

Index of Production, November 2015



Coverage: UK

Date: 12 January 2016

Geographical Area: UK and GB

Theme: **Economy**

Main points

- Total production output is estimated to have increased by 0.9% in November 2015 compared with the same month a year ago. There were increases in 3 of its 4 main sectors, with the largest contribution coming from mining & quarrying, which increased by 10.5%.
- Manufacturing output decreased by 1.2% in November 2015 compared with November 2014. The largest contribution to the decrease came from the manufacture of machinery & equipment not elsewhere classified, which decreased by 13.7%.
- Total production output is estimated to have decreased by 0.7% between October 2015 and November 2015. There were decreases in all of the main sectors, with manufacturing, mining & quarrying and electricity & gas having the largest contributions to the decrease.
- Manufacturing output decreased by 0.4% in November 2015 compared with October 2015. The largest contribution to the decrease came from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which decreased by 4.9%.
- In the 3 months to November 2015, total production and manufacturing output increased by 0.2% and 0.5% respectively on the previous 3 months.
- In the 3 months to November 2015, production and manufacturing were 9.1% and 6.1% respectively below their values reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.
- In this release, the only period open for revision was October 2015, in line with the National Accounts revisions policy.

Index of Production headline figures

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

IoP values are referenced to 2012 so that the average for 2012 is equal to 100. Therefore, currently an index value of 110 would indicate that output is 10% higher than the average for 2012. The index estimates are mainly based on a monthly business survey (MBS) of approximately 6,000 businesses, covering all the territory of the UK without geographical breakdown. The total IoP estimate and various breakdowns are widely used in private and public sector institutions. Care should be taken when using the month-on-month growth rates due to their volatility. All figures contained within this release are 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 August 2013 to November 2015.

Table 1: Index of Production main figures, November 2015, UK

	Index number, 2012=100	Most recent month on a year earlier	Most recent 3 months on a year earlier	Most recent month on previous month	Most recent 3 months on previous 3 months
Production	101.7	0.9	1.4	-0.7	0.2
Manufacturing	101.0	-1.2	-0.6	-0.4	0.5

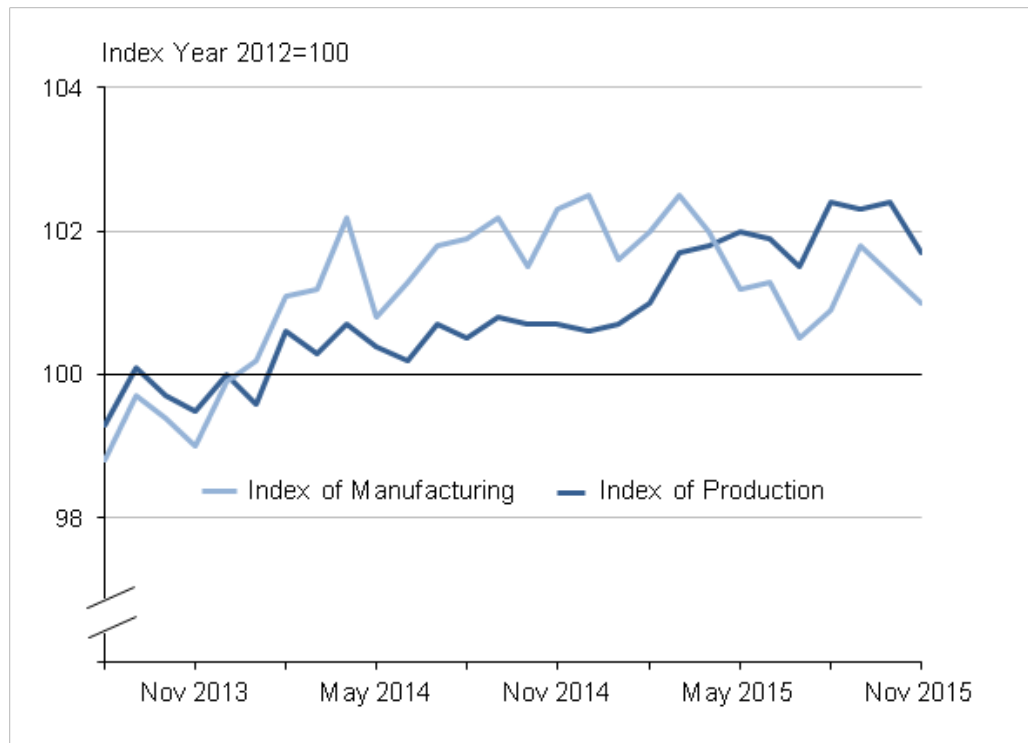
Table source: Office for National Statistics

Download table

[XLS](#) [XLS format](#)

(17 Kb)

Figure 1: Seasonally adjusted production and manufacturing, August 2013 to November 2015, UK



Source: Office for National Statistics

Download chart

[XLS](#) [XLS format](#)

(25.5 Kb)

Quality of the Index of Production

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

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

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

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

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

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

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

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

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

Economic context

After a large rise in August 2015, production output remained relatively stable until October 2015, before experiencing a decline in November 2015. This followed positive quarterly growth in Quarter 1 (Jan to Mar) 2015, Quarter 2 (Apr to June) 2015 and positive annual growth in 2014 (the first year seeing expansion since 2010). Overall the level of production output in the latest month is also higher than November 2014 by 0.9%.

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

Figure 2 shows that between Quarter 1 (Jan to Mar) 1997 and Quarter 3 (July to Sep) 2015 production and its main components followed different paths. Over this period electricity, gas, steam & air conditioning and water & waste management grew at compound average growth rates of 0.2% and 0.5% per quarter while production as a whole contracted at a compound average growth rate of -0.1% per quarter. Over the same period manufacturing was relatively flat while mining & quarrying contracted faster than production at a compound average growth rate of -1.0% per quarter.

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

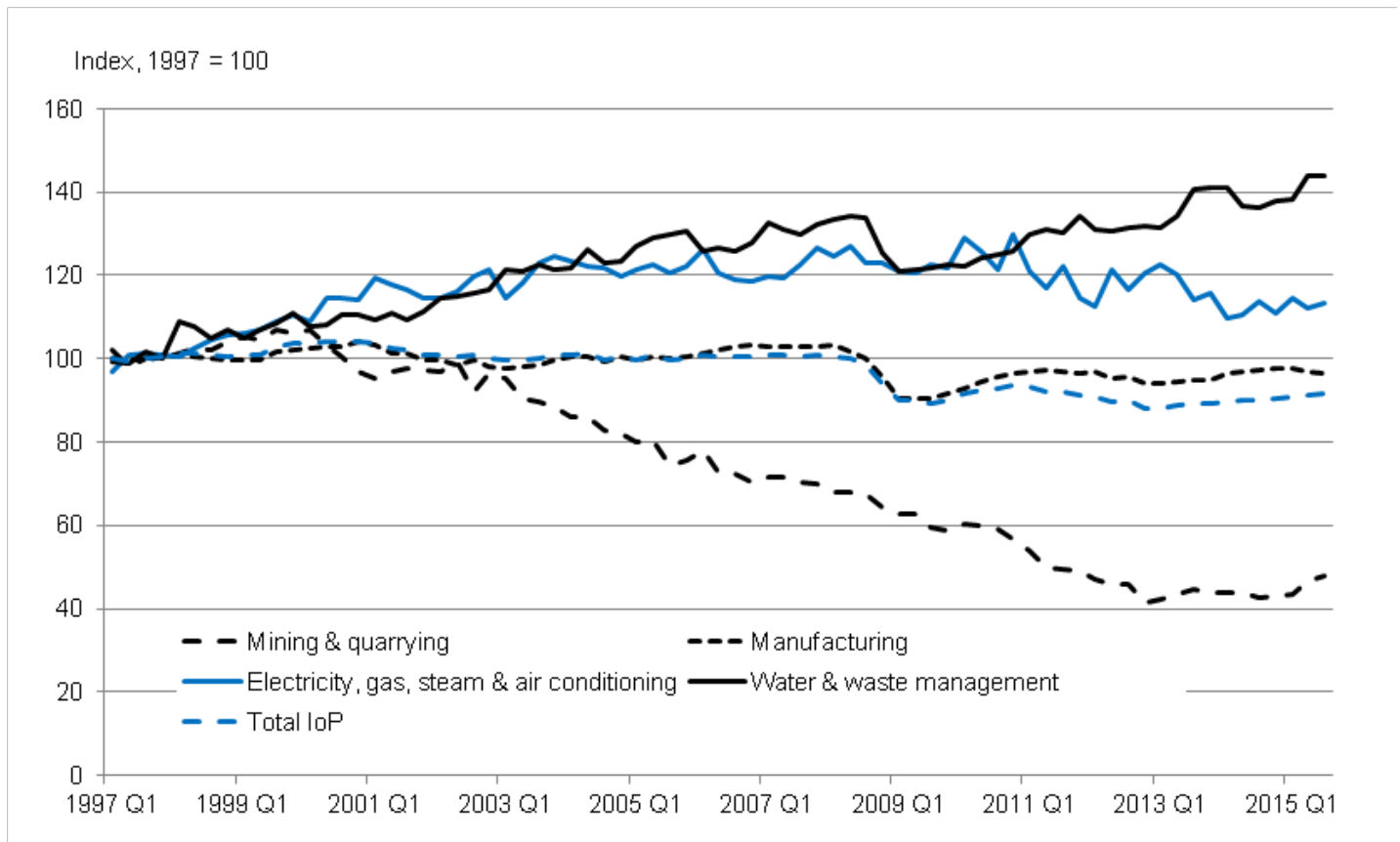
Following the economy's downturn, total production and some of its components returned to growth, although mining & quarrying and electricity, gas, steam & air conditioning continued to contract at compound average growth rates of -1.1% and -0.2%, per quarter, respectively between Quarter 2 (Apr to June) 2009 and Quarter 3 (July to Sep) 2015.

Despite the growth seen in production and manufacturing since the economy's downturn, in Quarter 3 (July to Sep) 2015, output remains 9.2% and 6.4% below Quarter 1 (Jan to Mar) 2008 levels. In Quarter 3 (July to Sep) 2015, mining & quarrying and electricity, gas, steam & air conditioning, which continued to decline following the downturn, were 29.4% and 9.1% below their respective values in Quarter 1 (Jan to Mar) 2008. Water & waste management remains the only production component which has surpassed its value in Quarter 1 (Jan to Mar) 2008 (by 8.2% as of Quarter 3 (July to Sep) 2015).

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

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices) and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by 13.1% in the year to November 2015, from a fall of 12.3% in the year to October 2015. Output prices have also experienced deflation, falling by 1.5% in the year to November 2015, with crude oil impacting input prices. This feeds through to petroleum products, contributing to the decrease in their output prices (more information can be found in [Producer Price Index, November 2015](#)).

Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 3 (July to Sep) 2015, UK



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

Notes:

- 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).

