

Statistical bulletin

## GDP monthly estimate, UK: June 2020

Gross domestic product (GDP) measures the value of goods and services produced in the UK. It estimates the size of and growth in the economy.



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## 1. UK GDP fell by 20.4% in Quarter 2 (Apr to June) 2020

### Figure 1: GDP saw its second consecutive quarterly decline in Quarter 2 2020

UK GDP growth, Quarter 1 (Jan to Mar) 2005 until Quarter 2 (Apr to June) 2020

### Notes:

1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept), Q4 refers to Quarter 4 (Oct to Dec).

### Download the data

This release captures the direct effects of the coronavirus (COVID-19) pandemic and the government measures taken to reduce transmission of the virus. The most significant was the introduction of restrictions in movement across the UK, which began on 23 March 2020.

This bulletin provides a broad overview of the economy and the impact of the coronavirus. A more detailed analysis of <u>Coronavirus and the impact on output in the UK economy</u> has also been published today (12 August 2020), along with a comprehensive account of <u>GDP first quarterly estimates for April to June 2020</u>.

GDP estimates for June 2020 are subject to more uncertainty than usual as a result of the challenges we faced in collecting the data under government imposed public health restrictions.

### Statistician's comment

Commenting on today's GDP and productivity figures for June and the second quarter, ONS Deputy National Statistical for Economic Statistics Jonathan Athow said:

"The recession brought on by the coronavirus pandemic has led to the biggest fall in quarterly GDP on record.

"The economy began to bounce back in June with shops reopening, factories beginning to ramp up production and housebuilding continuing to recover. Despite this, GDP in June still remains a sixth below its level in February, before the virus struck.

"Overall, productivity saw its largest fall in the second quarter since the three-day week. Hospitality was worst hit, with productivity in that industry falling by three quarters in recent months."

<u>Recent analysis</u> explains our latest position on how we are looking to communicate GDP, including how we will continue to acknowledge that "technical" recessions are comprising of at least two consecutive quarters of contracting GDP.

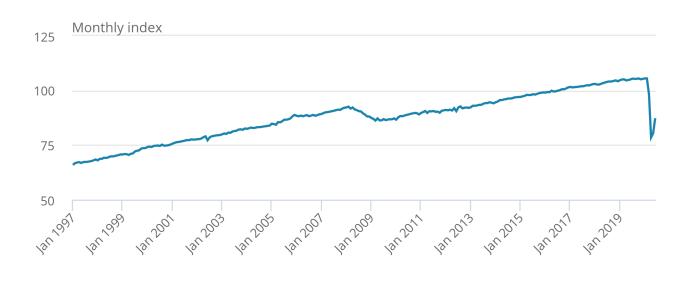
While it is still true that these early estimates are prone to revision, we prefer to focus on the magnitude of the contraction that has taken place in response to the coronavirus (COVID-19) pandemic. It is clear that the UK is in the largest recession on record. Our latest estimates show that the UK economy is now 17.2% smaller than it was in February, the effects of which have been most pronounced in those industries that are most exposed to public health restrictions and the effects of social distancing.

### Figure 2: GDP grew by 8.7% in June 2020, but is still well below the levels seen in February 2020

### Monthly index, January 1997 until June 2020

### Figure 2: GDP grew by 8.7% in June 2020, but is still well below the levels seen in February 2020

Monthly index, January 1997 until June 2020



### Source: Office for National Statistics – GDP monthly estimate

Looking at the monthly profile, Figure 2 shows the monthly GDP index level to June 2020. Monthly GDP grew by 8.7% in June 2020 as lockdown measures eased, following upwardly revised growth of 2.4% in May and a record fall of 20.0% in April 2020.

In the two months since its April 2020 low, the UK economy has grown by a total of 11.3%. However, it still remains 17.2% below levels seen in February 2020, before the full impact of the coronavirus. For more detail on the monthly data, please refer to <u>Section 3</u>.

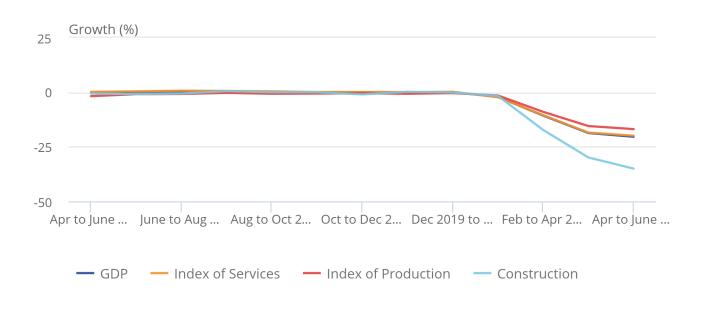
# 2 . GDP fell significantly in Quarter 2 (Apr to June) 2020 with widespread contractions across all main sectors of the economy

Figure 3: GDP fell by 20.4% in the three months to June 2020, with declines across all sectors

Growth, three months on previous three months, UK, April to June 2019 until April to June 2020

Figure 3: GDP fell by 20.4% in the three months to June 2020, with declines across all sectors

Growth, three months on previous three months, UK, April to June 2019 until April to June 2020



### Source: Office for National Statistics - GDP monthly estimate

Notes:

1. Rolling three-month estimates are calculated by comparing GDP in a three-month period with GDP in the previous three-month period. For example, GDP April to June compared with the previous January to March.

Gross domestic product (GDP) fell by 20.4% in the three months to June 2020, following a fall of 18.7% in the three months to May, as government restrictions on movement dramatically reduced economic activity.

Rolling three-month growth is based on output gross value added (GVA). There will therefore be discrepancies in the time series with our quarterly estimates of GDP, which include information on the expenditure and income approaches to measuring GDP.

## Figure 4: Breakdown of GDP and its sub-sectors, rolling three-month growth rates and contributions to growth, April to June 2020

### Notes:

- 1. Rolling three-month estimates are calculated by comparing GDP in a three-month period with GDP in the previous three-month period. For example, GDP April to June compared with the previous January to March.
- 2. Growth for aggregate sub-sectors is a weighted average of components.
- 3. Components contributions may not sum to total due to rounding. Please use additional caution when aggregating individual contributions for April to June 2020, as the larger-than-usual growth rates mean that, when summed, the rounded contributions may not accurately represent the higher-level contribution being calculated.

### Download the data

All the headline sectors provided a negative contribution to GDP growth in the three months to June 2020. The services sector fell by 19.9%, production by 16.9% and construction by 35.0%. The impacts of the coronavirus (COVID-19) continued to be seen right across the economy, with nearly all sub-sectors falling in the three months to June.

## 3 . GDP grew by 8.7% in June 2020

Monthly gross domestic product (GDP) grew by 8.7% in June 2020, following growth of 2.4% in May 2020. Despite this, the level of output did not fully recover from the record falls seen across March and April 2020, and has reduced by 17.2% compared with February 2020, before the full impact of the coronavirus (COVID-19) pandemic.

Looking ahead, results from <u>Wave 10</u> of the Business Impact of Coronavirus (COVID-19) Survey (BICS), which covered the dates 13 to 26 July 2020, found that of businesses currently trading, 45% reported their turnover exceeded their operating costs, compared with 16% who reported their operating costs exceeded their turnover. However, of those businesses currently trading, over half (54%) reported a decrease in turnover during this period compared with what is normally expected for July.

Table 1: Breakdown of GDP and its components' growth rates by month

	February 2020		April 2020	May Ju 2020 20	20	Change in GDP (February 2020 to June 2020)	Rolling three- month growth (April to June 2020)
GDP	0.0%	-6.9%	-20.0%	2.4% 8.7	7%	-17.2%	-20.4%
Index of Services	0.0%	-7.5%	-18.5%	1.5% 7.7	7%	-17.6%	-19.9%
Index of Production	0.4%	-4.3%	-20.4%	6.2% 9.3	3%	-11.6%	-16.9%
Manufacturing	0.9%	-5.2%	-24.6%	8.3% 11	.0%	-14.2%	-20.2%
Construction	-1.8%	-5.4%	-40.2%	7.6% 23	.5%	-24.8%	-35.0%
Agriculture	0.0%	-0.9%	-5.7%	1.0% 2.7	7%	-3.1%	-4.8%

Source: Office for National Statistics - GDP monthly estimate

### Notes

- 1. Change in GDP refers to the level change from February 2020 to June 2020. Back to table
- 2. Rolling three-month estimates are calculated by comparing GDP in a three-month period with GDP in the previous three-month period. For example, GDP April to June compared with the previous January to March. Back to table

This release features revisions to the monthly data back to April and May 2020 in line with the UK National Accounts revisions policy. There has been an upward revision to both April and May. Monthly GDP for April is now estimated to have fallen by 20.0%, an upward revision of 0.3 percentage points. Monthly GDP for May is now estimated to have increased by 2.4%, an upward revision of 0.6 percentage points. These revisions are largely the result of reprofiling of the monthly path to fit updated quarterly information on education output in line with the expenditure measure of GDP.

The monthly growth rate for GDP is volatile. It should therefore be used with caution and alongside other measures, such as the three-month growth rate, when looking for an indicator of the longer-term trend of the economy. However, it is useful in highlighting one-off changes that can be masked by three-month growth rates.

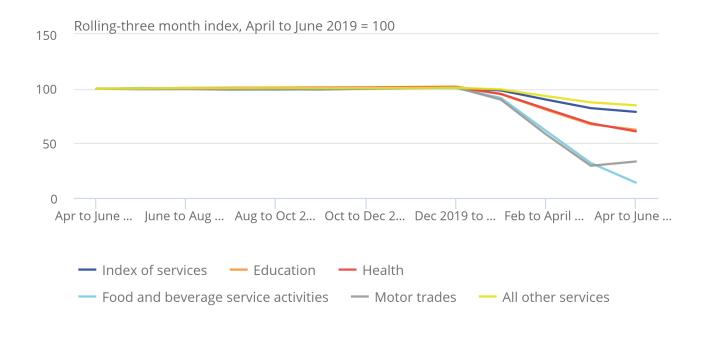
## 4. The services sector fell by 19.9% in Quarter 2 (Apr to June) 2020

Figure 5: Services fell by 19.9% in the three months to June 2020, with widespread falls across the vast majority of industries

Rolling three-month on three-month index, April to June 2019 until April to June 2020

Figure 5: Services fell by 19.9% in the three months to June 2020, with widespread falls across the vast majority of industries

Rolling three-month on three-month index, April to June 2019 until April to June 2020



### Source: Office for National Statistics – GDP monthly estimate

Notes:

- 1. Rolling three-month estimates are calculated by comparing GDP in a three-month period with GDP in the previous three-month period. For example, GDP April to June compared with the previous January to March.
- 2. "All other services" accounts for 65% of services. This is made up of many industries, with the majority falling in the three months to June.
- 3. "Motor trades" refers to industry 45: Wholesale and retail trade and Repair of motor vehicles and motorcycle.

Rolling three-month services growth fell by 19.9% in June 2020, following falls of 18.5% in May 2020 and 10.5% in April 2020. This was driven by falls in nearly every industry, most notably:

- education, which fell by 34.4% as a result of school closures
- health, which fell by 36.1% as a result of reduced activity in elective operations and fewer accident and emergency visits
- food and beverage service activities, which fell by 84.7% as a result of the closure of bars and restaurants
- wholesale and retail trade and repair of motor vehicles and motorcycles, which fell by 63.0%, predominantly driven by a reduction in new car registrations

Looking at monthly services, Figure 6 shows the monthly level of output in the services sub-sectors as a proportion of February 2020 levels.

## Figure 6: All sub-sectors of services showed an increase in growth in June 2020 but output did not recover to February 2020 levels

Monthly output (March, April, May and June 2020) as a proportion of February 2020, February 2020 output = 100%

### Notes:

- 1. Chart shows the March, April, May and June output as a proportion of February 2020 where February output equals 100%
- 2. Public Administration and Defence output saw marginal positive growth across March, April, May and June 2020 so output to February 2020 is over 100%

### Download the data

In June 2020, the services sector grew by 7.7%, following growth of 1.5% in May and a fall of 18.5% in April. The largest positive contributor to this increase was the wholesale, retail and repair of motor vehicles sub-sector, in particular the motor vehicles industry, which recovered to around three-quarters of its February 2020 level after seeing record low levels of output in April and May.

Despite an increase of 7.7% in services, the level of services output is 17.6% lower than the level in February 2020 before the full impact of the coronavirus.

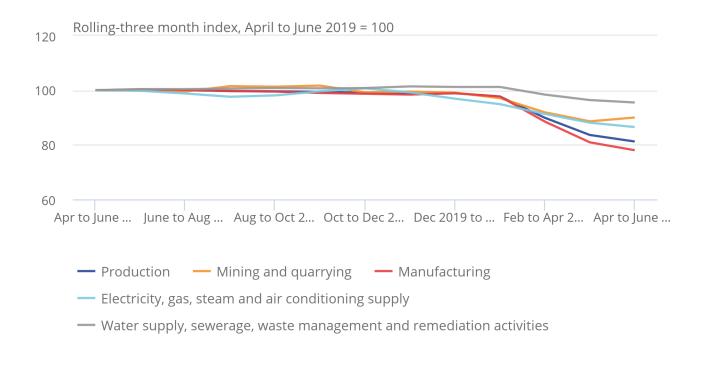
## 5. Production fell by 16.9% in Quarter 2 (Apr to June) 2020

### Figure 7: All four sub-sectors of production fell in the three months to June 2020

### Rolling three-month on three-month index, April to June 2019 until April to June 2020

## Figure 7: All four sub-sectors of production fell in the three months to June 2020

Rolling three-month on three-month index, April to June 2019 until April to June 2020



### Source: Office for National Statistics – GDP monthly estimate

#### Notes:

1. Rolling three-month estimates are calculated by comparing GDP in a three-month period with GDP in the previous three-month period. For example, GDP April to June compared with the previous January to March.

