Office for National Statistics

Statistical bulletin

Index of Production, UK: April 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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Next release:
7 July 2016

Table of contents

1 . Main points

Total production output is estimated to have increased by 1.6% in April 2016 compared with April 2015. There were increases in all 4 main sectors, with the largest contribution coming from manufacturing (the largest component of production), which increased by 0.8%.

The largest contribution to the increase in manufacturing came from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which increased by 12.5%, the largest rise since April 2009.

Total production output is estimated to have increased by 2.0% in April 2016 compared with March 2016. There were increases in 3 of the 4 main sectors, with the largest contribution coming from manufacturing, which increased by 2.3%, the largest rise since July 2012.

The largest contribution to the increase in manufacturing came from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which increased by 8.6%, the largest rise since February 2014.

In the 3 months to April 2016, production and manufacturing were 9.4% and 6.4% respectively below their level reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

There is no impact on previously published estimates as no previous periods were open for revision. This is in line with the standard revisions policy for National Accounts.

2 . Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (IoP) for the UK production industries, April 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 IoP figures
- the economic context to the IoP
- GDP impact and components
- a supplementary analysis to the IoP
- spotlight
- background notes section including an assessment of the quality of the IoP, as well as an explanation of the terms used in this bulletin

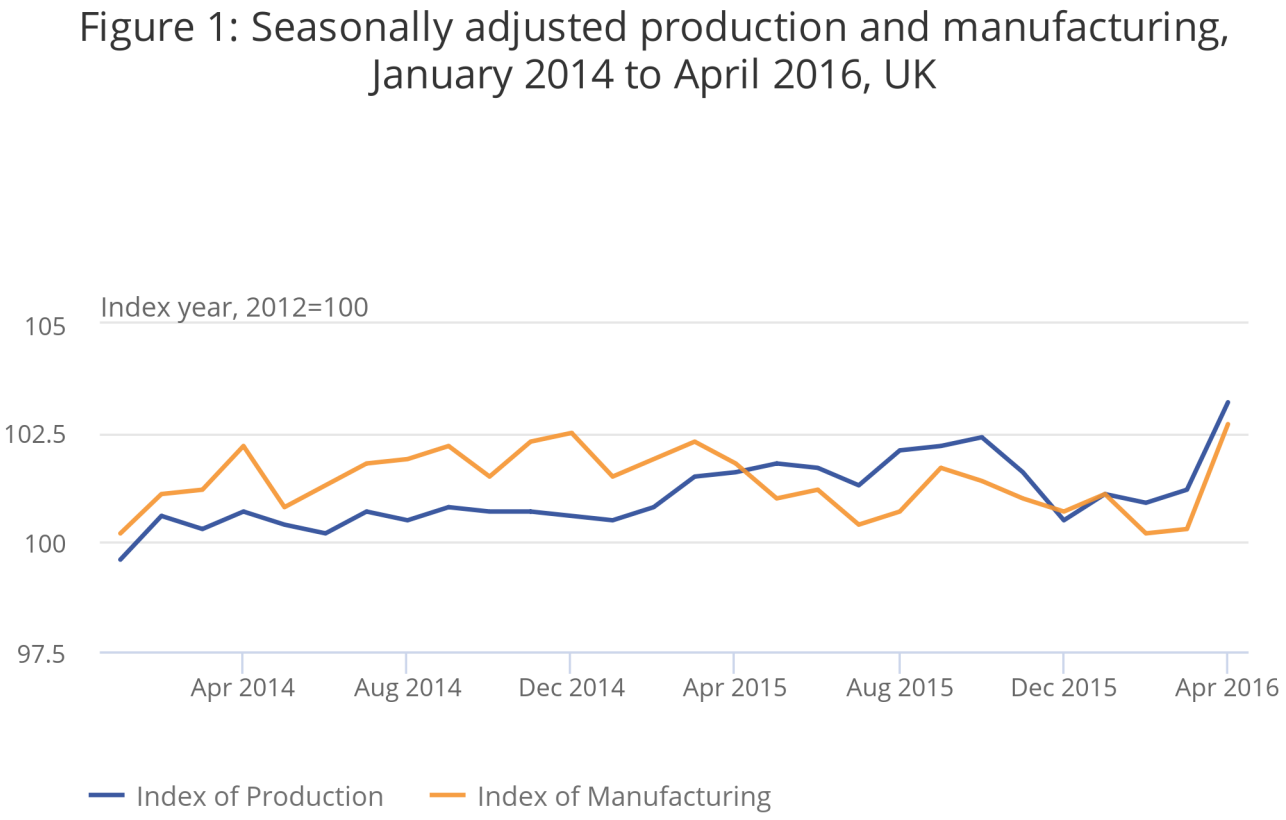
Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from January 2014 to April 2016.

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

		Percentage change			
	Index number (2012 = 100)	Most recent month on a year earlier	Most recent 3 months on a year earlier	Most recent month on previous month	Most recent 3 months on previous 3 months
Production	103.2	1.6	0.5	2.0	0.7
Manufacturing	102.7	0.8	-0.9	2.3	0.1

Source: Office for National Statistics

Figure 1: Seasonally adjusted production and manufacturing, January 2014 to April 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, 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 on 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.

Note 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 grew in April 2016, following growth in March and a contraction in February 2016. Overall, the level of production in the latest month is 1.6% higher than the level in April 2015 and 2.5% above its level in April 2014. Moreover, in the latest quarter (Quarter 1 (Jan to Mar) 2016) production output contracted for a second consecutive quarter but remains 0.1% above its level in Quarter 1 (Jan to Mar) 2015.

Throughout the previous 12 months, manufacturing – the largest component of production – experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being 0.8% higher than those recorded in April 2015. For more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin.

Looking over a longer-term period – from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2016 – production and its main components have followed very different paths (Figure 2). Over this period, the electricity, gas, steam & air conditioning and water supply, sewerage & waste management sectors grew at compound average growth rates of 0.2% 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 and mining & quarrying contracted at compound average growth rates of 0.1% and 1.1% per quarter respectively. Compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

During the economy's downturn (between Quarter 1 (Jan to Mar) 2008 and Quarter 2 (Apr to June) 2009), production and all of its components contracted. However, the path of mining & quarrying was broadly unaffected by the economy's downturn, with its output continuing to decline (Figure 2). Between the economy's peak in Quarter 1 (Jan to Mar) 2008 and the economy's trough in Quarter 2 (Apr to June) 2009, 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%).