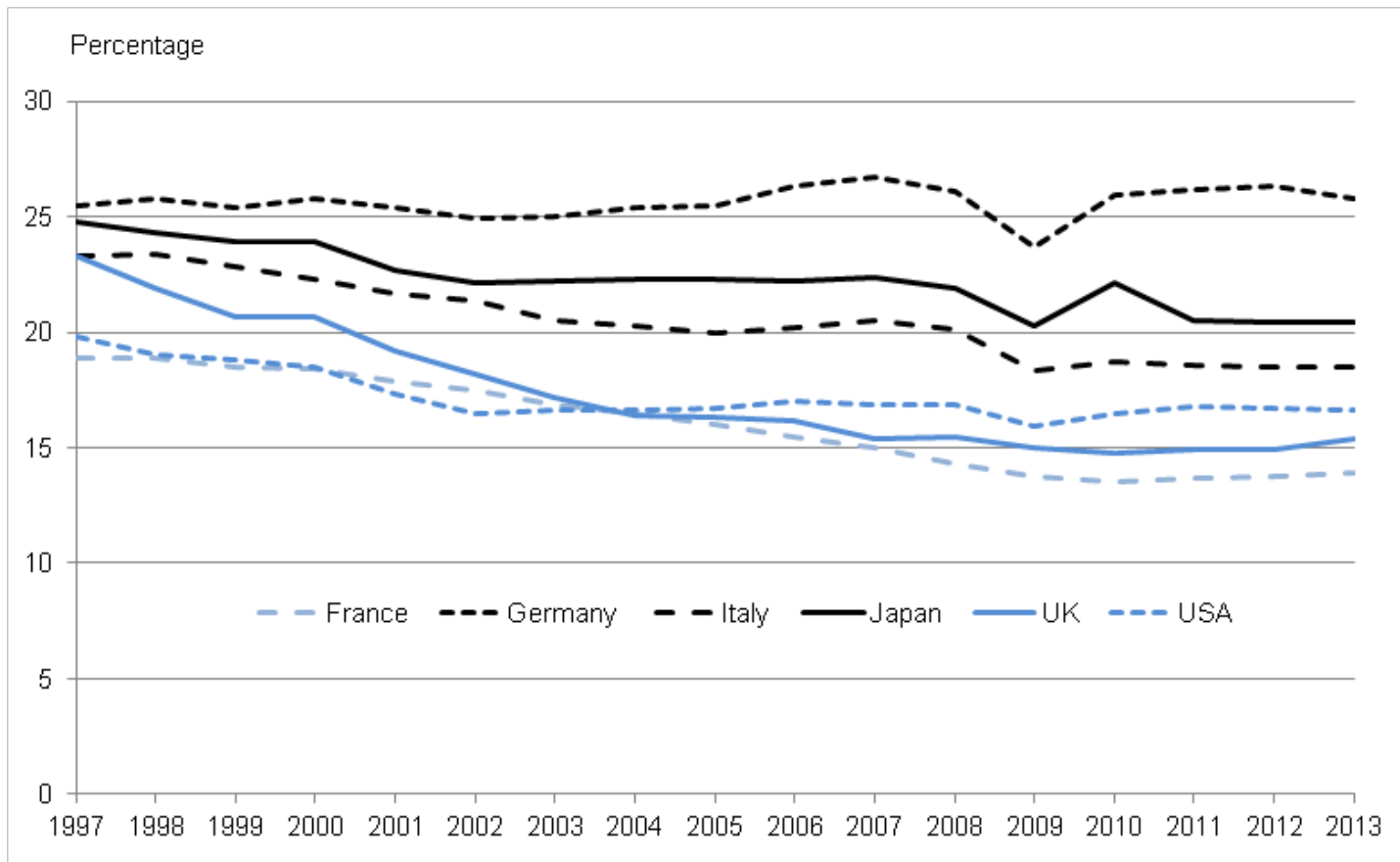
Download chart

[XLS](#) [XLS format](#)
(24 Kb)

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

The same trend was observed in manufacturing, where the share of nominal GVA fell from 18.4% in 1997 to 10.8% in 2013. Moreover, between 1997 and 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, UK 1997 to 2013



Source: Monthly Business Survey (Production and Services) - Office for National Statistics, Organisation for Economic Co-operation and Development

Notes:

1. OECD data correct at 4th December 2015.

Download chart

XLS [XLS format](#)

(20 Kb)

Gross domestic product (GDP) impact and components

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

The estimates for the production industries are generally the first of the main components for the output approach to the measurement of GDP to be published (agriculture, [construction](#) and [services](#) are the other components). All the components are available for Quarter 3 (July to Sep) 2015.

Details of the data already published can be found in Table 2. The [Retail Sales Index](#) reported in Table 2 is not a direct component of the output approach to measuring GDP. It does, however,

feed into estimates of GDP in 2 ways. Firstly, it feeds into the services industries when GDP is measured from the output approach. Secondly, it is a data source used to measure household final consumption expenditure which feeds into GDP estimates when measured from the expenditure approach.

Output in the construction industry for November 2015 will be published on 15 January 2016 and services output for the same period on 28 January 2016.

Table 2: Components of GDP, November 2015, UK

Publication	Percentage of GDP ⁴	Release date	Month or quarter of GDP ²	Percentage change			
				Most recent 3 months on a year earlier	Most recent 3 months on 3 months earlier ³	Most recent month on the same month a year ago ³	Most recent month on the previous month
Index of Production ¹	14.9	12 Jan	Nov	1.4	0.2	0.9	-0.7
			Oct	1.7	0.6	1.7	0.0
Construction	5.9	11 Dec	Oct	0.2	-2.0	1.0	0.2
Index of Services	78.6	23 Dec	Oct	2.3	0.5	2.1	0.1
			Sep	2.4	0.6	2.4	0.5
Retail Sales		17 Dec	Nov	5.3	2.1	5.0	1.7
			Oct	4.9	1.2	4.2	-0.5
Agriculture	0.7		Q3 2015	-0.1	0.2

Table source: Office for National Statistics

Table notes:

1. The data for the index of production reflect 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.

Download table**XLS** [XLS format](#)

(31.5 Kb)

Production and sectors supplementary analysis**Table 3: Headline growth rates and contributions for the Index of Production, November 2015, UK**

Description	Percentage of production	Month on same month a year ago growth (Percentage)	Contribution to production (Percentage points)	Month on previous month growth (Percentage)	Contribution to production (Percentage points)
IoP	100.0	0.9	0.9	-0.7	-0.7
Sector B	13.5	10.5	1.33	-1.6	-0.23
Division 06	10.6	16.5	1.53	-1.8	-0.20
Sector C	69.1	-1.2	-0.86	-0.4	-0.25
Sector D	9.3	2.4	0.21	-2.1	-0.19
Sector E	8.1	3.0	0.26	-0.5	-0.05

Table source: Office for National Statistics**Table notes:**

- Headline figures for the Index of Production are:

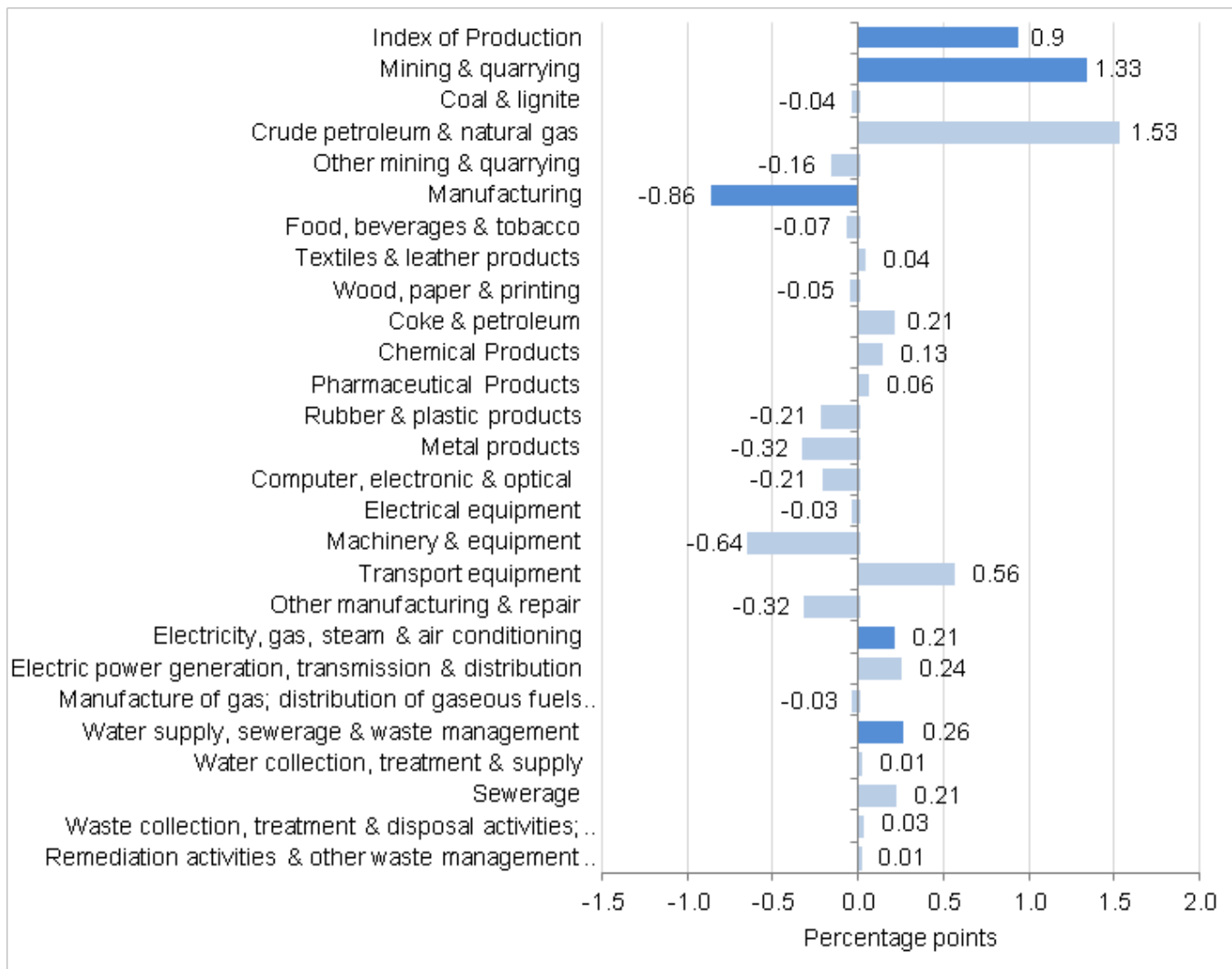
Total Index of Production; Sector B Mining & quarrying; and within this Division 06 Oil & gas extraction; Sector C Manufacturing; Sector D Electricity, gas, steam & air conditioning; and Sector E Water supply, sewerage & waste management.

Download table**XLS** [XLS format](#)

(18 Kb)

Figure 4: Contribution to production percentage growth, between November 2014 and November 2015, UK

Growth rates can be found in the attached IoP 5 tables



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

Notes:

