed by negative growth in Quarter 4 (Oct to Dec) 2015 – which was the first quarter of negative growth since Quarter 4 (Oct to Dec) 2012.

Throughout the previous 12 months, manufacturing experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being 0.1% lower than those recorded in January 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

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

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

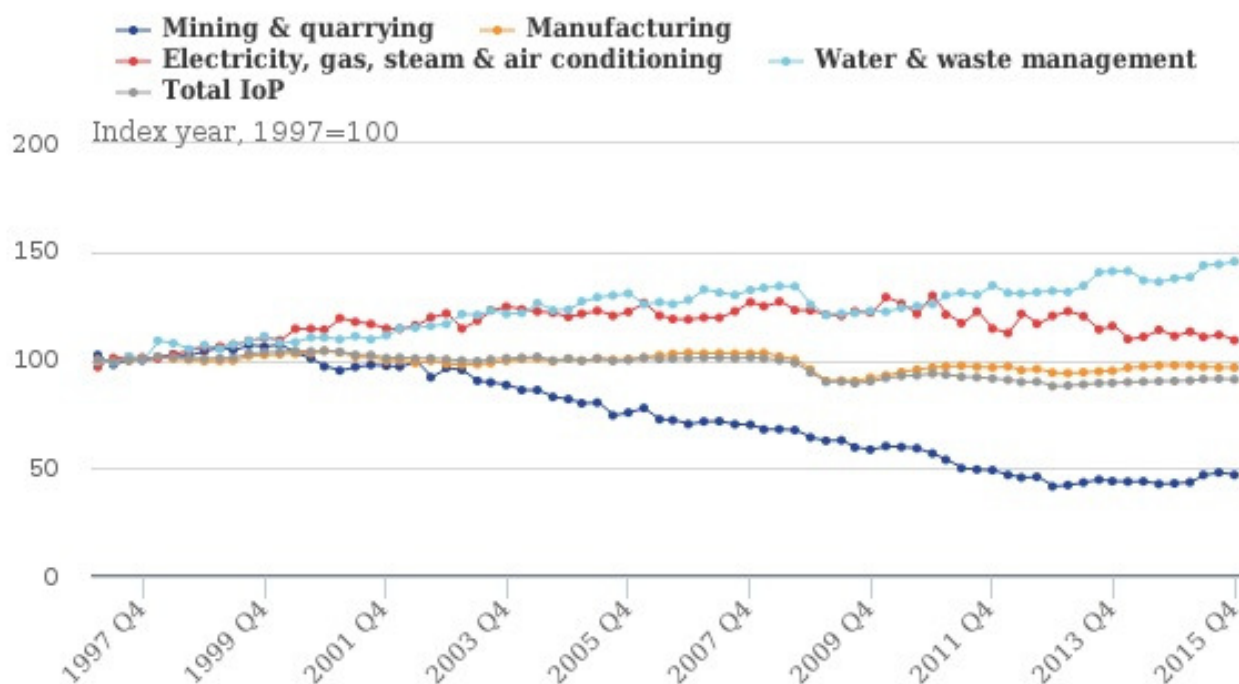
Following the UK economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015), total production remained broadly stable while manufacturing and water supply, sewerage & waste management returned to growth at compound average growth rates of 0.2% and 0.7% respectively. However, over the same period, mining & quarrying and electricity, gas, steam & air conditioning continued to contract at compound average growth rates of 1.1% and 0.4%, per quarter.

In Quarter 4 (Oct to Dec) 2015, production and manufacturing remained below their Quarter 1 (Jan to Mar) 2008 levels by 9.7% and 6.5%, respectively. Moreover, in Quarter 4 (Oct to Dec) 2015, mining & quarrying and electricity, gas, steam & air conditioning output, which continued to decline following the downturn, were 30.9% and 12.6% below their respective values in Quarter 1 (Jan to Mar) 2008. Water supply, sewerage & waste management remains the only main sector within production to have surpassed its value in Quarter 1 (Jan to Mar) 2008, by 9.2%, as of Quarter 4 (Oct to Dec) 2015.

Headline GDP surpassed its pre-downturn peak in Quarter 2 (Apr to June) 2013 and services remains the only headline industry grouping to have achieved this. This is consistent with the historical trend of services growing at a faster rate than production and manufacturing, despite the fact that productivity in the production industries (manufacturing in particular) has on average grown at a faster rate than in the service industries since 1997 (more information can be found in Labour Productivity, Quarter 3 (July to Sep) 2015 (<http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/bulletins/labourproductivity/q32015>)). 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 (Labour Market Statistics, February 2016, dataset Employment by industry. EMP13) (<http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/february2016>)).

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices) and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by 7.6% in the year to January 2016, from a fall of 10.4% in the year to December 2015. Output prices have also experienced deflation, falling by 1.0% in the year to January 2016. With crude oil impacting input prices, this feeds through to petroleum products, contributing to the decrease in their output prices (more information can be found in [Producer Price Index, January 2016](http://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/producerpriceinflation/january2016) (<http://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/producerpriceinflation/january2016>)).

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



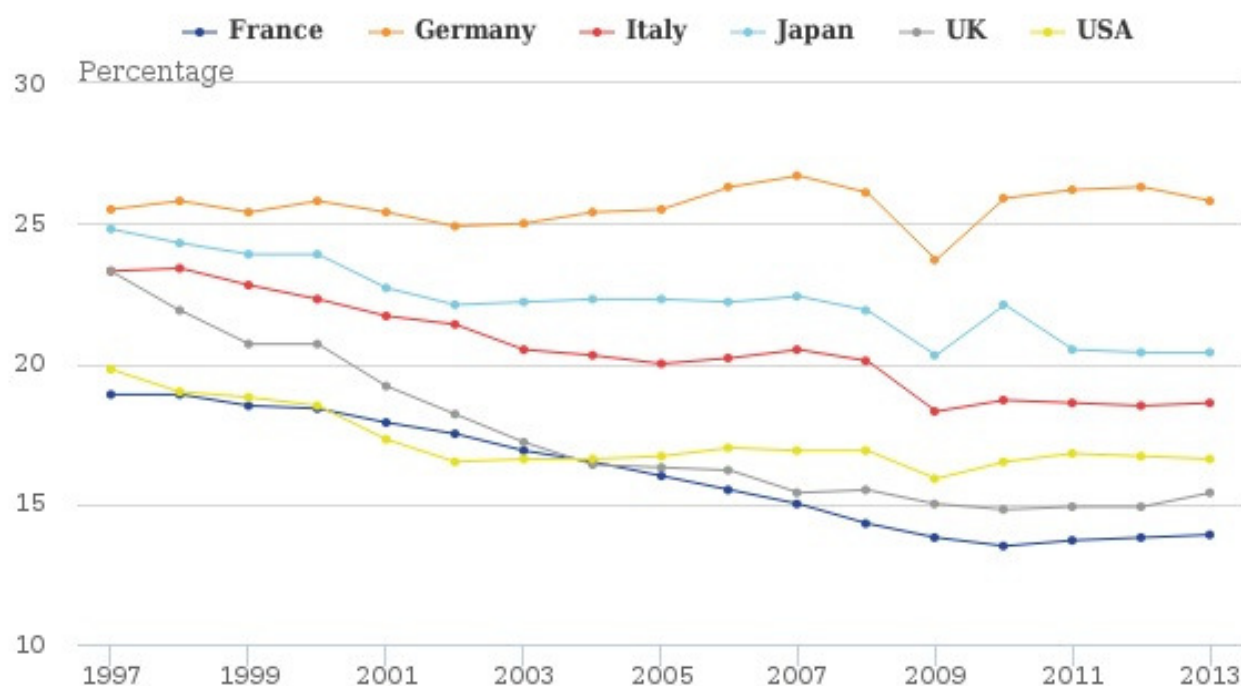
**Source: Primarily Monthly Business Survey (Production and Services) - Office for National Statistics**



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](http://www.oecd.org/) (<http://www.oecd.org/>)). In 1997, the share of nominal GVA accounted for by production in the UK was 23.3%, around the middle of the range relative to the other economies. By 2013, the UK had become relatively less reliant on production, as its share fell to 15.4% of nominal GVA.

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

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



**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).



Index of	14.9	09 Mar	Jan	0.3	-1.3	0.2	0.3
Production <sup>1</sup>			Dec	0.8	-0.4	-0.2	-1.1
Construction	5.9	12 Feb	Dec	0.4	-0.4	0.5	1.5
Index of	78.6	25 Feb	Dec	2.2	0.7	2.1	0.2
services			Nov	2.3	0.6	2.4	0.3
Retail Sales		19 Feb	Jan-16	3.9	1.4	5.2	2.3
			Dec-15	3.6	1.1	2.3	-1.4
Agriculture	0.7		Q4 2015	-2.0	0.4	..	..
			Q3 2015	0.0	0.2	..	..

Source: Office for National Statistics

Notes:

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

## 6. Production and sectors supplementary analysis

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

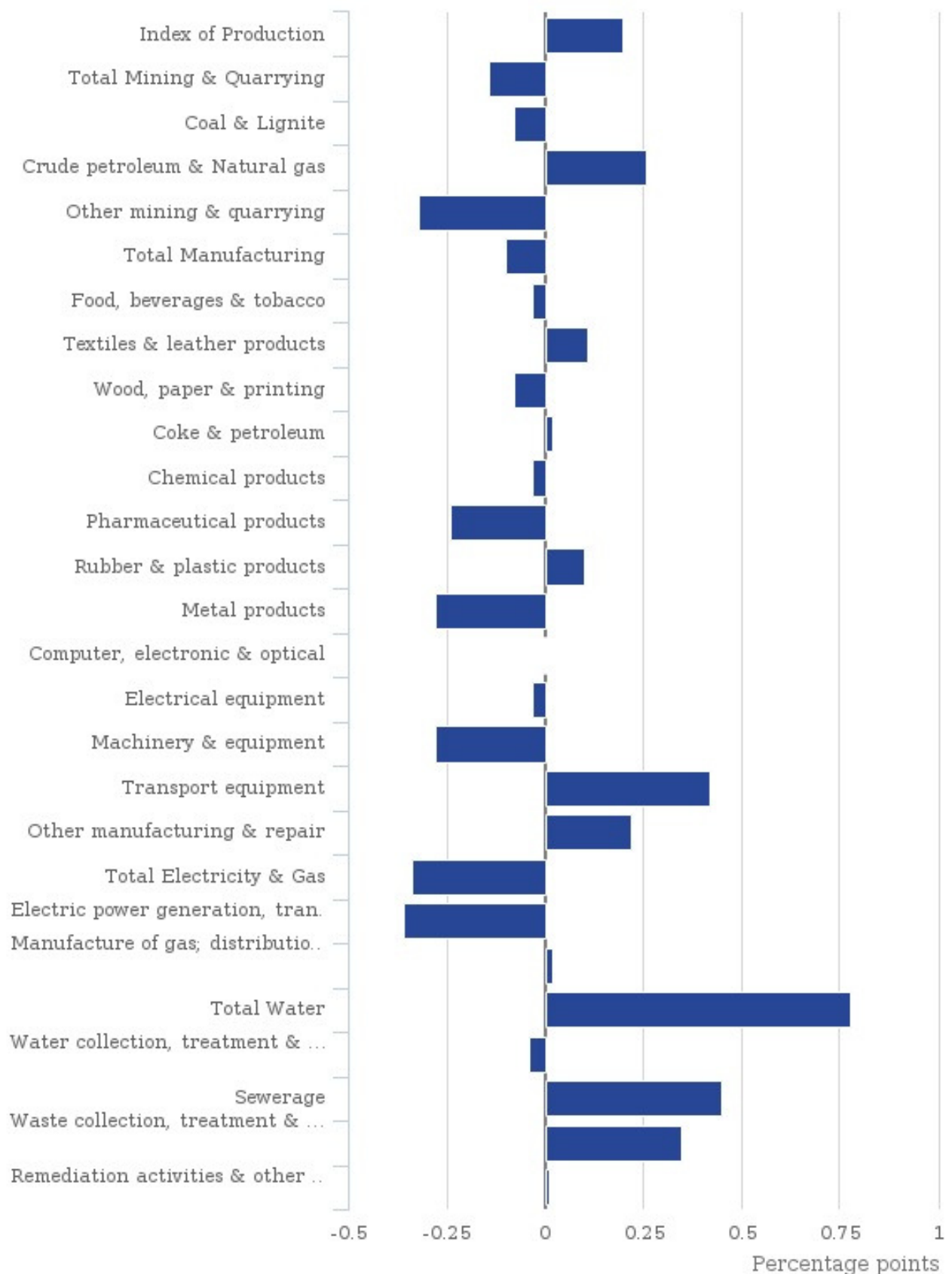
Description <sup>1</sup>	% of production	Month on same month a year ago growth (%)	Contribution to production (% points)	Month on previous month growth (%)	Contribution to production (% points)
IoP	100.0	0.2	0.2	0.3	0.3
Sector B	13.5	-1.1	-0.14	-5.0	-0.68
Division 06	10.6	2.8	0.26	-6.3	-0.65
Sector C	69.1	-0.1	-0.10	0.7	0.48
Sector D	9.3	-3.9	-0.34	4.3	0.35
Sector E	8.1	9.3	0.78	1.1	0.10

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.