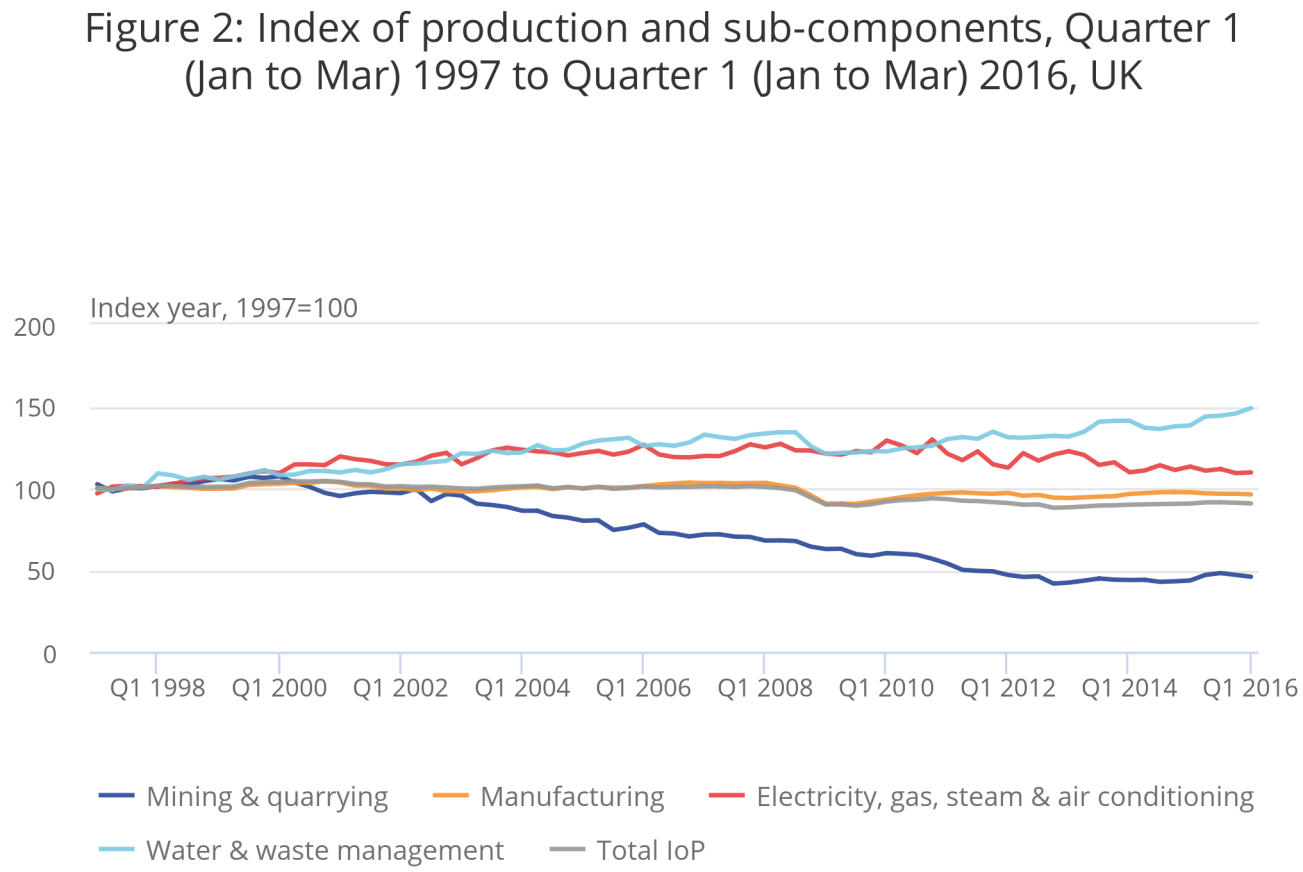
Following the economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 1 (Jan to Mar) 2016), total production remained broadly stable while manufacturing and water supply, sewerage & waste management returned to growth at compound average growth rates of 0.2% and 0.8% per quarter respectively. Over the same period, mining & quarrying and electricity, gas, steam & air conditioning continued to contract at compound average growth rates of 1.2% and 0.3% per quarter respectively.

In Quarter 1 (Jan to Mar) 2016, production and manufacturing output remained below their Quarter 1 (Jan to Mar) 2008 levels by 10.0% and 6.9%, respectively. Moreover, in Quarter 1 (Jan to Mar) 2016, mining & quarrying and electricity, gas, steam & air conditioning output, which continued to decline following the downturn, were 32.5% and 12.2% 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 11.7%, as of Quarter 1 (Jan to Mar) 2016.

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 Gross Domestic Product, second estimate: Quarter 1 (Jan to Mar) 2016 and UK Productivity: Oct to Dec 2015). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from 16.5% to 9.6% between 1997 and 2015 (UK Labour Market: May 2016, EMP13).

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices), and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by 6.5% in the year to April 2016, from a fall of 6.1% in the year to March 2016. Output prices have also experienced deflation, falling by 0.7% in the year to April 2016 (more information can be found in UK Producer price inflation: April 2016).