Rolling three-month output in the production sector fell by 16.9% in June 2020, following falls of 15.5% in May and 9.0% in April. This was driven by falls in all four sub-sectors:

- manufacturing, which fell by 20.2% as a result of widespread falls with 12 out of 13 sub-sectors falling; the most notable was the manufacture of transport equipment, which fell by 49.1% as <u>many factories remained</u> <u>closed</u>
- electricity, gas, steam and air conditioning supply, which fell by 8.8% as a result of falling industrial demand for electricity caused by the temporary closures of businesses
- water supply, which fell by 5.6% as a result of a decline in industrial and commercial waste, resulting directly from business closures
- mining and quarrying, which fell by 7.3% as a result of some coronavirus (COVID-19) related shutdowns, along with the reduced demand for oil and gas

Looking at monthly production, Figure 8 shows the monthly level of output in the manufacturing sub-sectors as a proportion of February 2020 levels.

## Figure 8: Most sub-sectors of manufacturing showed an increase in growth in June 2020 but output did not recover to February 2020 levels

Monthly output (March, April, May and June 2020) as a proportion of February 2020, February 2020 output = 100%

### Notes:

- 1. Chart shows the March, April, May and June output as a proportion of February 2020 where February output equals 100%
- 2. Manufacture of Basic Pharmaceuticals had higher output in March, April, May and June 2020 than February 2020, so the proportion is over 100%.

### Download the data

Production grew by 9.3% in June 2020, with manufacturing growing by 11.0%. The manufacturing sector saw 11 out of 13 sub-sectors increasing after large falls across March and April 2020. Despite growth in the latest month, production output is 11.6% lower than the level in February 2020, with manufacturing 14.2% lower.

## 6 . Output in the construction sector fell by 35.0% in Quarter 2 (Apr to June) 2020

Rolling three-month growth in the construction sector was negative 35.0% in June 2020. This is a record fall in the three-month on three-month growth and was caused by record declines in all sectors apart from infrastructure. The largest contributors to this fall were private new housing and private commercial, which fell by 51.2% and 33.4% respectively.

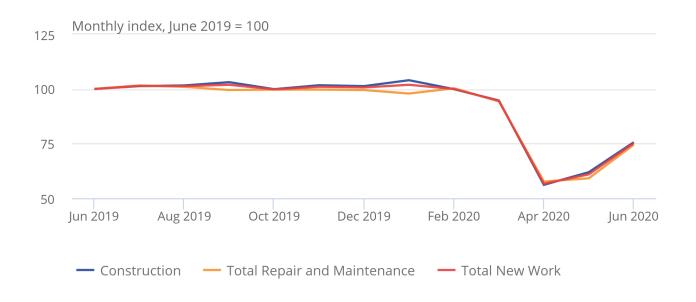
Looking at the monthly data, Figure 7 shows the monthly index for construction, total repair and maintenance, and total new work from June 2019 to June 2020.

## Figure 9: Construction grew by 23.5% in June 2020 but the level of output remains 24.8% lower than February 2020

Monthly index, June 2019 to June 2020, June 2019 = 100

### Figure 9: Construction grew by 23.5% in June 2020 but the level of output remains 24.8% lower than February 2020

Monthly index, June 2019 to June 2020, June 2019 = 100



### Source: Office for National Statistics - Construction output in Great Britain

Month-on-month, output in construction grew by 23.5% following growth of 7.6% in May and a record fall of 40.2% in April 2020. This increase was driven by new housing, and in particular private new housing (18.1% weight to construction), which grew by 42.3% after large declines in March and April.

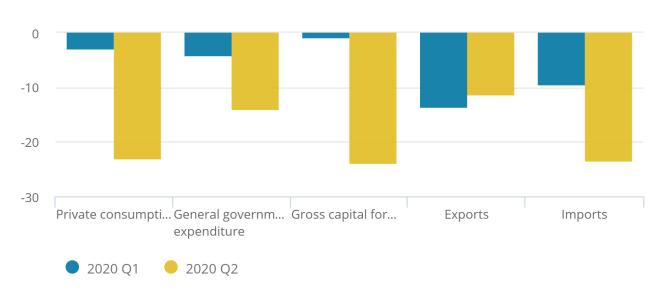
Despite growth in the construction sector, output remains 24.8% lower than the level in February 2020 before the full impact of the coronavirus.

## 7. Expenditure measure

Figure 10: There have been record contractions in private consumption, government consumption and gross capital formation, as well as large falls in gross trade flows in Quarter 2 2020

### UK, Quarter 1 (Jan to Mar) 2020 and Quarter 2 (Apr to June) 2020

Figure 10: There have been record contractions in private consumption, government consumption and gross capital formation, as well as large falls in gross trade flows in Quarter 2 2020



UK, Quarter 1 (Jan to Mar) 2020 and Quarter 2 (Apr to June) 2020

### Source: Office for National Statistics - GDP first quarterly estimate

### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar) and Q2 refers to Quarter 2 (Apr to June).
- 2. Chart shows percentage quarter-on-quarter growth rates.
- 3. Private consumption is household final consumption expenditure and non-profit institutions serving households.

The expenditure approach to measuring gross domestic product (GDP) fell by 20.4% in Quarter 2 (Apr to June) 2020. There have been record contractions in all types of expenditure in Quarter 2, most notably private consumption, which accounted for more than 70% of the fall in GDP in the second quarter.

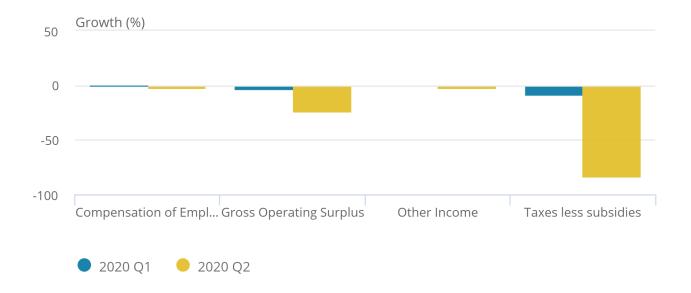
For more information please see the bulletin for the first GDP quarterly estimate.

## 8. Income measure

### Figure 11: Nominal GDP fell by 15.4% in Quarter 2 2020, driven by a decline in taxes less subsidies

### UK, Quarter 1 (Jan to Mar) 2020 and Quarter 2 (Apr to June) 2020

Figure 11: Nominal GDP fell by 15.4% in Quarter 2 2020, driven by a decline in taxes less subsidies



UK, Quarter 1 (Jan to Mar) 2020 and Quarter 2 (Apr to June) 2020

### Source: Office for National Statistics - GDP first quarterly estimate

### Notes:

- 1. Q1 refers to Quarter 1 (Jan to Mar) and Q2 refers to Quarter 2 (Apr to June).
- 2. Chart shows percentage quarter-on-quarter growth rates.

Nominal gross domestic product (GDP) fell by a record 15.4% in Quarter 2 (Apr to June) 2020, following a fall of 1.2% in the previous quarter. Taxes less subsidies fell by 83.7% in Quarter 2 2020, reflecting a decline in tax revenue and an increase in subsidies. The increase in subsidies primarily relates to the Coronavirus Job Retention Scheme (CJRS) and Self Employment Income Support Scheme (SEISS) and incorporate estimates from the <u>updated OBR coronavirus reference scenario</u> published on 14 July 2020.

It is worth noting, however, that there is more uncertainty around this estimate than other components of the income measure of GDP. For more information please see the bulletin for the first <u>GDP quarterly estimate</u>.

## 9. Things you need to know about this release

### Revisions

This release incorporates revisions to estimates for April and May 2020.

### Coronavirus (COVID-19)

This release captures the direct effects of the coronavirus pandemic and the government measures taken to reduce transmission of the virus. We have faced an increased number of challenges in producing monthly and quarterly estimates of UK gross domestic product (GDP) for June. More detailed information on the challenges and the steps taken to mitigate those can be found in <u>Coronavirus and the effects on UK GDP</u>.

As a result of these challenges, GDP estimates for June 2020 are subject to more uncertainty than usual.

It is important to note that, while in the short run we have faced challenges to collect the information required to produce the Monthly Business Survey (MBS), response rates have improved since the first published estimate, as shown in Table 2.

Table 2: Breakdown of components response rates for Monthly Business Survey (MBS)

### March MBS Response rates

	First March estimate	Current estimate
Index of Services	79.0%	92.3%
Index of Production	71.7%	90.5%
Construction	54.4%	72.3%
April MBS Respons	se rates	
	First April estimate	Current estimate
Index of Services	84.4%	91.6%
Index of Production	79.8%	93.7%
Construction	65.5%	81.3%
May MBS Respons	e rates	
	First May estimate	Current estimate
Index of Services	-	Current estimate 89.7%
Index of Services Index of Production	86.4%	
Index of Production	86.4%	89.7%
Index of Production	86.4% 88.4% 70.4%	89.7% 91.9%
Index of Production Construction	86.4% 88.4% 70.4%	89.7% 91.9%
Index of Production Construction	86.4% 88.4% 70.4% <b>Se rates</b> First June estimate	89.7% 91.9%
Index of Production Construction June MBS Respons	86.4% 88.4% 70.4% <b>Se rates</b> First June estimate 75.2%	89.7% 91.9%
Index of Production Construction June MBS Respons Index of Services	86.4% 88.4% 70.4% <b>Se rates</b> First June estimate 75.2%	89.7% 91.9%

Source: Office for National Statistics - GDP monthly estimate

- 1. Table shows MBS turnover response rates.
- 2. Response rate for all months, both questionnaire and turnover, can be found in <u>Index of Production</u>, <u>Index</u> <u>of Services</u>, and <u>Construction</u>.

Construction response rates for March are lower than usual as the MBS survey was collected by paper before moving online in April. For more information, please refer to the <u>Construction release</u>.

## 10. Quality and methodology

Quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the <u>Gross domestic product (GDP) QMI</u>.

## 11. Related links

Construction output in Great Britain: June 2020

Bulletin | Released 12 August 2020

Short-term measures of output by the construction industry in Great Britain and contracts awarded for new construction work in Great Britain.

Index of Production, UK: June 2020

Bulletin | Released 12 August 2020 Movements in the volume of production for the UK production industries: manufacturing, mining and quarrying, energy supply, and water and waste management.

### Index of Services, UK: June 2020

Bulletin | Released 12 August 2020 Monthly movements in output for the services industries.

### Coronavirus and the impact on output in the UK economy, UK: June 2020

Article | Released 12 August 2020 Analysis of monthly growth for the production, services and construction industries in the UK economy between 2020, highlighting the impact from the coronavirus (COVID-19) pandemic.

### Coronavirus and the effects on GDP

Article | Released 6 May 2020

How the global coronavirus (COVID-19) pandemic and the wider containment efforts are expected to impact on UK gross domestic product (GDP) as well as some of the challenges that national statistical institutes are likely to face.

### GDP first quarterly estimate, UK: April to June 2020

Bulletin | Released 12 August 2020

First quarterly estimate of gross domestic product (GDP). Contains current and constant price data on the value of goods and services to indicate the economic performance of the UK.

**GVA1** Monthly GDP based on GVA (Gross Value Added) <sup>1</sup> Chained volume indices of gross value added at basic prices <sup>2,3,4,5</sup>