**Figure 4: Contribution to production percentage growth, between January 2015 and January 2016, UK**



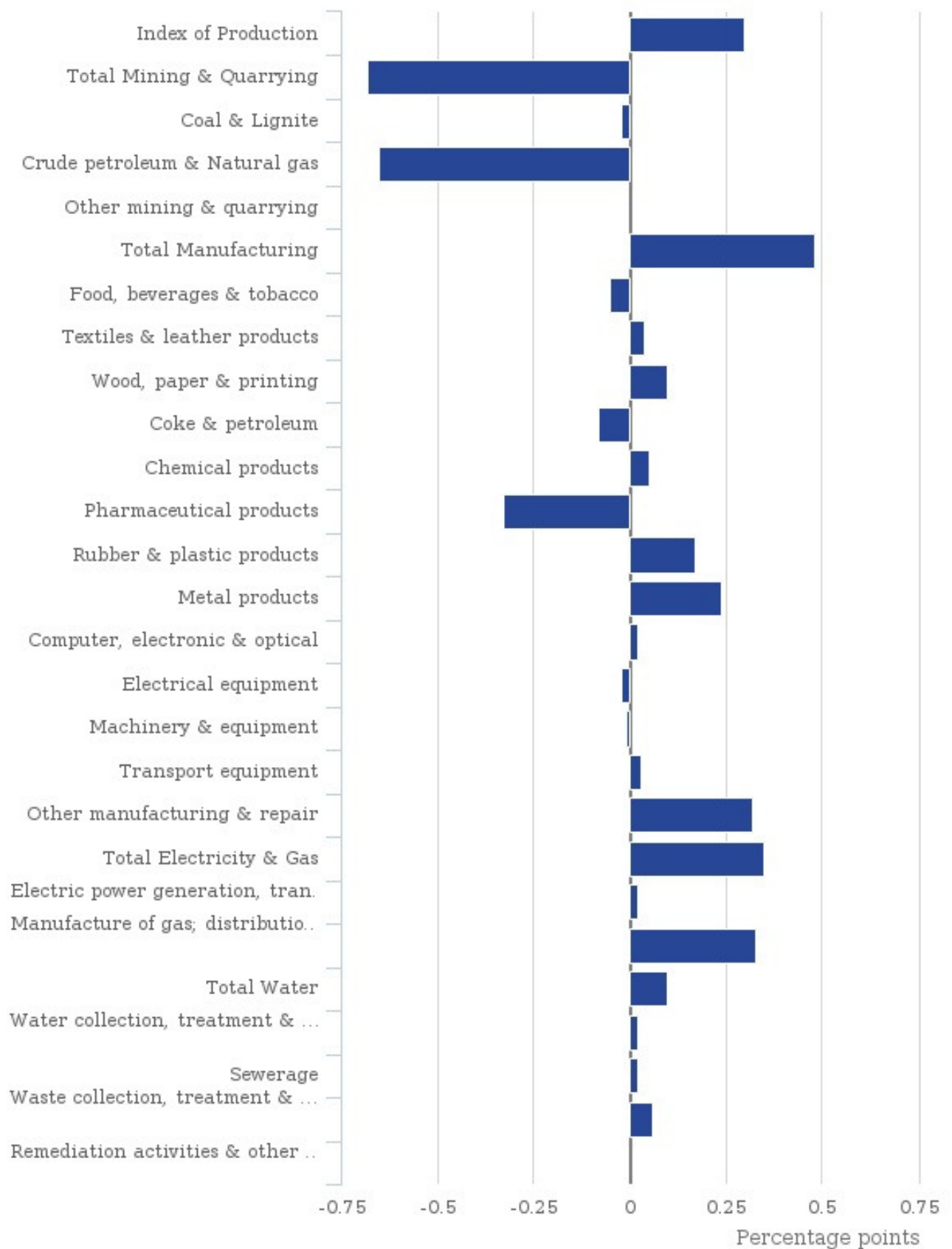
**Source: Primarily Monthly Business Survey (Production and Services) - Office for National Statistics**

**Notes:**

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

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**Figure 5: Contribution to production percentage growth, between December 2015 and January 2016, UK**



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

**Notes:**

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

## Total production

Total production output increased by 0.2% in January 2016 compared with January 2015 (Table 3). This increase reflected a rise in 1 of the 4 main sectors, water supply, sewerage & waste management output, which increased by 9.3% and contributed 0.8 percentage points to total production. Largely offsetting this increase were decreases in electricity, gas, steam & air conditioning output, which decreased by 3.9% and contributed 0.3 percentage points to total production; in mining & quarrying output, which decreased by 1.1% and contributed 0.1 percentage points; and in manufacturing, the largest component of production, which decreased by 0.1% and contributed 0.1 percentage points to total production (Figure 4).

Between December 2015 and January 2016, total production increased by 0.3% following a fall of 1.1% in the previous month (Table 3). There were increases in 3 of its 4 main sectors. The largest positive contribution came from manufacturing, which increased by 0.7% and contributed 0.5 percentage points to total production. There were also increases in electricity, gas, steam & air-conditioning output, which increased by 4.3% and contributed 0.4 percentage points to total production and in water supply, sewerage & waste management output, which increased by 1.1% and contributed 0.1 percentage points to total production. Partially offsetting the increases was a decrease in mining & quarrying output, which decreased by 5.0% and contributed 0.7 percentage points to total production (Figure 5).

## Manufacturing

Manufacturing output decreased by 0.1% between January 2015 and January 2016 and contributed 0.1 percentage points to total production. Output decreased in 7 of the 13 manufacturing sub-sectors compared with a year ago (Figure 4). The manufacturing sub-sector with the largest downward contribution to total production output was the manufacture of machinery & equipment not elsewhere classified (<http://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/2015-09-09#industry-spotlight-manufacture-of-machinery-and-equipment-not-elsewhere-classified>), which decreased by 6.5% and contributed 0.3 percentage points to total production. This was the 14th consecutive decrease since November 2014.



In contrast, the manufacturing sub-sector with the largest upward contribution to total production compared with a year ago was the manufacture of transport equipment, which increased by 4.8% and contributed 0.4 percentage points to total production. This was the 17th consecutive increase since August 2014. The largest contribution within this sub-sector came from the manufacture of motor vehicles, trailers & semi trailers, which increased by 8.0% and contributed 0.4 percentage points to total production.

Manufacturing output increased by 0.7% between December 2015 and January 2016, having decreased by 0.3% the previous month. There were increases in 8 of the 13 manufacturing sub-sectors (Figure 5). The manufacturing sub-sector with the largest upward contribution to total production was other manufacturing & repair, which increased by 4.8% and contributed 0.3 percentage points to total production. The largest contribution to the increase within this sub-sector came from other manufacturing (<http://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/2015-05-12#industry-spotlight-other-manufacturing-and-repair>), which increased by 11.9%, its largest recorded rise, contributing 0.3 percentage points to total production.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production was the manufacture of pharmaceutical products & pharmaceutical preparations, which decreased by 5.9% and contributed 0.3 percentage points to total production. This followed a rise of 1.3% in the previous month.

## Mining & quarrying

Mining & quarrying output decreased by 1.1% between January 2015 and January 2016 and contributed 0.1 percentage points to total production. The sub-sector with the largest contribution to this decrease was other mining & quarrying, which decreased by 9.6% and contributed 0.3 percentage points to total production (Figure 4).

Mining & quarrying output decreased by 5.0% in January 2016 compared with December 2015, the third consecutive decrease. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which decreased by 6.3% and contributed 0.7 percentage points to total production (Figure 5). Anecdotal evidence suggested that stormy weather was a contributing factor to the decrease in output (<http://www.offshoreenergytoday.com/banff-fps-o-back-online-after-north-sea-storm-caused-shutdown/>) observed in the oil and gas production facilities in the North Sea.

## Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output decreased by 3.9% in January 2016 compared with January 2015, the third consecutive decrease (Figure 4). This reflected a fall in output in 1 of its 2 sub-sectors, electric power generation, transmission & distribution, which decreased by 5.5% and contributed 0.4 percentage points to total production. Evidence cited the decrease in demand was due to warmer than usual weather temperature and the increase in the fuel mix costs as contributing factors. The 3 main elements in the fuel mix for the generation of electricity are coal, gas and nuclear power.

Electricity, gas, steam & air conditioning output increased by 4.3% in January 2016 compared with December 2015 and contributed 0.4 percentage points to total production (Figure 5). This reflected an increase in output in both of its sub-sectors; the largest contribution came from the manufacture of gas & distribution of gaseous fuels through mains, which increased by 16.7% and contributed 0.3 percentage points to total production, having decreased by 10.1% in the previous month (Figure 5). Evidence suggested that the larger than average drop in temperature between December 2015 (<http://www.metoffice.gov.uk/climate/uk/summaries/2015/december>) and January 2016 (<http://www.metoffice.gov.uk/climate/uk/summaries/2016/january>) (source Met Office) when compared with the previous year and the increase in gas used for the purpose of generating electricity may have been contributing factors to the increase in output.

## Water & waste management

Water supply, sewerage & waste management output increased by 9.3% in January 2016 compared with January 2015, the largest rise since January 2014 and contributed 0.8 percentage points to total production. This increase reflected a rise in 3 of its 4 sub-sectors' output (Figure 4), with the largest contribution coming from sewerage output, which increased by 20.2% and contributed 0.5 percentage points to total production. Evidence suggested that January 2016, which was provisionally the fourth wettest January in the UK since 1910 (<http://www.metoffice.gov.uk/climate/uk/summaries/2016/january>) (source Met Office), may have contributed to the increase in sewerage output.

Water supply, sewerage & waste management output increased by 1.1% between December 2015 and January 2016 and contributed 0.1 percentage points to total production. This increase reflected rises in all of its 4 sub-sectors. The largest contribution to the increase came from waste collection, treatment & disposal activities, which increased by 1.4% and contributed 0.1 percentage points to total production, having increased by 2.3% in the previous month (Figure 5).

## Revisions to IoP

Revisions to the Index of Production follow the [National Accounts Revisions policy](http://www.ons.gov.uk/methodology/methodologytopicsandstatisticalconcepts/revisions/revisionspoliciesforeconomicstatistics) (<http://www.ons.gov.uk/methodology/methodologytopicsandstatisticalconcepts/revisions/revisionspoliciesforeconomicstatistics>). Revisions are caused by a number of factors including, but not limited to revisions to source data due to late responses to the Monthly Business Survey (MBS), actual data replacing forecast data and revisions to seasonal factors that are re-estimated every period.

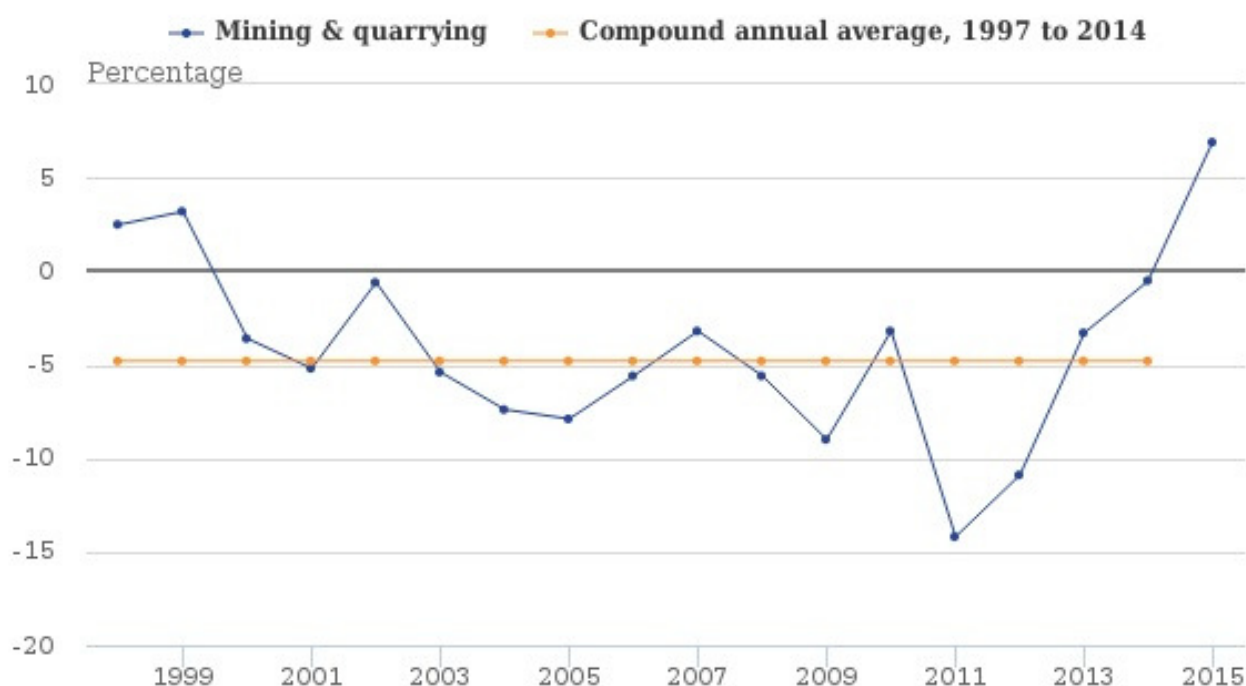
We produce revisions triangles of production and manufacturing growth to provide users with one indication of the reliability of this important indicator. Statistical tests are performed on the average revision to test if it is statistically significantly different from zero. Further information can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

In this release of data, the earliest period open for revision was January 2015. There were no revisions to IoP month-on-month growth rates greater than 0.1 percentage points. Further details on the revisions to IoP components can be found in the IOP5R tables.