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



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

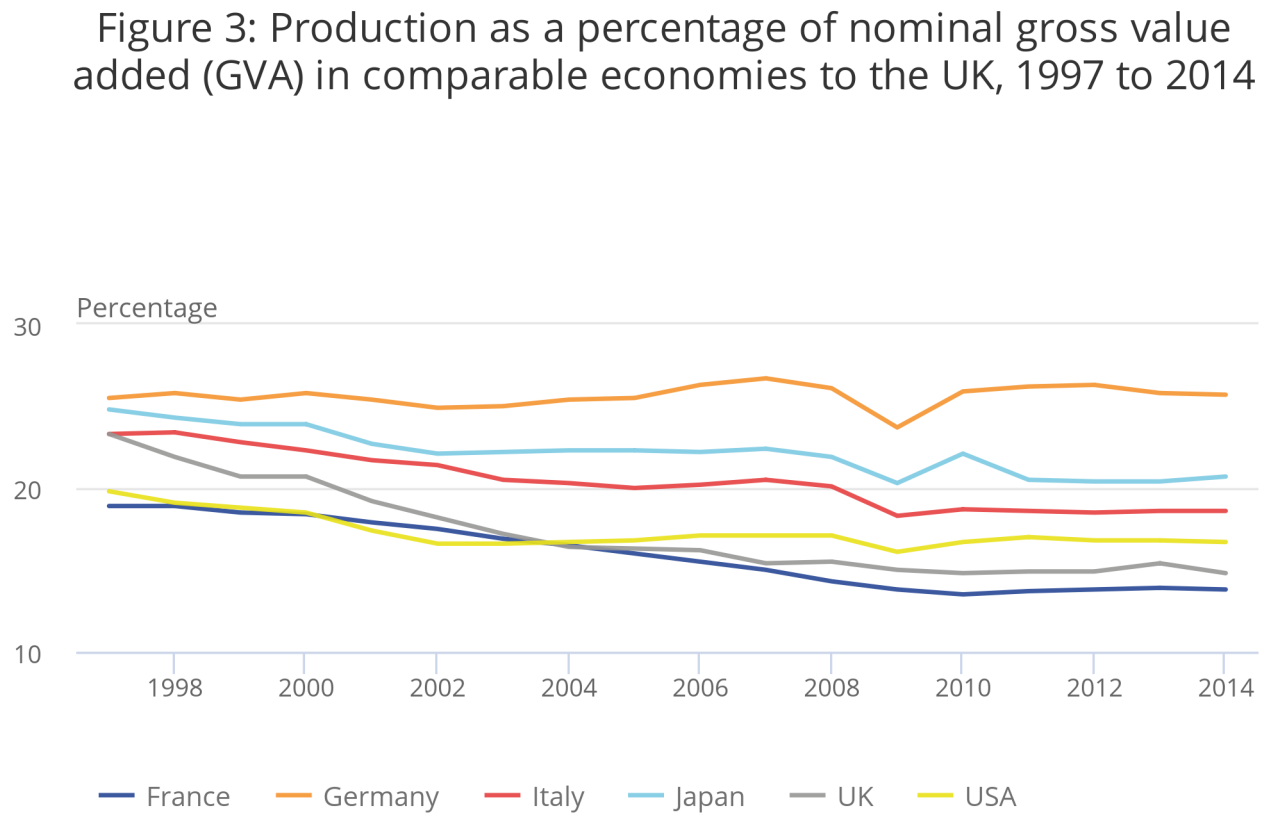
Notes:

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

Figure 3 shows the share of nominal gross value added (GVA) accounted for by production in the UK and a selection of other major economies (more information on data for France, Germany, Italy, Japan and the USA can be found on the Organisation for Economic Co-operation and Development (OECD) website). In 1997, the share of nominal GVA accounted for by production in the UK was 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 gross value added (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 there are no periods open for revision and hence no impact on previously published estimates. The next release, UK Index of Production: May 2016, will contain revisions back to 1997 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). 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 April 2016 will be published on 10 June 2016 and services output for the same period on 30 June 2016.

Table 2: Components of GDP, April 2016, UK

						Percentage change	
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]	Most recent month on the previous month
Index of	14.9	08 Jun	Apr 2016	0.5	0.7	1.6	2.0
Production [1]			Mar 2016	0.1	-0.4	-0.2	0.3
Construction	5.9	13 May	Mar 2016	-1.9	-1.1	-4.5	-3.6
			Feb 2016	0.1	1.2	-0.4	-0.9
Index of	78.6	26 May	Mar 2016	2.7	0.6	2.6	-0.1
services			Feb 2016	2.6	0.8	2.6	0.1
Retail		19 May	Apr 2016	3.7	0.3	4.3	1.3
Sales			Mar 2016	3.9	0.9	3.0	-0.5
Agriculture	0.7		Q1 2016	1.3	0.1	..	..
			Q4 2015	-2.1	0.3	..	..

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, April 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	1.6	1.6	2.0	2.0
Sector B	13.5	0.3	0.04	-0.3	-0.04
Division 06	10.6	2.6	0.27	-1.3	-0.14
Sector C	69.1	0.8	0.56	2.3	1.58
Sector D	9.3	6.2	0.53	3.9	0.34
Sector E	8.1	5.5	0.48	1.0	0.09

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, April 2016, UK

Sector	Summary Description	Month on same month a year ago growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	1.6	1.61
Sector B	Total Mining & Quarrying	0.3	0.04
5	Coal & Lignite	-75.3	-0.08
6	Crude petroleum & Natural gas	2.6	0.27
789	Other mining & quarrying	-4.6	-0.14
Sector C	Total Manufacturing	0.8	0.56
CA	Food, beverages & tobacco	1.8	0.20
CB	Textiles & leather products	-1.1	-0.02
CC	Wood, paper & printing	0.3	0.02
CD	Coke & petroleum	-4.2	-0.07
CE	Chemical products	-4.2	-0.17
CF	Pharmaceutical products	12.5	0.68
CG	Rubber & plastic products	2.7	0.16
CH	Metal products	-4.8	-0.37
CI	Computer, electronic & optical	-3.3	-0.14
CJ	Electrical equipment	-5.3	-0.10
CK	Machinery & equipment	-6.3	-0.28
CL	Transport equipment	7.6	0.67
CM	Other manufacturing & repair	-0.1	-0.01
Sector D	Total Electricity & Gas	6.2	0.53
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	26.7	0.58
Sector E	Total Water	5.5	0.48
36	Water collection, treatment & supply	-2.3	-0.05
37	Sewerage	5.8	0.14
38	Waste collection, treatment & disposal activities; materials recovery	9.4	0.38
39	Remediation activities & other waste management services	13.5	0.01