1. Darker bars denote headline sectors.

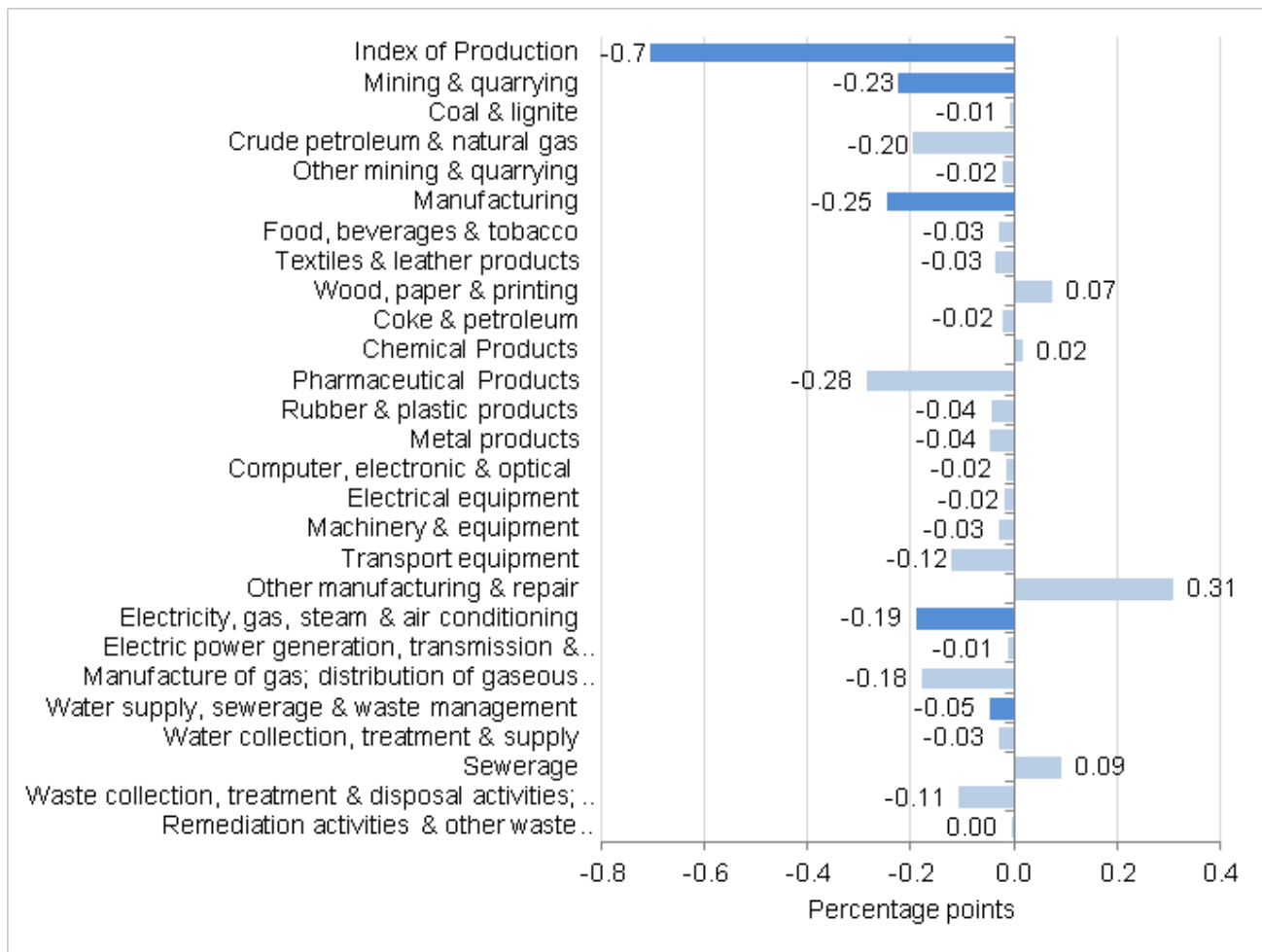
Download chart

[XLS](#) [XLS format](#)

(19.5 Kb)

Figure 5: Contribution to production percentage growth, between October 2015 and November 2015, UK

Growth rates can be found in the attached IoP 5 tables



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

Notes:

1. Darker bars denote headline sectors.

Download chart

[XLS](#) [XLS format](#)
(27.5 Kb)

Total production

Total production output increased by 0.9% in November 2015 compared with November 2014 (Table 3). There were increases in 3 of the 4 main sectors, with the largest contribution coming from mining & quarrying output, which increased by 10.5% and contributed 1.3 percentage points to total production. This was followed by increases in water supply, sewerage & waste management and electricity, gas, steam & air conditioning output, which increased by 3.0% and 2.4% respectively. The

only main sector to fall was manufacturing (the largest component of production), which decreased by 1.2% and contributed 0.9 percentage points to total production (Figure 4).

Between October 2015 and November 2015, total production decreased by 0.7% (Table 3), having remained unchanged at 0.0% in the previous month. The fall in total production reflected decreases in all of its 4 main sectors. The largest downward contribution was from manufacturing, which decreased by 0.4% and contributed 0.2 percentage points to total production (Figure 5). This was followed by falls in mining & quarrying, which decreased by 1.6% and contributed 0.2 percentage points; in electricity, gas, steam & air conditioning output, which decreased by 2.1%; and in water supply, sewerage & waste management output, which decreased by 0.5%.

Manufacturing

Manufacturing output decreased by 1.2% between November 2014 and November 2015 and provided a downward contribution of 0.9 percentage points to total production. Output decreased in 8 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, which decreased by 13.7% and contributed 0.6 percentage points to total production. This was this industry's 12th 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 6.4% and contributed 0.6 percentage points to total production. This was the 15th 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 8.1% and contributed 0.4 percentage points to total production.

Manufacturing output decreased by 0.4% between October 2015 and November 2015, having had an equivalent decrease the previous month. There were decreases in 10 of the 13 manufacturing sub-sectors (Figure 5). The manufacturing sub-sector with the largest downward contribution to total production was the manufacture of basic pharmaceutical products & pharmaceutical preparations, which decreased by 4.9% and contributed 0.3 percentage points to total production. This followed an increase of 2.5% in the previous month.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production was other manufacturing & repair, which increased by 5.0% and contributed 0.3 percentage points to total production. This reversed a decrease of 5.4% in the previous month. The largest contribution within this sub-sector came from the repair & maintenance of aircraft & spacecraft, which increased by 28.1% and contributed 0.2 percentage points to total production. Anecdotal evidence cited increased contracts and exports as contributing factors.

Mining & quarrying

Mining & quarrying output increased by 10.5% between November 2014 and November 2015 and contributed 1.3 percentage points to total production. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which increased by 16.5% and contributed 1.5

percentage points to total production (Figure 4). This was due to the higher level of production of crude oil and gas compared with a year ago. Anecdotal evidence suggested limited maintenance to oil and gas facilities this year in comparison with the previous year, was a contributing factor.

Mining & quarrying output decreased by 1.6% in November 2015 compared, with October 2015, having increased by 1.0% the previous month. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which decreased by 1.8% and contributed 0.2 percentage points to total production (Figure 5).

Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output increased by 2.4% in November 2015 compared with November 2014, the third consecutive increase since August 2015 and contributed 0.2 percentage points to total production (Figure 4). This reflected an increase in output in 1 of its 2 sub-sectors, electric power generation, transmission & distribution, which increased by 3.8% and contributed 0.2 percentage points to total production. Evidence cited an increase in demand, lower fuel mix costs and an increase in the use of cheaper renewables for generating electricity as contributing factors.

Electricity, gas, steam & air conditioning output decreased by 2.1% in November 2015 compared with October 2015 and contributed 0.2 percentage points to total production. This reflected a decrease in output in both of its sub-sectors. The largest contribution to the decrease came from the manufacture of gas & distribution of gaseous fuel through mains, which decreased by 7.6% and contributed 0.2 percentage points to total production (Figure 5). Evidence suggested that the temperature in November 2015, which was 2.0 degrees Celsius warmer than average, contributed to the decrease in demand.

Water & waste management

Water supply, sewerage & waste management output increased by 3.0% in November 2015 compared with November 2014 and contributed 0.3 percentage points to total production. This reflected increases in all of its 4 sub-sectors' output (Figure 4), with the largest contribution coming from sewerage, which increased by 9.2% and contributed 0.2 percentage points to total production.

Water supply, sewerage & waste management output decreased by 0.5% between October 2015 and November 2015, with decreases in 3 of its 4 sub-sectors. The largest contribution to the decrease came from waste collection, treatment & disposal activities, which decreased by 2.6% and contributed 0.1 percentage points to total production (Figure 5).

Revisions to IoP

Revisions to the Index of Production follow the National Accounts Revisions policy (41.7 Kb Pdf). Revisions are caused by a number of factors including, but not limited to revisions to source data due to late responses to the Monthly Business Survey (MBS), actual data replacing forecast data and revisions to seasonal factors that are re-estimated every period. We produce revisions triangles of production and manufacturing growth to provide users with one indication of the reliability of this important indicator. Statistical tests are performed on the average revision to test if it is statistically significantly different from zero. Further information can be found in background note 6.

In this release of data, the only period open for revision was October 2015. In October 2015, there was a downward revision of 0.1 percentage points. The month-on-month growth rate was revised from a rise of 0.1% to 0.0%. Further details on the revisions to IoP components can be found in the IOP5R tables, located within the data section of this release.

Industry spotlight: Production of intermediate goods

The index of production (IoP) can be classified either by the [standard industrial classification \(SIC\) 2007](#) (used in the previous editions of the spotlight) or by main industrial groupings (MIGs). While SIC 2007 classifies business establishments and other statistical units by the type of economic activity in which they are engaged, MIGs group industries in terms of demand-based products (capital goods, intermediate goods, consumer durable goods, consumer non-durable goods and energy).

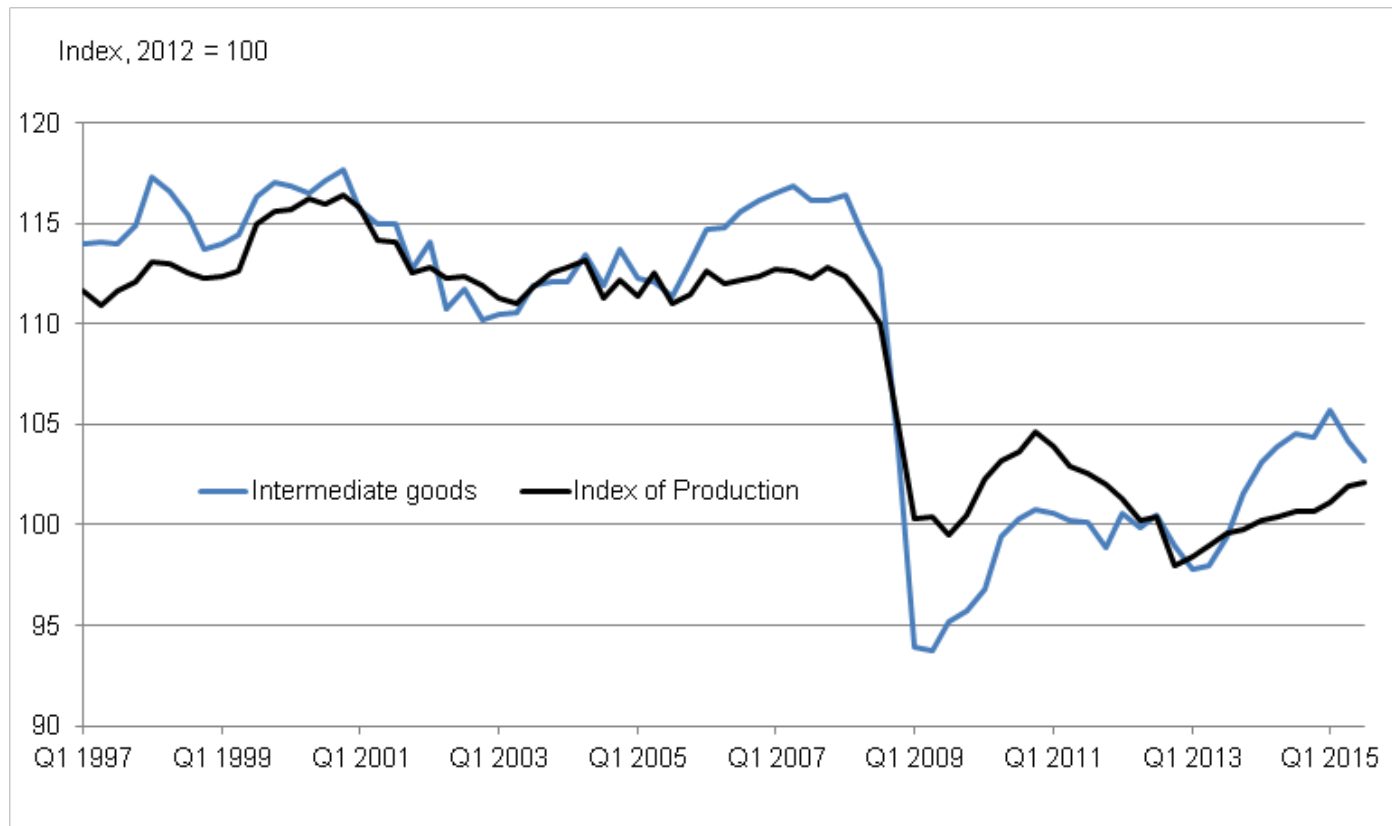
According to the [Eurostat glossary](#) MIGs provide a breakdown at an intermediate level, that is, a level of detail which is between the 4 main production sectors (mining & quarrying, manufacturing, electricity, gas, steam & air conditioning and water & waste management) and their 34 sub-industries. Eurostat note that this classification is useful because the 4 main sectors may be too broad for some analysis, while the 34 sub-industries into which these 4 main sectors are divided, can be too numerous and varied to adequately represent the development of industry over time. Using the MIGs framework, the focus of this month's spotlight was on production of intermediate goods.

