

Statistical bulletin

Index of Production, UK: February 2016

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



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1 . Main points

Total production output is estimated to have decreased by 0.5% in February 2016 compared with the same month a year ago, the largest fall since August 2013. The largest contribution to the fall came from manufacturing, which decreased by 1.8%. This was the largest fall since July 2013, when it fell by an equal amount.

There were decreases in 10 of the 13 manufacturing sub-sectors, with the largest contribution coming from the [manufacture of machinery & equipment not elsewhere classified](#), which decreased by 10.6% and contributed a downward 0.5 percentage points to total production.

Total production output is estimated to have decreased by 0.3% between January 2016 and February 2016. There were decreases in 2 of the 4 main sectors, with manufacturing (the largest component of production) having the largest contribution to the decrease, falling by 1.1%.

Manufacturing output decreased in 11 of the 13 manufacturing sub-sectors, with the largest contribution coming from the manufacture of transport equipment, which decreased by 2.9%.

In the 3 months to February 2016, production and manufacturing were 10.6% and 6.8% respectively below their figures reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

In this release, the only period open for revision was January 2016, in line with the National Accounts revisions policy. In January 2016, there was a downward revision of 0.1 percentage points whereby the month-on-month growth rate was revised from a rise of 0.3% to 0.2%.

2 . Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, February 2016. The IoP is one of the earliest indicators of growth and it measures output in the manufacturing (the largest component of production), mining & quarrying, energy supply and water supply & waste management industries. The production industries account for 14.9% of the [output approach to the measurement of gross domestic product](#).

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

This release presents:

- the most recent loP figures
- the economic context to the loP
- GDP impact and components
- a supplementary analysis to the loP
- spotlight
- background notes section including an assessment of the quality of the loP, 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 November 2013 to February 2016.

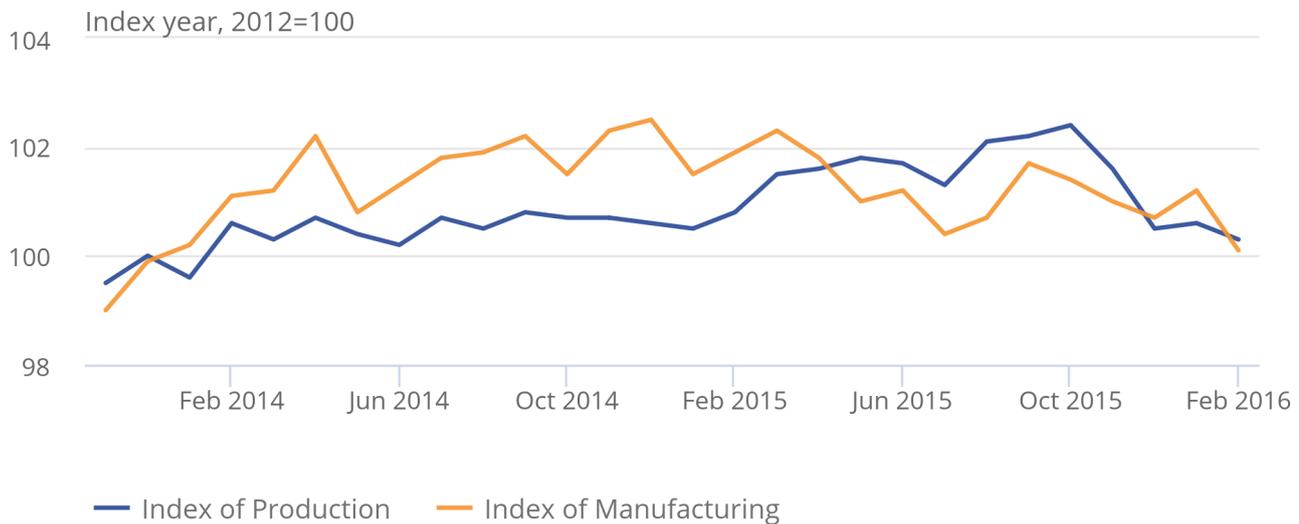
Table 1: Index of Production main figures, February 2016, UK

	Index number (2012 = 100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Percentage change	
				Most recent month on previous month	Most recent 3 months on previous 3 months
Production	100.3	-0.5	-0.2	-0.3	-1.5
Manufacturing	100.1	-1.8	-1.3	-1.1	-0.7

Source: Office for National Statistics

Figure 1: Seasonally adjusted production and manufacturing, November 2013 to February 2016, UK

Figure 1: Seasonally adjusted production and manufacturing, November 2013 to February 2016, UK



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

3 . Quality of the Index of Production

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

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

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

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

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

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

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

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

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

4 . Economic context

Production output contracted in February 2016, with output falling to its lowest level since June 2014. Overall, the level of production in the latest month is 0.5% below that of February 2015 and 0.3% below its level in February 2014. Moreover, in the latest quarter (Quarter 4 (Oct to Dec) 2015) production output contracted for a first time since Quarter 4 (Oct to Dec) 2012, breaking a pattern of 11 consecutive quarters of growth.

Throughout the previous 12 months, manufacturing – the largest component of production – experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being 1.8% lower than those recorded in February 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

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

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

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

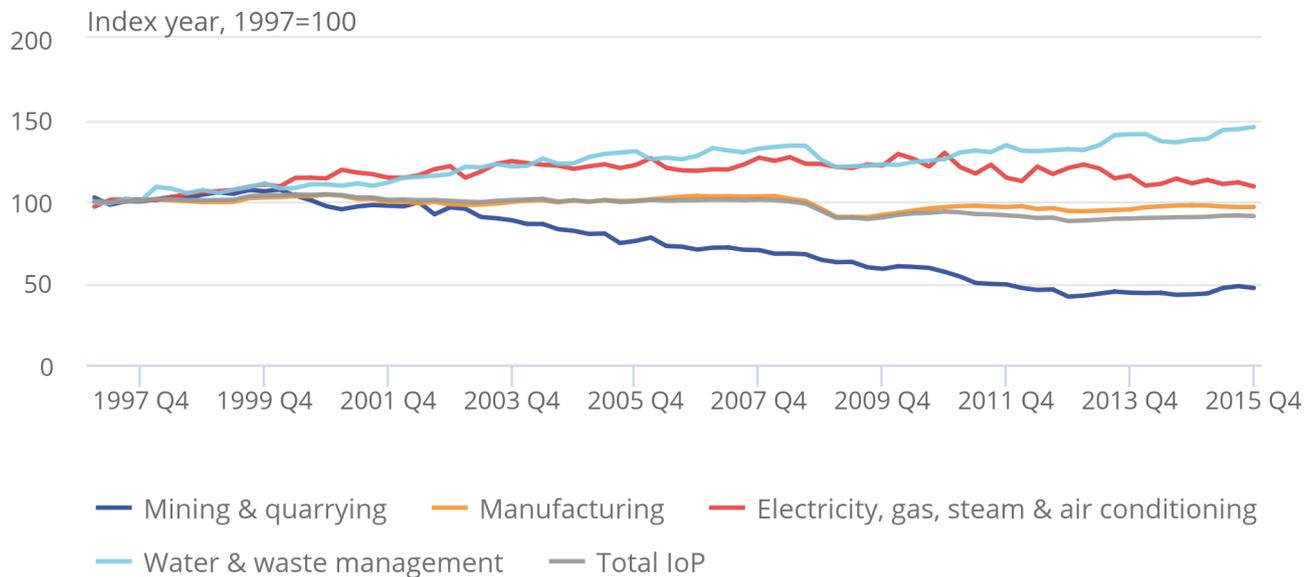
In Quarter 4 (Oct to Dec) 2015, production and manufacturing remained below their Quarter 1 (Jan to Mar) 2008 levels by 9.7% and 6.5%, respectively. Moreover, in Quarter 4 (Oct to Dec) 2015, mining & quarrying and electricity, gas, steam & air conditioning output, which continued to decline following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

Headline GDP surpassed its pre-downturn peak in Quarter 2 (Apr to June) 2013 and services remains the only headline industry grouping to have achieved this. This is consistent with the historical trend of services growing at a faster rate than production and manufacturing, despite the fact that productivity in the production industries (manufacturing in particular) has on average grown at a faster rate than in the service industries since 1997 (more information can be found in [UK productivity: Oct to Dec 2015](#)). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from 16.5% to 9.6% between 1997 and 2015 ([Labour Market Statistics, March 2016, dataset Employment by industry: 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 8.1% in the year to February 2016, from a fall of 8.0% in the year to January 2016. Output prices have also experienced deflation, falling by 1.1% in the year to February 2016 (more information can be found in [Producer Price Index, February 2016](#)).

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

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



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

Notes:

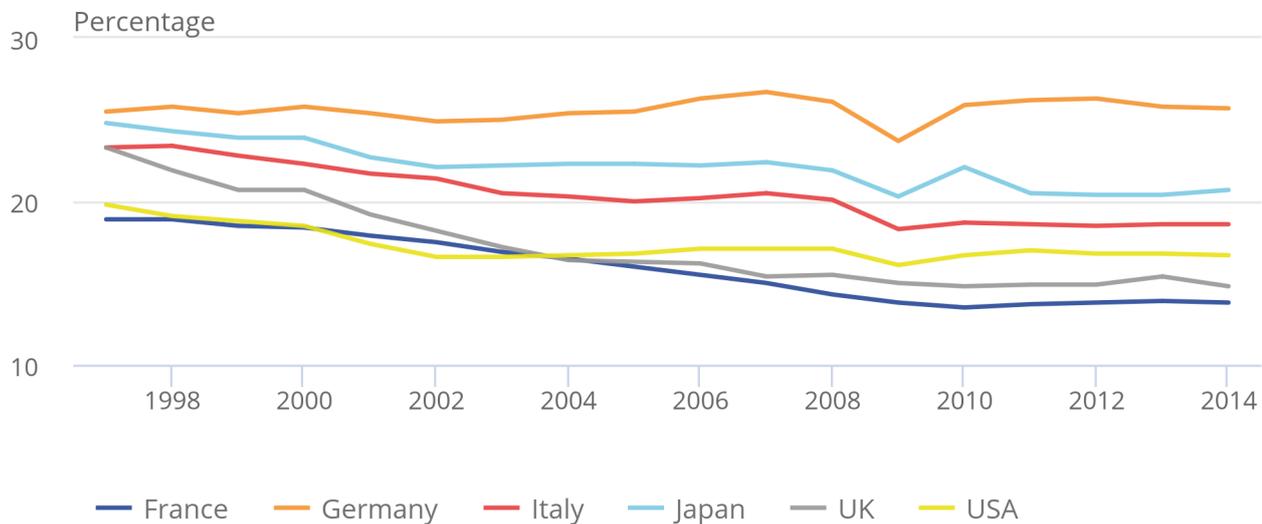
1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

Figure 3 shows the share of nominal gross value added (GVA) accounted for by production in the UK and a selection of other major economies (more information on data for France, Germany, Italy, Japan and the USA can be found on the [Organisation for Economic Co-operation and Development \(OECD\) website](#)). In 1997, the share of nominal GVA accounted for by production in the UK was 23.3%, around the middle of the range relative to the other economies. By 2014, the UK had become relatively less reliant on production, as its share fell to 14.8% of nominal GVA.