Source: Office for National Statistics

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

Sector	Summary Description	Month on previous month growth (Percentage)	Contribution to production (Percentage points)
IoP	Index of Production	2.0	1.97
Sector B	Total Mining & Quarrying	-0.3	-0.04
5	Coal & Lignite	2.0	0.00
6	Crude petroleum & Natural gas	-1.3	-0.14
789	Other mining & quarrying	3.3	0.10
Sector C	Total Manufacturing	2.3	1.58
CA	Food, beverages & tobacco	1.1	0.12
CB	Textiles & leather products	5.7	0.11
CC	Wood, paper & printing	1.8	0.09
CD	Coke & petroleum	-3.7	-0.06
CE	Chemical products	1.5	0.06
CF	Pharmaceutical products	8.6	0.48
CG	Rubber & plastic products	3.0	0.18
CH	Metal products	-0.7	-0.05
CI	Computer, electronic & optical	2.6	0.10
CJ	Electrical equipment	1.4	0.03
CK	Machinery & equipment	2.2	0.09
CL	Transport equipment	4.7	0.43
CM	Other manufacturing & repair	0.0	0.00
Sector D	Total Electricity & Gas	3.9	0.34
35.1	Electric power generation, transmission & distribution	0.7	0.04
35.2-3	Manufacture of gas; distribution of gaseous fuels through mains; steam & aircon supply	12.1	0.30
Sector E	Total Water	1.0	0.09
36	Water collection, treatment & supply	-0.8	-0.02
37	Sewerage	-0.6	-0.02
38	Waste collection, treatment & disposal activities; materials recovery	2.7	0.12
39	Remediation activities & other waste management services	3.8	0.00

Source: Office for National Statistics

Total production

Total production output in April 2016 increased by 1.6% compared with April 2015 (Table 4), the largest rise since October 2015, when it rose by an equivalent amount. This increase reflected rises in all of its 4 main sectors with manufacturing (the largest component in production) having the largest contribution, increasing by 0.8% and contributing 0.6 percentage points to total production. There were also increases in electricity, gas, steam & air conditioning output of 6.2%; in water supply, sewerage & waste management of 5.5%; and in mining & quarrying of 0.3%.

Between March 2016 and April 2016, total production increased by 2.0%, the largest increase since July 2012, following a rise of 0.3% in the previous month (Table 5). This increase reflected rises in 3 of its 4 main sectors, with manufacturing having the largest contribution, increasing by 2.3% and contributing 1.6 percentage points to total production. There were also increases in electricity, gas, steam & air conditioning output of 3.9% and in water supply, sewerage & waste management of 1.0%. These increases were slightly offset by a decrease in mining & quarrying, which decreased by 0.3% and had a negligible contribution to total production.

Manufacturing

Manufacturing output increased by 0.8% between April 2015 and April 2016, contributing 0.6 percentage points to total production. Output increased in 5 of the 13 manufacturing sub-sectors compared with a year ago (Table 4). The manufacturing sub-sector with the largest upward contribution to total production output was the manufacture of basic pharmaceutical products & pharmaceutical preparations, which increased by 12.5% and contributed 0.7 percentage points to total production. This was the largest increase since April 2009, having decreased by 2.4% in the previous month. Anecdotal evidence suggested increased exports were the main contributing factor to the rise.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production output was the manufacture of basic metals & metal products. This sub-sector decreased by 4.8%, continuing the downward trend since June 2015 and contributed -0.4 percentage points to total production. The largest contribution to the decrease within this sub-sector came from the manufacture of basic iron & steel, which decreased by 29.0% and contributed -0.2 percentage points to total production. Anecdotal evidence suggested shut downs to steel production facilities towards the end of 2015 to be a contributing factor.

Manufacturing output increased by 2.3% between March 2016 and April 2016, the largest rise since July 2012 and contributed 1.6 percentage points to total production. There were increases in 10 of the 13 manufacturing sub-sectors (Table 5) with the largest upward contribution coming from the manufacture of basic pharmaceutical products & pharmaceutical preparations, which increased by 8.6% – the largest rise since February 2014, – and contributed 0.5 percentage points to total production. Anecdotal evidence suggested increased exports as a contributing factor.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production in April 2016 compared with March 2016 was the manufacture of coke & refined petroleum products, which decreased by 3.7%, the sixth consecutive decrease and contributed -0.1 percentage points to total production. Anecdotal evidence suggested extended maintenance periods were a contributing factor to the fall.

Mining & quarrying

Mining & quarrying output increased by 0.3% between April 2015 and April 2016 and had a negligible contribution to total production. The sub-sector with the largest contribution to the increase was the extraction of crude petroleum & natural gas, which increased by 2.6% and contributed 0.3 percentage points to total production (Table 4).

Mining & quarrying output decreased by 0.3% in April 2016 compared with March 2016 and had a negligible contribution to total production. This followed a decrease of 0.4% in the previous month. The sub-sector with the largest contribution to the fall was the extraction of crude petroleum & natural gas, which decreased by 1.3% and contributed -0.1 percentage points to total production (Table 5).

Electricity, gas, steam & air conditioning

Electricity, gas, steam & air conditioning output increased by 6.2% in April 2016 compared with April 2015 and contributed 0.5 percentage points to total production (Table 4). This was the largest increase compared with a year ago since February 2015, having decreased by 0.6% in the previous month. This increase reflected a rise in output in one of its two sub-sectors, the manufacture of gas & distribution of gaseous fuels through mains, which increased by 26.7%. This was the largest rise since March 2013 and contributed 0.6 percentage points to total production. Anecdotal evidence suggested the increase was a result of a substantial increase in electricity generated from gas at the expense of coal, as a result of reduced coal generating capacity.

Electricity, gas, steam & air conditioning output increased by 3.9% in April 2016 compared with March 2016 and contributed 0.3 percentage points to total production (Table 5). The increase in electricity, gas, steam & air conditioning output reflected rises in output in both of its sub-sectors. The sub-sector with the largest contribution was the manufacture of gas & distribution of gaseous fuels through mains, which increased by 12.1% and contributed 0.3 percentage points to total production. Anecdotal evidence suggested an increase in the volume of gas used for the purpose of generating electricity was a contributing factor to the increase.

Water & waste management

Water supply, sewerage & waste management output increased by 5.5% in April 2016 compared with April 2015 and contributed 0.5 percentage points to total production. This reflected increases in 3 of its 4 sub-sectors' output (Table 4), with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 9.4% and contributed 0.4 percentage points to total production.