GVA1	Chained volume in	ndices of gross	value added at	basic prices	2,3,4,5							s Industry sectio	easonally adjuste	d 2016=100									
										Wholesale			lis (3102007)										Activities of
	Total GVA at basic prices	Agriculture, forestry and fishing	Total production industries	Mining &	Manufacturing	Electricity gas, steam and air	Water supply, sewerage	Construction <sup>6</sup>	Total service industries	and retail: repair of motor vehicles and motorcycles	Transport and storage	Accommodation and food service	Information and Communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Administrative and support ac service activities	and	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities	households as employers, undifferentiated goods and services
Section	A-T	A	B-E	В	C	D	E	F	G-T	G	Ĥ	1	J	К	L	М	N	0	Р	Q	R	S	T
2016 weights	1000	7	138	10	100	17	10	60	796	104	43	30	63	73	138	75	48	47	59	75	15	21	4
	YBFR	L2KL	L2KQ	L2KR	L2KX	L2MW	L2N2	L2N8	L2NC	L2NE	L2NI	L2NQ	L2NT	L2O6	L2OC	L2OI	L2OX	L2P8	L2PA	L2PC	L2PJ	L2PP	L2PT
2015	98.1	105.9	98.9	102.0	99.8	96.4	93.3	96.2	98.0	95.9	101.3	98.5	94.8	96.3	98.0	96.7	98.1	102.0	100.8	98.4	101.6	106.5	84.0
2016	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2017	102.0	105.7	101.7	101.7	102.2	98.2	102.0	106.4	101.7	102.5	101.8	102.4	104.8	99.1	99.0	104.5	104.0	100.8	101.2	101.0	103.2	101.1	101.6
2018	103.7	102.5	102.5	107.1	103.1	96.7	102.5	106.4	103.7	105.7	103.6	104.9	110.1	98.1	99.6	109.7	108.1	101.6	101.9	101.5	104.6	101.6	105.4
2019	105.1	101.4	101.3	108.5	101.3	95.0	104.2	108.5	105.5	108.7	105.9	107.4	116.2	95.1	100.3	112.3	111.4	103.8	104.6	103.1	105.1	101.6	97.8
	ECY2	ECY3	ECY4	ECY5	ECY6	ECY7	ECY8	ECY9	ECYC	ECYD	ECYG	ECYH	ECYI	ECYJ	ECYK	ECYL	ECYP	ECYQ	ECYR	ECYS	ECYT	ECYU	ECYV
2018 Jun	103.7	101.9	102.9	106.4	103.8	94.3	104.6	107.1	103.6	106.0	104.0	105.3	109.0	98.2	99.7	108.8	108.6	101.7	101.8	101.2	104.7	102.9	105.3
Jul	104.0	101.7	103.2	111.1	103.5	97.2	104.3	107.2	103.9	107.2	104.1	105.9	109.1	97.9	99.7	110.2	108.4	102.1	101.8	101.2	103.4	102.5	106.5
Aug	104.1	101.8	103.1	112.1	103.3	97.0	104.0	106.8	104.1	107.1	104.5	104.7	111.8	97.6	99.6	110.3	108.4	102.4	101.9	101.5	103.9	102.6	107.7
Sep	104.1	102.4	102.5	108.0	103.0	94.9	104.3	107.6	104.2	106.3	104.6	105.1	113.3	97.4	99.5	110.7	108.0	102.3	102.1	101.8	104.9	101.0	107.6
Oct	104.4	103.0	102.4	111.4	102.5	96.2	103.7	108.2	104.5	106.9	105.3	106.3	112.1	97.2	99.8	111.4	110.0	102.1	102.4	101.9	106.4	101.2	107.6
Nov	104.6	103.0	102.2	107.9	102.6	95.7	103.2	107.8	104.8	107.8	105.5	107.2	112.9	96.9	99.7	112.0	110.1	102.1	102.7	102.0	105.6	100.3	106.5
Dec	104.2	102.0	101.6	107.3	102.1	94.6	102.9	105.7	104.5	106.6	105.6	106.8	113.8	96.4	99.8	110.9	109.4	102.5	103.1	102.2	106.8	99.3	105.8
2019 Jan	104.7	101.7	102.5	105.2	103.2	96.7	102.1	107.9	104.8	108.1	106.0	107.9	115.0	95.7	99.8	109.9	110.5	103.1	103.5	102.3	105.2	98.4	103.8
Feb	105.0	101.4	102.6	107.8	103.7	93.1	102.1	110.1	105.1	108.3	106.0	108.2	115.3	95.1	99.9	111.1	111.4	103.5	103.8	102.4	105.2	99.6	102.5
Mar	105.1	101.3	103.7	113.1	105.0	92.4	102.5	108.9	105.1	108.7	106.4	107.5	114.5	94.7	100.0	111.2	111.4	103.7	103.9	102.4	105.2	99.6	99.7
Apr	104.6	101.2	100.5	108.1	100.4	95.4	102.9	108.9	105.0	108.8	106.3	106.6	115.9	94.4	100.1	110.6	110.4	103.7	104.0	102.5	103.4	99.3	98.1
May	104.8	101.2	101.5	108.6	101.3	95.9	105.3	108.9	105.1	108.9	105.7	106.5	115.5	94.6	100.3	110.7	111.0	103.7	104.3	102.7	103.1	100.4	95.4
Jun	105.0	101.3	101.4	108.0	101.2	96.3	105.0	107.2	105.5	108.4	105.3	108.9	117.1	95.1	100.2	112.4	110.5	103.6	104.6	103.1	106.1	101.0	94.2
Jul	105.4	101.4	101.2	107.3	101.4	94.9	104.2	108.7	105.9	108.9	107.4	108.1	117.6	95.5	100.2	112.9	112.2	103.7	104.6	103.4	104.0	102.4	96.6
Aug	105.3	101.5	100.5	107.6	100.6	93.1	105.3	108.7	105.9	109.2	106.2	106.8	116.1	95.8	100.3	113.4	111.4	103.8	104.7	103.6	106.4	103.2	96.5
Sep	105.3	101.4	100.5	114.6	100.1	92.7	105.5	109.3	105.8	109.0	105.3	106.1	117.5	95.2	100.4	113.4	110.9	103.9	104.8	103.7	104.0	103.8	96.0
Oct	105.5	101.3	100.9	106.8	100.7	96.3	104.7	107.0	106.2	109.6	106.3	106.5	117.5	95.6	100.6	114.4	111.5	104.4	105.0	103.5	103.9	104.4	96.3
Nov	105.1	101.3	100.0	108.8	99.1	97.6	105.2	108.4	105.8	108.3	104.8	107.6	115.6	94.6	100.5	113.3	112.6	104.4	105.5	103.6	107.0	104.0	96.5
Dec	105.3	101.4	99.8	106.5	99.2	95.7	105.6	108.0	106.1	108.1	105.2	107.9	116.8	94.6	100.8	114.1	113.3	104.5	106.0	103.7	107.2	103.3	97.8
2020 Jan	105.5 105.5 105.5	101.5	100.0	107.7	99.8 100.7	92.0 91.1	106.7	109.3	106.2	109.4 108.6	106.4 105.3	107.1	113.8	94.0 94.9 95.6	101.0	113.7	113.3 113.8 112.5	104.6	106.5 106.6	103.6 103.3	107.2 107.9 107.7	104.3	97.9
Feb Mar	98.2	101.6 100.7	100.3 96.0	107.4 100.1	95.4	89.8	104.7 105.4	107.3 101.5	106.2 98.2	97.9	91.8	107.6 73.6	115.1 113.7	95.4	101.1 100.7	114.6 112.2	100.9	104.7 104.7	84.4	90.7	93.7	104.0 86.4	97.1 92.5
Apr	78.5	94.9	76.4	91.0	71.9	81.9	98.0	60.7	80.1	70.8	64.5	10.0	99.7	90.6	98.1	90.6	73.2	104.9	61.8	71.2	56.3	50.2	50.4
May	80.4	95.8	81.1	96.6	77.9	81.8	98.5	65.3	81.2	80.1	68.3	10.6	98.0	91.9	97.6	87.4	72.4	105.1	64.6	71.9	50.9	52.1	51.7
Jun Percentage change,			88.7	104.7	86.4	85.2	102.5	80.7	87.5	101.7	79.7	17.8	104.6	93.0	97.3	92.9	82.6	105.1	68.7	73.6	64.5	55.3	60.0
2015	GDPQ 2.2	<b>L3BB</b> 1.0	<b>L3BG</b>	<b>L3BH</b> 5.1	<b>L3BN</b> -0.1	<b>L3DM</b> 2.2	<b>L3DQ</b> 4.6	<b>L3DW</b> 4.0	L3E2	<b>L3E4</b> 3.9	L3E8 0.9	<b>L3EG</b> 4.4	<b>L3EJ</b> 5.6	-3.8	<b>L3F2</b> 2.8	<b>L3F8</b> 4.8	<b>L3FN</b> 5.0	<b>L3FW</b> -2.4	<b>L3FY</b> 1.1	L3G2	L3G9 0.8	<b>L3GF</b> 4.0	L3GJ 0.3
2016 2017	1.9	-5.5 5.7	1.1 1.7	-2.0 1.7	0.2	3.7 -1.8	7.1 2.0	3.9 6.4	2.0 1.7	4.2 2.5	-1.3 1.8	1.5 2.4	5.4 4.8	3.8 -0.9	2.0 -1.0	3.4 4.5	1.9 4.0	-1.9 0.8	-0.8 1.2	1.6 1.0	-1.6 3.2	-6.1 1.1	19.0 1.6
2018 2019	1.6 1.4	-3.0 -1.1	0.8 -1.3	5.3 1.3	0.9 -1.7	-1.6 -1.8	0.5 1.7	0.0 1.9	2.0 1.8	3.2 2.8	1.8 2.2	2.5 2.4	5.1 5.5	-1.1 -3.0	0.6 0.6	4.9 2.4	3.9 3.1	0.9	0.7	0.4	1.4 0.4	0.4	3.7
Percentage change, la	atest 3 months on	previous 3 mon	ths																				
	ED3H	ED3I	ED3J	ED3K	ED3L	ED3M	ED3N	ED3O	ED3P	ED3Q	ED3R	ED3S	ED3T	ED3U	ED3V	ED3W	ED3X	ED3Y	ED3Z	ED42	ED43	ED44	ED9R
2018 Jun	0.6	-1.0	-0.4	4.8	-0.4	-5.1	2.2	0.8	0.8	1.9	1.4	1.7	1.4	-0.6	0.2	0.9	0.8	0.4	0.6	-0.1	1.1	0.9	1.9
Jul	0.9	-0.8	0.0	4.4	0.3	-6.7	3.2	2.1	0.9	2.7	2.3	2.2	1.2	-1.0	0.1	1.2	1.4	0.8	0.5	0.0	0.4	0.8	1.5
Aug	0.8	-0.7	0.7	4.9	0.5	-1.8	3.1	2.0	0.8	2.2	2.2	1.4	1.3	-1.1	0.0	1.0	1.5	1.1	0.3	0.1	-0.4	0.4	1.9
Sep	0.7	-0.3	0.6	3.2	0.1	1.6	1.8	1.1	0.7	1.4	1.4	0.5	2.4	-1.0	-0.1	1.3	0.6	1.0	0.3	0.3	-0.6	-0.4	2.3
Oct	0.5	0.4	0.0	2.3	-0.5	1.7	0.4	0.7	0.6	0.3	1.0	0.0	3.1	-0.9	-0.1	1.4	0.7	0.6	0.4	0.5	0.8	-0.9	2.1
Nov	0.4	1.0	-0.7	-0.7	-0.8	-0.6	-0.6	0.8	0.6	0.2	0.9	0.9	2.5	-0.8	0.0	1.5	0.9	0.1	0.6	0.6	1.6	-1.8	0.7
Dec	0.3	0.7	-0.9	-1.4	-0.8	-0.9	-0.9	0.0	0.5	0.2	1.0	1.5	1.4	-0.8	0.1	1.0	1.5	0.0	0.8	0.5	2.1	-1.7	-0.6
2019 Jan	0.2	-0.2	-0.6	-3.3	-0.3	-0.4	-1.2	-0.4	0.4	0.7	0.9	1.9	1.3	-1.1	0.1	0.1	1.1	0.3	0.9	0.4	0.8	-2.2	-2.1
Feb	0.2	-1.1	-0.1	-2.1	0.3	-0.8	-1.3	0.0	0.3	0.6	0.7	1.4	1.7	-1.4	0.2	-0.7	1.0	0.8	1.0	0.4	0.1	-1.7	-3.0
Mar	0.5	-1.2	0.9	-0.1	1.5	-1.5	-1.0	1.6	0.4	1.1	0.6	1.0	1.8	-1.7	0.2	-0.7	1.2	1.2	1.0	0.3	-1.0	-1.0	-4.3
Apr	0.4	-0.9	0.2	2.7	0.4	-2.1	-0.2	2.1	0.3	1.0	0.5	0.1	1.2	-1.7	0.2	0.0	1.0	1.1	0.8	0.3	-1.2	0.2	-5.0
May	0.2	-0.5	-0.3	3.0	-0.8	-0.2	1.2	1.0	0.2	1.1	0.3	-0.7	0.5	-1.3	0.3	0.2	0.4	0.7	0.6	0.2	-1.8	0.7	-6.0
Jun	-0.1	-0.2	-1.8	-0.4	-2.9	1.9	2.1	-0.6	0.2	0.4	-0.3	-0.5	1.1	-0.5	0.3	0.4	-0.4	0.2	0.5	0.4	-0.9	1.0	-6.0
Jul	0.2	0.0	-0.9	-1.6	-1.7	2.2	2.3	-0.9	0.4	0.2	-0.1	0.4	1.3	0.3	0.2	0.9	0.2	0.0	0.6	0.6	-0.2	1.8	-4.7
Aug	0.4	0.2	-0.8	-2.1	-1.1	0.2	1.2	-0.6	0.7	0.0	0.1	1.0	1.5	1.0	0.1	1.9	0.4	0.0	0.5	0.8	1.6	2.4	-2.0
Sep	0.5	0.2 0.2 0.1	-0.3	1.5	-0.3	-2.4	0.6	0.5	0.6	0.3	0.5	-0.3	0.8	0.9 0.5	0.1	1.8	0.8	0.1	0.4	0.8	0.6	2.9	0.5
Oct Nov	0.2 0.0	-0.1	-0.7 -0.6	1.5 2.2	-0.8 -1.1	-1.7 0.8	0.3 0.3	0.0 0.0	0.4 0.1	0.4 0.1	-0.2 -0.8	-1.3 -1.1	0.2 -0.1	-0.4	0.2	1.5 0.7	0.0 0.3	0.4 0.5	0.3 0.5	0.5 0.2	0.3 -0.5	2.5 1.8	0.9 0.5
Dec	0.0	-0.1	-0.5	-2.2	-1.0	3.2	0.2	-1.0	0.1	-0.3	-0.8	0.3	-0.4	-0.6	0.3	0.6	0.9	0.6	0.7	0.0	1.1	0.8	0.5
2020 Jan	0.0	0.0	-0.7	-1.8	-1.1	1.1	0.6	0.2	0.1	-0.6	-0.4	1.0	-1.4	-0.9	0.3	0.0	1.8	0.5	1.1	0.0	2.5	0.1	1.2
Feb	0.1	0.1	-0.4	-2.6	-0.1	-2.8	0.5	-0.1	0.2	-0.3	0.2	0.7	-1.4	-0.1	0.4	0.4	1.4	0.3	1.2	0.0	2.5	-0.2	1.4
Mar	-2.2	-0.1	-1.5	-2.1	-1.1	-5.8	0.4	-1.7	-2.3	-3.1	-4.1	-10.4	-2.1	0.4	0.3	-0.4	-3.0	0.2	-6.0	-4.2	-2.7	-5.4	-1.1
Apr	-10.7	-2.3	-9.0	-7.6	-10.1	-7.9	-3.0	-17.3	-10.5	-14.9	-17.3	-40.7	-5.1	-0.9	-0.8	-6.9	-15.6	0.2	-20.5	-14.7	-20.0	-22.8	-17.9
May	-18.7	-4.3	-15.5	-10.6	-18.2	-9.1	-4.8	-29.9	-18.5	-23.7	-29.1	-70.8	-9.9	-2.5	-2.2	-15.2	-27.4	0.3	-33.9	-24.7	-37.8	-39.4	-33.6
Jun	-20.4	-4.8	-16.9	-7.3	-20.2	-8.8	-5.6	-35.0	-19.9	-20.0	-30.0	-86.7	-11.8	-3.7	-3.2	-20.4	-30.2	0.4	-34.4	-27.2	-44.5	-46.5	-43.6

 1 The GVA output is designated as a National Statistic.
 Sources: For further information on these data please telephone

 2 Indices reflect values measured at basic prices, which exclude "taxes less subsidies on products".
 01633 456724 or E-mail gdp@ons.gov.uk

 3 Estimates cannot be regarded as accurate to the last digit shown.
 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

 5 A complete run of data is available on the ONS website.
 Monthly data from the construction survey are only available from January 2010, therefore the data prior to this period are derived using statistical methods from the available quarterly data, and should therefore be treated with some caution.