Intermediate goods are typically defined as inputs to the production process, but unlike capital goods, are used up in production. Furthermore, as intermediate goods are used to produce other goods (or services), they differ from final goods which are instead typically consumed either by businesses as capital goods or by households as consumer goods.

Figure 6 shows that the index of production (IoP) and production of intermediate goods (IG) follow similar paths historically. Between Quarter 1 (Jan to Mar) 1997 and Quarter 2 (Apr to June) 2008, the output attributable to both IoP and IG experienced alternating periods of expansion and contraction, which resulted in the level of output being only slightly higher at the end of this period compared with the start. However, during the economy's downturn (Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009) IG experienced a larger contraction, decreasing by 19.5% compared with a 10.6% contraction for IoP.

Following the economy's downturn (Quarter 2 (Apr to June) 2009 to Quarter 3 (July to Sep) 2015), IG grew at a compound average growth rate of 0.4% per quarter while production as a whole grew slower at a compound average growth rate of 0.1% per quarter. Despite the post-downturn recovery seen by IG and IoP, in Quarter 3 (July to Sep) 2015 they were 11.3% and 9.2% below their respective levels in Quarter 1 (Jan to Mar) 2008. The 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.

Figure 6: Comparison between the index of production and production of intermediate goods, Quarter 1 (Jan to Mar) 1997 to Quarter 3 (July to Sep) 2015, UK



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

Notes:

1. Q1 is Quarter 1 January to March.

Download chart

[XLS](#) [XLS format](#)

(23 Kb)

The production of intermediate goods category consists of 18 sub-industries which are part of the mining & quarrying and manufacturing industries. Table 4 presents a selection of growth rates for output in these sub-industries. Prior to the downturn (Quarter 1 (Jan to Mar) 1997 and Quarter 1 (Jan to Mar) 2008) - when the production of intermediate goods was relatively stable - 10 of its 18 components contracted, with manufacture of textiles contracting the fastest at a compound average growth rate of 1.2% per quarter. Over the same period the manufacture of industrial gases, inorganics & fertilisers and manufacture of petrochemicals grew at the fastest rates (a compound average growth rate of 0.8% per quarter for both).

During the economy's downturn (Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009) - when IG contracted at a compound average growth rate of 4.2% per quarter - 16 of its 18 components contracted, with the manufacture of basic iron & steel contracting at the fastest rate (10.5% per quarter). The only sub-industries that grew on average during the downturn were the

manufacture of prepared animal feeds and manufacture of dyestuffs, agro-chemicals (at growth rates of 1.3% and 0.9% per quarter respectively).

Following the downturn (Quarter 2 (Apr to June) 2009 to Quarter 3 (July to Sep) 2015), the production of intermediate goods and 10 of its components recovered, with other mining & quarrying plus mining support service activities growing the fastest (1.7% per quarter). In contrast the manufacture of dyestuffs, agro-chemicals contracted the quickest, at a compound average growth rate of 1.3% per quarter.

Table 4: Comparison of the compound average growth of production of intermediate goods and its components prior to the downturn, during the downturn and during the recovery, UK, 1997 to 2015

Percent

Industry	Weights	Compound average growth rate		
		Prior to the downturn (Q1 1997- Q1 2008)	Downturn (Q1 2008 - Q2 2009)	Recovery (Q2 2009 - Q3 2015)
Other mining & quarrying plus mining support service activities (7+8+9)	10.5	0.4	-4.4	1.7
Manufacture of grain mill products, starches and starch products (10.6)	2.1	-0.2	-0.6	-1.0
Manufacture of prepared animal feeds (10.9)	1.4	-0.9	1.3	0.0
Manufacture of textiles (13)	4.8	-1.2	-1.5	-1.0
Manufacture of wood & products of wood & cork (16)	4.1	0.1	-5.0	-0.2
Manufacture of paper and paper products (17)	7.1	-0.1	-2.2	0.1
Manufacture of industrial gases, inorganics & fertilisers (20 A)	1.7	0.8	-4.1	0.2
Manufacture of petrochemicals (20 B)	3.2	0.8	-7.6	0.8
Manufacture of dyestuffs, agro-chemicals (20 C)	1.3	-0.2	0.9	-1.3
Manufacture of paint, varnishes &	2.4	0.3	-5.6	0.4

Industry	Weights	Compound average growth rate		
		Prior to the downturn (Q1 1997- Q1 2008)	Downturn (Q1 2008 - Q2 2009)	Recovery (Q2 2009 - Q3 2015)
similar coatings, printing ink and mastics (20.3)				
Manufacture of other chemical products (20.5)	2.7	-0.7	-0.6	-0.5
Manufacture of rubber and plastic products (22)	14.4	-0.1	-3.5	0.1
Manufacture of glass, reflectory, clay, porcelain, ceramic & stone products (23 other)	4.3	0.2	-6.1	0.7
Manufacture of cement, lime, plaster & articles of concrete, cement & plaster (23.5-6)	3.5	0.7	-2.7	-0.7
Manufacture of basic iron & steel (24.1-3)	3.3	-0.2	-10.5	1.0
Manufacture of other basic metals & casting (24.4-5)	2.6	-0.4	-4.7	-0.3
Manufacture of fabricated metal products (25 other)	22.2	0.2	-4.7	0.6
Manufacture of electrical equipment (27)	8.4	-0.1	-5.2	0.4
Production of intermediate goods	100.0	0.0	-4.2	0.4

Table source: Office for National Statistics

Table 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).

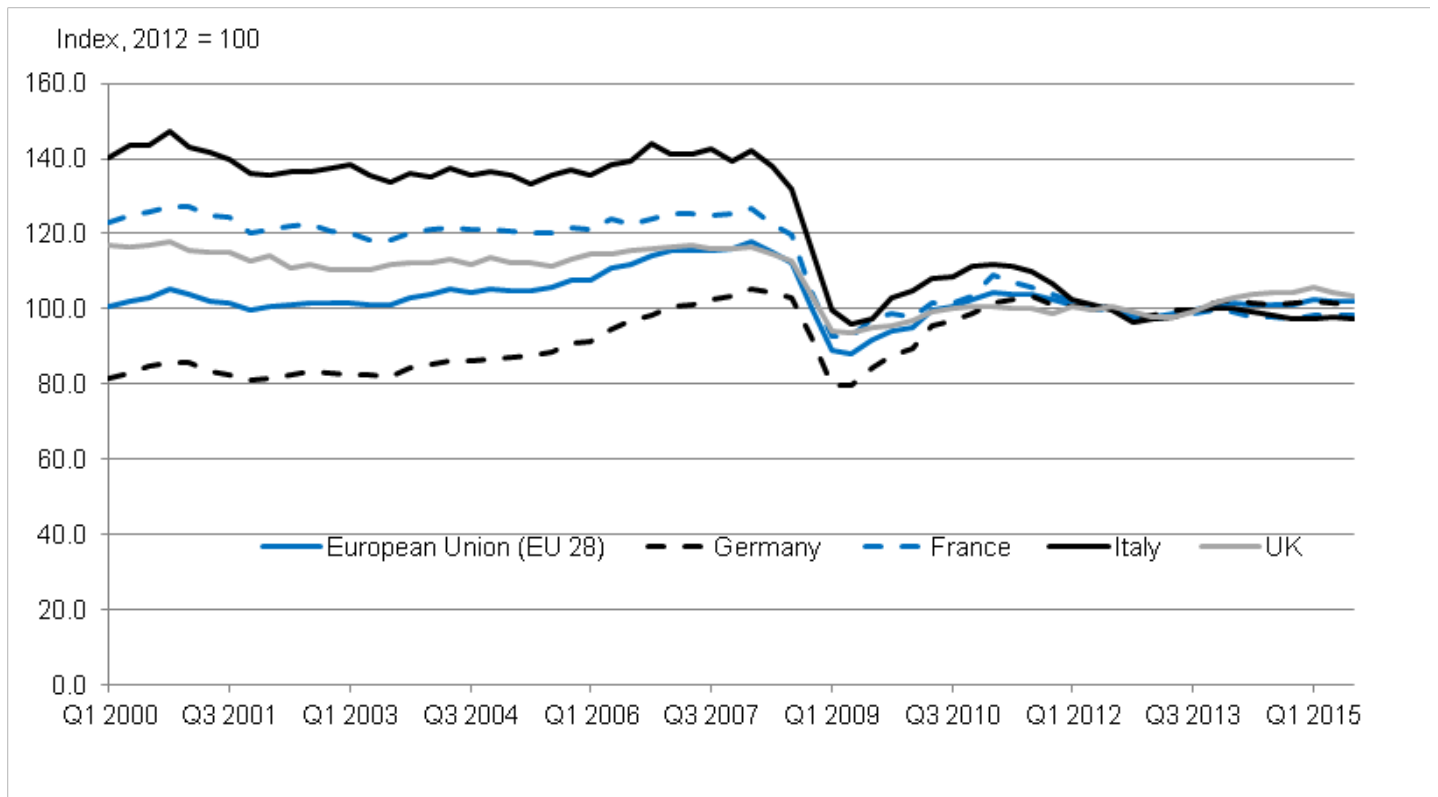
Download table

XLS [XLS format](#)
(29.5 Kb)

Figure 7 compares the volume of production of intermediate goods in the UK, the European Union (EU 28) and a selection of other major European economies (more information on France, Germany and Italy can be found on the Eurostat website).

Between Quarter 1 (Jan to Mar) 2000 and Quarter 1 (Jan to Mar) 2008, the UK and Italy's production of intermediate goods was relatively stable, while Germany, EU 28 and France grew at compound average growth rates of 0.8%, 0.5% and 0.1% per quarter respectively. During the UK economy's downturn (Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009), all of the economies experienced significant contractions in output, with the UK contracting the least (by 19.5%) while Italy contracted the most (by 32.4%). Following the economy's downturn (Quarter 2 (Apr to June) 2009 to Quarter 3 (July to Sep) 2015) all 5 economies experienced growth but due to the sharp contraction during the economy's downturn in Quarter 3 (July to Sep) 2015 they remained below their respective levels in Quarter 1 (Jan to Mar) 2008.

Figure 7: International comparison of production of intermediate goods in the UK, Germany, France, EU 28 and Italy, Quarter 1 (Jan to Mar) 2000 to Quarter 3 (July to Sep) 2015



Source: Office for National Statistics

Notes:

1. Eurostat data correct at 7th January 2016.

Download chart

[XLS](#) [XLS format](#)
(24 Kb)

Background notes

1. What's new?

As described in [Improving the Coverage of the Standard Business Survey Population published \(150.9 Kb Pdf\)](#) on 21 December 2015, the coverage of our Standard Business Survey Population has been extended to include a population of solely PAYE based businesses.

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

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

[The Summer Budget article](#) submitted by the Department of Energy & 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](#), 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.

Upcoming changes

The Index of Production release for December 2015, to be published on Wednesday 10 February 2016, will have a revisions period back to January 2015.

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

The [GDP Output Improvement Report](#) published on 30 September 2015, provides a detailed update of the implementation of improvements for Blue Book 2015, progress on industry reviews and wider cross-cutting improvements, a comprehensive timetable for the industry review project and progress on experimental statistics.