The same trend was observed in manufacturing, where the share of nominal GVA fell from 18.4% in 1997 to 10.6% in 2014. Moreover, between 1997 and 2014, the composition of production in the UK changed, with the share of production attributed to manufacturing decreasing from 78.8% in 1997 to 72.1% in 2014.

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

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



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

5 . Gross domestic product (GDP) impact and components

In this release, the only period open for revision was January 2016, in line with the [National Accounts revisions policy](#).

The estimates for the production industries are generally the first of the main components for the output approach to the measurement of GDP to be published (agriculture, [construction](#) and [services](#) are the other components). All the components are available for Quarter 4 (Oct to Dec) 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 February 2016 will be published on 15 April 2016 and services output for the same period on 27 April 2016.

Table 2: Components of GDP, February 2016, UK

Publication	Percentage of GDP ⁴	Release date	Month or quarter of GDP ²	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	Percentage change
							Most recent month on the previous month
Index of Production ¹	14.9	08 Apr	Feb-16	-0.2	-1.5	-0.5	-0.3
			Jan-16	0.3	-1.3	0.1	0.2
Construction	5.9	11 Mar	Jan-16	0.1	1.1	-0.8	-0.2
Index of services	78.6	31 Mar	Jan-16	2.7	0.9	2.8	0.2
			Dec-15	2.5	0.8	2.5	0.3
Retail Sales		24 Mar	Feb-16	3.7	0.8	3.8	-0.4
			Jan-16	3.9	1.4	5.4	2.3
Agriculture	0.7		Q4 2015	-2.1	0.3
			Q3 2015	0.0	0.2

Source: Office for National Statistics

Notes:

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

6 . Production and sectors supplementary analysis

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

Description ¹	% of production	Month on same month a year ago growth (%)	Contribution to production (% points)	Month on previous month growth (%)	Contribution to production (% points)
IoP	100.0	-0.5	-0.5	-0.3	-0.3
Sector B	13.5	4.7	0.60	3.6	0.46
Division 06	10.6	11.7	1.08	5.4	0.53
Sector C	69.1	-1.8	-1.24	-1.1	-0.77
Sector D	9.3	-4.5	-0.41	0.7	0.06
Sector E	8.1	6.5	0.56	-0.6	-0.05

Source: Office for National Statistics

Notes:

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

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

Sector	Summary Description	Month on same month a year ago growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	-0.5	-0.50
Sector B	Total Mining & Quarrying	4.7	0.60
5	Coal & lignite	-76.9	-0.10
6	Crude petroleum & natural gas	11.7	1.08
789	Other mining & quarrying	-11.5	-0.38
Sector C	Total Manufacturing	-1.8	-1.24
CA	Food, beverages & tobacco	-0.1	-0.01
CB	Textiles & leather products	-4.6	-0.09
CC	Wood, paper & printing	-2.7	-0.14
CD	Coke & petroleum	-3.2	-0.06
CE	Chemical products	-4.1	-0.17
CF	Pharmaceutical products	4.6	0.25
CG	Rubber & plastic products	0.6	0.04
CH	Metal products	-5.1	-0.40
CI	Computer, electronic & optical	-2.7	-0.11
CJ	Electrical equipment	-2.6	-0.05
CK	Machinery & equipment	-10.6	-0.48
CL	Transport equipment	-0.2	-0.02
CM	Other manufacturing & repair	0.1	0.00
Sector D	Total Electricity & Gas	-4.5	-0.41
35.1	Electric power generation, transmission & distribution	-5.8	-0.39
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	-0.8	-0.02
Sector E	Total Water	6.5	0.56
36	Water collection, treatment & supply	-2.4	-0.05
37	Sewerage	11.9	0.27
38	Waste collection, treatment & disposal activities; materials recovery	8.4	0.33
39	Remediation activities & other waste management services	16.2	0.01

Source: Office for National Statistics

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

Sector	Summary Description	Month on previous month growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	-0.30	-0.30
Sector Total	Mining & Quarrying	3.6	0.46
B			
5	Coal & lignite	-10.8	0.00
6	Crude petroleum & natural gas	5.40	0.53
789	Other mining & quarrying	-2.10	-0.06
Sector Total	Manufacturing	-1.10	-0.77
C			
CA	Food, beverages & tobacco	-0.4	-0.04
CB	Textiles & leather products	-7	-0.14
CC	Wood, paper & printing	-2.5	-0.13
CD	Coke & petroleum	-2	-0.04
CE	Chemical products	-0.8	-0.03
CF	Pharmaceutical products	7.2	0.38
CG	Rubber & plastic products	-0.8	-0.05
CH	Metal products	-0.7	-0.05
CI	Computer, electronic & optical	-4	-0.17
CJ	Electrical equipment	0.6	0.01
CK	Machinery & equipment	-1.8	-0.07
CL	Transport equipment	-2.9	-0.26
CM	Other manufacturing & repair	-2.5	-0.17
Sector Total	Electricity & Gas	0.7	0.06
D			
35.1	Electric power generation, transmission & distribution	0.8	0.05
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	0.6	0.01
Sector Total	Water	-0.6	-0.05
E			
36	Water collection, treatment & supply	-0.1	0.00
37	Sewerage	-5.3	-0.14
38	Waste collection, treatment & disposal activities; materials recovery	2.1	0.09
39	Remediation activities & other waste management services	4.2	0.00

Source: Office for National Statistics

7 . Total production

Total production output in February 2016 decreased by 0.5% compared with February 2015 (Table 3). This decrease reflected falls in 2 of its 4 main sectors, with manufacturing (the largest component of production) having the largest downward contribution, decreasing by 1.8% and contributing -1.2 percentage points to total production. This was the largest decrease on a year since August 2013. The decrease in manufacturing was followed by a decrease in electricity, gas, steam & air-conditioning output, which decreased by 4.5% and contributed -0.4 percentage points to total production. These decreases were partially offset by an increase in mining & quarrying, which increased by 4.7% and contributed 0.6 percentage points and in water supply, sewerage & waste management output, which increased by 6.5% and contributed 0.6 percentage points to total production (Table 4).

Total production output in February 2016 decreased by 0.3% compared with January 2016 (Table 3), having increased by 0.2% the previous month. This decrease reflected falls in 2 of its 4 main sectors, with manufacturing having the largest contribution, decreasing by 1.1% and contributing -0.8 percentage points to total production. The decrease in manufacturing was followed by a decrease in water supply, sewerage & waste management output, which decreased by 0.6% and contributed -0.1 percentage points to total production. These decreases were partially offset by an increase in mining & quarrying, which increased by 3.6% and contributed 0.5 percentage points and in electricity, gas, steam & air-conditioning output, which increased by 0.7% and contributed 0.1 percentage points to total production (Table 5).

Manufacturing

Manufacturing output decreased by 1.8% between February 2015 and February 2016 and contributed -1.2 percentage points to total production. Output decreased in 10 of the 13 manufacturing sub-sectors compared with a year ago (Table 4). The manufacturing sub-sector with the largest downward contribution to the fall in total production output was the manufacture of machinery & equipment not elsewhere classified, which decreased by 10.6% and contributed -0.5% to total production. This was the 15th consecutive decrease since November 2014 and anecdotal evidence suggested that there was a general decrease across the industry compared with a year ago. The second largest downward contribution came from the manufacture of basic metals & metal products, which decreased by 5.1% and contributed -0.4 percentage points to the fall in total production. The sub-sector with the largest contribution to the decrease in this sector was the manufacture of basic iron & steel, which fell by 37.7% and contributed -0.4 percentage points to total production.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production compared with a year ago was the manufacture of basic pharmaceutical products & pharmaceutical preparations. This sub-sector increased by 4.6% and contributed 0.2 percentage points to total production. Anecdotal evidence suggested increased exports as the main contributor to the rise.

Manufacturing output decreased by 1.1% between January 2016 and February 2016, having increased in January 2016 by 0.5%, revised from 0.7% (see revisions to IoP for further details). There were decreases in 11 of the 13 manufacturing sub-sectors (Table 5). The manufacturing sub-sector with the largest downward contribution to total production was the manufacture of transport equipment, which decreased by 2.9% and contributed -0.3 percentage points to total production. The main contributor to the decrease within this sub-sector was the manufacture of motor vehicles, trailers & semi trailers, which decreased by 5.6% and contributed -0.3 percentage points to total production, the largest fall since August 2014, when it fell by 6.5%. Anecdotal evidence suggested falling exports were a contributing factor to the decrease.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production was the manufacture of basic pharmaceutical products & pharmaceutical preparations. This sub-sector increased by 7.2% and contributed 0.4 percentage points to total production. Anecdotal evidence suggested increased exports as the main contributor to the increase.

Mining & quarrying

Mining & quarrying output increased by 4.7% between February 2015 and February 2016 and contributed 0.6 percentage points to total production. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which increased by 11.7% and contributed 1.1 percentage points to total production (Table 4). Anecdotal evidence suggested maintenance, due to technical issues in the Buzzard oil field (which feeds into the Forties) in the previous year was a contributing factor to this year's increase in production when compared with the previous year. In addition the change to the investment allowance announced in the [summer Budget](#) has also been a contributing factor.

Mining & quarrying output increased by 3.6% in February 2016 compared with January 2016 and contributed 0.5 percentage points to total production. This followed a decrease of 4.9% in the previous month. The sub-sector with the largest contribution was the extraction of crude petroleum & natural gas, which increased by 5.4% and contributed 0.5 percentage points to total production (Table 5).

Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output decreased by 4.5% in February 2016 compared with February 2015, the fourth consecutive decrease and contributed -0.4 percentage points to total production (Table 4). This decrease reflected falls in output in both of its sub-sectors, with the largest contribution coming from electric power generation, transmission & distribution, which decreased by 5.8% and contributed -0.4 percentage points to total production. Evidence cited the warmer weather and the increase in the cost of fuel mix for the purpose of generating electricity as contributing factors to this year's decrease in output.

Electricity, gas, steam & air conditioning output increased by 0.7% in February 2016 compared with January 2016 and contributed 0.1 percentage points to total production (Table 5). This reflected an increase in output in both of its sub-sectors; the largest contribution came from electric power generation, transmission & distribution, which increased by 0.8% with a negligible contribution to total production (Table 5). Evidence cited the decrease in the cost of fuel mix used for the purpose of generating electricity this month in comparison with the previous month as a contributing factor to the increase in output.

Water & waste management

Water supply, sewerage & waste management output increased by 6.5% in February 2016 compared with February 2015, the 12th consecutive increase since February 2015. This increase reflected a rise in 3 of its 4 sub-sectors' output (Table 4), with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 8.4% and contributed 0.3 percentage points to total production.

Water supply, sewerage & waste management output decreased by 0.6% between January 2016 and February 2016 and contributed -0.1 percentage points to total production. This decrease reflected falls in 2 of its 4 sub-sectors. The largest contribution to the decrease came from sewerage, which decreased by 5.3% and contributed -0.1 percentage points to total production, having increased by 0.6% in the previous month (Table 5).

Revisions to IoP

Revisions to the Index of Production follow the [National Accounts revisions policy](#). Revisions are caused by a number of factors including, but not limited to revisions to source data due to late responses to the Monthly Business Survey (MBS), actual data replacing forecast data and revisions to seasonal factors that are re-estimated every period.

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

In this release of data, the only period open for revision was January 2016. There were no revisions to loP month-on-month growth rates greater than 0.1 percentage points.

In January 2016, there was a downward revision of 0.1 percentage points whereby the month-on-month growth rate was revised from a rise of 0.3% to 0.2%. The manufacturing sector was the only loP main sector to have revised downwards, primarily due to late responses. Within this, the largest contribution to the downward revision came from the other manufacturing & repair sub-sector.

Further details on the revisions to loP components can be found in the IOP5R tables, located within the dataset section of this release.

8 . Industry spotlight: Durable and non-durable consumer goods

In the [Index of Production for November 2015 \(loP\)](#) the main industrial groupings classification (MIGs) was discussed together with one of its components (intermediate goods). Following on from that analysis, this month's spotlight focuses on the production of consumer durable and non-durable goods.

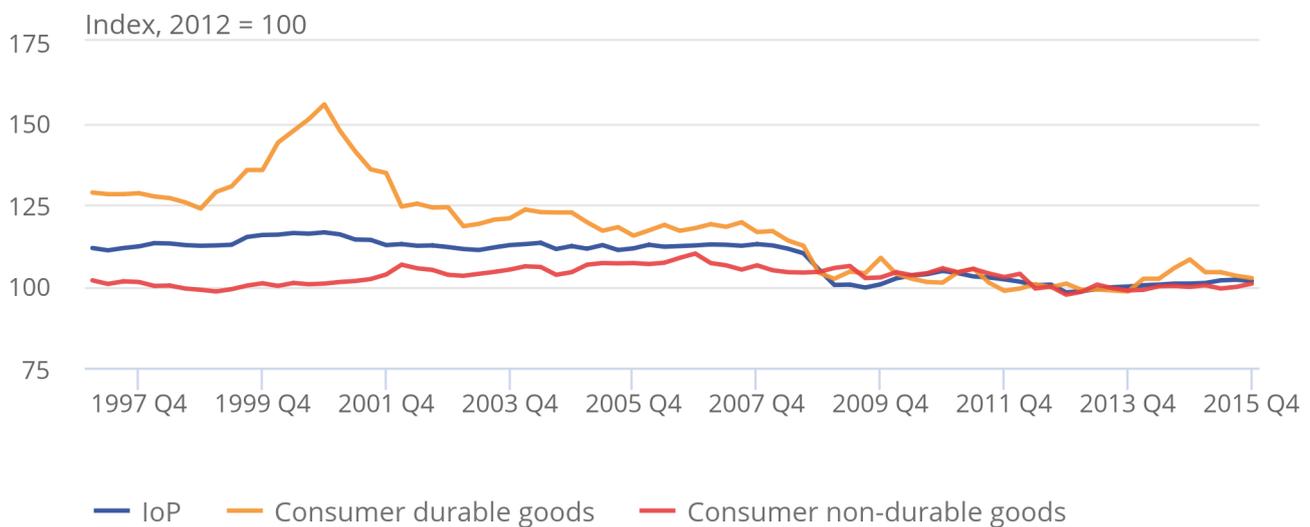
[According to the OECD glossary of statistical terms](#) consumer goods are used by households, without any further transformation in the production process (that is, final goods). There are 2 types of consumer goods: durable goods and non-durable goods (within household expenditure we identify a third, semi-durable, which is not covered in this spotlight). Durable goods are those which may be used for final consumption repeatedly or continuously over a period of more than a year, whereas non-durable goods will be used up within a year ([System of National Accounts 1993](#), [European System of Accounts ESA 2010](#) and [Classification by broad economic categories](#)).

Figure 4 shows that the path of loP was relatively more stable when compared with the paths of non-durable and durable goods. From Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, production of durable goods contracted at a compound average growth rate of 0.2% per quarter while the production of non-durable goods grew slightly at a compound average growth rate of 0.1% per quarter. This compares with production as a whole being relatively stable over the same period (compound average growth rate of 0.0% per quarter). The pre-downturn contraction of durable goods masks some significant volatility, with output increasing by 25.8% between Quarter 4 (Oct to Dec) 1998 and Quarter 4 (Oct to Dec) 2000. This effect was driven by the manufacture of computer, electronics & optical products which may reflect the timing of the "dot-com boom" (late 1990s to early 2000) and the growing popularity and accessibility of the internet through the 1990s.

During the economy's downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009) the production of consumer durable goods and loP both contracted by 10.6%, while consumer non-durable goods grew by 1.3% over the same period. Durable goods tend to have longer life cycles and higher prices, and are likely to respond more acutely to uncertainty in economic conditions such as changes in income, financing conditions or price expectations. As those uncertainties tend to take place during economic crisis, households are more likely to postpone their purchases of durable goods (the volume of household final consumption expenditure on durable goods fell by 7.9% between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009 ([Quarterly National Accounts: Quarter 4 \(Oct to Dec\) 2015](#)) until more favourable times. By contrast, the majority of the 14 sub-industries of non-durable goods can be considered essential items (such as food, drink and wearing apparel among other sub-industries). In the period following the economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015), durable goods and non-durable goods contracted at compound average growth rates of 0.1% and 0.2% per quarter, respectively, while loP was relatively stable over the same period.

Figure 4: Comparison between the index of production (IoP) and consumer goods, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2015, UK

Figure 4: Comparison between the index of production (IoP) and consumer goods, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2015, UK



Source: Office for National Statistics

Table 6 presents a selection of growth rates for the production of consumer durable and non-durable goods, as well as their sub-industries. Prior to the downturn (from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008) consumer durable and non-durable goods had different paths underpinned by the varying growth rates of their sub-industries. From Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, production of non-durable goods and 6 of the 13 sub-industries which underpin it grew. The manufacture of basic pharmaceutical products & preparations grew the fastest (compound average growth rate of 1.1% per quarter), while the manufacture of leather & related products contracted at the fastest rate (compound average rate of 2.0% per quarter). In contrast, prior to the downturn the production of consumer durable goods contracted at a compound average rate of 0.2% per quarter, driven entirely by a contraction in the manufacture of computer, electronic & optical products.

During the economy's downturn (from Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009) the divergence in the paths of consumer durable and non-durable goods continued. Production of consumer non-durable goods was relatively stable, despite falling output in 11 of its 13 components. These contractions were offset by strong growth in the manufacture of basic pharmaceuticals & preparations (the largest weighted industry) and manufacture of soft drinks: production of mineral & other bottled waters. In contrast, consumer durables contracted during the downturn, at a compound average rate of 1.8% per quarter. This decline was broad-based, with contractions in both the manufacture of computer, electronic & optical products, and the manufacture of furniture.

Following the downturn (from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015) the production of both consumer durable and non-durable goods struggled to recover. The production of consumer non-durables contracted at a compound average rate of 0.2% per quarter from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015 despite growth in 10 of its 13 components; this was offset by falling output in 3 of its sub-industries (manufacture of basic pharmaceutical products & preparations, printing & reproduction of recorded media, and manufacture of other food products) with a combined weight of 52.5%. The production of consumer durable goods continued to contract in the post-downturn period, at a compound average rate of 0.1% per quarter, driven by a contraction in the largest weighted industry (manufacture of computer, electronic & optical products).

Table 6: Comparison of growth in the consumer goods sector, 1997 to 2015, February 2016, UK

Industry	Weights as of 2012	Compound average growth		
		Prior to the downturn (Q2 1997- Q1 2008)	Downturn (Q1 2008 - Q2 2009)	Recovery (Q3 2009 - Q4 2015)
Processing & preserving of meat & production of meat products (10.1)	7.3	0.1	-0.9	1.0
Processing & preserving of fish, crustaceans, molluscs, fruit & vegetables (10.2-3)	6.0	0.2	-2.1	0.8
Manufacture of vegetable & animal oils & fats (10.4)	0.7	0.2	-0.5	0.8
Manufacture of dairy products (10.5)	2.3	-0.4	-0.1	1.2
Manufacture of bakery & farinaceous products (10.7)	8.6	0.2	-0.3	0.6
Manufacture of other food products (10.8)	11.6	0.0	-1.1	-0.4
Manufacture of alcoholic beverages & tobacco (11.01-6+12)	9.8	-0.3	-0.4	0.6
Manufacture of soft drinks: production of mineral & other bottled waters (11.07)	2.9	0.6	0.7	0.2
Manufacture of wearing apparel (14)	3.8	-1.4	-2.3	0.2
Manufacture of leather & related products (15)	1.3	-2.0	-2.6	0.6
Printing & reproduction of recorded media (18)	11.3	-0.2	-1.1	-0.7
Manufacture of soap & detergents; cleaning, polishing, perfumes & toilet preparations (20.4)	4.8	-0.1	-0.5	0.9
Manufacture of basic pharmaceutical products and preparations (21)	29.6	1.1	2.2	-1.4
Production of consumer non-durable goods	100	0.1	0.0	-0.2
Manufacture of computer, electronic & optical products (26)	74.6	-0.3	-1.5	-0.2
Manufacture of furniture (31)	25.4	0.0	-2.7	0.4
Production of consumer durable goods	100	-0.2	-1.8	-0.1

Source: Office for National Statistics

Notes:

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

Figure's 5a and 5b compare the volume of production of consumer durable and non-durable goods in the UK, the European Union (EU28) and a selection of other major European economies (more information on France, Germany and Italy can be found on the [Eurostat website](#)).