## 7. Industry spotlight: Mining & quarrying, a review of 2015

In 2015, [mining & quarrying](http://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/october2015#industry-spotlight-mining-quarrying) (<http://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/october2015#industry-spotlight-mining-quarrying>) experienced positive annual growth for the first time since 1999 (Figure 6). The growth of 6.9% in 2015 was significantly higher than the decrease of 0.5% in 2014 and above the long-run compound average growth rate from 1998 to 2014, a contraction of 4.8%. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

## Figure 6: Percentage growth in mining & quarrying, 1998 to 2015, UK



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

### Notes:

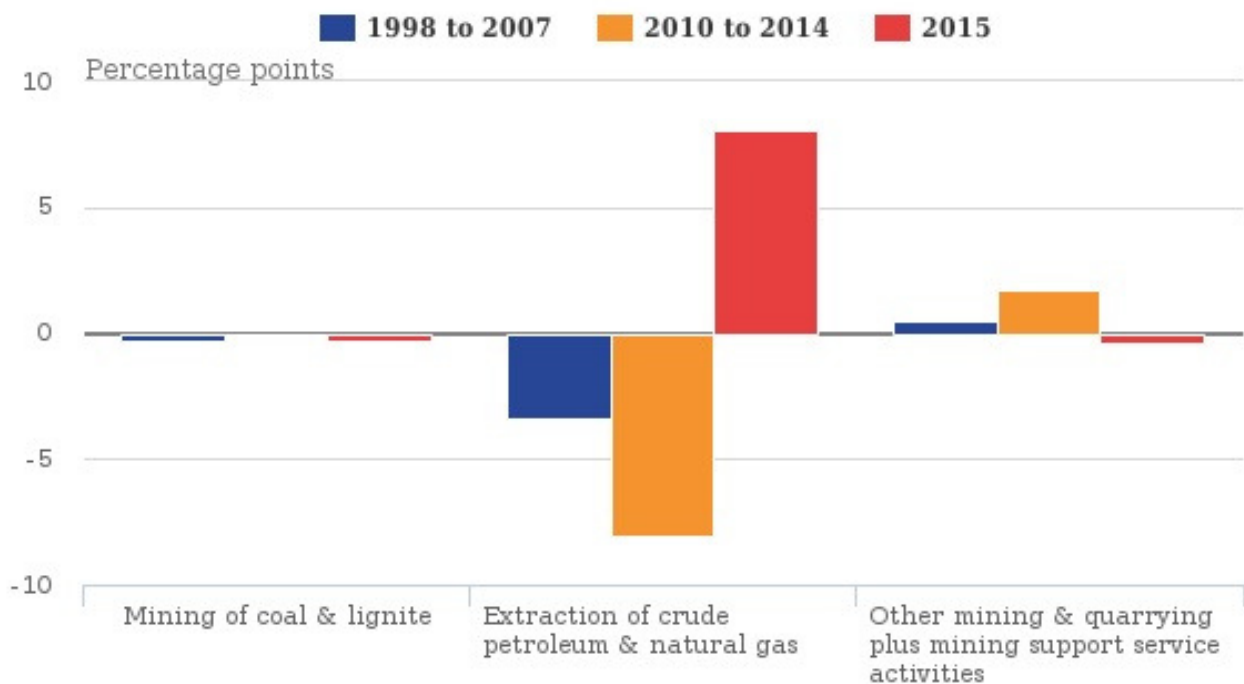
1. Index values can be found in the attached IoP 5 tables.

Figure 7 examines the contributions to mining & quarrying from its 3 main components, for the latest year (2015), the UK economy's pre-downturn period (from 1998 to 2007) and the post-downturn period (from 2010 to 2014). The strong growth seen in mining & quarrying in 2015 was driven by the extraction of crude petroleum & natural gas (the biggest component within mining & quarrying), which made the only positive contribution (of 8.1 percentage points).

Historically the extraction of crude petroleum and natural gas has made negative contributions to mining & quarrying, on average there were decreases of 3.4 percentage points in the pre-downturn period (from 1998 to 2007) and 8.1 percentage points in the post-downturn period (from 2010 to 2014). However, in 2015 its performance may have been boosted by government reforms announced in the March Budget 2015 (<https://www.gov.uk/government/topical-events/budget-2015>) and Summer Budget 2015 (<https://www.gov.uk/government/topical-events/budget-july-2015>). These reforms included, among others, the introduction of a new investment allowance, a reduction in the supplementary charge from 30% to 20% and a reduction in the petroleum revenue tax from 50% to 35%. Moreover, the Department for Energy and Climate Change (DECC) cited that UK dependence on crude oil imports had decreased in 2015 as a result of a new UK oil field (Golden Eagle) coming online and maintenance issues not affecting 2015 production levels as severely as they did in 2014 (Energy Trends section 3: oil and oil products (<https://www.gov.uk/government/statistics/oil-and-oil-products-section-3-energy-trends>))).

Mining of coal & lignite has consistently made negative contributions to mining & quarrying across the 3 periods (Figure 7). Despite this industry contracting by 22.8% on an annual basis in 2015, its relatively small weight of 1.3% (of mining & quarrying) resulted in a negative contribution of only 0.3 percentage points to growth. Historically other mining & quarrying plus support services has been the only industry having modest positive contributions to mining & quarrying in the period prior to the downturn and following the downturn, however, in 2015 it reversed its historical trend to make a slight negative contribution (of 0.4 percentage points). Evidence from the Department for Energy and Climate Change suggested that the fall in mining of hard coal from open cast coal working (surface mining) was due to surface mines producing less coal as they were coming to the end of coaling. In addition, the last UK large deep mine closed in December 2015.

**Figure 7: Contributions to mining & quarrying growth in 2015, prior to the downturn (1998 to 2007) and following the downturn (2010 to 2014), UK**



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

**Notes:**

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

## 8. Background notes

1. What's new?

**Coverage of Standard Business Survey Population extended**

The coverage of our Standard Business Survey Population has been extended to include a population of solely PAYE based businesses as described in [Improving the Coverage of the Standard Business Survey Population \(http://www.ons.gov.uk/ons/guide-method/method-quality/specific/business-and-energy/business-population/improving-the-coverage-of-the-standard-business-survey-population.pdf\)](http://www.ons.gov.uk/ons/guide-method/method-quality/specific/business-and-energy/business-population/improving-the-coverage-of-the-standard-business-survey-population.pdf) published on 21 December 2015.

This was the first IoP release to contain the extended population of solely PAYE based businesses. The impact of this improvement was investigated by running the Monthly Business Survey (MBS) results both including and excluding these units to measure the impact. This work has shown that the impact was negligible, less than 0.01 effect on the index, except for 2 industries; wearing apparel and wood & wood products except furniture. A link factor was applied to remove the effect on those 2 industries. Therefore, the impact on the Index of Production for January 2016 and future estimates will be negligible.

## **IDBR annual update**

The [Inter Departmental Business Register \(IDBR\) \(https://www.ons.gov.uk/aboutus/whatwedo/paidservices/interdepartmentalbusinessregisteridbr\)](https://www.ons.gov.uk/aboutus/whatwedo/paidservices/interdepartmentalbusinessregisteridbr) is the sampling frame used by the Monthly Business Survey, which is the main data source for the IoP. The IDBR is updated on a large scale annually, as a result of businesses responses to the Business Register Employment Survey (BRES). BRES collects data to update local unit information and business structures on the IDBR, for each site that they operate. The annual update of the register coincides with every January publication of IoP, therefore included in this release and this results in a larger effect of sample rotation, reclassifications and other changes when compared with other months during the year.

[A methodological note on leap year adjustments \(http://www.ons.gov.uk/economy/economicoutputandproductivity/output/methodologies/amethodologicalnoteonleapyearadjustments\)](http://www.ons.gov.uk/economy/economicoutputandproductivity/output/methodologies/amethodologicalnoteonleapyearadjustments) 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. Economic Review March 2016 was published on 2 March 2016, providing further commentary on the economy, GDP and leap year effects.

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 \(http://www.ons.gov.uk/economy/grossdomesticproductgdp/methodologies/outputapproachtogrossdomesticproductgdp#improvements\)](http://www.ons.gov.uk/economy/grossdomesticproductgdp/methodologies/outputapproachtogrossdomesticproductgdp#improvements) of our website.

An article was published on 25 January 2016, suggesting that production decreased [in the North Sea in January due to a shut-down caused by a storm \(http://www.offshoreenergytoday.com/banff-fpso-back-online-after-north-sea-storm-caused-shutdown/\)](http://www.offshoreenergytoday.com/banff-fpso-back-online-after-north-sea-storm-caused-shutdown/).

## **Upcoming changes**

The Index of Production release for February 2016, to be published on 8 April 2016, will contain revisions back to January 2016.

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

## **VAT Project update**

The VAT project are scheduled to publish their fourth update in March 2016, therefore the next IoP release to be published on 8 April 2016 will contain the link to the article.

For previous updates, an article, [HMRC VAT Project Update](http://www.ons.gov.uk/ons/rel/naa1-%20rd/national-accounts-articles/hmrc-vat-project-update/index.html) (<http://www.ons.gov.uk/ons/rel/naa1-%20rd/national-accounts-articles/hmrc-vat-project-update/index.html>) was published on 21 December 2015. This is the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The project is exploring ways in which HM Revenue and Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys.

## 2. **Special events**

We maintain a list of candidate special events in the [Special Events Calendar](http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/special-events-group/special-events-calendar/index.html) (<http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/special-events-group/special-events-calendar/index.html>). As explained in our [Special Events policy](http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/special-events-group/index.html) (<http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/special-events-group/index.html>), it is not possible to separate the effects of special events from other changes in the series.

## 3. **Understanding the data**

### **Short guide to the Index of Production**

This statistical bulletin gives details of the index of output of the production industries in the UK. Index numbers of output in this statistical bulletin are on the base 2012=100 and are classified to the [2007 Standard Industrial Classification](http://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007) (<http://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>) (SIC). The production industries, which accounted for 14.9% of GDP in 2012, cover mining & quarrying (Section B), manufacturing (Section C), electricity, gas, steam & air conditioning (Section D) and water supply & sewerage (Section E).



## Interpreting the data

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

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

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

## Definitions and explanations

Definitions found within the main statistical bulletin are listed:

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

## Use of the data

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

## 4. Methods

The [Index of Production methodology](http://www.ons.gov.uk/economy/economicoutputandproductivity/output/methodologies/indexofproductioniop) (<http://www.ons.gov.uk/economy/economicoutputandproductivity/output/methodologies/indexofproductioniop>) is published on our website within our guidance and methodology web pages. These include details on improvements, a sources catalogue detailing methods, data and weights used to compile IoP, IoS and GDP(O).

### **Composition of the data**

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

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

Approximately 70% of the IoP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 4 for the current month and the 3 months prior. The response rates for the historical periods are updated to reflect the current level of response, incorporating data from late returns. We have included 2 response rates: one percentage for the amount of turnover returned and the other percentage for the amount of questionnaire forms. We have also published [MBS historical production industries response rates](https://publishing.onsdigital.co.uk/economy/economicoutputandproductivity/output/datasets/historicmonthlybusinesssurveyresponserates) (<https://publishing.onsdigital.co.uk/economy/economicoutputandproductivity/output/datasets/historicmonthlybusinesssurveyresponserates>) back to 2010.

**Table 4: Monthly business survey (MBS) response rates, January 2016, UK**

	Year	Period	Turnover	Percentage
				Questionnaire
MBS overall	2016	Jan	86.6	75.1
	2015	Dec	93.8	81.7
		Nov	94.4	83.7
		Oct	95.8	85.3
MBS production only	2016	Jan	87.8	76.7
	2015	Dec	94.5	84.7
		Nov	95.6	86.8
		Oct	96.4	88.4

Source: Office for National Statistics

## Seasonal adjustment

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

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

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

## Deflation

It is common for the value of a group of financial transactions to be measured in several time periods. The values measured will include both the change in the volume sold and the effect of the change of prices over that year. Deflation is the process whereby the effect of price change is removed from a set of values. All series, unless otherwise quoted, are chained volume measures. Deflators adjust the value series to take out the effect of price change to give the volume series.

## 5. Code of Practice for Official Statistics

National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics (<https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice/>). They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

## 6. Quality

### **Basic quality information**

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

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

### **Quality and methodology information report**

A quality and methodology information report (<http://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/qmis/indexofproductionqmi>) for this statistical bulletin is available on our website.

### **Revision triangles**

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

Table 5 presents a summary of the differences between the first estimates published between February 2010 and January 2015 and the estimates published 12 months later.

**Table 5: Revisions, January 2016, UK**

Growth rates	Value in latest period	Average over the last 60 months	Percentage change
			Revisions between first publication and estimates 12 months later
			Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	-1.3	-0.15	0.28
Manufacturing - 3 month	-0.2	-0.11	0.26
Production - 1 month	0.3	-0.11 *	0.23
Manufacturing - 1 month	0.7	-0.07	0.21

Source: Office for National Statistics

Spreadsheets give revisions triangles of estimates

(<https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/revisionstotheindexofproduction>) for all months from March 1998 through to the current month.

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

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

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

## 7. Publication policy

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

(<https://www.ons.gov.uk/releases/ukindexofproductionjan2016#prereleaseaccesslist>) to the contents of this release.

A complete set of series in the statistical bulletin are available to download free of charge on the [dataset section](#)

(<https://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/december2015/relateddata>) of the Office for National Statistics website. Alternatively, for low-cost tailored data, call Online Services on 0845 601 3034 or email [Customer Contact Centre](#).

## 8. Accessing data

We provide an [analysis of past revisions in the loP and other statistical bulletins](#) (<https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/revisionstotheindexofproduction>) which present time series. Details can be found on our website.