Water supply, sewerage & waste management output increased by 1.0% between March 2016 and April 2016 and contributed 0.1 percentage points to total production. This increase reflected increases in 2 of its 4 subsectors' output, with the largest contribution coming from waste collection, treatment & disposal activities, which increased by 2.7% and contributed 0.1 percentage points to total production.

Revisions to IoP

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

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

In the March 2016 IoP release we announced that we would be open for revisions back to January 2016 in the April 2016 release. However, in line with previous timetables for publishing revisions to IoP in the month before the Blue Book consistent release, no periods were open for revision and hence there is no impact on previously published estimates.

We will be open for revisions back to January 1997 in our next publication.

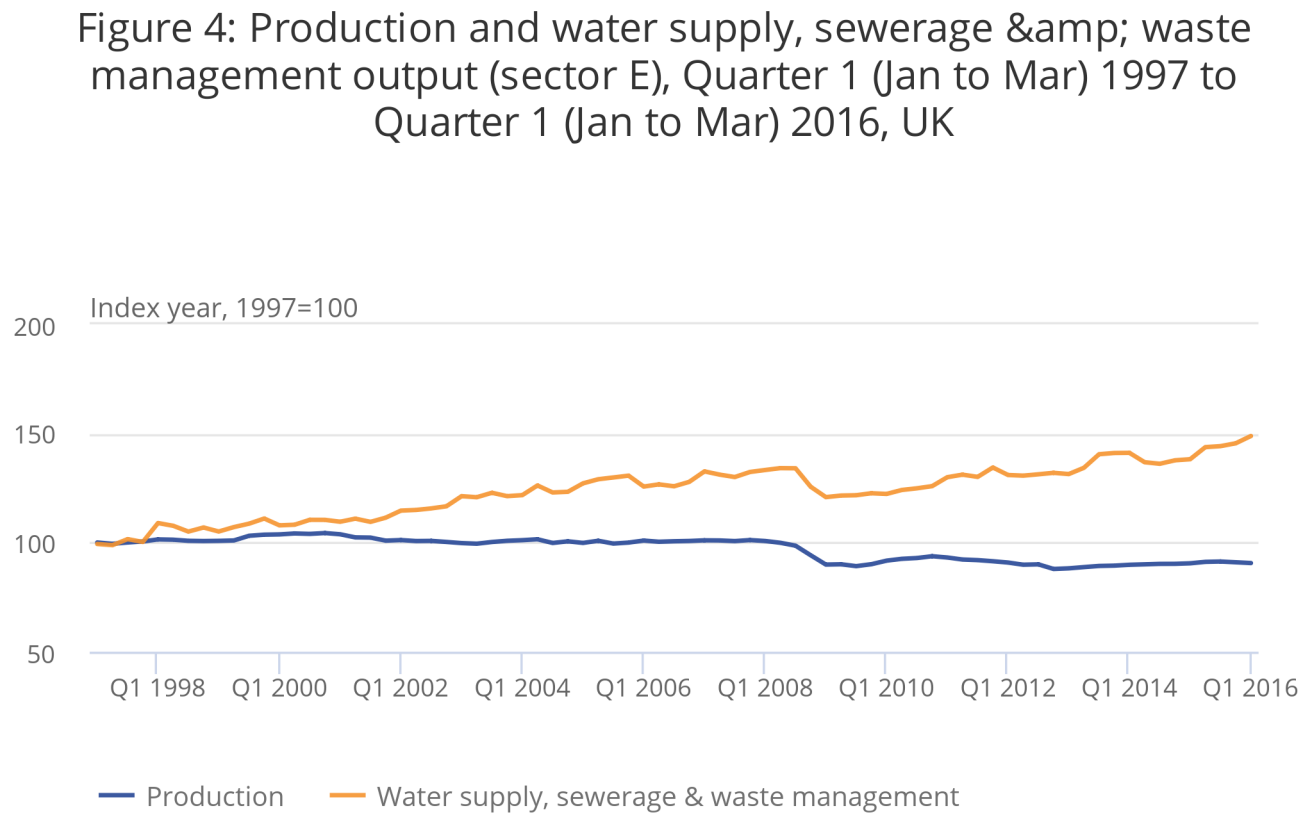
7 . Industry spotlight: Water supply, sewerage & waste management

Water supply, sewerage & waste management (sector E) is 1 of the 4 main sectors within production and accounts for 8.1% of total production output. Around 46% of the total output in the sector is attributable to “waste collection, treatment & disposal activities; materials recovery” (industry 38) while the remainder consists of “water collection, treatment & supply” (industry 36), sewerage (industry 37) and “remediation activities & other waste management services” (industry 39).

Figure 4 shows that water supply, sewerage & waste management output has generally outperformed production as a whole. From Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, production output was broadly stable, whilst water supply, sewerage & waste management output grew at a compound average growth rate of 0.7% per quarter. The economy’s downturn (from Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009) affected the sector and production as a whole severely, with production output contracting by 10.6% while the output of water supply, sewerage & waste management contracted by 8.8% over the same period.

Following the downturn (from Quarter 3 (July to Sept) 2009 to Quarter 1 (Jan to Mar) 2016), production has struggled to recover and remains 10% below its level in Quarter 1 (Jan to Mar) 2008. Water supply, sewerage & waste management performed better, growing at a compound average growth rate of 0.8% per quarter. This strong recovery in water supply, sewerage & waste management output meant it surpassed its pre-downturn level in Quarter 4 (Oct to Dec) 2011. In Quarter 1 (Jan to Mar) 2016 the level of output of water supply, sewerage & waste management output was 11.7% above its level in Quarter 1 (Jan to Mar) 2008.