From Quarter 2 (Apr to June) 2000 to Quarter 1 (Jan to Mar) 2008, the production of consumer durable goods decreased in all of the countries, with the biggest contractions taking place in the UK and France (both at a compound average rate of 0.6% per quarter). During the same period the production of consumer non-durable goods was growing across all economies except France, where it contracted at a compound average growth rate of 0.4% per quarter.

During the UK economy's downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009), all of the economies experienced significant contractions in their output of durable goods, with the UK contracting the least (by 10.6%) while Italy contracted the most (by 23.9%). Over the same period there was a contraction in production of non-durable goods among all of the economies, except for the UK which expanded output by 1.3%.

Following the economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 4 (Oct to Dec) 2015), EU 28, Germany and France saw growth in their production of both consumer durable and non-durable goods while the UK and Italy experienced a contraction. In Quarter 4 (Oct to Dec) 2015, despite the growth that some of the economies experienced, production of consumer durable goods remained below respective Quarter 1 (Jan to Mar) 2008 levels by between 8.5% and 34.9%. In contrast, in Quarter 4 (Oct to Dec) 2015, the production of consumer non-durable goods was more mixed, with EU28 and France surpassing their pre-downturn values by 2.0% and 2.1% respectively while the rest of the economies remained below their Quarter 1 (Jan to Mar) 2008 levels.

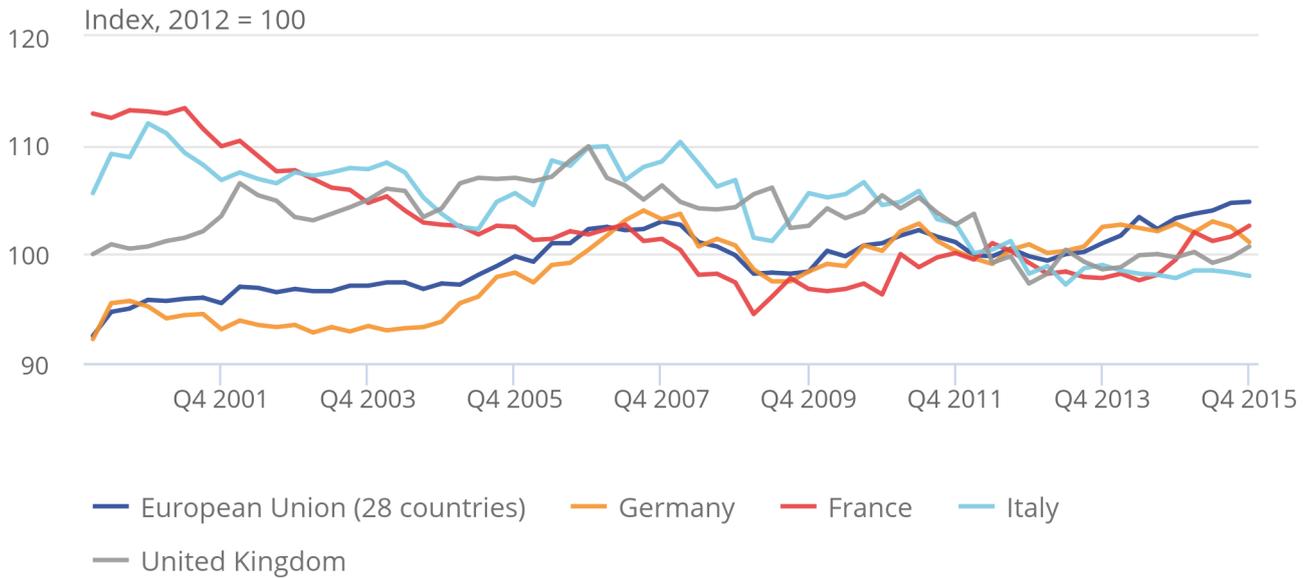
Figure 5a: International comparison of production of consumer non-durable goods in the UK, Germany, France, EU 28 and Italy ¹

Quarter 1 (Jan to Mar) 2000 to Quarter 4 (Oct to Dec) 2015

Figure 5a: International comparison of production of consumer non-durable goods in the UK, Germany, France, EU 28 and Italy

1

Quarter 1 (Jan to Mar) 2000 to Quarter 4 (Oct to Dec) 2015



Source: Office for National Statistics and Eurostat

Notes:

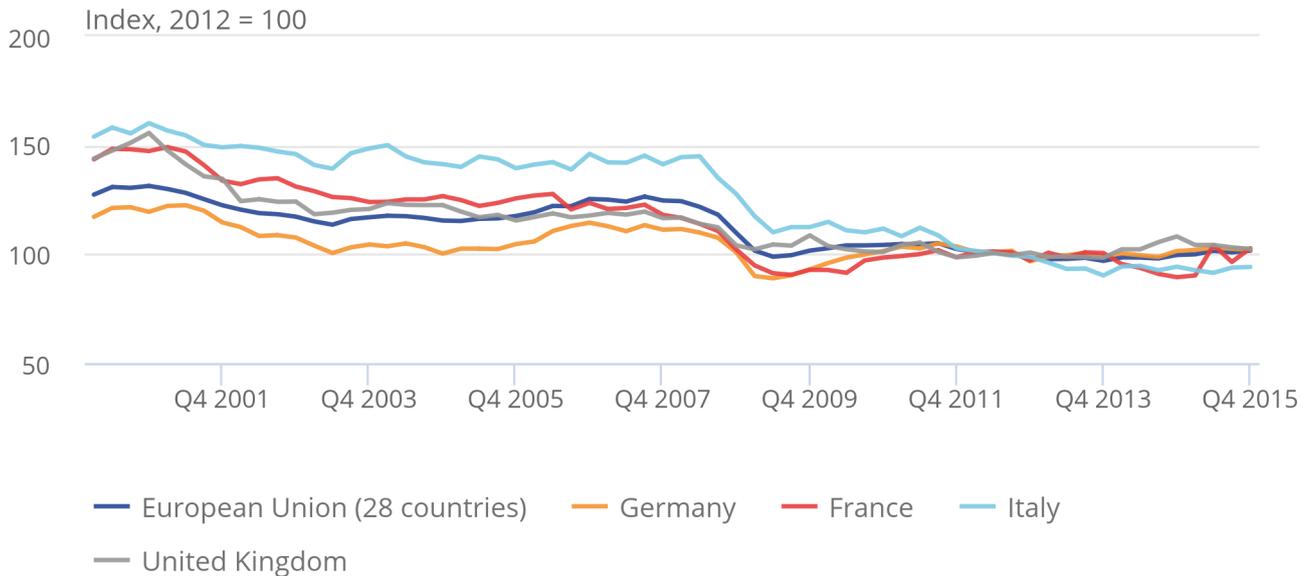
1. Eurostat data correct at 4th April 2016.

Figure 5b: International comparison of production of consumer durable goods in the UK, Germany, France, EU 28 and Italy ¹

Quarter 1 (Jan to Mar) 2000 to Quarter 4 (Oct to Dec) 2015

Figure 5b: International comparison of production of consumer durable goods in the UK, Germany, France, EU 28 and Italy ¹

Quarter 1 (Jan to Mar) 2000 to Quarter 4 (Oct to Dec) 2015



Source: Office for National Statistics and Eurostat

Notes:

1. Eurostat data correct at 4th April 2016.

9. Background notes

1. What's new?

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

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

The IoP is constantly being reviewed and improved, a full list of the GDP(O) improvement project articles can be found on the [Improvements page](#) of our website.

Upcoming changes

The Index of Production release for March 2016, to be published on 11 May 2016, will contain revisions back to January 2016.

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

VAT project update

[HMRC VAT update April 2016](#) was published on 4 April 2016. This is the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The project is exploring ways in which HM Revenue and Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys.

2. Special events

We maintain a list of candidate special events in the Special Events Calendar. 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

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

Composition of the data

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

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

Approximately 70% of the IoP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 7 for the current month and the 3 months prior. The response rates for the historical periods are updated to reflect the current level of response, incorporating data from late returns. We have included 2 response rates: one percentage for the amount of turnover returned and the other percentage for the amount of questionnaire forms. We have also published [MBS historical production industries response rates](#) back to 2010.

Table 7: Monthly business survey (MBS) Response Rates, February 2016, UK

	Year Period		Percentage	
			Turnover	Questionnaire
MBS overall	2016	Feb	86.9	75.8
		Jan	94.5	82.6
	2015	Dec	95.6	84.1
		Nov	94.9	84.8
MBS production only	2016	Feb	87.8	78.1
		Jan	95.0	84.9
	2015	Dec	95.9	86.9
		Nov	96.1	87.8

Source: Office for National Statistics

Seasonal adjustment

The index numbers in this statistical bulletin are all seasonally adjusted in line with international best 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 5 is based on the revisions which have occurred over the last 5 years. Please note that these indicators only report summary measures for revisions. The revised data may, themselves, be subject to sampling or other sources of error.

Table 8 presents a summary of the differences between the first estimates published between February 2010 and January 2015 and the estimates published 12 months later.

Table 8: Revisions, February 2016, UK

Growth rates	Value in latest period	Revisions between first publication and estimates 12 months later		Percentage change
		Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)	
Production - 3 month	-1.5	-0.14		0.28
Manufacturing - 3 month	-0.7	-0.11		0.26
Production - 1 month	-0.3	-0.10*		0.23
Manufacturing - 1 month	-1.1	-0.08		0.21

Source: Office for National Statistics

[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. 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. You can download the complete bulletin in a choice of zipped formats, or view and download your own selections of individual series.