## **GVA2** Monthly GDP based on GVA (Gross Value Added)<sup>1</sup> Chained volume indices of gross value added at basic prices <sup>2,3,4,5</sup>

												Industry sectio	ns (SIC2007)										
	Total GVA at	Agriculture,	Total			Electricity	Water supply,		Total	Wholesale and retail: repair of		Accommodation and food	Information	Financial		Professional, scientific	Administrative and support ad	Public Iministration		Human health	Arts,	Other	Activities of household as employer
	basic prices	forestry and fishing	production industries	Mining &	Manufacturing	gas, steam and air	sewerage	Construction 6	service industries	motor vehicles and motorcycles	Transport and storage	service	and Communication	and insurance activities	Real estate activities	and technical activities	service activities	and defence	Education	and social work activities	entertainment and recreation	service activities	undifferentiate goods and service
Section	A-T	A	B-E	guanying B	C	D	E	F	G-T	G	H	l	J	K	L	M	N	0	P	Q	R	S	goods and service
2016 weights	1000	7	138	10	100	17	10	60	796	104	43	30	63	73	138	75	48	47	59	75	15	21	
Percentage change, lat	test 3 months on	same 3 months	a year ago																				
	ED9T	ED9U	ED9V	ED9W	EDGQ	EDGR	EDGS	EDGT	EDGU	EDGV	EDGW	EDGX	EDGY	EDGZ	EDHA	EDHB	EDHC	EDHD	EDHE	EDHF	EDHG	EDHH	EDH
2018 Jun	1.6	-3.2	1.4	5.0	1.8	-3.5	2.0	-0.2	1.9	3.2	1.5	2.0	3.9	-1.0	0.8	5.4	5.0	0.2	0.4	-0.3	1.6	0.7	2.1
Jul	1.8 2.0	-3.6 -4.0	1.5 1.7	4.9 6.5	1.9 1.8	-4.4 -2.3	2.9 3.6	0.9 0.8	2.0 2.1	4.1 4.0	2.4 2.9	2.4 2.6	3.7 4.2	-1.2 -1.3	0.9 0.8	5.0 5.0	4.3 4.4	0.7 1.2	0.6 0.7	-0.2 0.1	1.9 1.7	1.2 1.1	1.2 1.7
Aug Sep	2.0	-4.1	1.1	6.9	1.0	-2.3	2.9	0.8	2.1	4.0	2.9	2.0	4.2 5.5	-1.3	0.8	4.9	3.7	1.2	0.7	0.1	1.7	0.0	2.3
Oct	1.9	-3.6	0.3	5.6	0.0	-2.1	2.5	1.4	2.3	3.6	2.8	3.6	5.8	-1.1	0.8	4.9	3.6	1.5	1.0	0.9	1.8	-0.8	4.2
Nov	1.9	-2.9	-0.5	2.3	-0.7	-2.4	1.8	1.6	2.4	3.7	3.0	4.5	5.8	-1.1	0.7	5.0	3.4	1.3	1.3	1.3	2.2	-1.0	5.0
Dec	1.8	-2.5	-0.9	8.2	-1.4	-3.1	1.3	0.0	2.4	3.9	3.3	4.5	5.5	-1.3	0.6	4.8	3.1	1.3	1.7	1.4	2.3	-0.8	5.5
2019 Jan	1.6 1.7	-2.4	-0.7	7.0 9.0	-1.3	-2.4 -4.3	1.6	-0.7	2.2 2.2	4.2	3.6	4.4 4.7	6.1	-2.1	0.5	3.3	2.6	1.6	2.1	1.2	2.0	-1.7	3.9
Feb Mar	1.7	-2.2 -1.7	-0.6 0.1	9.0 6.5	-0.9 0.4	-4.3 -6.0	2.0 2.1	0.5 3.5	2.2	4.2 4.8	3.9 4.5	4.7	7.0 7.1	-3.1 -4.0	0.5 0.4	2.8 2.6	3.2 4.2	2.1 2.6	2.4 2.6	1.1 1.1	2.0 1.6	-1.7 -2.3	2.1 -0.9
Apr	2.0	-1.4	-0.4	6.1	-0.1	-7.4	2.1	4.4	2.3	4.7	4.8	4.3	7.0	-4.5	0.4	2.7	4.3	2.8	2.6	1.2	0.7	-2.2	-3.6
May	1.7	-1.3	-0.4	5.0	-0.7	-3.5	2.4	3.8	1.9	4.2	4.1	2.9	6.2	-4.4	0.5	2.0	3.8	2.7	2.5	1.3	-0.5	-2.5	-6.5
Jun	1.4	-1.0	-1.2	1.1	-2.1	1.0	2.0	2.1	1.8	3.1	2.8	2.6	6.8	-4.0	0.5	2.1	2.9	2.4	2.6	1.6	-0.4	-2.2	-8.5
Jul	1.3	-0.7	-1.3	0.0	-2.1	1.3	1.2	1.4	1.8	2.2	2.3	2.4	7.1	-3.2	0.5	2.4	3.0	2.0	2.7	1.8	0.2	-1.3	-9.5
Aug	1.3	-0.4	-2.0	-2.0	-2.4	-1.5	0.5	1.1	1.8	2.0	2.0	2.5	6.4	-2.5	0.5	2.9	2.7	1.6	2.7	2.0	1.5	-0.5	-10.1
Sep Oct	1.2 1.1	-0.5 -1.0	-2.1 -1.9	-0.5 -0.8	-2.5 -2.4	-2.9 -2.1	0.8 1.1	1.6 0.7	1.7 1.6	2.0 2.3	1.8 1.1	1.7 1.0	5.1 4.1	-2.1 -1.9	0.7 0.8	2.6 2.6	3.0 2.2	1.5 1.7	2.7 2.6	2.0 1.9	0.7 -0.3	1.1 2.2	-10.1 -10.6
Nov	0.9	-1.4	-1.8	-0.0	-2.4	-0.1	1.4	0.3	1.0	1.8	0.3	0.5	3.6	-1.9	0.9	2.0	2.2	2.0	2.0	1.6	-0.6	3.2	-10.0
Dec	0.9	-1.3	-1.8	-1.4	-2.7	1.1	1.9	0.5	1.4	1.4	0.0	0.5	3.3	-2.0	0.9	2.2	2.4	2.2	2.7	1.5	-0.3	3.6	-9.1
2020 Jan	0.8	-0.8	-2.1	0.8	-3.2	-0.6	3.0	1.3	1.3	1.0	-0.2	0.2	1.3	-1.7	1.0	2.5	2.9	1.9	2.8	1.4	1.4	4.6	-7.5
Feb	0.7	-0.2	-2.2	0.4	-3.0	-2.0	3.2	0.3	1.3	0.9	-0.2	-0.1	0.5	-0.8	1.1	3.2	2.5	1.5	2.8	1.2	1.8	4.8	-6.1
Mar	-1.8	-0.2	-4.1	-3.4	-5.1	-3.3	3.3	-2.7	-1.4	-2.8	-4.7	-10.9	-0.6	0.2	1.0	2.5	-1.9	1.2	-4.4	-3.1	-2.0	-1.0	-6.0
Apr	-10.4	-2.2 -4.0	-11.1	-9.3	-13.3	-6.5	0.2	-17.8	-9.7	-14.9	-17.9 -29.5	-40.7	-5.0	-0.9	0.0	-4.7	-14.0	1.1	-18.9	-13.7 -24.0	-17.9	-19.4	-20.0
May Jun	-18.3 -21.7	-4.0	-17.1 -18.8	-12.8 -10.0	-20.0 -22.0	-10.7 -13.5	-2.8 -4.5	-30.4 -36.4	-17.7 -21.2	-23.8 -22.5	-29.5 -33.0	-70.6 -88.1	-10.0 -13.2	-2.0 -3.0	-1.4 -2.5	-12.7 -18.8	-25.9 -31.2	1.1 1.3	-32.5 -37.6	-24.0 -29.7	-35.6 -45.1	-36.9 -47.6	-33.6 -43.6
Percentage change, lat			1010	1010	22.0	10.0		0011	2112	22.0	00.0	00.1		0.0	2.0	10.0	01.2	1.0	0110	2011	10.11		1010
	ECYX	ECYY	ECYZ	ECZ2	ECZA	ECZC	ECZD	ECZE	ECZG	ECZK	ECZN	ECZT	ECZU	ED2G	ED2H	ED2I	ED2J	ED2K	ED2L	ED2M	ED2N	ED2O	ED2P
2018 Jun	0.3	-0.4	1.0	-0.1		2.8	2.6	0.8	0.2														
Jul	0.3									-0.1	0.9	0.6	0.1	-0.4	-0.1	-0.2	15	0.4	0.1	0.0	0.0	0.7	10
		-0.2		-0.1	0.7 -0.3			0.8		-0.1 1.1	0.9 0.2	0.6 0.6	0.1 0.1	-0.4 -0.4	-0.1 0.0	-0.2 1.3	1.5 -0.2	0.4 0.4	0.1 0.1	0.0 0.0	0.0 -1.2	0.7 -0.5	1.0 1.1
Aug	0.1	-0.2 0.1	0.3		-0.3 -0.2	3.1 -0.2	-0.3 -0.2		0.2 0.3 0.2		0.9 0.2 0.3	0.6 0.6 -1.2		-0.4 -0.4 -0.2		-0.2 1.3 0.1	1.5 -0.2 0.0				0.0 -1.2 0.5		1.0 1.1 1.2
Sep	0.0	0.1 0.6	0.3 -0.2 -0.6	4.4 0.9 -3.6	-0.3 -0.2 -0.2	3.1 -0.2 -2.2	-0.3 -0.2 0.2	0.1 -0.3 0.8	0.3 0.2 0.0	1.1 -0.1 -0.7	0.2 0.3 0.1	0.6 -1.2 0.4	0.1 2.5 1.3	-0.4 -0.2 -0.3	0.0 -0.1 -0.1	1.3 0.1 0.3	-0.2 0.0 -0.3	0.4 0.2 -0.1	0.1 0.1 0.2	0.0 0.2 0.3	-1.2 0.5 0.9	-0.5 0.2 -1.6	1.1 1.2 -0.1
Sep Oct	0.0 0.3	0.1 0.6 0.6	0.3 -0.2 -0.6 -0.1	4.4 0.9 -3.6 3.1	-0.3 -0.2 -0.2 -0.5	3.1 -0.2 -2.2 1.3	-0.3 -0.2 0.2 -0.5	0.1 -0.3 0.8 0.5	0.3 0.2 0.0 0.3	1.1 -0.1 -0.7 0.5	0.2 0.3 0.1 0.7	0.6 -1.2 0.4 1.1	0.1 2.5 1.3 -1.1	-0.4 -0.2 -0.3 -0.1	0.0 -0.1 -0.1 0.2	1.3 0.1 0.3 0.7	-0.2 0.0 -0.3 1.8	0.4 0.2 -0.1 -0.2	0.1 0.1 0.2 0.3	0.0 0.2 0.3 0.2	-1.2 0.5 0.9 1.4	-0.5 0.2 -1.6 0.2	1.1 1.2 -0.1 0.0
Sep Oct Nov	0.0 0.3 0.1	0.1 0.6 0.6 0.0	0.3 -0.2 -0.6 -0.1 -0.2	4.4 0.9 -3.6 3.1 -3.1	-0.3 -0.2 -0.2 -0.5 0.1	3.1 -0.2 -2.2 1.3 -0.5	-0.3 -0.2 0.2 -0.5 -0.6	0.1 -0.3 0.8 0.5 -0.4	0.3 0.2 0.0 0.3 0.2	1.1 -0.1 -0.7 0.5 0.9	0.2 0.3 0.1 0.7 0.2	0.6 -1.2 0.4 1.1 0.9	0.1 2.5 1.3 -1.1 0.7	-0.4 -0.2 -0.3 -0.1 -0.4	0.0 -0.1 -0.1 0.2 -0.1	1.3 0.1 0.3 0.7 0.5	-0.2 0.0 -0.3 1.8 0.1	0.4 0.2 -0.1 -0.2 0.0	0.1 0.1 0.2 0.3 0.3	0.0 0.2 0.3 0.2 0.1	-1.2 0.5 0.9 1.4 -0.7	-0.5 0.2 -1.6 0.2 -0.9	1.1 1.2 -0.1 0.0 -1.0
Sep Oct Nov Dec	0.0 0.3 0.1 -0.4	0.1 0.6 0.0 -1.0	0.3 -0.2 -0.6 -0.1 -0.2 -0.5	4.4 0.9 -3.6 3.1 -3.1 -0.6	-0.3 -0.2 -0.2 -0.5 0.1 -0.5	3.1 -0.2 -2.2 1.3 -0.5 -1.2	-0.3 -0.2 -0.5 -0.6 -0.3	0.1 -0.3 0.8 0.5 -0.4 -1.9	0.3 0.2 0.0 0.3 0.2 -0.2	1.1 -0.1 -0.7 0.5 0.9 -1.1	0.2 0.3 0.1 0.7 0.2 0.1	0.6 -1.2 0.4 1.1 0.9 -0.4	0.1 2.5 1.3 -1.1 0.7 0.9	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5	0.0 -0.1 -0.2 -0.1 0.1	1.3 0.1 0.3 0.7 0.5 -1.0	-0.2 0.0 -0.3 1.8 0.1 -0.7	0.4 0.2 -0.1 -0.2 0.0 0.3	0.1 0.1 0.2 0.3 0.3 0.3	0.0 0.2 0.3 0.2 0.1 0.1	-1.2 0.5 0.9 1.4 -0.7 1.1	-0.5 0.2 -1.6 0.2 -0.9 -0.9	1.1 1.2 -0.1 0.0 -1.0 -0.7
Sep Oct Nov Dec 2019 Jan	0.0 0.3 0.1 -0.4 0.5	0.1 0.6 0.0 -1.0 -0.3	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1	0.3 0.2 0.0 0.3 0.2 -0.2 0.3	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4	0.2 0.3 0.1 0.7 0.2 0.1 0.4	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0	0.1 2.5 1.3 -1.1 0.7 0.9 1.0	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1	1.3 0.1 0.3 0.7 0.5 -1.0 -0.9	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6	0.1 0.2 0.3 0.3 0.3 0.3 0.4	0.0 0.2 0.3 0.2 0.1 0.1 0.1	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 -0.9	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9
Sep Oct Nov Dec	0.0 0.3 0.1 -0.4	0.1 0.6 0.0 -1.0	0.3 -0.2 -0.6 -0.1 -0.2 -0.5	4.4 0.9 -3.6 3.1 -3.1 -0.6	-0.3 -0.2 -0.2 -0.5 0.1 -0.5	3.1 -0.2 -2.2 1.3 -0.5 -1.2	-0.3 -0.2 -0.5 -0.6 -0.3	0.1 -0.3 0.8 0.5 -0.4 -1.9	0.3 0.2 0.0 0.3 0.2 -0.2	1.1 -0.1 -0.7 0.5 0.9 -1.1	0.2 0.3 0.1 0.7 0.2 0.1	0.6 -1.2 0.4 1.1 0.9 -0.4	0.1 2.5 1.3 -1.1 0.7 0.9	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5	0.0 -0.1 -0.2 -0.1 0.1	1.3 0.1 0.3 0.7 0.5 -1.0	-0.2 0.0 -0.3 1.8 0.1 -0.7	0.4 0.2 -0.1 -0.2 0.0 0.3	0.1 0.1 0.2 0.3 0.3 0.3	0.0 0.2 0.3 0.2 0.1 0.1	-1.2 0.5 0.9 1.4 -0.7 1.1	-0.5 0.2 -1.6 0.2 -0.9 -0.9	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3
Sep Oct Nov Dec 2019 Jan Feb Mar Apr	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 -3.2	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7	-0.3 -0.2 0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 -1.1 0.0	0.3 0.2 0.0 0.3 0.2 -0.2 0.3 0.2	1.1 -0.1 -0.7 0.9 -1.1 1.4 0.1	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.0 0.1 0.1	1.3 0.1 0.3 0.7 0.5 -1.0 -0.9 1.1 0.1 -0.5	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0	0.1 0.2 0.3 0.3 0.3 0.4 0.3	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.0 0.0	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 1.2 0.0 -0.4	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.0	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 -3.2 1.0	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4	-0.3 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4 2.4	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1	0.3 0.2 0.0 0.3 0.2 -0.2 0.3 0.2 0.3 0.2 0.0 -0.1 0.1	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.4 0.1 0.1	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.5 -0.2 0.2	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.0 0.1 0.1 0.2	1.3 0.1 0.3 0.7 0.5 -1.0 -0.9 1.1 0.1 -0.5 0.0	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 1.2 0.0 -0.4 1.2	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6 -2.7