We [publish revisions triangles](#) (<http://www.ons.gov.uk/ons/rel/elmr/economic-trends--discontinued-/no--614--january-2005/publication-of-revisions-triangles.pdf>) for all the main published indicators on our website.

## 9. Relevant links

[The Assessment of Short-Term Economic Output Indicators: Preliminary Estimate of GDP, Indices of Production and Services, and Retail Sales](#)

(<https://www.statisticsauthority.gov.uk/publications-list/page/5/?keyword&type=assessment-report>)

has been published on the UK Statistics Authority website. See assessment report number 278 for further details.

[Impact of quarterly employment question on monthly survey response](#)

(<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/output-approach-to-gdp/methods-and-sources/mbs-variance-of-change-paper.pdf>).

[Monthly Business Survey variance of change](#) (<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/output-approach-to-gdp/methods-and-sources/impact-of-quarterly-employment-question-on-monthly-survey-response.pdf>).

[Monthly Business Survey variance of change](#) (<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/output-approach-to-gdp/methods-and-sources/impact-of-quarterly-employment-question-on-monthly-survey-response.pdf>).

In November 2014, Government Statistical Service (GSS) uncertainty guidance (<https://gss.civilservice.gov.uk/wp-content/uploads/2014/11/Communicating-uncertainty-and-change-v1.pdf>) was published.

Disclosure control policy

(<https://www.ons.gov.uk/methodology/methodologytopicsandstatisticalconcepts/disclosurecontrol>)

The UK has one of the fastest growing economies in the G7

(<http://www.ons.gov.uk/ons/rel/elmr/gdp-and-the-labour-market/q1-2014--may-gdp-update/sty-gdp-g7-economies.html>)

We have published a short story describing how the pharmaceuticals industry has changed over time (<http://www.ons.gov.uk/ons/rel/iop/index-of-production/april-2014/sty-pharmaceuticals.html>).

Impact on National Accounts of Producer Price Index Rebasing

(<http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-articles/impact-on-national-accounts-of-producer-price-index-rebasing/index.html>)

On 22 October 2014, we published an article on the changing shape of UK manufacturing (<http://www.ons.gov.uk/ons/rel/uncategorised/summary/changing-shape-of-uk-manufacturing/index.html>).

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

(<http://www.ons.gov.uk/ons/rel/uncategorised/summary/changing-shape-of-uk-manufacturing---aerospace/index.html>).

On 2 December 2015, we published a short story on the British steel industry since the 1970s (<http://visual.ons.gov.uk/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 (<http://www.ons.gov.uk/ons/rel/abs/annual-business-survey/car-production/sty-car.html>).

The Summer Budget (<http://www.offshoreenergytoday.com/oil-gas-uk-welcomes-summer-budget-announcement/>) article submitted by the Department of Energy and Climate Change (DECC) highlights the oil and gas industry annual investment allowance. Source: Offshore Energy Today.com.

We published Impact of Blue Book 2015 Changes on Chained Volume Measure Gross Domestic Product Estimates (<http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-articles/impact-on-gdp-cvm-annual-estimates-1997-2010/rpt-impact-on-gdp-chained-volume-measure-estimates-1997-2010.html>),

this article details estimates of the total impact of all the improvements to chained volume measure (CVM or "real") gross domestic product (GDP) implemented in September 2015.

## 10. Customer feedback

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

- users commented that longer time series would be useful so long run time series of data for the main IoP industries are available - furthermore, data at 4 decimal

places for IoP and the main sub-sectors

(<https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/indexofproductionandsectorsto4decimalplaces>) is now available

- users would like more information on data content - from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to IoP were included
- users also raised concerns that the IoP is not benchmarked to annual data through the supply and use framework - this is being addressed as part of our response (<http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-reviews/list-of-current-national-statistics-quality-reviews/ons-response-to-national-statistics-quality-review-of-national-accounts-and-balance-of-payments.pdf>) to the National Statistics Quality Review of National Accounts (<http://webarchive.nationalarchives.gov.uk/20150904113534/http://ons.gov.uk/ons/guide-method/method-quality/quality/quality-reviews/list-of-current-national-statistics-quality-reviews/index.html>)

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

## 11. Following ONS

Follow @ONS on Twitter (<https://twitter.com/ons>) and receive up to date information about our statistical releases.

Like our Facebook page (<http://facebook.com/ons>) to receive our updates in your newsfeed and to post comments on our page.

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## Index of Production Release Tables

Pages 2-11 Table IoP5, index values and growth rates for industry groups and manufacturing sub-sectors

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

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

# IOP5 Output of the Production Industries

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

Seasonally adjusted 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	102.8	112.3	101.4	100.9	100.1	116.4	102.3	104.0	98.7	100.0	109.9
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	99.2	96.7	98.9	100.4	104.3	91.8	98.7	99.1	100.6	99.2	96.6
2014	100.5	96.2	101.6	94.6	105.1	90.0	104.5	99.6	103.5	104.0	92.9
2015	101.5	102.8 <sup>†</sup>	101.3 <sup>†</sup>	94.4 <sup>†</sup>	108.9 <sup>†</sup>	99.2 <sup>†</sup>	103.5 <sup>†</sup>	99.9 <sup>†</sup>	102.2 <sup>†</sup>	103.6 <sup>†</sup>	97.0
2014 Q4	100.7	95.4	102.1	94.3	104.9	88.4	108.1	99.7	104.4	104.4	92.2
2015 Q1	100.9 <sup>†</sup>	96.6	101.9 <sup>†</sup>	96.1 <sup>†</sup>	105.3 <sup>†</sup>	89.7 <sup>†</sup>	104.2 <sup>†</sup>	100.2 <sup>†</sup>	102.4 <sup>†</sup>	105.4	93.5
Q2	101.7	104.0 <sup>†</sup>	101.4	93.9	109.5	101.1	104.2	99.2	102.9	104.1 <sup>†</sup>	97.0 <sup>†</sup>
Q3	101.9	106.5	101.0	94.8	109.9	104.1	103.1	99.7	101.7	103.0	99.4
Q4	101.5	104.2	101.0	92.7	110.9	101.8	102.4	100.7	101.6	101.8	97.9
2014 Nov	100.7	94.7	102.3	93.5	105.8	87.5	107.0	100.1	104.1	104.7	91.5
Dec	100.6	93.6	102.5	95.0	103.4	85.4	110.8	99.9	105.4	104.7	91.2
2015 Jan	100.5 <sup>†</sup>	96.9	101.5 <sup>†</sup>	95.6 <sup>†</sup>	103.7 <sup>†</sup>	89.8 <sup>†</sup>	106.3 <sup>†</sup>	100.0 <sup>†</sup>	101.2 <sup>†</sup>	105.2	93.4
Feb	100.8	94.9 <sup>†</sup>	101.9	97.1	105.8	87.2	102.4	99.2	103.0	105.6 <sup>†</sup>	93.1 <sup>†</sup>
Mar	101.5	98.1	102.3	95.6	106.4	91.9	104.1	101.5	102.8	105.2	94.0
Apr	101.6	102.0	101.8	93.0	108.7	98.1	103.8	98.7	103.7	105.2	95.4
May	101.8	106.4	101.0	94.7	108.9	104.6	102.2	101.0	101.5	102.7	98.9
Jun	101.7	103.6	101.2	94.1	111.1	100.5	106.7	97.8	103.6	104.3	96.8
Jul	101.3	104.0	100.4	94.2	112.2	100.2	104.1	99.3	99.8	103.6	97.5
Aug	102.1	110.4	100.7	94.6	109.1	109.3	102.5	99.0	102.2	102.7	101.6
Sep	102.2	105.2	101.7	95.6	108.3	102.9	102.6	100.8	103.2	102.7	99.2
Oct	102.4	106.6	101.4	96.6	110.3	104.3	100.7	101.7	101.4	102.6	100.9
Nov	101.6	105.0	101.0	93.4	110.2	102.7	103.1	100.0	101.1	102.4	98.8
Dec	100.5	100.9	100.7	88.1	112.1	98.4	103.3	100.4	102.3	100.5	94.2
2016 Jan	100.7	95.9	101.4	91.9	113.3	92.2	104.4	98.9	103.4	102.9	92.6
<b>Percentage change, latest year on previous year</b>											
2011	-0.6	-14.2	2.2	-6.1	5.7	-18.4	0.2	-0.2	6.6	0.6	-10.6
2012	-2.8	-10.9	-1.4	-0.9	-0.1	-14.1	-2.2	-3.8	1.3	-	-9.0
2013	-0.8	-3.3	-1.1	0.4	4.3	-8.2	-1.3	-0.9	0.6	-0.8	-3.4
2014	1.3	-0.5	2.7	-5.8	0.8	-2.0	5.9	0.5	2.9	4.8	-3.8
2015	1.0	6.9 <sup>†</sup>	-0.3 <sup>†</sup>	-0.2 <sup>†</sup>	3.6 <sup>†</sup>	10.2 <sup>†</sup>	-1.0 <sup>†</sup>	0.3 <sup>†</sup>	-1.3 <sup>†</sup>	-0.4 <sup>†</sup>	4.4
<b>Percentage change, latest month on same month a year ago</b>											
2013 Nov	1.3	1.5	0.9	0.4	5.3	-2.5	-0.7	0.6	-0.1	2.9	-0.2
Dec	1.3	3.6	1.0	-5.1	7.0	1.0	-2.2	2.8	-2.3	2.6	0.1
2014 Jan	1.6	-1.6	2.1	-5.1	9.7	-5.0	1.4	-2.1	1.4	7.5	-4.6
Feb	2.2	4.8	3.3	-11.3	4.9	8.4	7.8	2.0	2.3	4.4	-1.9
Mar	1.7	8.2	2.3	-14.7	7.8	10.4	1.2	2.0	0.6	4.7	-2.6
Apr	2.3	3.2	4.0	-13.4	5.5	2.6	3.9	2.0	2.4	7.8	-5.2
May	1.6	3.4	2.6	-7.7	1.9	1.6	3.6	-1.5	3.3	6.3	-2.9
Jun	0.4	-3.0	1.6	-1.9	-1.4	-3.9	2.7	-2.0	2.9	3.9	-3.7
Jul	1.3	-3.3	2.8	1.4	-3.4	-5.6	6.6	-0.8	2.9	6.8	-3.3
Aug	1.2	-5.8	3.1	2.4	-4.4	-9.4	5.0	2.4	2.7	4.9	-4.4
Sep	0.7	-4.0	2.5	-4.1	-1.6	-6.7	9.4	0.6	3.4	3.8	-5.0
Oct	1.0	-0.2	2.1	-3.0	-1.8	-0.6	9.0	0.7	2.7	2.0	-1.3
Nov	1.2	-1.2	3.3	-8.3	-1.4	-3.0	8.2	2.5	4.5	3.0	-4.9
Dec	0.6	-5.8	2.6	-0.8	-4.0	-10.2	12.6	0.2	5.6	3.4	-5.9
2015 Jan	0.9 <sup>†</sup>	3.7	1.3 <sup>†</sup>	-0.5 <sup>†</sup>	-4.5 <sup>†</sup>	2.7	3.2 <sup>†</sup>	3.9 <sup>†</sup>	-1.4 <sup>†</sup>	1.6	1.1
Feb	0.2	-5.1 <sup>†</sup>	0.8	6.6	-2.5	-10.2 <sup>†</sup>	-	-1.2	0.8	3.1 <sup>†</sup>	-1.5 <sup>†</sup>
Mar	1.2	0.1	1.1	3.6	0.9	-0.9	2.8	1.6	-	1.8	0.4
Apr	0.9	5.3	-0.3	1.2	3.9	8.5	-0.1	-2.3	-0.2	0.8	3.7
May	1.4	6.2	0.2	0.5	4.3	11.3	1.6	1.2	-0.5	-1.0	4.5
Jun	1.5	8.9	-0.1	-2.2	7.0	14.3	4.5	-1.1	-0.6	0.7	4.6
Jul	0.6	9.4	-1.4	-3.9	8.4	13.2	0.3	-0.4	-3.7	-0.9	4.3
Aug	1.6	18.5	-1.1	-3.8	5.7	26.8	-2.1	-1.3	-0.7	-1.8	9.7
Sep	1.3	9.2	-0.5	1.7	3.8	14.2	-5.0	0.7	-1.2	-1.7	7.0
Oct	1.6	8.9	-0.2	2.4	4.5	13.1	-5.3	2.6	-2.1	-1.1	7.5
Nov	0.9	10.8	-1.2	-0.1	4.2	17.3	-3.7	-0.1	-2.9	-2.2	8.0
Dec	-0.2	7.8	-1.7	-7.3	8.3	15.2	-6.8	0.4	-2.9	-4.0	3.3
2016 Jan	0.2	-1.1	-0.1	-3.9	9.3	2.8	-1.8	-1.2	2.1	-2.2	-0.8