VAT Project update

An article, [Feasibility study into the use of HMRC turnover data within Short-term Output Indicators and National Accounts](#), was published on 14 August 2015. The project is exploring ways in which HM Revenue & Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys. This article is the first of a series of planned articles into this work.

2. Special events

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

3. Understanding the data

Short guide to the Index of Production

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

Interpreting the data

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

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

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

Definitions and explanations

Definitions found within the main statistical bulletin are listed:

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

Use of the data

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

4. Methods

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

Composition of the data

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

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

Approximately 70% of the IoP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 5 for the current month and the 3 months prior. The response rates for the historical periods are updated to reflect the current level of response, incorporating data from late returns. We have included 2 response rates: one percentage for the amount of turnover returned and the other percentage for the amount of questionnaire forms. We have also published [MBS historical production industries response rates \(34.5 Kb Excel sheet\)](#) back to 2010.

Table 5: Monthly business survey (MBS) Response Rates, November 2015, UK

				Percentage	
	Year	Period	Turnover	Questionnaire	
MBS overall	2015	Nov	89.1	77.0	
		Oct	94.3	83.2	
		Sept	96.4	84.7	
		Aug	96.8	85.9	
MBS production only	2015	Nov	89.9	80.3	
		Oct	94.5	86.1	
		Sept	96.4	87.7	
		Aug	97.5	88.8	

Table source: Office for National Statistics

Download table

 [XLS format](#)
(26.5 Kb)

Seasonal adjustment

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

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

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

Deflation

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

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

5. Code of Practice for Official Statistics

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

6. Quality

Basic quality information

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

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

Quality and methodology information report

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

Revision triangles

One indication of the reliability of the key indicators in this bulletin can be obtained by monitoring the size of revisions. Table 6 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 6 presents a summary of the differences between the first estimates published between December 2009 and November 2014 and the estimates published 12 months later.

Table 6: Revisions, November 2015, UK

Growth rates	Value in latest period	Revisions between first publication and estimates 12 months later		
		Average over the last 60 months		Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	0.2	-0.14		0.28
Manufacturing - 3 month	0.5	-0.10		0.25
Production - 1 month	-0.7	-0.11	*	0.24
Manufacturing - 1 month	-0.4	-0.07		0.21

Table source: Office for National Statistics

Download table

 [XLS format](#)
(24.5 Kb)

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

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

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

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

7. Publication policy

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

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

8. Accessing data

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

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

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

9. Relevant links

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

On 7 January 2015, the following papers were published on our website:

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

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

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

[Disclosure control policy](#)

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

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

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

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

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

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](#) is now available
- users would like more information on data content - from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to IoP were included
- users also raised concerns that the IoP is not benchmarked to annual data through the supply and use framework - this is being addressed as part of our [response \(875 Kb Pdf\)](#) to the [National Statistics Quality Review of National Accounts \(570.9 Kb Pdf\)](#)

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

11. Following ONS

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

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

12. **Next publication:** Wednesday 10 February 2016

Issued by: Office for National Statistics, Government Buildings, Cardiff Road, Newport NP10 8XG

Media contact:

Tel: Media Relations Office +44 (0) 845 6041858

Emergency on-call +44 (0) 7867 906553

Email: Media Relations Office

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

Copyright

© Crown copyright 2016

You may use or re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.ons.gov.uk.

Statistical contacts

Name	Phone	Department	Email
Alaa Al-Hamed	+44 (0)1633 455648	Index of Production	alaa.al-hamad@ons.gsi.gov.uk

Next Publication Date:

10 February 2016

Issuing Body:

Office for National Statistics

Media Contact Details:

Telephone: 0845 604 1858

(8.30am-5.30pm Weekdays)

Emergency out of hours (limited service): 07867 906553

Email:

media.relations@ons.gsi.gov.uk

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 added¹

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
2010	103.4	130.9	99.3	107.5	94.7	142.7	102.0	104.2	92.7	99.3	122.8
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
2014 Q3	100.7	94.9	102.0	96.8	103.7	88.3	105.5	100.0	103.7	104.5	92.9
2014 Q4	100.7	95.4	102.1	94.3	104.9	88.4	108.1	99.7	104.4	104.4	92.2
2015 Q1	101.1	96.4	102.1	97.4	105.5	89.4	105.4	100.3	102.4	105.7	93.8
2015 Q2	101.9	103.8	101.5	95.4	109.6	100.9	105.1	99.4	102.8	104.2	97.6
2015 Q3	102.1	106.4	101.1	96.3	109.9	103.9	103.6	99.9	101.7	103.2	100.0
2014 Sep	100.8	96.3	102.2	94.0	104.4	90.1	108.0	100.1	104.5	104.5	92.7
2014 Oct	100.7	97.9	101.5	94.4	105.6	92.2	106.4	99.1	103.5	103.7	93.9
2014 Nov	100.7	94.7	102.3	93.5	105.8	87.5	107.0	100.1	104.1	104.7	91.5
2014 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	100.7	96.7	101.6	96.7	104.0	89.5	107.5	100.0	101.3	105.5	93.6
2015 Feb	101.0	94.6	102.0	98.5	106.0	86.9	103.6	99.2	103.1	106.0	93.4
2015 Mar	101.7	97.9	102.5	96.9	106.5	91.9	105.1	101.6	102.9	105.5	94.4
2015 Apr	101.8	101.7	102.0	94.4	108.7	97.9	104.9	98.9	103.6	105.4	95.9
2015 May	102.0	106.1	101.2	96.1	108.9	104.4	103.0	101.2	101.5	102.8	99.4
2015 Jun	101.9	103.5	101.3	95.6	111.1	100.3	107.4	98.1	103.4	104.4	97.4
2015 Jul	101.5	103.8	100.5	95.7	112.3	100.0	104.7	99.5	99.8	103.8	98.0
2015 Aug	102.4	110.1	100.9	96.2	109.3	108.8	103.0	99.3	102.2	102.9	102.1
2015 Sep	102.3	105.3	101.8	97.1	108.0	102.8	103.1	101.0	103.2	102.8	99.9
2015 Oct	102.4	106.4 [†]	101.4	97.8	109.6 [†]	103.9 [†]	101.4 [†]	101.5	101.5	102.6	101.3
2015 Nov	101.7	104.7	101.0	95.8	109.0	102.0	103.8	99.8	101.4	102.5	99.5

Percentage change, latest year on previous year

2010	3.3	-3.2	4.5	4.1	2.1	-6.7	-2.6	-	10.9	5.0	-1.9
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

Percentage change, latest month on same month a year ago

2013 Sep	2.4	15.4	-0.3	-0.6	9.4	16.0	-0.3	-0.9	0.7	0.7	7.3
2013 Oct	2.7	13.2	1.2	-6.7	8.4	11.1	-4.0	0.5	1.6	2.2	4.1
2013 Nov	1.3	1.5	0.9	0.4	5.3	-2.5	-0.7	0.6	-0.1	2.9	-0.2
2013 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
2014 Feb	2.2	4.8	3.3	-11.3	4.9	8.4	7.8	2.0	2.3	4.4	-1.9
2014 Mar	1.7	8.2	2.3	-14.7	7.8	10.4	1.2	2.0	0.6	4.7	-2.6
2014 Apr	2.3	3.2	4.0	-13.4	5.5	2.6	3.9	2.0	2.4	7.8	-5.2
2014 May	1.6	3.4	2.6	-7.7	1.9	1.6	3.6	-1.5	3.3	6.3	-2.9
2014 Jun	0.4	-3.0	1.6	-1.9	-1.4	-3.9	2.7	-2.0	2.9	3.9	-3.7
2014 Jul	1.3	-3.3	2.8	1.4	-3.4	-5.6	6.6	-0.8	2.9	6.8	-3.3
2014 Aug	1.2	-5.8	3.1	2.4	-4.4	-9.4	5.0	2.4	2.7	4.9	-4.4
2014 Sep	0.7	-4.0	2.5	-4.1	-1.6	-6.7	9.4	0.6	3.4	3.8	-5.0
2014 Oct	1.0	-0.2	2.1	-3.0	-1.8	-0.6	9.0	0.7	2.7	2.0	-1.3
2014 Nov	1.2	-1.2	3.3	-8.3	-1.4	-3.0	8.2	2.5	4.5	3.0	-4.9
2014 Dec	0.6	-5.8	2.6	-0.8	-4.0	-10.2	12.6	0.2	5.6	3.4	-5.9
2015 Jan	1.1	3.5	1.4	0.8	-4.3	2.5	4.4	3.9	-1.3	1.9	1.3
2015 Feb	0.4	-5.4	0.9	8.0	-2.3	-10.5	1.2	-1.2	0.9	3.4	-1.2
2015 Mar	1.4	-0.1	1.3	4.9	1.0	-1.0	3.7	1.8	0.1	2.0	0.9
2015 Apr	1.1	5.0	-0.2	2.7	3.9	8.3	0.9	-2.1	-0.3	1.0	4.2
2015 May	1.6	5.9	0.4	2.1	4.3	11.1	2.4	1.4	-0.5	-0.9	5.0
2015 Jun	1.7	8.7	-	-0.6	6.9	14.1	5.2	-0.9	-0.8	0.9	5.3
2015 Jul	0.8	9.2	-1.2	-2.4	8.5	13.0	0.9	-0.2	-3.7	-0.8	4.9
2015 Aug	1.9	18.2	-1.0	-2.2	5.8	26.2	-1.6	-1.0	-0.7	-1.6	10.3
2015 Sep	1.5	9.3	-0.4	3.3	3.5	14.1	-4.6	0.9	-1.2	-1.6	7.8
2015 Oct	1.7	8.7 [†]	-0.2 [†]	3.6	3.8 [†]	12.7 [†]	-4.7 [†]	2.4	-2.0 [†]	-1.1	7.9
2015 Nov	0.9	10.5	-1.2	2.4	3.0	16.5	-3.1	-0.4	-2.7	-2.1	8.7