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.0 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 -3.2 1.0 -0.1	4.4 0.9 -3.6 3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9 -0.1	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4 2.4 -0.4	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1 -1.6	0.3 0.2 0.0 0.3 0.2 -0.2 0.3 0.2 0.0 -0.1 0.1 0.1	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 0.1 -0.5	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.7 -0.8 -0.1 2.3	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.2 -0.1	1.3 0.1 0.3 0.7 0.5 -1.0 -0.9 1.1 0.1 -0.5 0.0 1.6	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4	0.4 0.2 -0.1 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2 0.3	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2 0.4	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jun	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.0 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 -3.2 1.0 -0.1 -0.1	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6	-0.3 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9 -0.1 0.2	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4 2.4 -0.4 -0.7	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4	0.3 0.2 0.0 0.3 0.2 -0.2 0.3 0.2 0.0 -0.1 0.1 0.4 0.4	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 0.4 0.1 0.1 -0.5 0.4	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4 0.4	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5 0.4	0.0 -0.1 -0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.2 -0.1 0.2 -0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ -0.5\\ 0.0\\ 1.6\\ 0.5\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.4 0.3 0.1 0.2 0.3 0.0	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2 0.4 0.3	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jun Jul Aug	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1	0.1 0.6 0.0 -1.0 -0.3 -0.1 -0.1 0.0 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 1.3 -3.2 1.0 -0.1 -0.1 -0.7	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9 -0.1 0.2 -0.8	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4 2.4 -0.4 -0.7 1.1	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.1 0.4 0.4 -0.1	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 0.1 0.1 -0.5 0.4 0.3	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -1.3	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4 0.4 -1.3	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.2 0.4 0.3	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.2 -0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7	0.4 0.2 -0.1 -0.2 0.0 0.3 0.5 0.5 0.2 0.0 -0.1	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2 0.3 0.0 0.0 0.1	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2 0.4 0.3 0.2	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 -0.9 -0.4 1.2 0.0 -0.4 1.2 0.6 1.4 0.8	1.1 1.2 -0.1 0.0 -1.0 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6 -0.1
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jul Aug Sep	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1 0.0	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.0 0.1 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 -0.9 0.1 1.1 -3.2 1.0 -0.1 -0.1 -0.1 -0.7 0.0	4.4 0.9 -3.6 3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9 -0.1 0.2 -0.8 -0.4	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 2.4 -0.4 -0.7 1.1 0.1	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0 0.6	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.1 0.4 0.4 0.4 -0.1 -0.1	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 -0.5 0.4 0.3 -0.2	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -1.3 -0.6	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4 0.4 -1.3 1.2	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5 0.4 0.3 -0.6	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.2 -0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\\ -0.1\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0 0.1 0.1	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.2 0.3 0.0 0.1 0.2	$\begin{array}{c} 0.0\\ 0.2\\ 0.3\\ 0.2\\ 0.1\\ 0.1\\ 0.1\\ 0.1\\ 0.0\\ 0.0\\ 0.2\\ 0.4\\ 0.3\\ 0.2\\ 0.0\\ \end{array}$	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2	-0.5 0.2 -1.6 0.2 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.8 0.6	1.1 1.2 -0.1 0.0 -1.0 -1.7 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6 -0.1 -0.1 -0.6
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jun Jul Aug	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1	0.1 0.6 0.0 -1.0 -0.3 -0.1 -0.1 0.0 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 1.3 -3.2 1.0 -0.1 -0.1 -0.7	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2	-0.3 -0.2 -0.2 -0.5 0.1 -0.5 1.1 0.5 1.2 -4.3 0.9 -0.1 0.2 -0.8	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 0.4 2.4 -0.4 -0.7 1.1	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.1 0.4 0.4 -0.1	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 0.1 0.1 -0.5 0.4 0.3	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -1.3	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4 0.4 -1.3	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.2 0.4 0.3	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.2 -0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7	0.4 0.2 -0.1 -0.2 0.0 0.3 0.5 0.5 0.2 0.0 -0.1	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2 0.3 0.0 0.0 0.1	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.2 0.4 0.3 0.2	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 -0.9 -0.4 1.2 0.0 -0.4 1.2 0.6 1.4 0.8	1.1 1.2 -0.1 0.0 -1.0 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6 -0.1
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jun Jul Aug Sep Oct	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.1 0.1 -0.1 -0.1 -0.1 -0.1 -	0.3 -0.2 -0.6 -0.1 -0.5 -0.5 -0.9 0.1 1.1 -3.2 1.0 -0.1 -0.1 -0.1 -0.7 0.0 0.4 -0.9 -0.2	4.4 0.9 -3.6 3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8	$\begin{array}{c} -0.3\\ -0.2\\ -0.2\\ -0.5\\ 0.1\\ -0.5\\ 1.1\\ 0.5\\ 1.2\\ -4.3\\ 0.9\\ -0.1\\ 0.2\\ -0.8\\ -0.4\\ 0.6\\ -1.6\\ 0.1\end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 2.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0 0.6 -2.1 1.2 -0.3	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.4 -0.1 -0.1 0.4 0.4 0.3	1.1 -0.1 -0.7 0.5 0.9 -1.1 1.4 0.1 0.1 0.1 0.1 -0.5 0.4 0.3 -0.2 0.5 -1.1 -0.2	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -1.3 -0.6 0.4 1.0 0.2	0.1 2.5 1.3 -1.1 0.7 0.9 1.0 0.2 -0.7 1.2 -0.4 1.4 -1.3 1.2 0.0 -1.5 1.0	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5 0.4 0.3 -0.6 0.3 -0.6 0.3 -1.0 0.0	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\\ -0.1\\ 0.9\\ 0.9\\ 0.7\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4 0.5 1.0 0.6	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0 0.1 0.1 0.1	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.2 0.3 0.0 0.1 0.2 0.1 0.2 0.5	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.2 0.4 0.3 0.2 0.0 -0.1	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2	-0.5 0.2 -1.6 0.2 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.8 0.6 0.6 -0.4 -0.6	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6 -0.1 -0.6 0.3 0.3 0.3 1.4
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2020 Jan	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.0 0.1 0.1 -0.1 -0.1 0.0 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 -0.9 0.1 1.1 -0.2 -0.1 -0.1 -0.1 -0.1 -0.7 -0.7 0.0 0.4 -0.2 -0.2	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8 1.9 -2.1 1.1	$\begin{array}{c} -0.3 \\ -0.2 \\ -0.2 \\ -0.5 \\ 0.1 \\ -0.5 \\ 1.1 \\ 0.5 \\ 1.2 \\ -4.3 \\ 0.9 \\ -0.1 \\ 0.2 \\ -0.8 \\ -0.4 \\ 0.6 \\ -1.6 \\ 0.1 \\ 0.6 \end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0 -3.9	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 2.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4 1.0	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0 0.6 -2.1 1.2 -0.3 1.2	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.1 0.4 0.4 -0.1 0.4 0.4 0.4 0.3 0.0 1	$\begin{array}{c} 1.1\\ -0.1\\ -0.7\\ 0.5\\ 0.9\\ -1.1\\ 1.4\\ 0.1\\ 0.4\\ 0.1\\ 0.1\\ -0.5\\ 0.4\\ 0.3\\ -0.2\\ 0.5\\ -1.1\\ -0.2\\ 1.2\\ \end{array}$	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4 1.1	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.6 0.4 1.0 0.2 -0.7	$\begin{array}{c} 0.1\\ 2.5\\ 1.3\\ -1.1\\ 0.7\\ 0.9\\ 1.0\\ 0.2\\ -0.7\\ 1.2\\ -0.4\\ 1.4\\ 0.4\\ -1.3\\ 1.2\\ 0.0\\ -1.5\\ 1.0\\ -2.5\end{array}$	$\begin{array}{c} -0.4 \\ -0.2 \\ -0.3 \\ -0.1 \\ -0.4 \\ -0.5 \\ -0.7 \\ -0.6 \\ -0.5 \\ -0.2 \\ 0.2 \\ 0.5 \\ 0.4 \\ 0.3 \\ -0.6 \\ 0.3 \\ -1.0 \\ 0.0 \\ 0.4 \\ 0.4 \end{array}$	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.3 -0.1 0.2 -0.1 0.1 0.2 -0.1 0.2 0.2 0.2	1.3 0.1 0.3 0.7 0.5 -1.0 -0.9 1.1 0.1 1.0 1.6 0.5 0.5 -0.1 0.9 -0.9 0.9 0.7 -0.9 -0.9 0.5 -0.1 0.5 -0.1 0.5 -0.1 0.5 -0.2 -0.5 -	$\begin{array}{c} -0.2\\ 0.0\\ -0.3\\ 1.8\\ 0.1\\ -0.7\\ 1.1\\ 0.8\\ 0.0\\ -0.9\\ 0.6\\ -0.4\\ 1.5\\ -0.7\\ -0.4\\ 0.5\\ 1.0\\ 0.6\\ 0.4\end{array}$	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0 0.1 0.1 0.5 0.0 0.1	$\begin{array}{c} 0.1\\ 0.1\\ 0.2\\ 0.3\\ 0.3\\ 0.4\\ 0.3\\ 0.1\\ 0.2\\ 0.3\\ 0.0\\ 0.1\\ 0.2\\ 0.3\\ 0.0\\ 0.1\\ 0.2\\ 0.1\\ 0.5\\ 0.5\\ 0.5 \end{array}$	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.0 0.2 0.4 0.2 0.0 -0.1 0.1 0.1 -0.1	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2 0.7	$\begin{array}{c} -0.5\\ 0.2\\ -1.6\\ 0.2\\ -0.9\\ -0.9\\ -0.9\\ 1.2\\ 0.0\\ -0.4\\ 1.2\\ 0.6\\ 1.4\\ 0.8\\ 0.6\\ 0.6\\ -0.4\\ -0.6\\ 1.0\end{array}$	1.1 1.2 -0.1 0.0 -1.0 -0.7 -1.9 -1.3 -2.7 -1.6 -2.7 -1.2 2.6 -0.1 -0.6 0.3 0.3 0.3 0.3 1.4 0.1