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

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

8. Relevant links

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

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

9. Customer feedback

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

- you commented that longer time series would be useful so long run time series of data for the main IoP industries are available - furthermore, [data at 4 decimal places for IoP and the main sub-sectors](#) are now available
- you would like more information on data content - from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to IoP were included
- you also raised concerns that the IoP is not benchmarked to annual data through the supply and use framework - this is being addressed as part of our [response](#) to the [National Statistics Quality Review of National Accounts](#)

As a reader and user of our statistics we would welcome your feedback on the content of this publication, your views for improvement and on the way you 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.

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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 B+C+D+E	Mining and quarrying B	Manufacturing C	Electricity, gas, steam and air conditioning D	Water supply, sewerage and waste management E	Oil and gas extraction 06	Consumer durables MIG-CD	Consumer non-durables MIG-CND	Capital goods MIG-CAG	Intermediate goods MIG-IG	Energy MG-NRG
Latest weight	1 000.0	134.6	690.8	93.5	81.1	106.5	57.7	204.9	227.2	251.0	242.2
	K222	K224	K22A	K248	K24C	K226	K24Q	K24R	K24S	K24O	K24T
2011	102.8	112.3	101.4	100.9	100.1	116.4	102.3	104.0	98.7	100.0	109.9
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	99.2	96.7	98.9	100.4	104.3	91.8	98.7	99.1	100.6	99.2	96.6
2014	100.5	96.2	101.6	94.6	105.1	90.0	104.5	99.6	103.5	104.0	92.9
2015	101.5	102.8	101.3	94.4	108.9	99.2	103.5	99.9	102.2	103.6	97.0
2014 Q4	100.7	95.4	102.1	94.3	104.9	88.4	108.1	99.7	104.4	104.4	92.2
2015 Q1	100.9	96.6	101.9	96.1	105.3	89.7	104.2	100.2	102.4	105.4	93.5
Q2	101.7	104.0	101.4	93.9	109.5	101.1	104.2	99.2	102.9	104.1	97.0
Q3	101.9	106.5	101.0	94.8	109.9	104.1	103.1	99.7	101.7	103.0	99.4
Q4	101.5	104.2	101.0	92.7	110.9	101.8	102.4	100.7	101.6	101.8	97.9
2014 Dec	100.6	93.6	102.5	95.0	103.4	85.4	110.8	99.9	105.4	104.7	91.2
2015 Jan	100.5	96.9	101.5	95.6	103.7	89.8	106.3	100.0	101.2	105.2	93.4
Feb	100.8	94.9	101.9	97.1	105.8	87.2	102.4	99.2	103.0	105.6	93.1
Mar	101.5	98.1	102.3	95.6	106.4	91.9	104.1	101.5	102.8	105.2	94.0
Apr	101.6	102.0	101.8	93.0	108.7	98.1	103.8	98.7	103.7	105.2	95.4
May	101.8	106.4	101.0	94.7	108.9	104.6	102.2	101.0	101.5	102.7	98.9
Jun	101.7	103.6	101.2	94.1	111.1	100.5	106.7	97.8	103.6	104.3	96.8
Jul	101.3	104.0	100.4	94.2	112.2	100.2	104.1	99.3	99.8	103.6	97.5
Aug	102.1	110.4	100.7	94.6	109.1	109.3	102.5	99.0	102.2	102.7	101.6
Sep	102.2	105.2	101.7	95.6	108.3	102.9	102.6	100.8	103.2	102.7	99.2
Oct	102.4	106.6	101.4	96.6	110.3	104.3	100.7	101.7	101.4	102.6	100.9
Nov	101.6	105.0	101.0	93.4	110.2	102.7	103.1	100.0	101.1	102.4	98.8
Dec	100.5	100.9	100.7	88.1	112.1	98.4	103.3	100.4	102.3	100.5	94.2
2016 Jan	100.6 [†]	95.9	101.2 [†]	92.1 [†]	113.4 [†]	92.5 [†]	103.8 [†]	99.3 [†]	102.8 [†]	102.6 [†]	92.8 [†]
Feb	100.3	99.4	100.1	92.7	112.8	97.5	101.6	100.1	99.6	101.4	95.0
Percentage change, latest year on previous year											
2011	-0.6	-14.2	2.2	-6.1	5.7	-18.4	0.2	-0.2	6.6	0.6	-10.6
2012	-2.8	-10.9	-1.4	-0.9	-0.1	-14.1	-2.2	-3.8	1.3	-	-9.0
2013	-0.8	-3.3	-1.1	0.4	4.3	-8.2	-1.3	-0.9	0.6	-0.8	-3.4
2014	1.3	-0.5	2.7	-5.8	0.8	-2.0	5.9	0.5	2.9	4.8	-3.8
2015	1.0	6.9	-0.3	-0.2	3.6	10.2	-1.0	0.3	-1.3	-0.4	4.4
Percentage change, latest month on same month a year ago											
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
Feb	2.2	4.8	3.3	-11.3	4.9	8.4	7.8	2.0	2.3	4.4	-1.9
Mar	1.7	8.2	2.3	-14.7	7.8	10.4	1.2	2.0	0.6	4.7	-2.6
Apr	2.3	3.2	4.0	-13.4	5.5	2.6	3.9	2.0	2.4	7.8	-5.2
May	1.6	3.4	2.6	-7.7	1.9	1.6	3.6	-1.5	3.3	6.3	-2.9
Jun	0.4	-3.0	1.6	-1.9	-1.4	-3.9	2.7	-2.0	2.9	3.9	-3.7
Jul	1.3	-3.3	2.8	1.4	-3.4	-5.6	6.6	-0.8	2.9	6.8	-3.3
Aug	1.2	-5.8	3.1	2.4	-4.4	-9.4	5.0	2.4	2.7	4.9	-4.4
Sep	0.7	-4.0	2.5	-4.1	-1.6	-6.7	9.4	0.6	3.4	3.8	-5.0
Oct	1.0	-0.2	2.1	-3.0	-1.8	-0.6	9.0	0.7	2.7	2.0	-1.3
Nov	1.2	-1.2	3.3	-8.3	-1.4	-3.0	8.2	2.5	4.5	3.0	-4.9
Dec	0.6	-5.8	2.6	-0.8	-4.0	-10.2	12.6	0.2	5.6	3.4	-5.9
2015 Jan	0.9	3.7	1.3	-0.5	-4.5	2.7	3.2	3.9	-1.4	1.6	1.1
Feb	0.2	-5.1	0.8	6.6	-2.5	-10.2	-	-1.2	0.8	3.1	-1.5
Mar	1.2	0.1	1.1	3.6	0.9	-0.9	2.8	1.6	-	1.8	0.4
Apr	0.9	5.3	-0.3	1.2	3.9	8.5	-0.1	-2.3	-0.2	0.8	3.7
May	1.4	6.2	0.2	0.5	4.3	11.3	1.6	1.2	-0.5	-1.0	4.5
Jun	1.5	8.9	-0.1	-2.2	7.0	14.3	4.5	-1.1	-0.6	0.7	4.6
Jul	0.6	9.4	-1.4	-3.9	8.4	13.2	0.3	-0.4	-3.7	-0.9	4.3
Aug	1.6	18.5	-1.1	-3.8	5.7	26.8	-2.1	-1.3	-0.7	-1.8	9.7
Sep	1.3	9.2	-0.5	1.7	3.8	14.2	-5.0	0.7	-1.2	-1.7	7.0
Oct	1.6	8.9	-0.2	2.4	4.5	13.1	-5.3	2.6	-2.1	-1.1	7.5
Nov	0.9	10.8	-1.2	-0.1	4.2	17.3	-3.7	-0.1	-2.9	-2.2	8.0
Dec	-0.2	7.8	-1.7	-7.3	8.3	15.2	-6.8	0.4	-2.9	-4.0	3.3
2016 Jan	0.1 [†]	-1.0 [†]	-0.3 [†]	-3.6 [†]	9.4 [†]	3.0 [†]	-2.3 [†]	-0.8 [†]	1.5 [†]	-2.5 [†]	-0.6 [†]
Feb	-0.5	4.7	-1.8	-4.5	6.5	11.7	-0.8	0.9	-3.4	-4.0	2.1

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.