¹ 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 added¹

Seasonally adjusted 2012 = 100

Section	Broad industry groups					Main industrial groupings					
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
Percentage change, latest month on previous month											
2013 Sep	0.8	1.4	0.9	2.1	-1.8	1.5	-1.0	1.5	0.9	0.9	0.8
Oct	-0.4	-2.2	-0.3	-0.7	1.4	-3.9	-1.1	-1.1	-0.3	1.1	-2.6
Nov	-0.2	-2.3	-0.4	4.7	-0.3	-2.7	1.3	-0.8	-1.1	-0.1	1.1
Dec	0.5	3.6	0.9	-6.1	0.4	5.4	-0.5	2.1	0.1	-0.3	0.7
2014 Jan	-0.4	-5.9	0.4	0.3	0.8	-8.1	4.6	-3.5	2.9	2.2	-4.7
Feb	1.0	7.1	0.9	-5.1	-0.1	11.1	-0.6	4.3	-0.4	-1.1	2.3
Mar	-0.3	-2.1	0.1	1.3	-2.8	-4.4	-1.1	-0.5	0.6	0.9	-1.0
Apr	0.4	-1.1	0.9	-0.5	-0.9	-2.6	2.6	1.2	1.1	1.0	-1.6
May	-0.3	3.5	-1.3	2.4	-0.2	4.0	-3.2	-1.2	-1.8	-0.6	2.8
Jun	-0.2	-5.0	0.5	2.2	-0.5	-6.4	1.4	-0.8	2.1	-0.2	-2.3
Jul	0.5	-0.1	0.5	1.9	-0.3	0.6	1.7	0.8	-0.6	1.0	1.0
Aug	-0.2	-2.0	0.1	0.4	-0.2	-2.6	0.9	0.6	-0.7	-	-0.9
Sep	0.3	3.4	0.3	-4.5	1.1	4.5	3.2	-0.2	1.6	-0.1	0.1
Oct	-0.1	1.7	-0.7	0.4	1.2	2.3	-1.5	-1.0	-0.9	-0.7	1.2
Nov	-	-3.3	0.7	-1.0	0.2	-5.0	0.6	1.0	0.6	0.9	-2.5
Dec	-0.1	-1.2	0.2	1.6	-2.2	-2.4	3.6	-0.2	1.2	-	-0.3
2015 Jan	-	3.3	-0.8	1.9	0.5	4.8	-3.1	0.1	-3.9	0.8	2.6
Feb	0.3	-2.2	0.4	1.8	1.9	-2.9	-3.6	-0.8	1.8	0.4	-0.2
Mar	0.7	3.4	0.5	-1.6	0.5	5.7	1.4	2.5	-0.2	-0.5	1.0
Apr	0.1	3.9	-0.5	-2.5	2.0	6.6	-0.1	-2.7	0.7	-0.1	1.6
May	0.2	4.3	-0.8	1.8	0.2	6.7	-1.8	2.4	-2.0	-2.4	3.6
Jun	-0.1	-2.4	0.1	-0.5	2.0	-3.9	4.2	-3.1	1.8	1.6	-2.0
Jul	-0.4	0.3	-0.7	-	1.1	-0.3	-2.5	1.5	-3.5	-0.6	0.7
Aug	0.9	6.0	0.3	0.6	-2.7	8.8	-1.6	-0.3	2.4	-0.9	4.2
Sep	-	-4.3	0.9	0.9	-1.1	-5.5	0.1	1.7	1.0	-0.1	-2.2
Oct	- [†]	1.0 [†]	-0.4	0.7	1.4 [†]	1.0 [†]	-1.6 [†]	0.5	-1.7 [†]	-0.2	1.4 [†]
Nov	-0.7	-1.6	-0.4	-2.1	-0.5	-1.8	2.3	-1.7	-0.1	-0.1	-1.8
Percentage change, latest 3 months on same 3 months a year ago²											
2013 Sep	-0.8	-2.8	-1.1	-2.2	7.0	-6.7	-1.0	-0.5	-0.3	-1.0	-3.5
Oct	0.9	4.3	-0.1	-3.4	7.9	1.5	-1.3	-0.7	0.7	0.8	0.3
Nov	2.1	9.8	0.6	-2.4	7.7	7.8	-1.7	0.1	0.7	1.9	3.7
Dec	1.7	5.9	1.0	-3.8	6.9	2.9	-2.3	1.3	-0.3	2.6	1.3
2014 Jan	1.4	1.2	1.3	-3.3	7.3	-2.1	-0.5	0.4	-0.3	4.3	-1.6
Feb	1.7	2.3	2.1	-7.2	7.2	1.4	2.2	0.9	0.5	4.8	-2.1
Mar	1.8	3.7	2.6	-10.5	7.4	4.4	3.4	0.6	1.4	5.5	-3.0
Apr	2.1	5.4	3.2	-13.2	6.0	7.1	4.2	2.0	1.8	5.6	-3.2
May	1.9	4.9	3.0	-12.0	5.0	4.8	2.9	0.8	2.1	6.3	-3.6
Jun	1.4	1.2	2.7	-7.9	1.9	0.1	3.4	-0.5	2.9	6.0	-4.0
Jul	1.1	-1.0	2.3	-2.8	-1.0	-2.6	4.3	-1.4	3.0	5.7	-3.3
Aug	1.0	-4.0	2.5	0.6	-3.1	-6.3	4.8	-0.2	2.8	5.2	-3.8
Sep	1.1	-4.4	2.8	-0.1	-3.1	-7.2	7.0	0.7	3.0	5.1	-4.2
Oct	0.9	-3.3	2.6	-1.6	-2.6	-5.6	7.8	1.2	2.9	3.5	-3.6
Nov	1.0	-1.8	2.6	-5.2	-1.6	-3.5	8.8	1.3	3.5	2.9	-3.8
Dec	0.9	-2.4	2.7	-4.1	-2.4	-4.6	9.9	1.1	4.3	2.8	-4.1
2015 Jan	1.0	-1.2	2.4	-2.9	-3.2	-3.7	8.3	2.2	2.9	2.7	-3.2
Feb	0.7	-2.7	1.6	2.6	-3.5	-6.3	6.0	0.9	1.7	2.9	-2.0
Mar	1.0	-0.8	1.2	4.5	-1.9	-3.2	3.1	1.5	-0.1	2.4	0.3
Apr	1.0	-0.2	0.7	5.2	0.8	-1.3	1.9	-0.5	0.2	2.1	1.3
May	1.3	3.6	0.5	3.3	3.1	6.1	2.3	0.4	-0.2	0.7	3.4
Jun	1.4	6.5	0.1	1.4	5.1	11.1	2.8	-0.5	-0.5	0.3	4.8
Jul	1.4	7.9	-0.3	-0.3	6.6	12.7	2.8	0.1	-1.6	-0.3	5.1
Aug	1.5	12.0	-0.7	-1.7	7.1	17.7	1.4	-0.7	-1.7	-0.5	6.8
Sep	1.4	12.2	-0.9	-0.5	5.9	17.7	-1.8	-0.1	-1.9	-1.3	7.7
Oct	1.7	12.0 [†]	-0.5	1.5	4.3 [†]	17.5	-3.7 [†]	0.8	-1.3	-1.4	8.7
Nov	1.4	9.5	-0.6	3.1	3.4	14.4	-4.1	1.0	-2.0	-1.6	8.1

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

[†] 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 added¹

Seasonally adjusted 2012 = 100

Section	Broad industry groups					Main industrial groupings						
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy	
	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG	
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2	
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T	
Percentage change, latest 3 months on previous 3 months²												
2013	Sep	0.6	3.0	0.5	-5.1	4.6	4.9	-0.3	-1.1	0.2	1.5	0.1
	Oct	0.4	1.4	0.4	-1.8	2.1	2.4	0.8	-2.3	0.5	2.4	-0.2
	Nov	0.3	-0.4	0.2	2.3	0.1	-0.3	-0.4	-1.3	-0.2	2.3	-0.2
	Dec	0.2	-1.4	0.3	1.5	0.4	-2.6	-0.3	-0.7	-0.6	2.1	-1.0
2014	Jan	-	-2.9	0.4	0.7	0.6	-4.1	1.4	-0.8	-	1.5	-1.4
	Feb	0.3	-0.5	1.0	-4.9	1.3	-	2.9	0.3	1.0	1.1	-1.8
	Mar	0.4	-0.6	1.4	-5.3	-	-0.3	3.9	0.2	2.5	1.6	-2.7
	Apr	0.8	2.1	1.8	-6.2	-1.5	2.8	2.4	2.6	2.2	1.2	-1.9
	May	0.4	0.7	1.0	-1.6	-3.2	-0.8	0.7	1.4	1.3	1.4	-1.2
	Jun	0.2	0.3	0.6	1.0	-3.0	-1.8	-	1.1	0.8	0.7	-0.5
	Jul	-0.1	-1.5	-0.2	4.7	-2.2	-3.5	-0.4	-0.9	0.3	0.5	0.1
	Aug	-	-3.9	0.2	5.1	-1.2	-5.2	1.5	-0.5	0.6	0.4	-0.6
	Sep	0.2	-2.6	0.5	2.9	-0.5	-2.8	3.2	0.1	0.3	0.6	-0.2
	Oct	0.3	-1.1	0.6	-0.5	0.5	-0.7	4.1	0.4	0.3	0.3	-0.5
	Nov	0.3	2.0	0.3	-3.7	1.6	2.7	3.5	0.1	0.5	0.1	-0.2
	Dec	-	0.6	0.1	-2.6	1.2	0.1	2.5	-0.3	0.7	-0.2	-0.8
2015	Jan	-	-0.8	0.2	-0.6	-	-2.2	2.0	0.2	-	0.7	-1.0
	Feb	-	-1.4	-	2.9	-0.8	-3.0	0.2	-0.1	-0.8	1.1	0.1
	Mar	0.4	1.0	-	3.3	0.5	1.2	-2.5	0.5	-1.9	1.2	1.8
	Apr	0.8	3.2	0.1	1.6	2.6	5.4	-3.6	-0.1	-0.4	0.6	2.7
	May	1.0	7.3	-0.2	-0.9	3.4	12.3	-2.8	0.9	-0.6	-0.8	4.1
	Jun	0.7	7.6	-0.6	-2.0	3.9	12.8	-0.3	-0.9	0.4	-1.4	4.0
	Jul	0.3	6.5	-1.1	-0.8	3.5	10.2	0.5	-0.3	-1.6	-1.8	3.9
	Aug	0.1	3.8	-0.9	-	2.6	5.1	0.6	-1.6	-0.9	-0.8	2.7
	Sep	0.2	2.6	-0.4	1.0	0.3	3.0	-1.5	0.6	-1.1	-1.0	2.5
	Oct	0.6	2.7 ^T	0.3 ^T	1.3	-1.6 ^T	3.5	-2.4	1.0	0.7	-0.9	2.9
	Nov	0.2	-0.3	0.5	1.1	-1.8	-0.2	-2.2	1.8	0.2	-1.0	1.1

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

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

^T 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 added¹

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
2010	96.3	102.2	111.8	109.7	95.6	122.8
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
2014 Q3	103.2	89.4	104.3	87.9	101.3	93.6
Q4	103.9	86.4	103.8	91.7	102.4	91.1
2015 Q1	103.2	89.4	105.3	88.7	108.1	92.3
Q2	101.6	92.6	102.8	84.1	106.4	93.2
Q3	102.7	89.0	102.3	95.9	107.0	94.4
2014 Sep	103.1	89.8	104.9	89.0	102.7	92.6
Oct	103.7	86.9	104.9	91.1	101.6	88.9
Nov	103.5	87.7	104.3	90.7	103.8	92.1
Dec	104.6	84.6	102.3	93.4	101.9	92.3
2015 Jan	103.5	86.8	106.3	89.3	107.0	91.1
Feb	103.3	89.9	104.9	91.6	109.3	89.3
Mar	102.8	91.6	104.7	85.2	108.0	96.6
Apr	101.5	91.0	104.1	84.0	109.5	91.2
May	101.8	93.2	102.4	84.6	104.3	99.0
Jun	101.4	93.8	101.8	83.7	105.5	89.3
Jul	101.9	91.3	101.6	95.3	106.9	94.3
Aug	102.8	85.2	102.0	95.0	106.7	93.5
Sep	103.4	90.6	103.3	97.4	107.3	95.5
Oct	103.2 [†]	90.9	102.0 [†]	102.5	106.9 [†]	97.9 [†]
Nov	102.9	89.3	103.4	101.5	107.3	93.1

Percentage change, latest year on previous year

2010	4.3	3.1	0.8	-1.6	-0.6	-7.0
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