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2012 = 100

Section	Broad industry groups					Main industrial groupings					
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest month on previous month</b>											
2013 Nov	-0.2	-2.3	-0.4	4.7	-0.3	-2.7	1.3	-0.8	-1.1	-0.1	1.1
Dec	0.5	3.6	0.9	-6.1	0.4	5.4	-0.5	2.1	0.1	-0.3	0.7
2014 Jan	-0.4	-5.9	0.4	0.3	0.8	-8.1	4.6	-3.5	2.9	2.2	-4.7
Feb	1.0	7.1	0.9	-5.1	-0.1	11.1	-0.6	4.3	-0.4	-1.1	2.3
Mar	-0.3	-2.1	0.1	1.3	-2.8	-4.4	-1.1	-0.5	0.6	0.9	-1.0
Apr	0.4	-1.1	0.9	-0.5	-0.9	-2.6	2.6	1.2	1.1	1.0	-1.6
May	-0.3	3.5	-1.3	2.4	-0.2	4.0	-3.2	-1.2	-1.8	-0.6	2.8
Jun	-0.2	-5.0	0.5	2.2	-0.5	-6.4	1.4	-0.8	2.1	-0.2	-2.3
Jul	0.5	-0.1	0.5	1.9	-0.3	0.6	1.7	0.8	-0.6	1.0	1.0
Aug	-0.2	-2.0	0.1	0.4	-0.2	-2.6	0.9	0.6	-0.7	-	-0.9
Sep	0.3	3.4	0.3	-4.5	1.1	4.5	3.2	-0.2	1.6	-0.1	0.1
Oct	-0.1	1.7	-0.7	0.4	1.2	2.3	-1.5	-1.0	-0.9	-0.7	1.2
Nov	-	-3.3	0.7	-1.0	0.2	-5.0	0.6	1.0	0.6	0.9	-2.5
Dec	-0.1	-1.2	0.2	1.6	-2.2	-2.4	3.6	-0.2	1.2	-	-0.3
2015 Jan	-0.1 <sup>†</sup>	3.6 <sup>†</sup>	-0.9 <sup>†</sup>	0.6 <sup>†</sup>	0.2 <sup>†</sup>	5.1	-4.1 <sup>†</sup>	0.1 <sup>†</sup>	-4.0 <sup>†</sup>	0.5	2.3 <sup>†</sup>
Feb	0.3	-2.1	0.3	1.7	2.1	-2.8 <sup>†</sup>	-3.7	-0.8	1.8	0.4 <sup>†</sup>	-0.2
Mar	0.6	3.3	0.4	-1.6	0.6	5.4	1.7	2.3	-0.2	-0.4	0.9
Apr	0.1	4.0	-0.5	-2.7	2.1	6.6	-0.3	-2.7	0.8	-	1.6
May	0.2	4.3	-0.8	1.8	0.2	6.7	-1.5	2.3	-2.1	-2.4	3.6
Jun	-0.1	-2.6	0.2	-0.6	2.0	-3.9	4.3	-3.2	2.0	1.5	-2.2
Jul	-0.4	0.4	-0.8	-	1.0	-0.3	-2.4	1.5	-3.7	-0.6	0.7
Aug	0.9	6.1	0.3	0.5	-2.7	9.1	-1.6	-0.3	2.4	-0.9	4.2
Sep	-	-4.7	1.0	1.0	-0.7	-5.8	0.1	1.8	1.0	-	-2.3
Oct	0.2	1.3	-0.4	1.1	1.8	1.3	-1.8	0.8	-1.8	-0.1	1.7
Nov	-0.8	-1.5	-0.3	-3.3	-0.1	-1.5	2.4	-1.7	-0.2	-0.2	-2.1
Dec	-1.1	-3.9	-0.3	-5.7	1.7	-4.2	0.2	0.4	1.2	-1.8	-4.7
2016 Jan	0.3	-5.0	0.7	4.3	1.1	-6.3	1.0	-1.5	1.0	2.4	-1.7
<b>Percentage change, latest 3 months on same 3 months a year ago<sup>2</sup></b>											
2013 Nov	2.1	9.8	0.6	-2.4	7.7	7.8	-1.7	0.1	0.7	1.9	3.7
Dec	1.7	5.9	1.0	-3.8	6.9	2.9	-2.3	1.3	-0.3	2.6	1.3
2014 Jan	1.4	1.2	1.3	-3.3	7.3	-2.1	-0.5	0.4	-0.3	4.3	-1.6
Feb	1.7	2.3	2.1	-7.2	7.2	1.4	2.2	0.9	0.5	4.8	-2.1
Mar	1.8	3.7	2.6	-10.5	7.4	4.4	3.4	0.6	1.4	5.5	-3.0
Apr	2.1	5.4	3.2	-13.2	6.0	7.1	4.2	2.0	1.8	5.6	-3.2
May	1.9	4.9	3.0	-12.0	5.0	4.8	2.9	0.8	2.1	6.3	-3.6
Jun	1.4	1.2	2.7	-7.9	1.9	0.1	3.4	-0.5	2.9	6.0	-4.0
Jul	1.1	-1.0	2.3	-2.8	-1.0	-2.6	4.3	-1.4	3.0	5.7	-3.3
Aug	1.0	-4.0	2.5	0.6	-3.1	-6.3	4.8	-0.2	2.8	5.2	-3.8
Sep	1.1	-4.4	2.8	-0.1	-3.1	-7.2	7.0	0.7	3.0	5.1	-4.2
Oct	0.9	-3.3	2.6	-1.6	-2.6	-5.6	7.8	1.2	2.9	3.5	-3.6
Nov	1.0	-1.8	2.6	-5.2	-1.6	-3.5	8.8	1.3	3.5	2.9	-3.8
Dec	0.9	-2.4	2.7	-4.1	-2.4	-4.6	9.9	1.1	4.3	2.8	-4.1
2015 Jan	0.9	-1.2	2.4	-3.3 <sup>†</sup>	-3.3 <sup>†</sup>	-3.6 <sup>†</sup>	7.9 <sup>†</sup>	2.2	2.9 <sup>†</sup>	2.7 <sup>†</sup>	-3.3
Feb	0.6 <sup>†</sup>	-2.5 <sup>†</sup>	1.5 <sup>†</sup>	1.7	-3.7	-6.1	5.2	0.9 <sup>†</sup>	1.6	2.7	-2.2 <sup>†</sup>
Mar	0.8	-0.5	1.0	3.2	-2.1	-3.0	2.0	1.4	-0.2	2.2	-
Apr	0.7	0.1	0.5	3.8	0.7	-1.1	0.9	-0.6	0.2	1.9	0.8
May	1.1	3.9	0.3	1.8	3.0	6.3	1.4	0.2	-0.2	0.5	2.9
Jun	1.3	6.8	-0.1	-0.2	5.1	11.3	2.0	-0.7	-0.4	0.2	4.3
Jul	1.2	8.1	-0.4	-1.9	6.5	12.9	2.1	-0.1	-1.6	-0.4	4.5
Aug	1.2	12.2	-0.8	-3.3	7.0	18.0	0.9	-1.0	-1.6	-0.7	6.2
Sep	1.2	12.3	-1.0	-2.1	5.9	18.0	-2.3	-0.3	-1.9	-1.5	7.0
Oct	1.5	12.1	-0.6	-	4.6	17.9	-4.2	0.7	-1.3	-1.6	8.1
Nov	1.3	9.6	-0.6	1.3	4.2	14.8	-4.7	1.1	-2.1	-1.7	7.5
Dec	0.8	9.2	-1.0	-1.7	5.7	15.2	-5.3	1.0	-2.6	-2.5	6.3
2016 Jan	0.3	5.8	-1.0	-3.8	7.3	11.7	-4.1	-0.3	-1.3	-2.8	3.4

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 2012 = 100

Section	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months<sup>2</sup></b>											
2013 Nov	0.3	-0.4	0.2	2.3	0.1	-0.3	-0.4	-1.3	-0.2	2.3	-0.2
2013 Dec	0.2	-1.4	0.3	1.5	0.4	-2.6	-0.3	-0.7	-0.6	2.1	-1.0
2014 Jan	-	-2.9	0.4	0.7	0.6	-4.1	1.4	-0.8	-	1.5	-1.4
2014 Feb	0.3	-0.5	1.0	-4.9	1.3	-	2.9	0.3	1.0	1.1	-1.8
2014 Mar	0.4	-0.6	1.4	-5.3	-	-0.3	3.9	0.2	2.5	1.6	-2.7
2014 Apr	0.8	2.1	1.8	-6.2	-1.5	2.8	2.4	2.6	2.2	1.2	-1.9
2014 May	0.4	0.7	1.0	-1.6	-3.2	-0.8	0.7	1.4	1.3	1.4	-1.2
2014 Jun	0.2	0.3	0.6	1.0	-3.0	-1.8	-	1.1	0.8	0.7	-0.5
2014 Jul	-0.1	-1.5	-0.2	4.7	-2.2	-3.5	-0.4	-0.9	0.3	0.5	0.1
2014 Aug	-	-3.9	0.2	5.1	-1.2	-5.2	1.5	-0.5	0.6	0.4	-0.6
2014 Sep	0.2	-2.6	0.5	2.9	-0.5	-2.8	3.2	0.1	0.3	0.6	-0.2
2014 Oct	0.3	-1.1	0.6	-0.5	0.5	-0.7	4.1	0.4	0.3	0.3	-0.5
2014 Nov	0.3	2.0	0.3	-3.7	1.6	2.7	3.5	0.1	0.5	0.1	-0.2
2014 Dec	-	0.6	0.1	-2.6	1.2	0.1	2.5	-0.3	0.7	-0.2	-0.8
2015 Jan	-	-0.7 <sup>T</sup>	0.2	-1.0 <sup>T</sup>	-0.1 <sup>T</sup>	-2.1 <sup>T</sup>	1.6 <sup>T</sup>	0.2	- <sup>T</sup>	0.6	-1.1
2015 Feb	-0.1 <sup>T</sup>	-1.2	-	2.0	-0.9	-2.7	-0.6	-0.1 <sup>T</sup>	-0.8	0.8 <sup>T</sup>	-0.1
2015 Mar	0.2	1.3	-0.2 <sup>T</sup>	1.9	0.4	1.4	-3.6	0.5	-1.9	0.9	1.4
2015 Apr	0.7	3.4	-0.1	0.6	2.6	5.5	-4.3	-0.2	-0.4	0.4	2.4
2015 May	0.9	7.4	-0.2	-1.5	3.5	12.3	-2.9	0.7	-0.5	-0.8	3.8 <sup>T</sup>
2015 Jun	0.7	7.6	-0.5	-2.3	4.0	12.7	-	-1.0	0.6	-1.2	3.8
2015 Jul	0.3	6.5	-1.1	-1.0	3.5	10.1	0.9	-0.4	-1.5	-1.7	3.7
2015 Aug	0.1	3.8	-0.9	-0.1	2.6	5.2	1.0	-1.7	-0.8	-0.8	2.6
2015 Sep	0.2	2.4	-0.4	0.9	0.3	3.0	-1.1	0.5	-1.2	-1.0	2.5
2015 Oct	0.6	2.6	0.4	1.4	-1.3	3.7	-2.3	1.1	0.6	-0.9	2.9
2015 Nov	0.3	-0.4	0.6	0.9	-1.1	-	-2.2	2.2	0.1	-1.0	1.0
2015 Dec	-0.4	-2.2	0.1	-2.2	0.9	-2.3	-0.6	1.0	-0.1	-1.1	-1.5
2016 Jan	-1.3	-6.3	-0.2	-4.7	2.4	-7.3	1.6	-0.8	-	-0.7	-5.4

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

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

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

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2012 = 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	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
2011	102.6	103.5	105.6	111.3	102.0	106.2
2012	100.0	100.0	100.0	100.0	100.0	100.0
2013	98.3	95.5	102.2	98.1	98.9	97.3
2014	102.8	92.1	103.2	90.0	101.4	92.4
2015	102.7 †	89.9 †	103.4 †	91.9 †	106.9 †	93.1 †
2014 Q4	103.9	86.4	103.8	91.7	102.4	91.1
2015 Q1	103.1 †	88.7 †	105.0	89.1 †	107.9 †	92.5 †
Q2	101.5	92.0	103.0 †	83.9	106.3	92.6
Q3	102.8	88.8	102.6	95.3	107.0	93.5
Q4	103.6	90.0	103.2	99.4	106.4	93.9
2014 Nov	103.5	87.7	104.3	90.7	103.8	92.1
Dec	104.6	84.6	102.3	93.4	101.9	92.3
2015 Jan	103.4 †	86.1 †	105.9 †	90.0 †	106.8 †	91.5 †
Feb	103.2	89.2	104.5	92.1	109.0	89.7
Mar	102.6	90.9	104.4	85.2	107.8	96.5
Apr	101.4	90.2	104.1	84.0	109.4	90.8
May	101.8	92.6	102.7	84.5	104.2	98.5
Jun	101.4	93.3	102.1	83.2	105.4	88.6
Jul	101.9	91.0	101.8	94.9	106.9	93.4
Aug	102.7	85.0	102.3	94.4	106.7	92.5
Sep	103.7	90.4	103.7	96.5	107.3	94.5
Oct	103.7	91.5	102.8	101.9	106.8	96.9
Nov	103.5	89.7	104.5	101.2	107.8	91.8
Dec	103.6	88.9	102.4	95.1	104.7	93.0
2016 Jan	103.1	90.9	104.4	91.2	106.1	87.6
<b>Percentage change, latest year on previous year</b>						
2011	6.5	1.3	-5.6	1.4	6.6	-13.5
2012	-2.5	-3.4	-5.3	-10.1	-2.0	-5.8
2013	-1.7	-4.5	2.2	-1.9	-1.1	-2.7
2014	4.6	-3.6	0.9	-8.3	2.6	-5.1
2015	-	-2.4 †	0.3 †	2.2 †	5.4 †	0.8 †
<b>Percentage change, latest month on same month a year ago</b>						
2013 Nov	-0.8	0.4	2.2	3.9	1.4	-1.3
Dec	0.6	-4.6	7.0	18.5	-0.6	2.3
2014 Jan	1.9	-0.7	2.9	-7.9	6.2	-11.2
Feb	3.9	2.0	1.4	-10.7	3.2	-0.2
Mar	5.4	1.6	-4.7	-7.0	2.1	0.3
Apr	6.8	2.5	-0.1	-9.3	4.1	-4.0
May	1.5	8.4	-0.1	-5.7	1.9	-10.3
Jun	2.7	-3.5	-0.6	-16.3	-0.5	-9.8
Jul	1.8	-6.1	0.4	-12.3	5.2	-1.9
Aug	4.8	-8.9	3.0	-11.8	-0.8	3.6
Sep	6.5	-6.4	2.3	-4.8	2.8	-7.7
Oct	7.5	-10.8	3.5	1.5	2.1	-9.8
Nov	6.3	-10.3	3.6	-2.7	3.8	-2.3
Dec	6.3	-10.0	-0.7	-10.4	1.1	-6.3
2015 Jan	2.8 †	-11.5 †	3.3 †	-2.7 †	4.4 †	7.3 †
Feb	0.9	-7.5	1.3	4.8	9.2	-5.7
Mar	0.2	-4.5	3.9	-7.4	6.5	2.2
Apr	-1.4	-5.6	2.5	-8.3	7.9	-6.4
May	0.1	-8.7	-0.1	-6.4	2.6	7.2
Jun	-0.9	1.3	-0.7	-3.6	5.7	-2.3
Jul	-1.1	2.1	-1.0	9.1	4.8	-0.6
Aug	-0.7	-4.8	-2.8	7.5	7.8	-1.9
Sep	0.6	0.7	-1.1	8.5	4.5	2.1
Oct	-	5.3	-2.0	11.9	5.1	9.0
Nov	-	2.3	0.2	11.6	3.9	-0.3
Dec	-0.9	5.2	0.1	1.9	2.7	0.7
2016 Jan	-0.3	5.6	-1.5	1.2	-0.7	-4.3