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 Dec	0.5	3.6	0.9	-6.1	0.4	5.4	-0.5	2.1	0.1	-0.3	0.7
2014 Jan	-0.4	-5.9	0.4	0.3	0.8	-8.1	4.6	-3.5	2.9	2.2	-4.7
Feb	1.0	7.1	0.9	-5.1	-0.1	11.1	-0.6	4.3	-0.4	-1.1	2.3
Mar	-0.3	-2.1	0.1	1.3	-2.8	-4.4	-1.1	-0.5	0.6	0.9	-1.0
Apr	0.4	-1.1	0.9	-0.5	-0.9	-2.6	2.6	1.2	1.1	1.0	-1.6
May	-0.3	3.5	-1.3	2.4	-0.2	4.0	-3.2	-1.2	-1.8	-0.6	2.8
Jun	-0.2	-5.0	0.5	2.2	-0.5	-6.4	1.4	-0.8	2.1	-0.2	-2.3
Jul	0.5	-0.1	0.5	1.9	-0.3	0.6	1.7	0.8	-0.6	1.0	1.0
Aug	-0.2	-2.0	0.1	0.4	-0.2	-2.6	0.9	0.6	-0.7	-	-0.9
Sep	0.3	3.4	0.3	-4.5	1.1	4.5	3.2	-0.2	1.6	-0.1	0.1
Oct	-0.1	1.7	-0.7	0.4	1.2	2.3	-1.5	-1.0	-0.9	-0.7	1.2
Nov	-	-3.3	0.7	-1.0	0.2	-5.0	0.6	1.0	0.6	0.9	-2.5
Dec	-0.1	-1.2	0.2	1.6	-2.2	-2.4	3.6	-0.2	1.2	-	-0.3
2015 Jan	-0.1	3.6	-0.9	0.6	0.2	5.1	-4.1	0.1	-4.0	0.5	2.3
Feb	0.3	-2.1	0.3	1.7	2.1	-2.8	-3.7	-0.8	1.8	0.4	-0.2
Mar	0.6	3.3	0.4	-1.6	0.6	5.4	1.7	2.3	-0.2	-0.4	0.9
Apr	0.1	4.0	-0.5	-2.7	2.1	6.6	-0.3	-2.7	0.8	-	1.6
May	0.2	4.3	-0.8	1.8	0.2	6.7	-1.5	2.3	-2.1	-2.4	3.6
Jun	-0.1	-2.6	0.2	-0.6	2.0	-3.9	4.3	-3.2	2.0	1.5	-2.2
Jul	-0.4	0.4	-0.8	-	1.0	-0.3	-2.4	1.5	-3.7	-0.6	0.7
Aug	0.9	6.1	0.3	0.5	-2.7	9.1	-1.6	-0.3	2.4	-0.9	4.2
Sep	-	-4.7	1.0	1.0	-0.7	-5.8	0.1	1.8	1.0	-	-2.3
Oct	0.2	1.3	-0.4	1.1	1.8	1.3	-1.8	0.8	-1.8	-0.1	1.7
Nov	-0.8	-1.5	-0.3	-3.3	-0.1	-1.5	2.4	-1.7	-0.2	-0.2	-2.1
Dec	-1.1	-3.9	-0.3	-5.7	1.7	-4.2	0.2	0.4	1.2	-1.8	-4.7
2016 Jan	0.2 [†]	-4.9 [†]	0.5 [†]	4.5 [†]	1.2 [†]	-6.0 [†]	0.5 [†]	-1.1 [†]	0.4 [†]	2.0 [†]	-1.5 [†]
Feb	-0.3	3.6	-1.1	0.7	-0.6	5.4	-2.2	0.9	-3.1	-1.1	2.5
Percentage change, latest 3 months on same 3 months a year ago²											
2013 Dec	1.7	5.9	1.0	-3.8	6.9	2.9	-2.3	1.3	-0.3	2.6	1.3
2014 Jan	1.4	1.2	1.3	-3.3	7.3	-2.1	-0.5	0.4	-0.3	4.3	-1.6
Feb	1.7	2.3	2.1	-7.2	7.2	1.4	2.2	0.9	0.5	4.8	-2.1
Mar	1.8	3.7	2.6	-10.5	7.4	4.4	3.4	0.6	1.4	5.5	-3.0
Apr	2.1	5.4	3.2	-13.2	6.0	7.1	4.2	2.0	1.8	5.6	-3.2
May	1.9	4.9	3.0	-12.0	5.0	4.8	2.9	0.8	2.1	6.3	-3.6
Jun	1.4	1.2	2.7	-7.9	1.9	0.1	3.4	-0.5	2.9	6.0	-4.0
Jul	1.1	-1.0	2.3	-2.8	-1.0	-2.6	4.3	-1.4	3.0	5.7	-3.3
Aug	1.0	-4.0	2.5	0.6	-3.1	-6.3	4.8	-0.2	2.8	5.2	-3.8
Sep	1.1	-4.4	2.8	-0.1	-3.1	-7.2	7.0	0.7	3.0	5.1	-4.2
Oct	0.9	-3.3	2.6	-1.6	-2.6	-5.6	7.8	1.2	2.9	3.5	-3.6
Nov	1.0	-1.8	2.6	-5.2	-1.6	-3.5	8.8	1.3	3.5	2.9	-3.8
Dec	0.9	-2.4	2.7	-4.1	-2.4	-4.6	9.9	1.1	4.3	2.8	-4.1
2015 Jan	0.9	-1.2	2.4	-3.3	-3.3	-3.6	7.9	2.2	2.9	2.7	-3.3
Feb	0.6	-2.5	1.5	1.7	-3.7	-6.1	5.2	0.9	1.6	2.7	-2.2
Mar	0.8	-0.5	1.0	3.2	-2.1	-3.0	2.0	1.4	-0.2	2.2	-
Apr	0.7	0.1	0.5	3.8	0.7	-1.1	0.9	-0.6	0.2	1.9	0.8
May	1.1	3.9	0.3	1.8	3.0	6.3	1.4	0.2	-0.2	0.5	2.9
Jun	1.3	6.8	-0.1	-0.2	5.1	11.3	2.0	-0.7	-0.4	0.2	4.3
Jul	1.2	8.1	-0.4	-1.9	6.5	12.9	2.1	-0.1	-1.6	-0.4	4.5
Aug	1.2	12.2	-0.8	-3.3	7.0	18.0	0.9	-1.0	-1.6	-0.7	6.2
Sep	1.2	12.3	-1.0	-2.1	5.9	18.0	-2.3	-0.3	-1.9	-1.5	7.0
Oct	1.5	12.1	-0.6	-	4.6	17.9	-4.2	0.7	-1.3	-1.6	8.1
Nov	1.3	9.6	-0.6	1.3	4.2	14.8	-4.7	1.1	-2.1	-1.7	7.5
Dec	0.8	9.2	-1.0	-1.7	5.7	15.2	-5.3	1.0	-2.6	-2.5	6.3
2016 Jan	0.3	5.8	-1.1 [†]	-3.7 [†]	7.3	11.7	-4.3 [†]	-0.1 [†]	-1.5 [†]	-2.9 [†]	3.5 [†]
Feb	-0.2	3.8	-1.3	-5.1	8.1	9.9	-3.4	0.2	-1.6	-3.5	1.5

- 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 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	-	-0.7	0.2	-1.0	-0.1	-2.1	1.6	0.2	-	0.6	-1.1
Feb	-0.1	-1.2	-	2.0	-0.9	-2.7	-0.6	-0.1	-0.8	0.8	-0.1
Mar	0.2	1.3	-0.2	1.9	0.4	1.4	-3.6	0.5	-1.9	0.9	1.4
Apr	0.7	3.4	-0.1	0.6	2.6	5.5	-4.3	-0.2	-0.4	0.4	2.4
May	0.9	7.4	-0.2	-1.5	3.5	12.3	-2.9	0.7	-0.5	-0.8	3.8
Jun	0.7	7.6	-0.5	-2.3	4.0	12.7	-	-1.0	0.6	-1.2	3.8
Jul	0.3	6.5	-1.1	-1.0	3.5	10.1	0.9	-0.4	-1.5	-1.7	3.7
Aug	0.1	3.8	-0.9	-0.1	2.6	5.2	1.0	-1.7	-0.8	-0.8	2.6
Sep	0.2	2.4	-0.4	0.9	0.3	3.0	-1.1	0.5	-1.2	-1.0	2.5
Oct	0.6	2.6	0.4	1.4	-1.3	3.7	-2.3	1.1	0.6	-0.9	2.9
Nov	0.3	-0.4	0.6	0.9	-1.1	-	-2.2	2.2	0.1	-1.0	1.0
Dec	-0.4	-2.2	0.1	-2.2	0.9	-2.3	-0.6	1.0	-0.1	-1.1	-1.5
2016 Jan	-1.3	-6.3	-0.3 ^T	-4.6 ^T	2.4	-7.2 ^T	1.4 ^T	-0.6 ^T	-0.2 ^T	-0.8 ^T	-5.3 ^T
Feb	-1.5	-6.5	-0.7	-4.4	2.8	-6.9	0.7	-0.9	-0.4	-1.0	-5.7

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
2011	102.6	103.5	105.6	111.3	102.0	106.2
2012	100.0	100.0	100.0	100.0	100.0	100.0
2013	98.3	95.5	102.2	98.1	98.9	97.3
2014	102.8	92.1	103.2	90.0	101.4	92.4
2015	102.7	89.9	103.4	91.9	106.9	93.1
2014 Q4	103.9	86.4	103.8	91.7	102.4	91.1
2015 Q1	103.1	88.7	105.0	89.1	107.9	92.5
Q2	101.5	92.0	103.0	83.9	106.3	92.6
Q3	102.8	88.8	102.6	95.3	107.0	93.5
Q4	103.6	90.0	103.2	99.4	106.4	93.9
2014 Dec	104.6	84.6	102.3	93.4	101.9	92.3
2015 Jan	103.4	86.1	105.9	90.0	106.8	91.5
Feb	103.2	89.2	104.5	92.1	109.0	89.7
Mar	102.6	90.9	104.4	85.2	107.8	96.5
Apr	101.4	90.2	104.1	84.0	109.4	90.8
May	101.8	92.6	102.7	84.5	104.2	98.5
Jun	101.4	93.3	102.1	83.2	105.4	88.6
Jul	101.9	91.0	101.8	94.9	106.9	93.4
Aug	102.7	85.0	102.3	94.4	106.7	92.5
Sep	103.7	90.4	103.7	96.5	107.3	94.5
Oct	103.7	91.5	102.8	101.9	106.8	96.9
Nov	103.5	89.7	104.5	101.2	107.8	91.8
Dec	103.6	88.9	102.4	95.1	104.7	93.0
2016 Jan	103.5 [†]	91.5 [†]	104.3 [†]	91.0 [†]	105.3 [†]	87.5 [†]
Feb	103.1	85.1	101.7	89.2	104.5	93.8
Percentage change, latest year on previous year						
2011	6.5	1.3	-5.6	1.4	6.6	-13.5
2012	-2.5	-3.4	-5.3	-10.1	-2.0	-5.8
2013	-1.7	-4.5	2.2	-1.9	-1.1	-2.7
2014	4.6	-3.6	0.9	-8.3	2.6	-5.1
2015	-	-2.4	0.3	2.2	5.4	0.8
Percentage change, latest month on same month a year ago						
2013 Dec	0.6	-4.6	7.0	18.5	-0.6	2.3
2014 Jan	1.9	-0.7	2.9	-7.9	6.2	-11.2
Feb	3.9	2.0	1.4	-10.7	3.2	-0.2
Mar	5.4	1.6	-4.7	-7.0	2.1	0.3
Apr	6.8	2.5	-0.1	-9.3	4.1	-4.0
May	1.5	8.4	-0.1	-5.7	1.9	-10.3
Jun	2.7	-3.5	-0.6	-16.3	-0.5	-9.8
Jul	1.8	-6.1	0.4	-12.3	5.2	-1.9
Aug	4.8	-8.9	3.0	-11.8	-0.8	3.6
Sep	6.5	-6.4	2.3	-4.8	2.8	-7.7
Oct	7.5	-10.8	3.5	1.5	2.1	-9.8
Nov	6.3	-10.3	3.6	-2.7	3.8	-2.3
Dec	6.3	-10.0	-0.7	-10.4	1.1	-6.3
2015 Jan	2.8	-11.5	3.3	-2.7	4.4	7.3
Feb	0.9	-7.5	1.3	4.8	9.2	-5.7
Mar	0.2	-4.5	3.9	-7.4	6.5	2.2
Apr	-1.4	-5.6	2.5	-8.3	7.9	-6.4
May	0.1	-8.7	-0.1	-6.4	2.6	7.2
Jun	-0.9	1.3	-0.7	-3.6	5.7	-2.3
Jul	-1.1	2.1	-1.0	9.1	4.8	-0.6
Aug	-0.7	-4.8	-2.8	7.5	7.8	-1.9
Sep	0.6	0.7	-1.1	8.5	4.5	2.1
Oct	-	5.3	-2.0	11.9	5.1	9.0
Nov	-	2.3	0.2	11.6	3.9	-0.3
Dec	-0.9	5.2	0.1	1.9	2.7	0.7
2016 Jan	- [†]	6.3 [†]	-1.5	1.0 [†]	-1.4 [†]	-4.4 [†]
Feb	-0.1	-4.6	-2.7	-3.2	-4.1	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