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jun Jul Aug Sep Oct Nov Dec 2020 Jan Feb	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.3 -0.2 -0.6 -0.1 -0.2 -0.5 0.9 0.1 1.1 -3.2 1.0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.2 -0.9 -0.2 0.2 0.2 0.4	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8 1.9 -2.1 1.1 -0.2	$\begin{array}{c} -0.3\\ -0.2\\ -0.2\\ -0.5\\ 0.1\\ -0.5\\ 1.1\\ 0.5\\ 1.2\\ -4.3\\ 0.9\\ -0.1\\ 0.2\\ -0.8\\ -0.4\\ 0.6\\ -1.6\\ 0.1\\ 0.6\\ 0.9\end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0 -3.9 -1.0	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 -0.4 -0.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4 1.0 -1.9	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0 0.6 -2.1 1.2 -0.3 1.2 -1.8	0.3 0.2 0.0 0.3 0.2 -0.2 0.3 0.2 0.0 -0.1 0.1 0.4 -0.1 0.4 -0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.3 0.1 0.0	$\begin{array}{c} 1.1\\ -0.1\\ -0.7\\ 0.5\\ 0.9\\ -1.1\\ 1.4\\ 0.1\\ 0.4\\ 0.1\\ 0.4\\ 0.1\\ 0.4\\ 0.3\\ -0.5\\ 0.4\\ 0.3\\ -0.2\\ 0.5\\ -1.1\\ -0.2\\ 1.2\\ -0.7\end{array}$	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4 1.1 1.1	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -1.3 -0.8 -1.3 -0.6 0.4 1.0 0.2 -0.7 0.5	$\begin{array}{c} 0.1\\ 2.5\\ 1.3\\ -1.1\\ 0.7\\ 0.9\\ 1.0\\ 0.2\\ -0.7\\ 1.2\\ -0.4\\ 1.4\\ 0.4\\ -1.3\\ 1.2\\ 0.0\\ -1.5\\ 1.0\\ -2.5\\ 1.1\end{array}$	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.5 -0.5 -0.2 0.2 0.2 0.4 0.3 -0.6 0.3 -0.6 0.3 -0.1 0.3 -0.0 0.3 -0.1 0.3 -0.1 -0.4 0.3 -0.1 -0.4 0.3 -0.1 -0.4 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ -0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\\ -0.1\\ 0.9\\ -0.9\\ 0.7\\ -0.3\\ 0.8\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4 0.5 1.0 0.6 0.4 -1.1	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0 0.1 0.5 0.0 0.1 0.1 0.1	$\begin{array}{c} 0.1\\ 0.1\\ 0.2\\ 0.3\\ 0.3\\ 0.3\\ 0.4\\ 0.3\\ 0.1\\ 0.2\\ 0.3\\ 0.0\\ 0.1\\ 0.2\\ 0.1\\ 0.5\\ 0.5\\ 0.5\\ 0.1\\ \end{array}$	$\begin{array}{c} 0.0\\ 0.2\\ 0.3\\ 0.2\\ 0.1\\ 0.1\\ 0.1\\ 0.1\\ 0.0\\ 0.0\\ 0.2\\ 0.4\\ 0.3\\ 0.2\\ 0.0\\ -0.1\\ 0.1\\ 0.1\\ -0.1\\ -0.2 \end{array}$	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2 0.7 -0.2	-0.5 0.2 -1.6 0.2 -0.9 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.6 0.6 0.6 -0.4 -0.6 1.0 -0.3	1.1 1.2 -0.1 0.0 -1.0 -1.9 -1.3 -2.7 -1.9 -1.3 -2.7 -1.2 2.6 -0.1 -0.1 -0.6 0.3 0.3 0.3 1.4 4 0.1 -0.8
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2020 Jan Feb Mar	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.1 0.6 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 0.3 \\ -0.2 \\ -0.6 \\ -0.1 \\ -0.2 \\ -0.5 \\ 0.9 \\ 0.1 \\ 1.1 \\ -3.2 \\ 1.0 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.7 \\ 0.0 \\ 0.4 \\ -0.9 \\ -0.2 \\ 0.2 \\ 0.4 \\ -4.3 \end{array}$	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8 1.9 -2.1 1.1 1.1 -0.2 -6.9	$\begin{array}{c} -0.3 \\ -0.2 \\ -0.2 \\ -0.5 \\ 0.1 \\ -0.5 \\ 1.1 \\ 0.5 \\ 1.2 \\ -4.3 \\ 0.9 \\ -0.1 \\ 0.2 \\ -0.8 \\ -0.4 \\ 0.6 \\ -1.6 \\ 0.1 \\ 0.6 \\ 0.9 \\ -5.2 \end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0 -3.9 -1.0 -1.4	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 -0.4 2.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4 1.0 -1.9 0.7	0.1 -0.3 0.8 0.5 -0.4 -1.9 2.1 2.1 2.1 -1.1 0.0 0.1 -1.6 1.4 0.0 0.6 -2.1 1.2 -0.3 1.2 -0.3 1.2 -1.8 -5.4	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.4 -0.1 -0.1 0.4 -0.1 -0.1 0.4 -0.1 0.4 -0.3 0.1 0.4 -0.5	$\begin{array}{c} 1.1\\ -0.1\\ -0.7\\ 0.5\\ 0.9\\ -1.1\\ 1.4\\ 0.1\\ 0.4\\ 0.1\\ 0.1\\ -0.5\\ 0.4\\ 0.3\\ -0.2\\ 0.5\\ -1.1\\ -0.2\\ 1.2\\ -0.7\\ -9.9\end{array}$	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4 1.1 -1.0 -12.9	0 6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -1.3 -0.6 0.4 1.0 0.2 -0.7 0.5 -31.6	$\begin{array}{c} 0.1\\ 2.5\\ 1.3\\ -1.1\\ 0.7\\ 0.9\\ 1.0\\ 0.2\\ -0.7\\ 1.2\\ -0.4\\ 1.4\\ 0.4\\ -1.3\\ 1.2\\ 0.0\\ -1.5\\ 1.0\\ -2.5\\ 1.1\\ -1.2\end{array}$	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5 0.4 0.3 -0.6 0.3 -0.6 0.3 -1.0 0.0 0.4 0.3 -0.0 -0.5 -0.2 -0.2 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.5\\ 0.5\\ -0.1\\ 0.9\\ 0.7\\ -0.3\\ 0.8\\ -2.1\\ \end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4 0.5 1.0 0.6 0.4 -1.1 -1.1 -1.1	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2 0.3 0.0 0.1 0.2 0.1 0.5 0.5 0.5 0.5 0.1 -20.8	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.2 0.4 0.3 0.2 0.0 -0.1 0.1 0.1 -0.1 -0.2 -12.3	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2 0.7 -0.2 -13.0	-0.5 0.2 -1.6 0.2 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.8 0.6 -0.4 -0.6 1.0 -0.3 -16.9	1.1 1.2 -0.1 0.0 -1.0 -1.7 -1.9 -1.3 -2.7 -1.2 2.6 -0.1 -0.6 0.3 0.3 0.3 0.3 1.4 0.1 -0.8 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7
Sep Oct Nov Dec 2019 Jan Feb Mar Apr Jul Jul Aug Sep Oct Nov Dec 2020 Jan Feb Mar Apr	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.1 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.1 0.1 -0.1 -0.1 -0.1 -0.1 0.0 0.1 0.1 0.1 0.0 0.1 0.1 0.1 -0.9 -5.7	$\begin{array}{c} 0.3 \\ -0.2 \\ -0.6 \\ -0.1 \\ -0.2 \\ -0.5 \\ 0.9 \\ 0.1 \\ 1.1 \\ -3.2 \\ 1.0 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.7 \\ 0.0 \\ 0.4 \\ -0.9 \\ -0.2 \\ 0.2 \\ 0.4 \\ -3.3 \\ -20.4 \end{array}$	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8 1.9 -2.1 1.1 -0.2 6.9 -9.1	$\begin{array}{c} -0.3 \\ -0.2 \\ -0.2 \\ -0.5 \\ 0.1 \\ -0.5 \\ 1.1 \\ 0.5 \\ 1.2 \\ -4.3 \\ 0.9 \\ -0.1 \\ 0.2 \\ -0.8 \\ -0.4 \\ 0.6 \\ 0.1 \\ 0.6 \\ 0.1 \\ 0.6 \\ 0.9 \\ -5.2 \\ -24.6 \end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0 -3.9 -1.0 -3.9 -1.4 -8.8	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 2.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4 1.0 -1.9 0.7 -7.0	$\begin{array}{c} 0.1\\ -0.3\\ 0.8\\ 0.5\\ -0.4\\ -1.9\\ 2.1\\ 2.1\\ 2.1\\ -1.1\\ 0.0\\ 0.1\\ -1.6\\ 1.4\\ 0.0\\ 0.6\\ -2.1\\ 1.2\\ -0.3\\ 1.2\\ -0.3\\ 1.2\\ -1.8\\ -5.4\\ -40.2\end{array}$	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.4 0.4 0.4 0.4 0.4 0.4 0.3 0.1 0.0 3 0.1 0.3 0.1 0.3	$\begin{array}{c} 1.1\\ -0.1\\ -0.7\\ 0.5\\ 0.9\\ -1.1\\ 1.4\\ 0.1\\ 0.4\\ 0.1\\ 0.1\\ 0.5\\ 0.4\\ 0.3\\ -0.2\\ 0.5\\ -1.1\\ -0.2\\ 1.2\\ -0.7\\ -9.9\\ -27.6\end{array}$	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4 1.1 -1.0 -0.4 1.1 -1.2,9 -29.7	0.6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -1.3 -0.6 0.4 1.0 0.2 -0.7 0.5 -31.6 -36.6,4	$\begin{array}{c} 0.1\\ 2.5\\ 1.3\\ -1.1\\ 0.7\\ 0.9\\ 1.0\\ 0.2\\ -0.7\\ 1.2\\ -0.4\\ 1.4\\ 0.4\\ -1.3\\ 1.2\\ 0.0\\ -1.5\\ 1.0\\ -2.5\\ 1.1\\ -1.2\\ -1.2\\ -1.2\end{array}$	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 0.2 0.2 0.5 0.4 0.3 -0.6 0.3 -0.6 0.3 -1.0 0.0 0.4 0.7 -0.2 -0.5 0.4 -0.5 -0.2 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.5 -0.5 -0.5 -0.2 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.0\\ 1.6\\ 0.5\\ 0.5\\ -0.1\\ 0.9\\ 0.7\\ -0.3\\ 0.8\\ -2.1\\ -19.2\end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4 0.5 1.0 0.6 0.4 -1.1 0.5 1.0 0.6 0.4 -1.1 0.5 1.0 0.6 0.4 -0.7 -0.7 -0.4 0.5 1.0 0.6 0.4 -0.7 -0.7 -0.4 0.5 1.0 0.6 0.7 -0.4 -0.7 -0.4 -0.7 -0.4 -0.7 -0.4 -0.6 -0.4 -1.10 -0.6 -0.4 -1.10 -0.6 -0.4 -1.10 -0.6 -1.10 -0.7 -0.7 -0.7 -0.7 -0.4 -1.10 -0.7 -0.7 -0.4 -1.10 -0.7	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.2	0.1 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.2 0.3 0.2 0.3 0.0 1 0.2 0.1 0.5 0.5 0.5 0.1 20.8 26.7	$\begin{array}{c} 0.0\\ 0.2\\ 0.3\\ 0.2\\ 0.1\\ 0.1\\ 0.1\\ 0.1\\ 0.0\\ 0.0\\ 0.2\\ 0.4\\ 0.3\\ 0.2\\ 0.0\\ -0.1\\ 0.1\\ -0.1\\ -0.2\\ -12.3\\ -21.4 \end{array}$	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2 0.7 -0.2 0.7 -0.2 -13.0 -40.0	-0.5 0.2 -1.6 0.2 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.6 0.6 0.6 0.6 0.6 1.0 -0.4 -0.6 1.0 -0.3 -16.9 -4.1.9	$\begin{array}{c} 1.1\\ 1.2\\ -0.1\\ 0.0\\ -0.7\\ -1.9\\ -1.3\\ -2.7\\ -1.6\\ -1.6\\ -0.1\\ -0.6\\ 0.3\\ 0.3\\ 0.3\\ 1.4\\ 0.1\\ -0.8\\ -4.5\\ 5\end{array}$
Sep Oct Nov Dec 2019 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2020 Jan Feb Mar	0.0 0.3 0.1 -0.4 0.5 0.3 0.1 -0.5 0.2 0.2 0.2 0.2 0.4 -0.1 0.0 0.2 -0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.1 0.6 0.6 0.0 -1.0 -0.3 -0.3 -0.1 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 0.3 \\ -0.2 \\ -0.6 \\ -0.1 \\ -0.2 \\ -0.5 \\ 0.9 \\ 0.1 \\ 1.1 \\ -3.2 \\ 1.0 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.7 \\ 0.0 \\ 0.4 \\ -0.9 \\ -0.2 \\ 0.2 \\ 0.4 \\ -4.3 \end{array}$	4.4 0.9 -3.6 3.1 -3.1 -0.6 -2.0 2.5 4.9 -4.4 0.4 -0.5 -0.6 0.2 6.5 -6.8 1.9 -2.1 1.1 1.1 -0.2 -6.9	$\begin{array}{c} -0.3 \\ -0.2 \\ -0.2 \\ -0.5 \\ 0.1 \\ -0.5 \\ 1.1 \\ 0.5 \\ 1.2 \\ -4.3 \\ 0.9 \\ -0.1 \\ 0.2 \\ -0.8 \\ -0.4 \\ 0.6 \\ -1.6 \\ 0.1 \\ 0.6 \\ 0.9 \\ -5.2 \end{array}$	3.1 -0.2 -2.2 1.3 -0.5 -1.2 2.3 -3.7 -0.8 3.3 0.4 0.5 -1.5 -1.9 -0.4 3.9 1.3 -2.0 -3.9 -1.0 -1.4	-0.3 -0.2 -0.5 -0.6 -0.3 -0.7 0.0 0.4 -0.4 2.4 -0.4 -0.7 1.1 0.1 -0.7 0.5 0.4 1.0 -1.9 0.7	$\begin{array}{c} 0.1\\ -0.3\\ 0.8\\ 0.5\\ -0.4\\ -1.9\\ 2.1\\ 2.1\\ 2.1\\ -1.1\\ 0.0\\ 0.1\\ -1.6\\ 1.4\\ 0.0\\ 0.6\\ -2.1\\ 1.2\\ -0.3\\ 1.2\\ -0.3\\ 1.2\\ -1.8\\ -5.4 \end{array}$	0.3 0.2 0.0 0.3 0.2 0.3 0.2 0.0 -0.1 0.1 0.4 -0.1 -0.1 0.4 -0.1 -0.1 0.4 -0.1 0.4 -0.3 0.1 0.4 -0.5	$\begin{array}{c} 1.1\\ -0.1\\ -0.7\\ 0.5\\ 0.9\\ -1.1\\ 1.4\\ 0.1\\ 0.4\\ 0.1\\ 0.1\\ -0.5\\ 0.4\\ 0.3\\ -0.2\\ 0.5\\ -1.1\\ -0.2\\ 1.2\\ -0.7\\ -9.9\end{array}$	0.2 0.3 0.1 0.7 0.2 0.1 0.4 0.0 0.3 -0.1 -0.6 -0.4 2.0 -1.1 -0.8 0.9 -1.4 0.4 1.1 -1.0 -12.9	0 6 -1.2 0.4 1.1 0.9 -0.4 1.0 0.3 -0.7 -0.8 -0.1 2.3 -0.8 -0.1 2.3 -0.8 -1.3 -0.6 0.4 1.0 0.2 -0.7 0.5 -31.6	$\begin{array}{c} 0.1\\ 2.5\\ 1.3\\ -1.1\\ 0.7\\ 0.9\\ 1.0\\ 0.2\\ -0.7\\ 1.2\\ -0.4\\ 1.4\\ 0.4\\ -1.3\\ 1.2\\ 0.0\\ -1.5\\ 1.0\\ -2.5\\ 1.1\\ -1.2\end{array}$	-0.4 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.6 -0.5 -0.2 0.2 0.5 0.4 0.3 -0.6 0.3 -0.6 0.3 -1.0 0.0 0.4 0.3 -0.0 -0.5 -0.2 -0.2 -0.2 -0.3 -0.1 -0.4 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.7 -0.6 -0.5 -0.2 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.7 -0.6 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5 -0.5	0.0 -0.1 -0.1 0.2 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{c} 1.3\\ 0.1\\ 0.3\\ 0.7\\ 0.5\\ -1.0\\ -0.9\\ 1.1\\ 0.1\\ 0.5\\ 0.5\\ 0.5\\ 0.5\\ -0.1\\ 0.9\\ 0.7\\ -0.3\\ 0.8\\ -2.1\\ \end{array}$	-0.2 0.0 -0.3 1.8 0.1 -0.7 1.1 0.8 0.0 -0.9 0.6 -0.4 1.5 -0.7 -0.4 0.5 1.0 0.6 0.4 -1.1 -1.1 -1.1	0.4 0.2 -0.1 -0.2 0.0 0.3 0.6 0.5 0.2 0.0 -0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0	0.1 0.2 0.3 0.3 0.3 0.4 0.3 0.1 0.1 0.2 0.3 0.0 0.1 0.2 0.1 0.5 0.5 0.5 0.5 0.1 -20.8	0.0 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.0 0.0 0.2 0.4 0.3 0.2 0.0 -0.1 0.1 0.1 -0.1 -0.2 -12.3	-1.2 0.5 0.9 1.4 -0.7 1.1 -1.5 -0.1 0.0 -1.7 -0.3 3.0 -2.0 2.3 -2.2 -0.1 3.0 0.2 0.7 -0.2 -13.0	-0.5 0.2 -1.6 0.2 -0.9 -0.9 1.2 0.0 -0.4 1.2 0.6 1.4 0.8 0.6 -0.4 -0.6 1.0 -0.3 -16.9	1.1 1.2 -0.1 0.0 -1.0 -7 -1.9 -1.3 -2.7 -1.2 2.6 -0.1 -0.6 0.3 0.3 0.3 0.3 0.3 1.4 0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7