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

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

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	104.3	97.2	99.5	90.2	98.9	95.9	106.8
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	97.2	97.1	98.0	95.3	88.1	107.6	104.4
2014	109.7	99.2	101.9	92.5	92.2	110.6	109.7
2015	106.8 †	99.3 †	99.1 †	92.7 †	80.0 †	117.9 †	108.5 †
2014 Q4	110.8	99.5	105.3	92.2	89.5	113.0	110.7
2015 Q1	107.8 †	102.4 †	98.8 †	93.1 †	83.2 †	115.3 †	110.6 †
Q2	107.0	101.0	100.3	93.4	81.4	117.6	110.0
Q3	106.2	97.7	99.2	92.1	78.7	118.8	106.9
Q4	106.4	96.2	97.9	92.2	76.6	120.0	106.5
2014 Nov	109.9	100.5	103.0	93.5	88.4	113.1	112.6
Dec	111.4	99.4	110.2	94.4	89.2	114.1	108.5
2015 Jan	107.6 †	102.1 †	99.5 †	91.7 †	82.5 †	114.0 †	109.8 †
Feb	107.6	103.0	97.7	93.4	84.2	116.1	109.7
Mar	108.3	102.0	99.1	94.1	83.0	115.7	112.1
Apr	108.0	102.1	99.5	94.3	84.8	116.2	111.7
May	106.2	97.7	98.0	92.4	79.6	118.5	108.4
Jun	106.7	103.2	103.5	93.5	79.7	118.0	109.9
Jul	106.9	97.2	99.1	91.0	78.1	115.9	106.9
Aug	105.0	98.9	99.3	91.2	78.6	120.8	104.7
Sep	106.5	96.9	99.2	94.3	79.3	119.8	109.0
Oct	106.7	97.1	97.7	93.3	76.5	121.3	103.0
Nov	106.2	96.2	97.2	92.3	75.9	119.5	108.3
Dec	106.4	95.4	99.0	91.1	77.4	119.2	108.2
2016 Jan	109.4	98.5	99.5	90.3	77.2	119.6	113.4
<b>Percentage change, latest year on previous year</b>							
2011	-0.2	4.4	-1.2	-3.8	8.6	10.1	5.4
2012	-4.2	2.9	0.6	10.9	1.1	4.3	-6.3
2013	-2.8	-2.9	-2.0	-4.7	-11.9	7.6	4.4
2014	12.9	2.1	4.0	-3.0	4.6	2.8	5.1
2015	-2.6 †	0.1 †	-2.8 †	0.2 †	-13.3 †	6.6 †	-1.1 †
<b>Percentage change, latest month on same month a year ago</b>							
2013 Nov	1.9	2.0	-5.3	0.1	-11.2	8.9	6.4
Dec	3.2	4.1	-5.8	-5.1	-10.3	-0.5	8.0
2014 Jan	15.8	4.1	-3.1	-2.5	7.7	1.2	4.7
Feb	13.6	3.7	3.5	-4.7	8.7	2.1	2.7
Mar	14.2	-0.6	-1.6	-0.4	1.1	2.5	6.2
Apr	18.9	1.8	-0.2	-2.2	8.2	4.8	6.2
May	14.6	4.6	1.3	-7.6	12.3	1.8	6.1
Jun	11.9	5.2	-1.2	-2.4	5.2	3.9	6.1
Jul	12.7	3.8	6.0	-1.2	6.0	2.2	5.2
Aug	13.4	4.1	3.0	-6.4	4.7	-0.8	7.6
Sep	12.1	0.6	11.0	-2.9	2.8	1.1	2.8
Oct	10.6	-1.3	8.8	-6.1	0.5	1.1	5.2
Nov	8.3	0.8	7.4	-0.6	0.8	3.5	8.0
Dec	9.9	-1.0	14.6	1.7	-1.4	10.2	0.5
2015 Jan	0.1 †	2.5 †	-2.3 †	-1.2 †	-10.6 †	7.0 †	0.3 †
Feb	-0.1	3.7	-1.7	2.4	-10.3	7.1	1.5
Mar	-	3.8	-0.6	-0.1	-11.6	5.2	4.1
Apr	-2.6	3.1	-2.6	1.7	-9.1	4.9	2.5
May	-2.5	0.5	-0.5	2.0	-15.2	9.1	0.9
Jun	-1.9	3.8	5.7	-2.9	-15.1	4.4	0.8
Jul	-3.2	-0.6	-1.6	-3.0	-17.1	3.8	-3.0
Aug	-5.8	-2.2	-1.1	1.8	-13.6	11.7	-7.7
Sep	-3.5	-2.9	-7.1	2.1	-13.7	7.6	-0.5
Oct	-4.0	-1.6	-4.7	5.2	-15.8	8.5	-7.1
Nov	-3.4	-4.2	-5.7	-1.3	-14.1	5.7	-3.9
Dec	-4.5	-4.1	-10.2	-3.5	-13.2	4.5	-0.3
2016 Jan	1.7	-3.5	-	-1.6	-6.5	4.8	3.3

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

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



# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2012 = 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	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest month on previous month</b>						
2013 Nov	1.0	0.4	-0.6	4.0	0.5	-4.3
2013 Dec	1.0	-3.9	2.2	11.7	0.9	4.5
2014 Jan	2.2	3.5	-0.4	-11.1	1.4	-13.5
2014 Feb	1.7	-0.7	0.6	-5.0	-2.5	11.6
2014 Mar	0.2	-1.4	-2.5	4.7	1.4	-0.8
2014 Apr	0.4	0.4	1.1	-0.5	0.2	2.8
2014 May	-1.2	6.1	1.2	-1.5	0.1	-5.3
2014 Jun	0.6	-9.2	-0.1	-4.3	-1.8	-1.3
2014 Jul	0.8	-3.2	0.1	0.8	2.3	3.7
2014 Aug	0.3	0.2	2.4	0.9	-2.9	0.4
2014 Sep	-0.3	0.5	-0.4	1.3	3.7	-1.9
2014 Oct	0.6	-3.2	-	2.4	-1.1	-4.0
2014 Nov	-0.2	1.0	-0.5	-0.4	2.2	3.6
2014 Dec	1.0	-3.6	-1.9	2.9	-1.8	0.2
2015 Jan	-1.1 <sup>T</sup>	1.8 <sup>T</sup>	3.6 <sup>T</sup>	-3.6 <sup>T</sup>	4.8 <sup>T</sup>	-0.9 <sup>T</sup>
2015 Feb	-0.2	3.7	-1.4	2.3	2.0	-2.0
2015 Mar	-0.5	1.9	-0.1	-7.5	-1.1	7.6
2015 Apr	-1.1	-0.8	-0.3	-1.4	1.5	-5.8
2015 May	0.3	2.7	-1.4	0.6	-4.8	8.4
2015 Jun	-0.4	0.7	-0.7	-1.5	1.1	-10.0
2015 Jul	0.5	-2.5	-0.2	14.1	1.4	5.4
2015 Aug	0.8	-6.6	0.5	-0.6	-0.2	-1.0
2015 Sep	0.9	6.3	1.3	2.3	0.6	2.1
2015 Oct	-	1.2	-0.9	5.5	-0.6	2.6
2015 Nov	-0.2	-1.9	1.7	-0.6	1.0	-5.3
2015 Dec	0.2	-0.9	-2.1	-6.0	-2.9	1.3
2016 Jan	-0.5	2.2	1.9	-4.2	1.3	-5.9
<b>Percentage change, latest 3 months on same 3 months a year ago</b>						
2013 Nov	-2.0	-2.1	3.3	3.2	1.4	-0.2
2013 Dec	-0.7	-2.4	4.0	11.5	0.6	1.1
2014 Jan	0.6	-1.6	4.0	4.3	2.3	-3.4
2014 Feb	2.1	-1.1	3.7	-0.8	2.9	-3.0
2014 Mar	3.7	1.0	-0.2	-8.5	3.8	-3.7
2014 Apr	5.3	2.0	-1.1	-9.0	3.1	-1.4
2014 May	4.5	4.2	-1.7	-7.3	2.7	-4.8
2014 Jun	3.6	2.4	-0.3	-10.5	1.8	-8.0
2014 Jul	2.0	-0.5	-0.1	-11.6	2.2	-7.5
2014 Aug	3.1	-6.2	0.9	-13.5	1.3	-2.9
2014 Sep	4.3	-7.1	1.9	-9.8	2.4	-2.2
2014 Oct	6.3	-8.7	2.9	-5.3	1.4	-4.9
2014 Nov	6.8	-9.2	3.1	-2.1	2.9	-6.7
2014 Dec	6.7	-10.4	2.1	-4.2	2.3	-6.2
2015 Jan	5.1	-10.6 <sup>T</sup>	2.1	-5.5 <sup>T</sup>	3.1	-0.8
2015 Feb	3.3 <sup>T</sup>	-9.7	1.3 <sup>T</sup>	-3.2	4.9 <sup>T</sup>	-1.9 <sup>T</sup>
2015 Mar	1.3	-7.9	2.8	-1.9	6.7	1.0
2015 Apr	-0.1	-5.9	2.6	-3.7	7.8	-3.3
2015 May	-0.3	-6.3	2.1	-7.4	5.6	0.9
2015 Jun	-0.7	-4.5	0.6	-6.1	5.4	-0.6
2015 Jul	-0.6	-2.0	-0.6	-0.4	4.3	1.4
2015 Aug	-0.9	-0.5	-1.5	4.3	6.0	-1.6
2015 Sep	-0.4	-0.7	-1.6	8.4	5.7	-0.2
2015 Oct	-0.1	0.3	-2.0	9.3	5.8	2.9
2015 Nov	0.2	2.7	-1.0	10.7	4.5	3.5
2015 Dec	-0.3	4.2	-0.6	8.4	3.9	3.1
2016 Jan	-0.4	4.3	-0.4	4.9	1.9	-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>T</sup> indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised.