Percentage change, latest month on same month a year ago

2013 Sep	-3.1	-3.6	4.6	-4.9	1.7	-1.4
Oct	-2.1	-3.0	3.0	12.4	1.0	2.2
Nov	-0.8	0.4	2.2	3.9	1.4	-1.3
Dec	0.6	-4.6	7.0	18.5	-0.6	2.3
2014 Jan	1.9	-0.7	2.9	-7.9	6.2	-11.2
Feb	3.9	2.0	1.4	-10.7	3.2	-0.2
Mar	5.4	1.6	-4.7	-7.0	2.1	0.3
Apr	6.8	2.5	-0.1	-9.3	4.1	-4.0
May	1.5	8.4	-0.1	-5.7	1.9	-10.3
Jun	2.7	-3.5	-0.6	-16.3	-0.5	-9.8
Jul	1.8	-6.1	0.4	-12.3	5.2	-1.9
Aug	4.8	-8.9	3.0	-11.8	-0.8	3.6
Sep	6.5	-6.4	2.3	-4.8	2.8	-7.7
Oct	7.5	-10.8	3.5	1.5	2.1	-9.8
Nov	6.3	-10.3	3.6	-2.7	3.8	-2.3
Dec	6.3	-10.0	-0.7	-10.4	1.1	-6.3
2015 Jan	2.9	-10.8	3.7	-3.5	4.6	6.9
Feb	1.0	-6.9	1.7	4.2	9.5	-6.1
Mar	0.3	-3.8	4.1	-7.4	6.6	2.4
Apr	-1.3	-4.8	2.4	-8.2	7.9	-6.0
May	0.2	-8.1	-0.5	-6.2	2.7	7.8
Jun	-0.8	1.8	-0.9	-3.1	5.7	-1.5
Jul	-1.2	2.4	-1.2	9.6	4.8	0.3
Aug	-0.7	-4.5	-3.1	8.2	7.7	-0.9
Sep	0.3	0.9	-1.5	9.5	4.5	3.1
Oct	-0.5 [†]	4.6 [†]	-2.7 [†]	12.6	5.3 [†]	10.1 [†]
Nov	-0.6	1.9	-0.9	11.9	3.4	1.0

¹ 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 added¹

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
2010	104.5	93.1	100.7	93.8	91.1	87.1	101.4
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
2014 Q3	110.8	99.6	102.7	91.9	92.4	110.4	111.1
Q4	110.8	99.5	105.3	92.2	89.5	113.0	110.7
2015 Q1	108.1	102.5	100.2	92.9	83.3	114.9	110.6
Q2	107.1	101.3	101.5	92.9	81.3	117.4	109.7
Q3	106.2	97.8	99.9	91.9	78.8	119.3	106.3
2014 Sep	110.4	99.8	106.8	92.4	91.9	111.3	109.5
Oct	111.1	98.7	102.5	88.7	90.8	111.7	111.0
Nov	109.9	100.5	103.0	93.5	88.4	113.1	112.6
Dec	111.4	99.4	110.2	94.4	89.2	114.1	108.5
2015 Jan	108.1	102.0	101.1	91.5	82.5	113.7	109.8
Feb	107.7	103.2	99.2	93.2	84.3	115.7	109.8
Mar	108.5	102.3	100.4	93.9	83.1	115.4	112.2
Apr	108.1	102.5	101.0	93.8	84.6	115.9	111.7
May	106.3	98.2	99.0	91.9	79.7	118.4	108.1
Jun	106.8	103.2	104.5	93.1	79.6	118.0	109.4
Jul	106.8	97.6	99.9	90.7	78.1	116.1	106.6
Aug	105.2	99.0	100.0	90.8	78.6	121.5	104.1
Sep	106.7	96.7	99.9	94.1	79.6	120.3	108.1
Oct	106.9	96.8 †	98.5 †	92.8 †	76.8 †	122.0 †	102.3
Nov	106.1	96.3	98.1	92.0	76.3	120.3	107.4
Percentage change, latest year on previous year							
2010	0.1	6.0	-4.3	11.5	19.7	22.6	4.3
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
Percentage change, latest month on same month a year ago							
2013 Sep	-1.1	-2.9	-4.3	-6.2	-4.8	7.9	6.2
Oct	2.7	-0.9	-9.1	-6.2	-5.2	12.7	5.7
Nov	1.9	2.0	-5.3	0.1	-11.2	8.9	6.4
Dec	3.2	4.1	-5.8	-5.1	-10.3	-0.5	8.0
2014 Jan	15.8	4.1	-3.1	-2.5	7.7	1.2	4.7
Feb	13.6	3.7	3.5	-4.7	8.7	2.1	2.7
Mar	14.2	-0.6	-1.6	-0.4	1.1	2.5	6.2
Apr	18.9	1.8	-0.2	-2.2	8.2	4.8	6.2
May	14.6	4.6	1.3	-7.6	12.3	1.8	6.1
Jun	11.9	5.2	-1.2	-2.4	5.2	3.9	6.1
Jul	12.7	3.8	6.0	-1.2	6.0	2.2	5.2
Aug	13.4	4.1	3.0	-6.4	4.7	-0.8	7.6
Sep	12.1	0.6	11.0	-2.9	2.8	1.1	2.8
Oct	10.6	-1.3	8.8	-6.1	0.5	1.1	5.2
Nov	8.3	0.8	7.4	-0.6	0.8	3.5	8.0
Dec	9.9	-1.0	14.6	1.7	-1.4	10.2	0.5
2015 Jan	0.5	2.4	-0.8	-1.5	-10.6	6.7	0.2
Feb	0.1	4.0	-0.2	2.2	-10.1	6.7	1.6
Mar	0.2	4.1	0.7	-0.3	-11.6	5.0	4.2
Apr	-2.5	3.4	-1.2	1.2	-9.2	4.6	2.4
May	-2.4	0.9	0.6	1.4	-15.1	8.9	0.7
Jun	-1.9	3.8	6.6	-3.3	-15.2	4.4	0.3
Jul	-3.4	-0.2	-0.9	-3.3	-17.1	4.0	-3.3
Aug	-5.7	-2.1	-0.4	1.5	-13.6	12.3	-8.2
Sep	-3.3	-3.0	-6.5	1.8	-13.5	8.1	-1.3
Oct	-3.8 †	-1.9 †	-3.9 †	4.6 †	-15.4 †	9.2 †	-7.8
Nov	-3.5	-4.2	-4.8	-1.7	-13.7	6.4	-4.6

¹ 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 added¹

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
Percentage change, latest month on previous month						
2013 Sep	-1.9	-2.2	0.3	-6.2	0.1	10.2
Oct	-0.4	1.6	-1.2	-4.0	-0.4	-1.7
Nov	1.0	0.4	-0.6	4.0	0.5	-4.3
Dec	1.0	-3.9	2.2	11.7	0.9	4.5
2014 Jan	2.2	3.5	-0.4	-11.1	1.4	-13.5
Feb	1.7	-0.7	0.6	-5.0	-2.5	11.6
Mar	0.2	-1.4	-2.5	4.7	1.4	-0.8
Apr	0.4	0.4	1.1	-0.5	0.2	2.8
May	-1.2	6.1	1.2	-1.5	0.1	-5.3
Jun	0.6	-9.2	-0.1	-4.3	-1.8	-1.3
Jul	0.8	-3.2	0.1	0.8	2.3	3.7
Aug	0.3	0.2	2.4	0.9	-2.9	0.4
Sep	-0.3	0.5	-0.4	1.3	3.7	-1.9
Oct	0.6	-3.2	-	2.4	-1.1	-4.0
Nov	-0.2	1.0	-0.5	-0.4	2.2	3.6
Dec	1.0	-3.6	-1.9	2.9	-1.8	0.2
2015 Jan	-1.0	2.6	3.9	-4.4	5.0	-1.4
Feb	-0.2	3.6	-1.3	2.6	2.1	-1.9
Mar	-0.5	1.9	-0.2	-7.0	-1.2	8.2
Apr	-1.3	-0.7	-0.6	-1.4	1.4	-5.6
May	0.3	2.4	-1.6	0.7	-4.7	8.6
Jun	-0.3	0.6	-0.5	-1.1	1.1	-9.8
Jul	0.4	-2.7	-0.3	13.9	1.4	5.5
Aug	0.9	-6.6	0.5	-0.4	-0.2	-0.9
Sep	0.6	6.3	1.3	2.5	0.6	2.1
Oct	-0.2 [†]	0.3 [†]	-1.3 [†]	5.3 [†]	-0.4 [†]	2.5 [†]
Nov	-0.3	-1.7	1.4	-1.0	0.4	-4.9
Percentage change, latest 3 months on same 3 months a year ago						
2013 Sep	-1.3	-3.0	3.3	-0.9	0.4	-3.5
Oct	-2.4	-2.9	3.5	2.8	1.5	-1.9
Nov	-2.0	-2.1	3.3	3.2	1.4	-0.2
Dec	-0.7	-2.4	4.0	11.5	0.6	1.1
2014 Jan	0.6	-1.6	4.0	4.3	2.3	-3.4
Feb	2.1	-1.1	3.7	-0.8	2.9	-3.0
Mar	3.7	1.0	-0.2	-8.5	3.8	-3.7
Apr	5.3	2.0	-1.1	-9.0	3.1	-1.4
May	4.5	4.2	-1.7	-7.3	2.7	-4.8
Jun	3.6	2.4	-0.3	-10.5	1.8	-8.0
Jul	2.0	-0.5	-0.1	-11.6	2.2	-7.5
Aug	3.1	-6.2	0.9	-13.5	1.3	-2.9
Sep	4.3	-7.1	1.9	-9.8	2.4	-2.2
Oct	6.3	-8.7	2.9	-5.3	1.4	-4.9
Nov	6.8	-9.2	3.1	-2.1	2.9	-6.7
Dec	6.7	-10.4	2.1	-4.2	2.3	-6.2
2015 Jan	5.1	-10.4	2.2	-5.7	3.2	-0.9
Feb	3.4	-9.2	1.6	-3.6	5.0	-2.2
Mar	1.4	-7.2	3.2	-2.3	6.9	0.8
Apr	-	-5.2	2.8	-3.9	8.0	-3.3
May	-0.3	-5.6	2.0	-7.3	5.7	1.3
Jun	-0.7	-3.9	0.4	-5.9	5.4	-
Jul	-0.6	-1.6	-0.9	-	4.4	2.2
Aug	-0.9	-0.1	-1.7	4.9	6.1	-0.7
Sep	-0.5	-0.4	-1.9	9.1	5.6	0.8
Oct	-0.3	0.3	-2.4	10.1	5.8 [†]	4.0
Nov	-0.3	2.5	-1.7	11.3	4.4	4.7

¹ 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 added¹

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

Percentage change, latest month on previous month

2013	Sep	0.2	2.1	-1.3	-0.5	2.9	0.9	1.0
	Oct	2.0	0.8	-2.2	-0.8	1.1	0.4	-1.0
	Nov	1.0	-0.4	1.9	-0.4	-3.0	-1.1	-1.1
	Dec	-0.1	0.7	0.2	-1.3	3.2	-5.2	3.5
2014	Jan	6.0	-0.8	5.9	-	2.0	2.9	1.4
	Feb	0.1	-0.3	-2.4	-1.7	1.7	1.7	-1.3
	Mar	0.6	-1.0	0.2	3.3	0.1	1.4	-0.3
	Apr	2.3	0.8	2.5	-1.6	-0.8	0.7	1.2
	May	-1.6	-1.8	-3.6	-2.3	0.6	-1.9	-1.5
	Jun	-0.2	2.2	-0.5	6.3	-	4.1	1.5
	Jul	1.5	-1.6	2.8	-2.6	0.4	-1.3	1.1
	Aug	1.0	3.4	-0.3	-4.5	-3.4	-3.1	3.0
	Sep	-1.0	-1.3	6.4	3.3	1.0	2.9	-3.5
	Oct	0.6	-1.1	-4.1	-4.0	-1.2	0.4	1.3
	Nov	-1.1	1.8	0.5	5.4	-2.7	1.2	1.5
	Dec	1.4	-1.0	7.0	1.0	0.9	0.9	-3.7
2015	Jan	-3.0	2.6	-8.3	-3.1	-7.5	-0.4	1.1
	Feb	-0.3	1.2	-1.9	1.9	2.2	1.8	0.1
	Mar	0.7	-0.9	1.2	0.7	-1.5	-0.2	2.2
	Apr	-0.4	0.2	0.6	-0.1	1.9	0.3	-0.5
	May	-1.6	-4.2	-1.9	-2.1	-5.8	2.2	-3.2
	Jun	0.4	5.1	5.5	1.3	-0.2	-0.3	1.2
	Jul	-	-5.4	-4.4	-2.6	-1.8	-1.7	-2.6
	Aug	-1.5	1.4	0.1	0.1	0.6	4.7	-2.3
	Sep	1.5	-2.2	-0.1	3.6	1.2	-1.0	3.8
	Oct	0.1 [†]	0.1 [†]	-1.4 [†]	-1.4 [†]	-3.4 [†]	1.4 [†]	-5.4
	Nov	-0.8	-0.6	-0.4	-0.9	-0.7	-1.3	5.0