 1 The GVA output is designated as a National Statistic.
 Sources: For further information on these data please telephone

 1 Indices reflect values measured at basic prices, which exclude "taxes less subsidies on products".
 01633 456724 or E-mail gdp@ons.gov.uk

 2 Indices reflect values measured at basic prices, which exclude "taxes less subsidies on products".
 01633 456724 or E-mail gdp@ons.gov.uk

 3 Estimates cannot be regarded as accurate to the last digit shown.
 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

 5 A complete run of data is available on the ONS website.
 6 Monthly data from the construction survey are only available from January 2010, therefore the data prior to this period are derived using statistical methods from the available quarterly data, and should therefore be treated with some caution.

Sources: For further information on these data please telephone 01633 456724 or E-mail gdp@ons.gov.uk

## **GVA3** Monthly GDP based on GVA (Gross Value Added) <sup>1</sup> Chained volume indices of gross value added at basic prices <sup>2,3,4,5</sup>

GVA3	Chained volume in	naices of gross	value added at	basic price	es								easonally adjuste	d 2016=100									
												Industry section	ns (SIC2007)										
	Tatal						Water			Wholesale and retail:		Accommodation				Professional.	Administrative	Public					Activities househo
	Total		<b>T</b> - 4 - 1			-			Total							,						0.1	
	GVA at	Agriculture, forestry and	Total production	Minina &		Electricity	supply, sewerage		service	repair of motor vehicles	Transport	and food service	Information and	Financial and insurance	Real estate	scientific and technical	and support ad service	ministration and		Human health and social	Arts, entertainment	Other service	as employ undifferentia
	basic prices	fishing	industries	5	Manufacturing	gas, steam and air		Construction 6	industries	and motorcycles	and storage		Communication	activities	activities	activities	activities		Education		and recreation	activities	goods and servi
Section	A-T	A	B-E	quarrying	Ivianulaciumig	anu an D	eic	Construction	G-T	G	and storage	activities	Communication	activities	activities	ACTIVITIES	Activities	O	Euucation			activities	goous and servic
2016 weights	1000	7	138	10	0	17	10	60	796	104	43	30	63	73	138	75	48	47	59	75	15	21	
2010 Holgino		,	100																				
Percentage change,	, latest month on sa	ame month a ye	ear ago																				
	ED2R	ED2S	ED2T	ED2U	ED2V	ED2W	ED2X	ED2Y	ED2Z	ED32	ED33	ED34	ED35	ED36	ED37	ED38	ED39	ED3A	ED3B	ED3C	ED3D	ED3E	ED3
2018 Jun	1.8	-3.6	1.8	1.3	2.2	-4.1	4.7	1.0	1.9	3.2	3.2	3.6	2.4	-1.1	0.9	4.5	4.8	0.6	0.6	-0.3	2.9	1.8	1.
Jul	2.1	-4.1	1.9	7.9	1.8	-1.1	2.6	1.5	2.3	4.8	2.8	1.8	4.1	-1.5	0.9	5.5	4.4	1.4	0.8	0.1	1.2	1.8	0
Aug	2.0	-4.3	1.6	10.3	1.2	-1.7	3.5	-0.1	2.3	4.0	2.8	2.4	5.9	-1.3	0.7	4.9	4.0	1.7	0.8	0.4	0.9	-0.4	3
Sep	1.7	-3.9	-0.2	2.5	-0.1	-4.1	2.5	1.0	2.1	3.1	2.6	3.9	6.5	-1.2	0.8	4.3	2.8	1.6	0.9	0.7	2.1	-1.5	2
Oct	2.1	-2.5	-0.6	4.3	-1.2	-0.5	1.5	3.3	2.5	3.7	2.9	4.5	5.1	-0.8	0.8	5.6	4.1	1.3	1.4	1.6	2.4	-0.5	6
Nov	1.9	-2.2	-0.8	0.0	-0.9	-2.6	1.3	0.7	2.5	4.4	3.6	4.9	5.9	-1.3	0.5	5.1	3.4	1.1	1.7	1.4	2.2	-0.8	5
Dec	1.2	-2.8	-1.1	23.2	-2.0	-6.0	1.1	-3.6	2.1	3.7	3.6	4.0	5.3	-1.9	0.6	3.6	1.9	1.4	2.0	1.2	2.4	-1.2	4
2019 Jan	1.6	-2.2	-0.2	0.8	-0.9	1.4	2.4	1.0	2.0	4.5	3.6	4.2	7.1	-3.2	0.5	1.2	2.6	2.2	2.5	1.0	1.4	-3.1	1
Feb	2.3	-1.7	-0.3	5.2	0.2	-8.0	2.5	4.4	2.6	4.3	4.5	6.0	8.5	-4.3	0.4	3.7	5.2	2.7	2.7	1.1	2.1	-0.8	0
Mar	2.3	-1.4	0.9	13.7	1.8	-10.8	1.4	5.2	2.4	5.5	5.4	4.3	5.8	-4.6	0.4	3.0	4.7	3.0	2.6	1.1	1.3	-2.8	-4
Apr	1.5	-1.3	-1.8	-0.1	-2.2	-3.3	2.4	3.8	1.9	4.5	4.4	2.6	6.7	-4.6	0.4	1.5	3.1	2.8	2.5	1.3	-1.2	-2.8	-6
May	1.4	-1.1	-0.4	2.0	-1.7	4.5	3.3	2.5	1.6	2.6	2.6	1.7	6.1	-4.1	0.5	1.5	3.7	2.4	2.5	1.5	-1.6	-1.8	-8
Jun	1.3	-0.6	-1.5	1.5	-2.5	2.2	0.4	0.1	1.8	2.3	1.3	3.4	7.5	-3.2	0.5	3.3	1.8	1.9	2.7	1.9	1.4	-1.9	-10
Jul	1.4	-0.3	-2.0	-3.4	-2.0	-2.4	-0.1	1.4	2.0	1.6	3.1	2.1	7.8	-2.4	0.5	2.5	3.5	1.5	2.7	2.1	0.6	-0.1	-9
Aug	1.1	-0.3	-2.5	-4.0	-2.6	-4.0	1.3	1.8	1.7	2.0	1.6	2.0	3.9	-1.8	0.7	2.8	2.8	1.4	2.7	2.1	2.4	0.6	-10
Sep	1.1	-1.0	-1.9	6.1	-2.8	-2.3	1.2	1.5	1.6	2.5	0.7	1.0	3.7	-2.2	0.9	2.4	2.7	1.6	2.6	1.9	-0.9	2.8	-10
Oct	1.0	-1.6	-1.4	-4.1	-1.8	0.1	1.0	-1.1	1.6	2.5	0.9	0.2	4.8	-1.7	0.9	2.6	1.3	2.2	2.5	1.6	-2.4	3.2	-10
Nov	0.5	-1.7	-2.1	0.8	-3.4	1.9	2.0	0.6	1.0	0.4	-0.7	0.3	2.4	-2.4	0.9	1.1	2.2	2.3	2.7	1.5	1.3	3.7	-9
Dec	1.1	-0.6	-1.8	-0.7	-2.8	1.2	2.6	2.2	1.5	1.3	-0.4	1.0	2.6	-1.9	1.0	2.9	3.6	2.0	2.8	1.5	0.3	4.0	-7
2020 Jan	0.8	-0.2	-2.4	2.4	-3.3	-4.9	4.5	1.3	1.3	1.2	0.4	-0.7	-1.0	-0.8	1.1	3.5	2.9	1.5	2.9	1.3	2.6	6.0	-5
Feb	0.4	0.1	-2.2	-0.4	-2.9	-2.2	2.5	-2.6	1.1	0.3	-0.7	-0.6	-0.1	0.5	1.3	3.2	1.0	1.1	2.7	0.9	2.4	4.4	-5
Mar	-6.6	-0.6	-7.5	-11.5	-9.1	-2.8	2.9	-6.8	-6.5	-10.0	-13.7	-31.5	-0.7	0.8	0.7	0.9	-9.5	0.9	-18.8	-11.5	-10.9	-13.2	-7
Apr	-25.0	-6.2	-24.0	-15.8	-28.4	-14.2	-4.7	-44.2	-23.8	-34.9	-39.3	-90.6	-14.0	-4.0	-2.0	-18.1	-33.7	1.1	-40.6	-30.5	-45.6	-49.4	-48
May	-23.3	-5.3	-20.0	-11.1	-23.1	-14.7	-6.5	-40.0	-22.7	-26.5	-35.4	-90.0	-15.1	-2.8	-2.7	-21.0	-34.7	1.4	-38.0	-29.9	-50.6	-48.1	-45
Jun	-16.8	-2.9	-12.5	-3.0	-14.6	-11.6	-2.3	-24.8	-17.1	-6.2	-24.3	-83.6	-10.7	-2.2	-2.9	-17.3	-25.2	1.5	-34.3	-28.6	-39.3	-45.2	-36

 1 The GVA output is designated as a National Statistic.
 Sources: For further information on these data please telephone

 2 Indices reflect values measured at basic prices, which exclude "taxes less subsidies on products".
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 3 Estimates cannot be regarded as accurate to the last digit shown.
 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.