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair	
	CG	CH	CI	CJ	CK	CL	CM	
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9	
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z	
<b>Percentage change, latest month on previous month</b>								
2013	Nov	1.0	-0.4	1.9	-0.4	-3.0	-1.1	-1.1
	Dec	-0.1	0.7	0.2	-1.3	3.2	-5.2	3.5
2014	Jan	6.0	-0.8	5.9	-	2.0	2.9	1.4
	Feb	0.1	-0.3	-2.4	-1.7	1.7	1.7	-1.3
	Mar	0.6	-1.0	0.2	3.3	0.1	1.4	-0.3
	Apr	2.3	0.8	2.5	-1.6	-0.8	0.7	1.2
	May	-1.6	-1.8	-3.6	-2.3	0.6	-1.9	-1.5
	Jun	-0.2	2.2	-0.5	6.3	-	4.1	1.5
	Jul	1.5	-1.6	2.8	-2.6	0.4	-1.3	1.1
	Aug	1.0	3.4	-0.3	-4.5	-3.4	-3.1	3.0
	Sep	-1.0	-1.3	6.4	3.3	1.0	2.9	-3.5
	Oct	0.6	-1.1	-4.1	-4.0	-1.2	0.4	1.3
	Nov	-1.1	1.8	0.5	5.4	-2.7	1.2	1.5
	Dec	1.4	-1.0	7.0	1.0	0.9	0.9	-3.7
2015	Jan	-3.5 <sup>†</sup>	2.7 <sup>†</sup>	-9.7 <sup>†</sup>	-2.9 <sup>†</sup>	-7.5 <sup>†</sup>	- <sup>†</sup>	1.2 <sup>†</sup>
	Feb	-	0.8	-1.9	1.8	2.0	1.8	-0.1
	Mar	0.7	-0.9	1.4	0.7	-1.3	-0.3	2.2
	Apr	-0.3	0.1	0.4	0.2	2.1	0.5	-0.3
	May	-1.6	-4.3	-1.5	-2.0	-6.1	2.0	-3.0
	Jun	0.4	5.6	5.7	1.2	0.1	-0.4	1.4
	Jul	0.2	-5.8	-4.2	-2.7	-2.0	-1.8	-2.7
	Aug	-1.7	1.8	0.2	0.2	0.7	4.3	-2.0
	Sep	1.4	-2.0	-0.1	3.5	0.9	-0.9	4.1
	Oct	0.1	0.2	-1.5	-1.1	-3.6	1.2	-5.5
	Nov	-0.5	-0.9	-0.6	-1.1	-0.7	-1.4	5.1
	Dec	0.2	-0.9	1.8	-1.2	2.0	-0.3	-0.1
2016	Jan	2.8	3.3	0.6	-0.9	-0.3	0.3	4.8
<b>Percentage change, latest 3 months on same 3 months a year ago</b>								
2013	Nov	1.2	-0.6	-6.3	-4.2	-7.1	9.8	6.1
	Dec	2.6	1.7	-6.8	-3.8	-9.0	6.9	6.7
2014	Jan	6.8	3.4	-4.7	-2.5	-5.2	3.1	6.4
	Feb	10.7	3.9	-1.9	-4.1	1.3	0.9	5.1
	Mar	14.5	2.4	-0.5	-2.5	5.7	1.9	4.5
	Apr	15.5	1.6	0.5	-2.5	5.9	3.1	5.0
	May	15.9	1.9	-0.2	-3.5	7.0	3.0	6.2
	Jun	15.1	3.9	-	-4.1	8.5	3.5	6.1
	Jul	13.0	4.6	2.0	-3.8	7.7	2.6	5.8
	Aug	12.7	4.4	2.6	-3.3	5.3	1.8	6.3
	Sep	12.7	2.8	6.7	-3.5	4.5	0.9	5.2
	Oct	12.0	1.1	7.6	-5.1	2.6	0.5	5.2
	Nov	10.3	-	9.1	-3.2	1.4	1.9	5.3
	Dec	9.6	-0.5	10.3	-1.7	-	4.8	4.5
2015	Jan	6.0 <sup>†</sup>	0.8 <sup>†</sup>	6.4 <sup>†</sup>	- <sup>†</sup>	-3.8	6.9 <sup>†</sup>	2.9 <sup>†</sup>
	Feb	3.2	1.8	3.4	1.0	-7.5 <sup>†</sup>	8.1	0.8
	Mar	-	3.4	-1.5	0.3	-10.8	6.4	2.0
	Apr	-0.9	3.5	-1.6	1.3	-10.3	5.7	2.7
	May	-1.7	2.5	-1.2	1.2	-12.0	6.4	2.5
	Jun	-2.3	2.5	0.8	0.2	-13.1	6.1	1.4
	Jul	-2.6	1.2	1.2	-1.3	-15.8	5.7	-0.5
	Aug	-3.7	0.3	0.9	-1.4	-15.3	6.6	-3.4
	Sep	-4.2	-1.9	-3.4	0.3	-14.8	7.7	-3.8
	Oct	-4.4	-2.2	-4.4	3.0	-14.4	9.3	-5.1
	Nov	-3.6	-2.9	-5.9	1.9	-14.5	7.3	-3.8
	Dec	-4.0	-3.3	-6.9	-	-14.4	6.2	-3.8
2016	Jan	-2.1	-3.9	-5.5	-2.1	-11.4	5.0	-0.3

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

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

# IOP5 Output of the Production Industries

continued

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

Seasonally adjusted 2012 = 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	109.7	22.5	51.3	19.4	38.1	60.6	
	K22B	K22P	K22T	K22X	K22Z	K239	
<b>Percentage change, latest 3 months on previous 3 months</b>							
2013	Nov	-3.0	1.0	-1.1	-8.4	0.8	2.0
	Dec	-1.5	0.1	-0.7	-1.8	1.2	1.5
2014	Jan	1.5	-0.8	-	2.6	1.3	-4.1
	Feb	3.6	-1.2	1.3	3.0	1.2	-4.9
	Mar	4.4	-0.1	0.4	-5.1	1.0	-5.7
	Apr	3.7	-0.6	-0.3	-6.4	-0.2	3.0
	May	1.9	1.6	-1.2	-3.8	0.4	1.6
	Jun	0.5	0.1	0.3	-1.6	-0.2	1.8
	Jul	-0.2	-1.6	1.0	-2.9	0.3	-3.5
	Aug	0.6	-7.4	1.9	-4.6	-1.1	-1.5
	Sep	1.0	-7.2	1.9	-1.6	0.3	0.5
	Oct	1.1	-5.9	2.1	1.6	-	-0.2
	Nov	0.5	-2.3	1.0	3.7	2.4	-1.9
	Dec	0.7	-3.4	-0.5	4.3	1.2	-2.7
2015	Jan	0.4	-2.8 <sup>†</sup>	-0.8	2.4 <sup>†</sup>	3.1 <sup>†</sup>	-
	Feb	0.3 <sup>†</sup>	-1.7	-0.4	1.8	3.1	- <sup>†</sup>
	Mar	-0.8	2.7	1.1 <sup>†</sup>	-2.9	5.3	1.5
	Apr	-1.4	4.6	0.2	-4.7	4.4	0.4
	May	-1.7	5.3	-0.5	-8.0	1.1	4.5
	Jun	-1.5	3.7	-1.9	-5.9	-1.4	0.1
	Jul	-0.7	2.4	-2.1	0.5	-3.0	1.3
	Aug	0.1	-1.7	-1.6	7.4	-0.8	-3.9
	Sep	1.2	-3.5	-0.3	13.6	0.6	0.9
	Oct	1.6	-3.6	0.7	11.5	1.4	1.2
	Nov	1.6	0.9	1.6	10.0	0.9	3.2
	Dec	0.8	1.4	0.6	4.3	-0.5	0.5
2016	Jan	-	1.0	0.8	-1.8	-0.7	-4.1

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

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

# IOP5 Output of the Production Industries

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

continued

Seasonally adjusted 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest 3 months on previous 3 months</b>							
2013							
Nov	2.3	4.6	-1.8	-1.9	1.0	0.8	1.1
Dec	2.9	3.3	-0.9	-1.5	1.3	-1.5	0.3
2014							
Jan	4.4	1.1	2.1	-1.9	1.4	-3.1	1.3
Feb	5.3	0.1	3.9	-2.4	3.4	-3.4	2.9
Mar	6.6	-1.0	5.1	-1.1	4.3	0.5	2.4
Apr	5.3	-1.0	2.5	-0.6	3.9	3.1	0.9
May	3.7	-1.5	1.0	0.2	1.6	3.4	-0.4
Jun	1.6	-0.5	-0.8	0.5	0.3	2.3	-
Jul	0.5	-0.7	-1.3	0.9	0.3	1.3	0.6
Aug	0.8	1.3	-0.4	0.7	-0.7	1.1	2.7
Sep	1.2	1.0	3.2	-1.4	-1.4	-0.4	2.4
Oct	1.5	1.8	4.2	-3.6	-2.9	-0.6	2.3
Nov	0.2	0.2	4.4	-1.8	-2.8	1.0	0.1
Dec	-	-	2.5	0.3	-3.1	2.4	-0.3
2015							
Jan	-1.2 <sup>†</sup>	0.8 <sup>†</sup>	1.0 <sup>†</sup>	3.4 <sup>†</sup>	-5.0	3.0	-0.9 <sup>†</sup>
Feb	-1.5	1.8	-1.6	1.8	-5.6 <sup>†</sup>	2.4 <sup>†</sup>	-1.5
Mar	-2.7	2.8	-6.2	0.9	-7.0	2.0	-0.1
Apr	-1.5	1.7	-5.3	0.7	-3.1	2.0	0.8
May	-1.2	-0.8	-3.6	0.4	-3.3	1.8	1.3
Jun	-0.8	-1.3	1.6	0.4	-2.3	2.0	-0.5
Jul	-1.2	-2.9	1.5	-1.7	-5.8	1.3	-2.5
Aug	-1.2	-0.9	1.8	-1.8	-4.5	1.2	-3.2
Sep	-0.7	-3.3	-1.1	-1.3	-3.3	1.0	-2.8
Oct	-0.5	-1.7	-1.5	0.7	-1.3	2.7	-2.6
Nov	0.2	-3.0	-2.6	1.5	-2.0	1.6	-0.4
Dec	0.2	-1.4	-1.3	0.1	-2.6	1.0	-0.4
2016							
Jan	1.2	-1.0	-0.2	-1.8	-1.6	-1.0	4.1

<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.

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

# IOP5R

## Output of the Production Industries

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

Seasonally adjusted 2012 = 100

Section	Broad industry groups					Main industrial groupings					
	Production industries B+C+D+E	Mining and quarrying B	Manufacturing C	Electricity, gas, steam and air conditioning D	Water supply, sewerage and waste management E	Oil and gas extraction 06	Consumer durables MIG-CD	Consumer non-durables MIG-CND	Capital goods MIG-CAG	Intermediate goods MIG-IG	Energy MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	0.2	-0.1	-0.5	0.5	0.2	-0.5	-0.2	-0.3	0.3	-
2014 Q4	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-0.2	-	-0.2	-0.5	-0.1	0.1	-0.9	-0.2	-0.3	-	-
Q2	-0.1	0.1	-	-0.6	0.1	0.1	-0.6	-0.2	-0.3	0.2	-0.1
Q3	-	0.4	-	-0.5	0.3	0.2	-0.3	-0.3	-0.3	0.5	-0.1
Q4	0.2	0.5	-	-0.3	1.8	0.4	-0.5	-0.1	-0.5	0.5	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-0.1	-	-0.1	-0.4	-0.2	0.1	-1.0	-0.1	-0.3	-	-
Feb	-0.2	0.1	-0.1	-0.6	-0.1	0.1	-0.8	-0.1	-0.4	-0.1	-0.1
Mar	-0.1	0.1	-0.2	-0.5	-	0.1	-0.8	-0.2	-0.5	-	-
Apr	-0.1	0.2	-0.2	-0.5	0.1	0.2	-0.8	-0.2	-0.3	0.1	-0.1
May	-0.1	0.1	-0.1	-0.5	0.1	-	-0.5	-0.3	-0.3	0.2	-0.1
Jun	-	0.2	-0.1	-0.5	0.2	0.1	-0.3	-0.3	-0.2	0.3	-
Jul	-	0.3	-0.1	-0.5	0.2	0.2	-0.4	-0.3	-0.3	0.4	-0.1
Aug	-	0.5	-0.1	-0.6	0.3	0.2	-0.3	-0.3	-0.3	0.5	-0.1
Sep	0.1	0.3	-	-0.4	0.5	0.2	-0.3	-0.3	-0.3	0.5	-0.1
Oct	0.2	0.5	0.1	-0.2	0.9	0.3	-0.4	-0.1	-0.3	0.7	0.1
Nov	0.2	0.4	-	-0.3	1.5	0.3	-0.4	-0.1	-0.6	0.6	0.1
Dec	0.2	0.4	-	-0.6	2.8	0.7	-0.7	-0.1	-0.7	0.4	0.1
<b>Percentage change, latest year on previous year</b>											
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	0.3	-0.1	-0.5	0.5	0.2	-0.6	-0.2	-0.4	0.3	-
<b>Percentage change, latest month on same month a year ago</b>											
2013 Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-0.1	-	-0.1	-0.5	-0.2	-	-1.0	-0.1	-0.3	-	-
Feb	-0.1	0.1	-0.1	-0.6	-0.1	0.1	-0.8	-0.1	-0.3	-0.1	-0.1
Mar	-0.1	-	-0.2	-0.4	-	0.1	-0.7	-0.3	-0.4	-	-
Apr	-0.1	0.1	-0.1	-0.6	0.1	0.2	-0.7	-0.2	-0.3	0.1	-
May	-0.1	0.1	-0.1	-0.6	0.1	-	-0.4	-0.3	-0.3	0.2	-0.2
Jun	-	0.2	-0.1	-0.6	0.2	0.2	-0.4	-0.3	-0.2	0.2	-0.1
Jul	-	0.4	-0.1	-0.5	0.2	0.2	-0.4	-0.3	-0.3	0.4	-0.1
Aug	-	0.5	-	-0.6	0.3	0.3	-0.3	-0.3	-0.3	0.5	-0.1
Sep	-	0.3	-0.1	-0.5	0.5	0.2	-0.3	-0.3	-0.3	0.5	-0.1
Oct	0.1	0.5	-	-0.1	0.9	0.3	-0.3	-0.1	-0.4	0.7	0.1
Nov	0.2	0.3	-	-0.3	1.5	0.3	-0.4	-0.1	-0.5	0.6	0.1
Dec	0.2	0.4	-	-0.7	2.6	0.9	-0.6	-0.2	-0.6	0.4	0.1