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
2011	104.3	97.2	99.5	90.2	98.9	95.9	106.8
2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2013	97.2	97.1	98.0	95.3	88.1	107.6	104.4
2014	109.7	99.2	101.9	92.5	92.2	110.6	109.7
2015	106.8	99.3	99.1	92.7	80.0	117.9	108.5
2014 Q4	110.8	99.5	105.3	92.2	89.5	113.0	110.7
2015 Q1	107.8	102.4	98.8	93.1	83.2	115.3	110.6
Q2	107.0	101.0	100.3	93.4	81.4	117.6	110.0
Q3	106.2	97.7	99.2	92.1	78.7	118.8	106.9
Q4	106.4	96.2	97.9	92.2	76.6	120.0	106.5
2014 Dec	111.4	99.4	110.2	94.4	89.2	114.1	108.5
2015 Jan	107.6	102.1	99.5	91.7	82.5	114.0	109.8
Feb	107.6	103.0	97.7	93.4	84.2	116.1	109.7
Mar	108.3	102.0	99.1	94.1	83.0	115.7	112.1
Apr	108.0	102.1	99.5	94.3	84.8	116.2	111.7
May	106.2	97.7	98.0	92.4	79.6	118.5	108.4
Jun	106.7	103.2	103.5	93.5	79.7	118.0	109.9
Jul	106.9	97.2	99.1	91.0	78.1	115.9	106.9
Aug	105.0	98.9	99.3	91.2	78.6	120.8	104.7
Sep	106.5	96.9	99.2	94.3	79.3	119.8	109.0
Oct	106.7	97.1	97.7	93.3	76.5	121.3	103.0
Nov	106.2	96.2	97.2	92.3	75.9	119.5	108.3
Dec	106.4	95.4	99.0	91.1	77.4	119.2	108.2
2016 Jan	109.1 [†]	98.4 [†]	99.0 [†]	90.4 [†]	76.6 [†]	119.3 [†]	112.6 [†]
Feb	108.2	97.7	95.0	90.9	75.2	115.8	109.8
Percentage change, latest year on previous year							
2011	-0.2	4.4	-1.2	-3.8	8.6	10.1	5.4
2012	-4.2	2.9	0.6	10.9	1.1	4.3	-6.3
2013	-2.8	-2.9	-2.0	-4.7	-11.9	7.6	4.4
2014	12.9	2.1	4.0	-3.0	4.6	2.8	5.1
2015	-2.6	0.1	-2.8	0.2	-13.3	6.6	-1.1
Percentage change, latest month on same month a year ago							
2013 Dec	3.2	4.1	-5.8	-5.1	-10.3	-0.5	8.0
2014 Jan	15.8	4.1	-3.1	-2.5	7.7	1.2	4.7
Feb	13.6	3.7	3.5	-4.7	8.7	2.1	2.7
Mar	14.2	-0.6	-1.6	-0.4	1.1	2.5	6.2
Apr	18.9	1.8	-0.2	-2.2	8.2	4.8	6.2
May	14.6	4.6	1.3	-7.6	12.3	1.8	6.1
Jun	11.9	5.2	-1.2	-2.4	5.2	3.9	6.1
Jul	12.7	3.8	6.0	-1.2	6.0	2.2	5.2
Aug	13.4	4.1	3.0	-6.4	4.7	-0.8	7.6
Sep	12.1	0.6	11.0	-2.9	2.8	1.1	2.8
Oct	10.6	-1.3	8.8	-6.1	0.5	1.1	5.2
Nov	8.3	0.8	7.4	-0.6	0.8	3.5	8.0
Dec	9.9	-1.0	14.6	1.7	-1.4	10.2	0.5
2015 Jan	0.1	2.5	-2.3	-1.2	-10.6	7.0	0.3
Feb	-0.1	3.7	-1.7	2.4	-10.3	7.1	1.5
Mar	-	3.8	-0.6	-0.1	-11.6	5.2	4.1
Apr	-2.6	3.1	-2.6	1.7	-9.1	4.9	2.5
May	-2.5	0.5	-0.5	2.0	-15.2	9.1	0.9
Jun	-1.9	3.8	5.7	-2.9	-15.1	4.4	0.8
Jul	-3.2	-0.6	-1.6	-3.0	-17.1	3.8	-3.0
Aug	-5.8	-2.2	-1.1	1.8	-13.6	11.7	-7.7
Sep	-3.5	-2.9	-7.1	2.1	-13.7	7.6	-0.5
Oct	-4.0	-1.6	-4.7	5.2	-15.8	8.5	-7.1
Nov	-3.4	-4.2	-5.7	-1.3	-14.1	5.7	-3.9
Dec	-4.5	-4.1	-10.2	-3.5	-13.2	4.5	-0.3
2016 Jan	1.4 [†]	-3.6 [†]	-0.5 [†]	-1.4 [†]	-7.2 [†]	4.6 [†]	2.6 [†]
Feb	0.6	-5.1	-2.7	-2.6	-10.6	-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.

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 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	-1.1	1.8	3.6	-3.6	4.8	-0.9
Feb	-0.2	3.7	-1.4	2.3	2.0	-2.0
Mar	-0.5	1.9	-0.1	-7.5	-1.1	7.6
Apr	-1.1	-0.8	-0.3	-1.4	1.5	-5.8
May	0.3	2.7	-1.4	0.6	-4.8	8.4
Jun	-0.4	0.7	-0.7	-1.5	1.1	-10.0
Jul	0.5	-2.5	-0.2	14.1	1.4	5.4
Aug	0.8	-6.6	0.5	-0.6	-0.2	-1.0
Sep	0.9	6.3	1.3	2.3	0.6	2.1
Oct	-	1.2	-0.9	5.5	-0.6	2.6
Nov	-0.2	-1.9	1.7	-0.6	1.0	-5.3
Dec	0.2	-0.9	-2.1	-6.0	-2.9	1.3
2016 Jan	-0.2 [†]	2.9 [†]	1.9	-4.3 [†]	0.6 [†]	-5.9
Feb	-0.4	-7.0	-2.5	-2.0	-0.7	7.2
Percentage change, latest 3 months on same 3 months a year ago						
2013 Dec	-0.7	-2.4	4.0	11.5	0.6	1.1
2014 Jan	0.6	-1.6	4.0	4.3	2.3	-3.4
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	-10.6	2.1	-5.5	3.1	-0.8
Feb	3.3	-9.7	1.3	-3.2	4.9	-1.9
Mar	1.3	-7.9	2.8	-1.9	6.7	1.0
Apr	-0.1	-5.9	2.6	-3.7	7.8	-3.3
May	-0.3	-6.3	2.1	-7.4	5.6	0.9
Jun	-0.7	-4.5	0.6	-6.1	5.4	-0.6
Jul	-0.6	-2.0	-0.6	-0.4	4.3	1.4
Aug	-0.9	-0.5	-1.5	4.3	6.0	-1.6
Sep	-0.4	-0.7	-1.6	8.4	5.7	-0.2
Oct	-0.1	0.3	-2.0	9.3	5.8	2.9
Nov	0.2	2.7	-1.0	10.7	4.5	3.5
Dec	-0.3	4.2	-0.6	8.4	3.9	3.1
2016 Jan	-0.3 [†]	4.6 [†]	-0.4	4.8 [†]	1.7 [†]	-1.3
Feb	-0.3	2.2	-1.4	-0.1	-1.0	0.3