Figure 4: Production and water supply, sewerage & waste management output (sector E), Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK



Source: Office for National Statistics

Notes:

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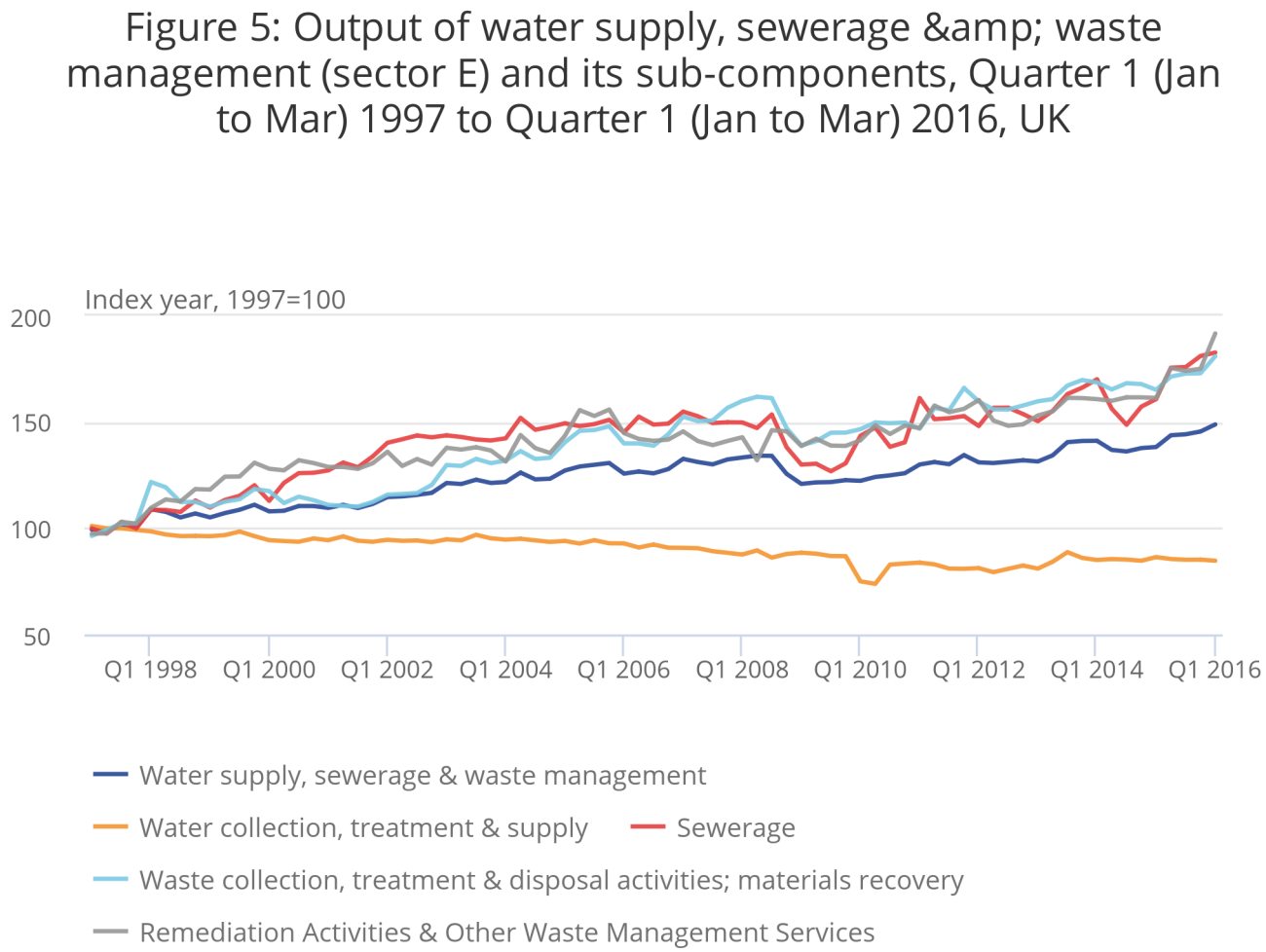
Figure 5 shows that whilst water supply, sewerage & waste management output has performed relatively strongly compared to production as a whole, the performance of its industries has varied. Whilst industries 37 (sewerage), 38 (waste collection, treatment & disposal activities; materials recovery) and 39 (remediation activities & other waste management services) have seen similar rates of growth, industry 36 (water collection, treatment & supply) has contracted. Between Quarter 1 (Jan to Mar) 1997 and Quarter 1 (Jan to Mar) 2016, the output of industries 37 (sewerage), 38 (waste collection, treatment and disposal; materials recovery) and 39 (remediation activities & other waste management services) grew at compound average growth rates of 0.8%, 0.8% and 0.9% per quarter respectively, following similar paths to water supply, sewerage & waste management. However, over the same period, industry 36 (water collection, treatment & supply) has contracted at a compound average growth rate of -0.2% per quarter.

Figure 5: Output of water supply, sewerage & waste management (sector E) and its sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK



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8. Background notes

1. What's new?

Economic Review; June 2016 was published on 3 June 2016, providing further commentary on the economy.

We published Impact of Blue Book 2016 changes on current price and chained volume measure Gross Domestic Product estimates, 1997 to 2014. This article details estimates of the total impact of all the improvements to current price and chained volume measure (CVM or "real") gross domestic product (GDP) up to 2014, planned for June 2016.

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

Blue Book 2016

The Index of Production for May 2016, to be published on 7 July 2016, will include revisions back to January 1997. This will be in line with the open revision period for the 2016 Blue Book publication on 29 July 2016. The estimates will also be consistent with the Quarterly National Accounts published on 30 June 2016.

These annual changes will include updating the reference year from 2012=100 to 2013=100, along with adding an additional year of chain-linking weights for 2013.

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

VAT project update

HMRC VAT update April 2016 was published on 4 April 2016. This was the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The next article is due to be published in July 2016 and will reflect on the analysis of the candidate industries and determine how the scope and timetable of the pilot will progress.

2. Special events

We previously maintained a list of candidate special events in the Special Events Calendar up to 2014. As explained in our Special Events policy, it is not possible to separate the effects of special events from other changes in the series.