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

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

Section	Broad industry groups					Main industrial groupings					
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest month on previous month</b>											
2013	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-0.1	0.1	-0.1	-0.5	-0.3	-	-0.9	-0.1	-0.3	-
	Feb	-	0.1	-0.1	-0.1	0.2	0.2	0.1	-	-	-0.1
	Mar	-	-	-0.1	0.1	0.1	-	0.1	-0.2	-0.1	0.1
	Apr	-	0.1	0.1	-0.1	0.1	-	-	0.1	0.1	0.1
	May	-	-0.1	-	-	-	-0.1	0.3	-0.1	-	0.1
	Jun	0.1	0.1	-	-	-	0.1	0.1	-	-	-
	Jul	-	0.2	-	-	-	-	-	-	-0.1	0.1
	Aug	0.1	0.1	-	-0.1	0.1	0.1	0.1	-	-	0.1
	Sep	-	-0.1	-	0.2	0.2	-	-	-	-	-
	Oct	0.1	0.1	-	0.3	0.3	-	-	0.1	-0.1	0.2
	Nov	-	-0.1	-	-0.2	0.6	0.1	-	-	-0.1	-0.1
	Dec	-	0.1	-0.1	-0.3	1.1	0.4	-0.3	-	-0.1	-0.1
<b>Percentage change, latest 3 months on same 3 months a year ago</b>											
2013	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-	-	-	-0.2	-0.1	0.1	-0.4	-	-0.1	0.1
	Feb	-0.1	0.1	-0.1	-0.4	-0.1	0.1	-0.6	-0.1	-0.3	-
	Mar	-0.1	0.1	-0.2	-0.5	-0.1	0.1	-0.8	-0.2	-0.4	-
	Apr	-0.2	0.2	-0.2	-0.5	-	0.1	-0.7	-0.2	-0.3	-0.1
	May	-0.2	0.1	-0.2	-0.5	-	0.1	-0.6	-0.3	-0.3	0.1
	Jun	-	0.2	-0.1	-0.6	0.2	0.1	-0.5	-0.2	-0.3	0.2
	Jul	-	0.2	-0.1	-0.6	0.1	0.2	-0.4	-0.3	-0.3	0.3
	Aug	-0.1	0.4	-	-0.5	0.2	0.2	-0.3	-0.4	-0.2	0.3
	Sep	-	0.4	-0.1	-0.6	0.3	0.3	-0.3	-0.3	-0.3	0.4
	Oct	-	0.5	-	-0.4	0.5	0.3	-0.3	-0.2	-0.3	0.5
	Nov	0.1	0.4	-	-0.3	1.0	0.2	-0.4	-0.1	-0.4	0.6
	Dec	0.2	0.5	-	-0.4	1.7	0.5	-0.5	-0.1	-0.5	0.5

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Section	Broad industry groups						Main industrial groupings				
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Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
<b>Percentage change, latest 3 months on previous 3 months</b>											
2013	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-	-	-	-
2015	Jan	-	0.1	-	-0.2	-0.1	0.1	-0.3	-	-0.1	-
	Feb	-0.1	0.1	-	-0.4	-0.1	0.1	-0.6	-0.1	-0.2	-0.1
	Mar	-0.2	0.1	-0.2	-0.5	-0.1	0.1	-0.9	-0.2	-0.3	-0.1
	Apr	-0.1	0.1	-0.2	-0.4	0.1	0.1	-0.4	-0.1	-0.3	-0.1
	May	-0.1	0.1	-	-0.2	0.2	0.1	-	-0.2	-0.1	0.1
	Jun	-	-	0.1	-0.1	0.2	-	0.3	-0.1	0.1	0.2
	Jul	0.1	0.1	0.1	-	0.2	-0.1	0.4	-0.1	0.1	0.3
	Aug	0.1	0.3	0.1	-	0.1	0.1	0.3	-0.1	0.1	0.3
	Sep	0.1	0.2	-	-	0.2	-	0.2	-0.1	-	0.3
	Oct	0.1	0.2	0.1	0.2	0.4	0.1	0.1	0.1	-0.1	0.2
	Nov	0.1	-	0.1	0.2	0.7	0.1	-	0.2	-0.1	0.2
	Dec	0.1	0.1	0.1	0.2	1.3	0.2	-0.1	0.2	-0.2	0.2

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



Section	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-0.1	-0.3	0.4	0.5	0.4	-0.7
2014 Q4	-	-	-	-	-	-
2015 Q1	-0.2	-0.4	-	1.0	0.3	-0.1
Q2	-0.1	-0.3	0.4	0.6	0.3	-0.7
Q3	-	-0.2	0.6	0.4	0.5	-0.9
Q4	0.1	-0.4	0.8	0.2	0.7	-0.8
2014 Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-0.2	-0.4	-0.1	1.4	0.1	0.2
Feb	-0.2	-0.4	-0.1	0.9	0.3	0.2
Mar	-0.2	-0.4	-0.1	0.7	0.3	-0.4
Apr	-0.1	-0.4	0.3	0.6	0.4	-0.6
May	-0.1	-0.3	0.5	0.6	0.2	-0.7
Jun	-0.1	-0.3	0.5	0.5	0.4	-0.8
Jul	-0.1	-0.2	0.5	0.3	0.4	-1.0
Aug	-0.1	-0.2	0.6	0.4	0.4	-1.0
Sep	-	-0.1	0.7	0.2	0.5	-0.9
Oct	0.2	-	0.9	0.3	0.6	-0.9
Nov	0.1	-0.6	0.8	0.3	1.1	-0.7
Dec	0.1	-0.4	0.9	-0.1	0.6	-0.9

### Percentage change, latest year on previous year

2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-0.3	0.5	0.6	0.4	-0.7

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

2013 Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-0.2	-0.4	-0.1	1.5	0.1	0.2
Feb	-0.2	-0.4	-0.2	1.0	0.3	0.2
Mar	-0.2	-0.4	-	0.7	0.3	-0.5
Apr	-0.1	-0.3	0.3	0.6	0.4	-0.5
May	-0.2	-0.3	0.5	0.6	0.3	-0.8
Jun	-0.2	-0.3	0.4	0.5	0.4	-0.9
Jul	-	-0.2	0.5	0.4	0.4	-1.0
Aug	-	-0.2	0.6	0.4	0.5	-1.0
Sep	-	-0.1	0.7	0.3	0.5	-0.9
Oct	0.2	-	0.9	0.3	0.6	-1.0
Nov	0.2	-0.6	0.8	0.4	1.1	-0.7
Dec	0.1	-0.4	0.8	-	0.6	-1.0

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

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

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	0.1	0.2	-0.7	0.7	-0.1	-0.3	-0.4
2014 Q4	-	-	-	-	-	-	-
2015 Q1	-0.3	0.1	-1.1	0.5	-0.3	0.2	-0.6
Q2	-	0.1	-0.7	0.6	-0.2	0.1	-0.5
Q3	0.1	0.4	-0.5	0.6	-0.1	-0.3	-0.3
Q4	0.6	0.4	-0.7	0.8	-	-1.1	-0.2
2014 Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.3	0.2	-1.3	0.8	-0.1	0.2	-0.6
Feb	-0.2	-0.1	-1.0	0.4	-0.4	0.2	-0.6
Mar	-0.2	-0.1	-1.0	0.4	-0.4	0.1	-0.7
Apr	-0.1	-	-1.0	0.6	-0.3	0.2	-0.7
May	-0.1	0.1	-0.6	0.7	-0.3	-	-0.4
Jun	-0.1	0.3	-0.5	0.6	-0.1	-0.1	-0.3
Jul	-	0.3	-0.6	0.6	-0.1	-	-0.4
Aug	-	0.4	-0.5	0.7	-	-0.4	-0.4
Sep	0.1	0.4	-0.5	0.8	-0.1	-0.3	-0.2
Oct	0.4	0.4	-0.4	1.0	-	-0.7	-0.3
Nov	0.6	0.5	-0.4	0.7	-0.1	-1.0	-0.4
Dec	0.9	0.4	-0.9	0.9	0.2	-1.6	-0.1

### Percentage change, latest year on previous year

2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	0.1	0.2	-0.7	0.7	-0.2	-0.2	-0.4

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

2013 Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.3	0.2	-1.3	0.9	-0.1	0.2	-0.5
Feb	-0.2	-0.2	-1.1	0.4	-0.4	0.2	-0.6
Mar	-0.2	-	-1.1	0.4	-0.4	0.1	-0.6
Apr	-0.1	-	-1.0	0.7	-0.4	0.2	-0.6
May	-	0.1	-0.6	0.8	-0.4	-	-0.4
Jun	-	0.3	-0.5	0.6	-0.1	-0.1	-0.3
Jul	0.1	0.3	-0.5	0.5	-0.1	-0.1	-0.4
Aug	0.1	0.4	-0.4	0.6	-	-0.3	-0.3
Sep	0.2	0.4	-0.4	1.0	-0.1	-0.3	-0.2
Oct	0.3	0.5	-0.5	1.1	-0.1	-0.7	-0.2
Nov	0.5	0.5	-0.4	0.7	-0.1	-0.8	-0.4
Dec	0.9	0.3	-0.8	1.0	0.3	-1.4	-0.1

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

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

Section	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	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239

### Percentage change, latest month on previous month

2013	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2014	Jan	-	-	-	-	-
	Feb	-	-	-	-	-
	Mar	-	-	-	-	-
	Apr	-	-	-	-	-
	May	-	-	-	-	-
	Jun	-	-	-	-	-
	Jul	-	-	-	-	-
	Aug	-	-	-	-	-
	Sep	-	-	-	-	-
	Oct	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2015	Jan	-0.1	-0.4	-0.1	1.5	0.2
	Feb	-	-	-0.1	-0.6	0.1
	Mar	0.1	0.1	0.1	-0.1	-
	Apr	0.1	-	0.3	-	0.1
	May	-0.1	0.1	0.1	-0.1	-0.1
	Jun	-	-	-0.1	-0.1	0.1
	Jul	-	-	0.1	-0.2	-0.1
	Aug	-	-	0.1	-	0.1
	Sep	-	-	-	-0.1	0.1
	Oct	0.2	0.1	0.2	-0.1	-
	Nov	-	-0.6	-0.1	0.2	0.5
	Dec	-	0.2	-	-0.3	-0.4

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

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

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

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

## Output of the Production Industries

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

Seasonally adjusted 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest month on previous month</b>							
2013 Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.4	0.3	-1.2	0.8	-0.1	0.2	-0.5
Feb	0.1	-0.4	0.2	-0.5	-0.4	-	-
Mar	-	0.1	-	-0.1	-	-0.1	-0.1
Apr	0.1	-	-	0.3	0.1	0.1	-
May	-	0.1	0.4	0.1	-	-0.1	0.2
Jun	-	0.1	0.2	-0.1	0.2	-0.1	0.1
Jul	0.1	0.1	-	-0.1	-	-	-0.1
Aug	0.1	0.1	0.1	0.1	0.1	-0.2	0.1
Sep	0.1	-	-	0.2	-0.1	-	0.2
Oct	0.2	-	0.1	0.2	-	-0.4	-0.1
Nov	0.1	0.1	-	-0.3	-	-0.2	-0.1
Dec	0.3	-0.2	-0.6	0.4	0.5	-0.6	0.2
<b>Percentage change, latest 3 months on same 3 months a year ago</b>							
2013 Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-0.1	0.1	-0.5	0.3	-	0.1	-0.1
Feb	-0.2	0.1	-0.8	0.5	-0.2	0.2	-0.3
Mar	-0.2	0.1	-1.1	0.5	-0.3	0.1	-0.5
Apr	-0.2	-0.1	-1.0	0.5	-0.4	0.1	-0.6
May	-0.1	0.1	-0.8	0.6	-0.4	0.1	-0.6
Jun	-	0.2	-0.7	0.7	-0.3	0.1	-0.4
Jul	-	0.2	-0.5	0.7	-0.2	-0.1	-0.4
Aug	-	0.3	-0.5	0.6	-0.1	-0.1	-0.4
Sep	0.1	0.4	-0.5	0.7	-0.1	-0.2	-0.3
Oct	0.2	0.4	-0.5	0.9	-0.1	-0.4	-0.2
Nov	0.4	0.5	-0.5	0.9	-0.1	-0.6	-0.2
Dec	0.5	0.4	-0.5	0.9	-	-1.0	-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.

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	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
<b>Percentage change, latest 3 months on previous 3 months</b>						
2013						
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014						
Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015						
Jan	-	-0.1	-	0.6	0.1	-
Feb	-0.1	-0.3	-	0.9	0.1	0.2
Mar	-0.1	-0.5	-0.1	1.0	0.2	-0.1
Apr	-0.1	-0.3	0.1	0.3	0.3	-0.3
May	-	-0.1	0.3	-0.1	0.1	-0.7
Jun	0.1	0.1	0.5	-0.5	0.1	-0.7
Jul	0.1	0.1	0.4	-0.3	-	-0.6
Aug	0.1	0.1	0.3	-0.4	0.1	-0.3
Sep	-	0.2	0.2	-0.3	0.1	-0.3
Oct	0.1	0.2	0.2	-0.2	0.2	-0.1
Nov	0.2	-	0.3	-0.1	0.3	0.2
Dec	0.2	-0.2	0.2	-0.2	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 2012 = 100

Section	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
<b>Percentage change, latest 3 months on previous 3 months</b>							
2013							
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014							
Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015							
Jan	-0.1	0.1	-0.4	0.4	-	-	-0.2
Feb	-0.2	-	-0.8	0.4	-0.2	0.1	-0.3
Mar	-0.2	-	-1.1	0.5	-0.4	0.1	-0.5
Apr	-	-0.1	-0.6	0.1	-0.4	0.1	-0.4
May	0.1	-	-0.2	0.1	-0.2	-	-0.2
Jun	0.1	0.1	0.5	0.2	-	-0.1	0.1
Jul	0.2	0.3	0.5	0.2	0.2	-0.1	0.3
Aug	0.1	0.2	0.4	0.1	0.3	-0.3	0.2
Sep	0.2	0.3	0.2	0.1	0.2	-0.3	0.1
Oct	0.2	0.2	-	0.2	0.1	-0.3	0.1
Nov	0.3	0.2	-	0.2	-0.1	-0.5	0.1
Dec	0.5	0.1	-0.1	0.3	0.2	-0.7	-

<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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