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[†] 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 Dec	-0.1	0.7	0.2	-1.3	3.2	-5.2	3.5
2014 Jan	6.0	-0.8	5.9	-	2.0	2.9	1.4
Feb	0.1	-0.3	-2.4	-1.7	1.7	1.7	-1.3
Mar	0.6	-1.0	0.2	3.3	0.1	1.4	-0.3
Apr	2.3	0.8	2.5	-1.6	-0.8	0.7	1.2
May	-1.6	-1.8	-3.6	-2.3	0.6	-1.9	-1.5
Jun	-0.2	2.2	-0.5	6.3	-	4.1	1.5
Jul	1.5	-1.6	2.8	-2.6	0.4	-1.3	1.1
Aug	1.0	3.4	-0.3	-4.5	-3.4	-3.1	3.0
Sep	-1.0	-1.3	6.4	3.3	1.0	2.9	-3.5
Oct	0.6	-1.1	-4.1	-4.0	-1.2	0.4	1.3
Nov	-1.1	1.8	0.5	5.4	-2.7	1.2	1.5
Dec	1.4	-1.0	7.0	1.0	0.9	0.9	-3.7
2015 Jan	-3.5	2.7	-9.7	-2.9	-7.5	-	1.2
Feb	-	0.8	-1.9	1.8	2.0	1.8	-0.1
Mar	0.7	-0.9	1.4	0.7	-1.3	-0.3	2.2
Apr	-0.3	0.1	0.4	0.2	2.1	0.5	-0.3
May	-1.6	-4.3	-1.5	-2.0	-6.1	2.0	-3.0
Jun	0.4	5.6	5.7	1.2	0.1	-0.4	1.4
Jul	0.2	-5.8	-4.2	-2.7	-2.0	-1.8	-2.7
Aug	-1.7	1.8	0.2	0.2	0.7	4.3	-2.0
Sep	1.4	-2.0	-0.1	3.5	0.9	-0.9	4.1
Oct	0.1	0.2	-1.5	-1.1	-3.6	1.2	-5.5
Nov	-0.5	-0.9	-0.6	-1.1	-0.7	-1.4	5.1
Dec	0.2	-0.9	1.8	-1.2	2.0	-0.3	-0.1
2016 Jan	2.5 [†]	3.2 [†]	0.1 [†]	-0.8 [†]	-1.1 [†]	- [†]	4.1 [†]
Feb	-0.8	-0.7	-4.0	0.6	-1.8	-2.9	-2.5
Percentage change, latest 3 months on same 3 months a year ago							
2013 Dec	2.6	1.7	-6.8	-3.8	-9.0	6.9	6.7
2014 Jan	6.8	3.4	-4.7	-2.5	-5.2	3.1	6.4
Feb	10.7	3.9	-1.9	-4.1	1.3	0.9	5.1
Mar	14.5	2.4	-0.5	-2.5	5.7	1.9	4.5
Apr	15.5	1.6	0.5	-2.5	5.9	3.1	5.0
May	15.9	1.9	-0.2	-3.5	7.0	3.0	6.2
Jun	15.1	3.9	-	-4.1	8.5	3.5	6.1
Jul	13.0	4.6	2.0	-3.8	7.7	2.6	5.8
Aug	12.7	4.4	2.6	-3.3	5.3	1.8	6.3
Sep	12.7	2.8	6.7	-3.5	4.5	0.9	5.2
Oct	12.0	1.1	7.6	-5.1	2.6	0.5	5.2
Nov	10.3	-	9.1	-3.2	1.4	1.9	5.3
Dec	9.6	-0.5	10.3	-1.7	-	4.8	4.5
2015 Jan	6.0	0.8	6.4	-	-3.8	6.9	2.9
Feb	3.2	1.8	3.4	1.0	-7.5	8.1	0.8
Mar	-	3.4	-1.5	0.3	-10.8	6.4	2.0
Apr	-0.9	3.5	-1.6	1.3	-10.3	5.7	2.7
May	-1.7	2.5	-1.2	1.2	-12.0	6.4	2.5
Jun	-2.3	2.5	0.8	0.2	-13.1	6.1	1.4
Jul	-2.6	1.2	1.2	-1.3	-15.8	5.7	-0.5
Aug	-3.7	0.3	0.9	-1.4	-15.3	6.6	-3.4
Sep	-4.2	-1.9	-3.4	0.3	-14.8	7.7	-3.8
Oct	-4.4	-2.2	-4.4	3.0	-14.4	9.3	-5.1
Nov	-3.6	-2.9	-5.9	1.9	-14.5	7.3	-3.8
Dec	-4.0	-3.3	-6.9	-	-14.4	6.2	-3.8
2016 Jan	-2.2 [†]	-4.0 [†]	-5.7 [†]	-2.1	-11.6 [†]	4.9 [†]	-0.6 [†]
Feb	-0.9	-4.3	-4.7	-2.5	-10.4	2.9	0.8

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[†] 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 Dec	-1.5	0.1	-0.7	-1.8	1.2	1.5
2014 Jan	1.5	-0.8	-	2.6	1.3	-4.1
Feb	3.6	-1.2	1.3	3.0	1.2	-4.9
Mar	4.4	-0.1	0.4	-5.1	1.0	-5.7
Apr	3.7	-0.6	-0.3	-6.4	-0.2	3.0
May	1.9	1.6	-1.2	-3.8	0.4	1.6
Jun	0.5	0.1	0.3	-1.6	-0.2	1.8
Jul	-0.2	-1.6	1.0	-2.9	0.3	-3.5
Aug	0.6	-7.4	1.9	-4.6	-1.1	-1.5
Sep	1.0	-7.2	1.9	-1.6	0.3	0.5
Oct	1.1	-5.9	2.1	1.6	-	-0.2
Nov	0.5	-2.3	1.0	3.7	2.4	-1.9
Dec	0.7	-3.4	-0.5	4.3	1.2	-2.7
2015 Jan	0.4	-2.8	-0.8	2.4	3.1	-
Feb	0.3	-1.7	-0.4	1.8	3.1	-
Mar	-0.8	2.7	1.1	-2.9	5.3	1.5
Apr	-1.4	4.6	0.2	-4.7	4.4	0.4
May	-1.7	5.3	-0.5	-8.0	1.1	4.5
Jun	-1.5	3.7	-1.9	-5.9	-1.4	0.1
Jul	-0.7	2.4	-2.1	0.5	-3.0	1.3
Aug	0.1	-1.7	-1.6	7.4	-0.8	-3.9
Sep	1.2	-3.5	-0.3	13.6	0.6	0.9
Oct	1.6	-3.6	0.7	11.5	1.4	1.2
Nov	1.6	0.9	1.6	10.0	0.9	3.2
Dec	0.8	1.4	0.6	4.3	-0.5	0.5
2016 Jan	0.1 [†]	1.2 [†]	0.8	-1.9 [†]	-0.9 [†]	-4.1
Feb	-0.2	-2.2	-0.8	-8.1	-2.3	-3.2

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[†] 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
Percentage change, latest 3 months on previous 3 months							
2013 Dec	2.9	3.3	-0.9	-1.5	1.3	-1.5	0.3
2014 Jan	4.4	1.1	2.1	-1.9	1.4	-3.1	1.3
Feb	5.3	0.1	3.9	-2.4	3.4	-3.4	2.9
Mar	6.6	-1.0	5.1	-1.1	4.3	0.5	2.4
Apr	5.3	-1.0	2.5	-0.6	3.9	3.1	0.9
May	3.7	-1.5	1.0	0.2	1.6	3.4	-0.4
Jun	1.6	-0.5	-0.8	0.5	0.3	2.3	-
Jul	0.5	-0.7	-1.3	0.9	0.3	1.3	0.6
Aug	0.8	1.3	-0.4	0.7	-0.7	1.1	2.7
Sep	1.2	1.0	3.2	-1.4	-1.4	-0.4	2.4
Oct	1.5	1.8	4.2	-3.6	-2.9	-0.6	2.3
Nov	0.2	0.2	4.4	-1.8	-2.8	1.0	0.1
Dec	-	-	2.5	0.3	-3.1	2.4	-0.3
2015 Jan	-1.2	0.8	1.0	3.4	-5.0	3.0	-0.9
Feb	-1.5	1.8	-1.6	1.8	-5.6	2.4	-1.5
Mar	-2.7	2.8	-6.2	0.9	-7.0	2.0	-0.1
Apr	-1.5	1.7	-5.3	0.7	-3.1	2.0	0.8
May	-1.2	-0.8	-3.6	0.4	-3.3	1.8	1.3
Jun	-0.8	-1.3	1.6	0.4	-2.3	2.0	-0.5
Jul	-1.2	-2.9	1.5	-1.7	-5.8	1.3	-2.5
Aug	-1.2	-0.9	1.8	-1.8	-4.5	1.2	-3.2
Sep	-0.7	-3.3	-1.1	-1.3	-3.3	1.0	-2.8
Oct	-0.5	-1.7	-1.5	0.7	-1.3	2.7	-2.6
Nov	0.2	-3.0	-2.6	1.5	-2.0	1.6	-0.4
Dec	0.2	-1.4	-1.3	0.1	-2.6	1.0	-0.4
2016 Jan	1.1 [†]	-1.0	-0.4 [†]	-1.8	-1.9 [†]	-1.1 [†]	3.9 [†]
Feb	1.3	0.4	-0.4	-2.6	-1.1	-1.7	3.2

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[†] 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
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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
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2014 Q4	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-0.1	-	-0.2	0.2	0.1	0.3	-0.6	0.4	-0.6	-0.3	0.2
Percentage change, latest year on previous year											
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago											
2013 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	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-0.1	0.1	-0.2	0.3	0.1	0.2	-0.5	0.4	-0.6	-0.3	0.2

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	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	-	-	-	-	-	-	-	-	-	-	
	Nov	-	-	-	-	-	-	-	-	-	-	
	Dec	-	-	-	-	-	-	-	-	-	-	
2016	Jan	-0.1	0.1	-0.2	0.2	0.1	0.3	-0.5	0.4	-0.6	-0.4	0.2
Percentage change, latest 3 months on same 3 months a year ago												
2013	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	-	-	-	-	-	-	-	-	-	-	
	Nov	-	-	-	-	-	-	-	-	-	-	
	Dec	-	-	-	-	-	-	-	-	-	-	
2016	Jan	-	-	-0.1	0.1	-	-	-0.2	0.2	-0.2	-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 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	-	-	-	-	-	-	-	-	-	-	-
2015 Nov	-	-	-	-	-	-	-	-	-	-	-
2015 Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-0.1	0.1	-	0.1	-0.2	0.2	-0.2	-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	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
	CA	CB	CC	CD	CE	CF
Latest weight	109.7	22.5	51.3	19.4	38.1	60.6
	K22B	K22P	K22T	K22X	K22Z	K239
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-	-	-	-	-
2014 Q4	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-
Q2	-	-	-	-	-	-
Q3	-	-	-	-	-	-
Q4	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	0.4	0.6	-0.1	-0.2	-0.8	-0.1
Percentage change, latest year on previous year						
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-	-	-	-	-
Percentage change, latest month on same month a year ago						
2013 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	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016 Jan	0.3	0.7	-	-0.2	-0.7	-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
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2014 Q4	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-
2014 Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016 Jan	-0.3	-0.1	-0.5	0.1	-0.6	-0.3	-0.8
Percentage change, latest year on previous year							
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago							
2013 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	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016 Jan	-0.3	-0.1	-0.5	0.2	-0.7	-0.2	-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.

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	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	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2016	Jan	0.3	0.7	-	-0.1	-

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

2013	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	-	-	-	-	-
	Nov	-	-	-	-	-
	Dec	-	-	-	-	-
2016	Jan	0.1	0.3	-	-0.1	-0.2

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							
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	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016							
Jan	-0.3	-0.1	-0.5	0.1	-0.8	-0.3	-0.7
Percentage change, latest 3 months on same 3 months a year ago							
2013							
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	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016							
Jan	-0.1	-0.1	-0.2	-	-0.2	-0.1	-0.3

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.

	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						
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	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
2016						
Jan	0.1	0.2	-	-0.1	-0.2	-

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[†] 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							
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	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016							
Jan	-0.1	-	-0.2	-	-0.3	-0.1	-0.2

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