3. Understanding the data

Short guide to the Index of Production

This statistical bulletin gives details of the index of output of the production industries in the UK. Index numbers of output in this statistical bulletin are on the base 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 6: Monthly business survey (MBS) response rates, April 2016, UK

				Percentage
	Year	Period	Turnover	Questionnaire
MBS overall	2016	Apr	88.1	75.8
	2016	Mar	94.2	82.0
	2016	Feb	95.4	84.3
	2016	Jan	96.8	85.2
MBS production only	2016	Apr	86.8	78.9
	2016	Mar	93.8	85.4
	2016	Feb	95.8	86.9
	2016	Jan	97.3	87.9

Source: Office for National Statistics

Seasonal adjustment

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

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

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

Deflation

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

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

5. Code of Practice for Official Statistics

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

6. Quality

Basic quality information

A common pitfall in interpreting data is that expectations of accuracy and reliability in early estimates are often too high. Revisions are an inevitable consequence of the trade off between timeliness and accuracy. Early estimates are based on incomplete data. Very few statistical revisions arise as a result of "errors" in the popular sense of the word. All estimates, by definition, are subject to statistical "error" but in this context the word refers to the uncertainty inherent in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques, or the incorporation of new information which allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable "errors" such as human or system failures, and such mistakes are made quite clear when they 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 7 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 7 presents a summary of the differences between the first estimates published between May 2010 and April 2015 and the estimates published 12 months later.

Table 7: Revisions, April 2016, UK

Percentage change

		Revisions between first publication and estimates 12 months later	
Growth rates	Value in latest period	Average over the last 60 months	Average over the last 60 months without regard to sign (average absolute revision)
Production - 3 month	0.7	-0.13	0.28
Manufacturing - 3 month	0.1	-0.12	0.26
Production - 1 month	2.0	-0.10 *	0.23
Manufacturing - 1 month	2.3	-0.08	0.21

Source: Office for National Statistics

Datasets give revisions triangles of estimates for all months from April 1998 through to the current month.

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

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

The result, presented in Table 7, suggests that the average revision for our 3 monthly estimates is not statistically significantly different from zero and that there are small downward revisions for our monthly production estimates over 12 months. In other words, the initial estimates for any given period provide a good indication of the later IoP estimates once more data have become available.

7. Accessing data

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

We publish revisions triangles or all the main published key indicators on our website.

8. Relevant links

On 2 December 2015, we published a short story on the British steel industry since the 1970s.

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

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

9. Customer feedback

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

- you commented that longer time series would be useful so long run time series of data for the main IoP industries are available – furthermore, data at 4 decimal places for IoP and the main sub-sectors are now available

- you would like more information on data content – from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to IoP were included

- you also raised concerns that the IoP is not benchmarked to annual data through the supply and use framework – this is being addressed as part of our response to the National Statistics Quality Review of National Accounts

As a reader and user of our statistics we 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 send your feedback please contact us via email: indexofproduction@ons.gsi.gov.uk

Index of Production
Release Tables

Output of the Production Industries, April 2016

IOP5 Output of the Production Industries

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	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
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
2016 Q1	101.1	101.8	100.6	93.1	113.4	100.4	102.1	99.8	101.4	101.6	96.3
2015 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	101.1	99.6	101.1	92.1	113.5	97.1	103.7	99.3	102.8	102.5	94.8
Feb	100.9	103.1	100.2	92.0	113.3	102.1	101.7	100.5	99.9	101.3	96.7
Mar	101.2	102.6	100.3	95.1	113.5	102.0	101.0	99.7	101.6	100.9	97.4
Apr	103.2	102.3	102.7	98.7	114.6	100.6	103.0	103.2	104.0	102.8	97.9
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											
2014 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	0.6	2.8	-0.4	-3.6	9.5	8.2	-2.4	-0.7	1.5	-2.6	1.5
Feb	0.1	8.6	-1.6	-5.3	7.0	17.0	-0.6	1.3	-3.0	-4.1	3.8
Mar	-0.2	4.7	-1.9	-0.6	6.6	10.9	-2.9	-1.8	-1.2	-4.1	3.7
Apr	1.6	0.3	0.8	6.2	5.5	2.6	-0.8	4.6	0.3	-2.3	2.6

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

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

IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	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											
2014 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	0.6	-1.3	0.5	4.6	1.3	-1.3	0.4	-1.0	0.4	1.9	0.6
Feb	-0.2	3.5	-0.9	-0.1	-0.2	5.1	-1.9	1.2	-2.8	-1.1	2.0
Mar	0.3	-0.4	0.1	3.3	0.2	-0.1	-0.6	-0.8	1.7	-0.3	0.8
Apr	2.0	-0.3	2.3	3.9	1.0	-1.3	1.9	3.6	2.4	1.9	0.5
Percentage change, latest 3 months on same 3 months a year ago[2]											
2014 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	0.4	7.1	-1.1	-3.7	7.3	13.5	-4.3	-0.1	-1.5	-2.9	4.2
Feb	0.1	6.4	-1.3	-5.4	8.3	13.4	-3.4	0.4	-1.5	-3.6	2.9
Mar	0.1	5.3	-1.3	-3.2	7.7	12.0	-2.0	-0.4	-0.9	-3.6	3.0
Apr	0.5	4.4	-0.9	-	6.4	9.9	-1.5	1.4	-1.3	-3.5	3.4

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

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IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

		Broad industry groups						Main industrial groupings				
		Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section		B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight		1 000.0	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[2]												
2014	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	-1.1	-5.2	-0.3	-4.6	2.4	-5.8	1.4	-0.6	-0.2	-0.8	-4.7
	Feb	-1.2	-4.2	-0.7	-4.7	3.0	-4.0	0.7	-0.8	-0.3	-1.1	-4.4
	Mar	-0.4	-2.3	-0.4	0.4	2.3	-1.4	-0.2	-0.8	-0.2	-0.3	-1.7
	Apr	0.7	0.8	0.1	4.5	1.7	2.2	-1.4	1.2	-0.3	-0.1	1.5

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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

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	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
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
2016 Q1	103.0	87.4	102.9	87.4	103.9	92.2
2015 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	103.4	92.0	104.2	90.4	104.8	88.1
Feb	103.6	85.6	101.9	88.1	103.7	94.4
Mar	102.2	84.5	102.6	83.6	103.2	94.1
Apr	103.3	89.2	104.5	80.5	104.8	102.2
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						
2014 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	-	6.9	-1.7	0.4	-2.0	-3.7
Feb	0.4	-4.1	-2.5	-4.3	-4.9	5.2
Mar	-0.4	-7.1	-1.7	-1.8	-4.2	-2.4
Apr	1.8	-1.1	0.3	-4.2	-4.2	12.5