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

2013	Sep	-1.1	-5.2	-3.7	-6.9	-11.1	8.2	4.6
	Oct	0.4	-2.8	-5.3	-6.4	-8.0	10.3	5.3
	Nov	1.2	-0.6	-6.3	-4.2	-7.1	9.8	6.1
	Dec	2.6	1.7	-6.8	-3.8	-9.0	6.9	6.7
2014	Jan	6.8	3.4	-4.7	-2.5	-5.2	3.1	6.4
	Feb	10.7	3.9	-1.9	-4.1	1.3	0.9	5.1
	Mar	14.5	2.4	-0.5	-2.5	5.7	1.9	4.5
	Apr	15.5	1.6	0.5	-2.5	5.9	3.1	5.0
	May	15.9	1.9	-0.2	-3.5	7.0	3.0	6.2
	Jun	15.1	3.9	-	-4.1	8.5	3.5	6.1
	Jul	13.0	4.6	2.0	-3.8	7.7	2.6	5.8
	Aug	12.7	4.4	2.6	-3.3	5.3	1.8	6.3
	Sep	12.7	2.8	6.7	-3.5	4.5	0.9	5.2
	Oct	12.0	1.1	7.6	-5.1	2.6	0.5	5.2
	Nov	10.3	-	9.1	-3.2	1.4	1.9	5.3
	Dec	9.6	-0.5	10.3	-1.7	-	4.8	4.5
2015	Jan	6.1	0.8	7.0	-0.1	-3.8	6.7	2.8
	Feb	3.4	1.8	4.4	0.8	-7.4	7.8	0.8
	Mar	0.3	3.5	-0.1	0.1	-10.8	6.1	2.0
	Apr	-0.8	3.8	-0.2	1.0	-10.3	5.4	2.7
	May	-1.6	2.8	-	0.8	-12.0	6.1	2.4
	Jun	-2.3	2.7	2.0	-0.3	-13.2	5.9	1.1
	Jul	-2.6	1.5	2.1	-1.8	-15.8	5.7	-0.8
	Aug	-3.7	0.5	1.7	-1.8	-15.3	6.8	-3.8
	Sep	-4.2	-1.8	-2.7	-	-14.7	8.1	-4.3
	Oct	-4.3	-2.4	-3.7 [†]	2.6 [†]	-14.2 [†]	9.8 [†]	-5.8
	Nov	-3.6	-3.0	-5.1	1.5	-14.2	7.9	-4.6

¹ 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 added¹

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	
Percentage change, latest 3 months on previous 3 months							
2013	Sep	0.3	2.3	-0.3	-2.4	-0.2	-5.5
	Oct	-3.0	2.6	-0.9	-5.1	0.8	-3.0
	Nov	-3.0	1.0	-1.1	-8.4	0.8	2.0
	Dec	-1.5	0.1	-0.7	-1.8	1.2	1.5
2014	Jan	1.5	-0.8	-	2.6	1.3	-4.1
	Feb	3.6	-1.2	1.3	3.0	1.2	-4.9
	Mar	4.4	-0.1	0.4	-5.1	1.0	-5.7
	Apr	3.7	-0.6	-0.3	-6.4	-0.2	3.0
	May	1.9	1.6	-1.2	-3.8	0.4	1.6
	Jun	0.5	0.1	0.3	-1.6	-0.2	1.8
	Jul	-0.2	-1.6	1.0	-2.9	0.3	-3.5
	Aug	0.6	-7.4	1.9	-4.6	-1.1	-1.5
	Sep	1.0	-7.2	1.9	-1.6	0.3	0.5
	Oct	1.1	-5.9	2.1	1.6	-	-0.2
	Nov	0.5	-2.3	1.0	3.7	2.4	-1.9
	Dec	0.7	-3.4	-0.5	4.3	1.2	-2.7
2015	Jan	0.4	-2.6	-0.7	2.1	3.1	-0.1
	Feb	0.3	-1.2	-0.2	1.3	3.3	-0.3
	Mar	-0.7	3.5	1.4	-3.3	5.5	1.3
	Apr	-1.3	5.2	0.2	-4.6	4.5	0.6
	May	-1.7	5.6	-0.7	-7.5	1.1	5.2
	Jun	-1.6	3.6	-2.4	-5.2	-1.5	0.9
	Jul	-0.8	2.1	-2.5	1.1	-3.1	2.0
	Aug	-	-2.0	-1.8	8.0	-0.8	-3.4
	Sep	1.1	-3.9	-0.5	14.1	0.5	1.3
	Oct	1.4	-4.1	0.5 [†]	11.9	1.3	1.5
	Nov	1.1	0.2	1.1	10.0	0.8	3.3

¹ 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 added¹

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
Percentage change, latest 3 months on previous 3 months							
2013 Sep	3.3	2.1	-3.3	-2.0	2.4	2.2	3.3
Oct	2.4	5.2	-1.2	-2.2	1.9	1.5	2.9
Nov	2.3	4.6	-1.8	-1.9	1.0	0.8	1.1
Dec	2.9	3.3	-0.9	-1.5	1.3	-1.5	0.3
2014 Jan	4.4	1.1	2.1	-1.9	1.4	-3.1	1.3
Feb	5.3	0.1	3.9	-2.4	3.4	-3.4	2.9
Mar	6.6	-1.0	5.1	-1.1	4.3	0.5	2.4
Apr	5.3	-1.0	2.5	-0.6	3.9	3.1	0.9
May	3.7	-1.5	1.0	0.2	1.6	3.4	-0.4
Jun	1.6	-0.5	-0.8	0.5	0.3	2.3	-
Jul	0.5	-0.7	-1.3	0.9	0.3	1.3	0.6
Aug	0.8	1.3	-0.4	0.7	-0.7	1.1	2.7
Sep	1.2	1.0	3.2	-1.4	-1.4	-0.4	2.4
Oct	1.5	1.8	4.2	-3.6	-2.9	-0.6	2.3
Nov	0.2	0.2	4.4	-1.8	-2.8	1.0	0.1
Dec	-	-	2.5	0.3	-3.1	2.4	-0.3
2015 Jan	-1.1	0.7	1.5	3.3	-5.0	2.9	-0.9
Feb	-1.3	1.9	-0.6	1.7	-5.6	2.2	-1.5
Mar	-2.5	3.0	-4.8	0.7	-6.9	1.7	-0.1
Apr	-1.6	2.0	-4.4	0.6	-3.1	1.8	0.8
May	-1.3	-0.6	-3.3	0.2	-3.4	1.8	1.2
Jun	-0.9	-1.2	1.3	-	-2.4	2.2	-0.8
Jul	-1.3	-2.9	1.0	-1.9	-5.8	1.6	-2.9
Aug	-1.3	-1.1	1.3	-1.8	-4.5	1.7	-3.6
Sep	-0.8	-3.5	-1.5	-1.2	-3.1	1.6	-3.1
Oct	-0.4 †	-2.2	-1.7 †	0.7 †	-1.0	3.2	-2.9
Nov	0.3	-3.3	-2.6	1.5	-1.5	2.0	-0.7

1 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.

- [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 added¹

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
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-	-	-	-	-	-
2014 Q4	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-	-	-	-	-
2015 Q2	-	-	-	-	-	-	-	-	-	-	-
2015 Q3	-	-	-	-	-	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-	-	-	-	-	-
2014 Sep	-	-	-	-	-	-	-	-	-	-	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
2014 Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
2015 Feb	-	-	-	-	-	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-	-	-	-	-	-
2015 Apr	-	-	-	-	-	-	-	-	-	-	-
2015 May	-	-	-	-	-	-	-	-	-	-	-
2015 Jun	-	-	-	-	-	-	-	-	-	-	-
2015 Jul	-	-	-	-	-	-	-	-	-	-	-
2015 Aug	-	-	-	-	-	-	-	-	-	-	-
2015 Sep	-	-	-	-	-	-	-	-	-	-	-
2015 Oct	-	0.1	-	-	-0.2	0.2	-0.3	-	-	-	-
Percentage change, latest year on previous year											
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago											
2013 Aug	-	-	-	-	-	-	-	-	-	-	-
2013 Sep	-	-	-	-	-	-	-	-	-	-	-
2013 Oct	-	-	-	-	-	-	-	-	-	-	-
2013 Nov	-	-	-	-	-	-	-	-	-	-	-
2013 Dec	-	-	-	-	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-	-	-	-	-
2014 Feb	-	-	-	-	-	-	-	-	-	-	-
2014 Mar	-	-	-	-	-	-	-	-	-	-	-
2014 Apr	-	-	-	-	-	-	-	-	-	-	-
2014 May	-	-	-	-	-	-	-	-	-	-	-
2014 Jun	-	-	-	-	-	-	-	-	-	-	-
2014 Jul	-	-	-	-	-	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-	-	-	-	-	-
2014 Sep	-	-	-	-	-	-	-	-	-	-	-
2014 Oct	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
2014 Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
2015 Feb	-	-	-	-	-	-	-	-	-	-	-
2015 Mar	-	-	-	-	-	-	-	-	-	-	-
2015 Apr	-	-	-	-	-	-	-	-	-	-	-
2015 May	-	-	-	-	-	-	-	-	-	-	-
2015 Jun	-	-	-	-	-	-	-	-	-	-	-
2015 Jul	-	-	-	-	-	-	-	-	-	-	-
2015 Aug	-	-	-	-	-	-	-	-	-	-	-
2015 Sep	-	-	-	-	-	-	-	-	-	-	-
2015 Oct	-	0.2	-0.1	-	-0.2	0.2	-0.3	-	-0.1	-	-

¹ 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.

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

¹ 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.

Output of the Production Industries
Chained volume indices of gross value added¹

Seasonally adjusted 2012 = 100

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

¹ 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.

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
2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-
Q4	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-
Q2	-	-	-	-	-	-
Q3	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	0.1	-	-0.2	-	0.2	-0.1

Percentage change, latest year on previous year

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

Percentage change, latest month on same month a year ago

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

¹ 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.

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
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2014 Q3	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-
2014 Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	0.1	-0.3	-0.2	-0.1	-0.1	-
Percentage change, latest year on previous year							
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago							
2013 Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-0.1	0.1	-0.3	-0.3	-0.1	-0.1	-

¹ 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.

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

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

2013 Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	0.1	-

¹ 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.

Output of the Production Industries

Chained volume indices of gross value added¹

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

Percentage change, latest month on previous month

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

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

2013 Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-0.1	-0.1	-0.1	-0.1	-

¹ 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.

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239

Percentage change, latest 3 months on previous 3 months

2013 Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2014 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-0.1	-	-	-

¹ 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.

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

Percentage change, latest 3 months on previous 3 months

2013	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2014	Jan	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-	-	-	-	-	-	-
	Nov	-	-	-	-	-	-	-
	Dec	-	-	-	-	-	-	-
2015	Jan	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-
	Jul	-	-	-	-	-	-	-
	Aug	-	-	-	-	-	-	-
	Sep	-	-	-	-	-	-	-
	Oct	-0.1	-	-0.1	-0.1	-	-	-

¹ 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.

Next publication: Wednesday 10th February 2016
Issued by: Office for National Statistics, Government Buildings, Cardiff Road, Newport NP10 8XG

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

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

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