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IOP5 Output of the Production Industries

continued

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	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
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
2016 Q1	108.1	97.8	95.9	89.6	76.7	118.3	111.7
2015 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	108.7	98.3	98.9	90.2	76.7	119.3	112.6
Feb	108.1	97.2	94.9	90.4	75.6	116.2	110.9
Mar	107.6	98.0	93.8	88.1	77.8	119.4	111.7
Apr	110.8	97.3	96.2	89.3	79.5	125.0	111.7
Percentage change, latest year on previous yea							
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 ag							
2014 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	1.0	-3.7	-0.6	-1.7	-7.1	4.6	2.6
Feb	0.5	-5.6	-2.8	-3.2	-10.2	0.1	1.1
Mar	-0.7	-4.0	-5.3	-6.4	-6.3	3.2	-0.4
Apr	2.7	-4.8	-3.3	-5.3	-6.3	7.6	-0.1

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IOP5 Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

	Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section	CA	CB	CC	CD	CE	CF
Latest weight	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						
2014 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	3.5	1.7	-4.9	0.1	-5.3
Feb	0.2	-7.0	-2.2	-2.6	-1.0	7.2
Mar	-1.4	-1.3	0.7	-5.1	-0.4	-0.2
Apr	1.1	5.7	1.8	-3.7	1.5	8.6
Percentage change, latest 3 months on same 3 months a year ago						
2014 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	4.8	-0.5	4.6	1.5	-1.1
Feb	-0.2	2.6	-1.4	-0.7	-1.5	0.7
Mar	-	-1.6	-2.0	-1.9	-3.7	-0.4
Apr	0.6	-4.1	-1.3	-3.5	-4.4	5.0

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

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

IOP5 Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.6	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								
2014	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	2.1	3.1	-	-1.0	-0.9	-	4.1
	Feb	-0.6	-1.2	-4.1	0.2	-1.4	-2.6	-1.5
	Mar	-0.4	0.8	-1.2	-2.6	2.9	2.7	0.7
	Apr	3.0	-0.7	2.6	1.4	2.2	4.7	-
Percentage change, latest 3 months on same 3 months a year ago								
2014	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	-2.3	-4.0	-5.7	-2.2	-11.6	4.9	-0.6
	Feb	-1.0	-4.5	-4.8	-2.8	-10.2	3.0	1.1
	Mar	0.3	-4.4	-2.9	-3.8	-7.8	2.6	1.0
	Apr	0.8	-4.8	-3.8	-5.0	-7.6	3.6	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.

IOP5 Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		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							
2014	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	1.4	0.7	-2.0	-1.1	-3.9
	Feb	-0.1	-1.8	-0.8	-8.7	-2.7	-2.8
	Mar	-0.5	-3.0	-0.3	-12.1	-2.4	-1.8
	Apr	-0.5	-4.2	-0.7	-12.1	-1.7	6.5

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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 added[1]

continued

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section		CG	CH	CI	CJ	CK	CL	CM
Latest weight		55.6	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								
2014	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	0.9	-1.0	-0.4	-1.9	-1.8	-1.1	3.9
	Feb	1.2	0.2	-0.4	-2.9	-0.8	-1.6	3.5
	Mar	1.6	1.6	-2.1	-2.9	0.1	-1.4	4.9
	Apr	1.6	0.8	-3.4	-2.2	1.2	0.7	1.6

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Revisions to Output of the Production Industries, April 2016

IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	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	-	-	-	-	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-	-	-	-	-
2016 Q1	-	-	-	-	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest year on previous year											
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago											
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	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-

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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.

IOP5R
continued

Output of the Production Industries

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	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											
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	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-
Percentage change, latest 3 months on same 3 months a year ago											
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	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-

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IOP5R
continued

Output of the Production Industries

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

	Broad industry groups						Main industrial groupings				
	Production industries	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning	Water supply, sewerage and waste management	Oil and gas extraction	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods	Energy
Section	B+C+D+E	B	C	D	E	06	MIG-CD	MIG-CND	MIG-CAG	MIG-IG	MG-NRG
Latest weight	1 000.0	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											
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	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-

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IOP5R
continued

Output of the Production Industries

Chained volume indices of gross value added[1]

Seasonally adjusted 2012 = 100

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

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IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

	Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
Section	CG	CH	CI	CJ	CK	CL	CM
Latest weight	55.6	77.6	43.0	21.1	53.6	77.3	60.9
	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2015 Q1	-	-	-	-	-	-	-
Q2	-	-	-	-	-	-	-
Q3	-	-	-	-	-	-	-
Q4	-	-	-	-	-	-	-
2016 Q1	-	-	-	-	-	-	-
2015 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Apr	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-
2016 Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-
Percentage change, latest year on previous yea							
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
Percentage change, latest month on same month a year ago							
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	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-

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IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

		Food products, beverages and tobacco	Textiles, wearing apparel and leather products	Wood and paper products and printing	Coke and refined petroleum products	Chemicals and chemical products	Basic pharmaceutical products and preparations
Section		CA	CB	CC	CD	CE	CF
Latest weight		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							
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	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
Percentage change, latest 3 months on same 3 months a year ago							
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	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-

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IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

		Rubber and plastic products and non-metallic mineral products	Basic metals and metal products	Computer, electronic and optical products	Electrical equipment	Machinery and equipment not elsewhere classified	Transport equipment	Other manufacturing and repair
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		K23B	K23G	K23N	K23P	K23R	K23T	K23Z
Percentage change, latest month on previous month								
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	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-
Percentage change, latest 3 months on same 3 months a year ago								
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	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-

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IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

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	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2015	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-
	Apr	-	-	-	-	-	-
	May	-	-	-	-	-	-
	Jun	-	-	-	-	-	-
	Jul	-	-	-	-	-	-
	Aug	-	-	-	-	-	-
	Sep	-	-	-	-	-	-
	Oct	-	-	-	-	-	-
	Nov	-	-	-	-	-	-
	Dec	-	-	-	-	-	-
2016	Jan	-	-	-	-	-	-
	Feb	-	-	-	-	-	-
	Mar	-	-	-	-	-	-

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IOP5R

Output of the Production Industries

Chained volume indices of gross value added[1]

continued

Seasonally adjusted 2012 = 100

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	K23B	K23G	K23N	K23P	K23R	K23T	K23Z
Percentage change, latest 3 months on previous 3 months							
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	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-

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