 5 A complete run of data is available on the ONS website.
 6 Monthly data from the construction survey are only available from January 2010, therefore the data prior to this period are derived using statistical methods from the available quarterly data, and should therefore be treated with some caution.

**REV1** Monthly GDP based on GVA (Gross Value Added) <sup>1</sup> Revisions to growth of gross value added at basic prices <sup>2</sup>

•	Revisions to grow			ic prices									easonally adjuste	12010-100						Periods open f		(pi 2020 -ivie	19 2020
	Total GVA at basic	Agriculture, forestry and	Total production	Mining &		Electricity gas, steam	Water supply, sewerage		Total service	Wholesale and retail: repair of motor vehicles	Transport	Industry section Accommodation and food service	Information and	Financial and insurance	Real estate	Professional, scientific and technical	Administrative and support ac service	Public dministration and		Human health and social	Arts, entertainment	Other service	Activitie househ as employ undifferenti
	prices	fishing	industries		Manufacturing	and air	etc	Construction 4	industries	and motorcycles	and storage	activities	Communication	activities	activities	activities	activities		Education	work activities	and recreation	activities	goods and servi
ection 016 weights	A-T 1000	A 7	B-E 138	В 10	C 100	D 17	E 10	F 60	G-T <b>796</b>	G 104	H 43	30	J 63	К 73	L 138	M 75	N 48	0 47	P 59	Q 75	R 15	S 21	
rcentage change, lat	itest 3 months on	previous 3 mon	ths <sup>3</sup>																				
18 May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Jul	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Aug Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Dec 19 Jan	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Apr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
May Jun	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Dec 020 Jan	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Apr	0.1	-0.1	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.2	0.0	0.0	0.4	0.3	-0.1	-0.1		0.3	0.0	1.6	-0.3	0.2	0.1	-
May	0.4	2.0	0.0	0.1	-0.2	0.7	-0.2	-0.1	0.4	0.0	0.4	0.9	0.9	0.0	-0.1	0.3	0.9	0.1	3.9	-0.5	0.6	0.4	-1
rcentage change, la	atest 3 months on	same 3 months	a year ago <sup>3</sup>																				
18 May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Jun Jul	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Nov	0.0 0.0	0.0	0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	0.0 0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0 0.0	0.0		0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	
Dec 119 Jan	0.0	0.0 0.0	0.0 0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	0.0 0.0	0.0	0.0 0.0		0.0 0.0	0.0	0.0	0.0	0.0	0.0 0.0	
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Apr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Jun Jul	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Dec 020 Jan	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Apr	0.1	-0.1	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.2	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.2	0.1	1.6	-0.3	0.1	0.1	
May	0.3	2.1	-0.1	0.1	-0.1	0.7	-0.1	-0.1	0.4	0.0	0.4	0.9	0.9	0.0	-0.1	0.2	0.9	0.0	4.0	-0.5	0.6	0.4	-1

 1 The GVA output is designated as a National Statistic.
 Sources: For further information on these data please telephone

 2 Estimates cannot be regarded as accurate to the last digit shown.
 01633 456724 or E-mail gdp@ons.gov.uk

 3 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.
 01633 456724 or E-mail gdp@ons.gov.uk

 4 Monthly data from the construction survey are only available from January 2010, therefore the data prior to this period are derived using statistical methods from the available quarterly data, and should therefore be treated with some caution.

 5 Revisions to periods highlighted in Grey are consistent with the First Quarterly Estimate published on 12 August 2020

	ione te gren	th of gross valu										Industry section	easonally adjuste	0 2010-100						Periods open f	or revision. P	pi 2020 -ilia	,
										Wholesale		industry secto	115 (3102007)										Activities
	Total						Water			and retail:		Accommodation				Professional,	Administrative	Public					househol
	GVA at basic	Agriculture, forestry and	Total production	Mining &		Electricity gas, steam	supply, sewerage		Total service	repair of motor vehicles	Transport	and food service	Information and	Financial and insurance	Real estate	scientific and technical	and support ad service	Iministration and		Human health and social	Arts, entertainment	Other service	as employe
	prices	fishing	industries		Manufacturing	and air		Construction 4	industries	and motorcycles	and storage		Communication	activities	activities	activities	activities		Education		and recreation	activities	goods and service
Section 016 weights	A-T 1000	A 7	B-E 138	В 10	C 100	D 17	E 10	F 60	G-T <b>796</b>	G 104	H 43	30	J 63	<u>к</u> 73	L 138	M 75	N 48	0 47	P 59	Q 75	R 15	s 21	
ercentage change, lat			100																				
018 May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Aug Sep	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Dec )19 Jan	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	C
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
Apr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
May Jun	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	(
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Oct Nov	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
020 Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Mar Apr	0.0	0.0 -0.3	0.0 -0.2	0.0 -0.3	0.0 -0.2	0.0	0.0 -0.1	0.0	0.0 0.4	0.0 -0.1	0.0 0.0	0.0	0.0	0.0 -0.1	0.0 -0.1	0.0	0.0 0.9	0.0	0.0 5.9	0.0	0.0	0.0	-22
Мау	0.6	7.2	0.2	-0.3	-0.2	2.4	0.0	-0.6	0.4	0.2	2.1	3.5	1.0	0.2	-0.1	0.3	1.6	-0.1	4.0	0.1	1.8	0.4	-22
Percentage change, la	atest month on sa	ame month a ye	ar ago <sup>3</sup>																				
018 May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Jun Jul	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Oct Nov	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	C (
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
019 Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C
Mar Apr	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	(
May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Aug Sep	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
20 Jan Feb	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	( (
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Apr	0.3	-0.3	-0.2	-0.3	-0.2	0.1	-0.1	0.0	0.4	-0.1	0.0	1.2	0.9	-0.1	-0.1	0.2	0.8	0.1	4.8	-0.9	0.5	0.4	-21
May	0.7	6.4	0.0	0.6	-0.3	2.1	-0.2	-0.3	0.9	0.0	1.2	1.6	1.9	0.1	-0.1	0.4	1.8	0.1	7.2	-0.7	1.5	0.8	-3

Sources: For further information on these data please telephone 01633 456724 or E-mail gdp@ons.gov.uk

 1 The GVA output is designated as a National Statistic.
 Sources: For further information on these data please telephone

 2 Estimates cannot be regarded as accurate to the last digit shown.
 O1633 456724 or E-mail gdp@ons.gov.uk

 3 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.
 O1633 456724 or E-mail gdp@ons.gov.uk

 4 Monthly data from the construction survey are only available from January 2010, therefore the data prior to this period are derived using statistical methods from the available quarterly data, and should therefore be treated with some caution.

 5 Revisions to periods highlighted in Grey are consistent with the First Quarterly Estimate published on 12 August 2020

riods o	pen for	revision:	Apr 2020	-May	2020

## **CONTRIB 1** Monthly GDP based on GVA (Gross Value Added) <sup>1</sup> Contributions to growth of gross value added at basic prices <sup>2,3,4,5</sup>

				-							Industry	sections (SIC2007	)										
	Total						Water			Wholesale		Assessmentation				Drafassianal	Administrativa	Dublia					Activities of
	GVA at	Agriculture,	Total			Electricity	Water supply,		Total	and retail: repair of		Accommodation and food	Information	Financial		Professional, scientific	Administrative and support a	Public		Human health	Arts,	Other	households as employers,
	basic	forestry and	production	Mining &		gas, steam	sewerage		service	motor vehicles	Transport	service		and insurance	Real estate	and technical	service	and		and social	entertainment	service	undifferentiated
	prices	fishing	industries	quarrying	Manufacturing	and air	etc	Construction	industries	and motorcycles	and storage	activities	Communication	activities	activities	activities	activities		Education		and recreation	activities	goods and services
Section 2016 weights	A-T 1000	A 7	B-E 138	<u>В</u> 10	C 100	D 17	L	F 60	G-T 796	G 104	H 43	30	J 63	<u>к</u> 73	138	M 75	N 48	0 47	59	Q 75	R 15	<u>s</u> 21	1
2010 weights		/	130	10	100		10	00	790	104	45	50	03	75	150	75	40	4/	55	75	15	21	4
Contribution to growth, late	est 3 months on previ	ous 3 months																					
	EDMB	EDMC	EDMD	EDME	EDMF	EDMG	EDMH	EDMI	EDMJ	EDMK	EDML	EDMM	EDMN	EDMO	EDMP	EDMQ	EDMR	EDMS	EDMT	EDMU	EDMV	EDMW	EDMX
2018 Jun	0.59	-0.01	-0.06	0.04	-0.04	-0.07	0.03	0.05	0.61	0.20	0.06	0.05	0.10	-0.04	0.03	0.07	0.04	0.02	0.03	-0.01	0.02	0.02	0.01
Jul	0.86	-0.01	0.00	0.03	0.03	-0.10	0.04	0.13	0.73	0.28	0.09	0.06	0.08	-0.07	0.02	0.09	0.08	0.04	0.03	0.00	0.01	0.01	0.00
Aug Sep	0.85 0.66	0.00 0.00	0.10 0.08	0.04 0.03	0.05 0.01	-0.03 0.02	0.04 0.02	0.12 0.06	0.63 0.52	0.23 0.14	0.09 0.06	0.04 0.02	0.09 0.17	-0.08 -0.07	0.00 -0.01	0.08 0.10	0.08 0.03	0.05 0.05	0.02 0.02	0.01 0.02	-0.01 -0.01	0.01 -0.01	0.01 0.01
Oct	0.50	0.00	-0.01	0.02	-0.05	0.02	0.02	0.04	0.46	0.03	0.04	0.02	0.22	-0.06	-0.01	0.10	0.03	0.03	0.02	0.02	0.01	-0.02	0.01
Nov	0.41	0.01	-0.10	-0.01	-0.08	-0.01	-0.01	0.05	0.45	0.03	0.04	0.02	0.18	-0.05	-0.01	0.11	0.05	0.01	0.03	0.04	0.03	-0.03	0.00
Dec	0.30	0.00	-0.12	-0.01	-0.08	-0.01	-0.01	0.00	0.41	0.03	0.04	0.04	0.10	-0.06	0.01	0.08	0.08	0.00	0.04	0.04	0.03	-0.03	0.00
Jan	0.24	0.00	-0.08	-0.03	-0.03	-0.01	-0.02	-0.03	0.34	0.08	0.04	0.05	0.10	-0.08	0.01	0.01	0.06	0.01	0.05	0.03	0.01	-0.04	-0.01
Feb	0.25	-0.01	-0.01	-0.02	0.03	-0.01	-0.02	0.00	0.27	0.07	0.03	0.04	0.12	-0.10	0.02	-0.05	0.05	0.04	0.06	0.03	0.00	-0.03	-0.01
Mar	0.52	-0.01	0.12	0.00	0.15	-0.02	-0.01	0.10	0.31	0.12	0.03	0.03	0.13	-0.12	0.02	-0.05	0.06	0.06	0.05	0.02	-0.02	-0.02	-0.01
Apr	0.42 0.20	-0.01 0.00	0.03 -0.04	0.03 0.03	0.04 -0.07	-0.03 0.00	0.00 0.01	0.12 0.06	0.27 0.19	0.10 0.11	0.02 0.01	0.00 -0.02	0.08 0.04	-0.11	0.03 0.04	0.00 0.01	0.05 0.02	0.05 0.03	0.05 0.04	0.02 0.02	-0.02	0.00 0.01	-0.01 -0.02
May Jun	-0.12	0.00	-0.04 -0.24	0.03	-0.28	0.00	0.01	-0.03	0.19	0.04	-0.01	-0.02	0.04	-0.09 -0.03	0.04	0.01	-0.02	0.03	0.04	0.02	-0.03 -0.02	0.01	-0.02
Jul	0.12	0.00	-0.12	-0.01	-0.16	0.03	0.03	-0.06	0.35	0.04	0.00	0.01	0.00	0.02	0.04	0.03	0.01	0.00	0.03	0.05	0.00	0.02	-0.02
Aug	0.39	0.00	-0.11	-0.02	-0.11	0.00	0.02	-0.04	0.54	0.00	0.01	0.03	0.11	0.06	0.01	0.15	0.02	0.00	0.03	0.06	0.02	0.04	-0.01
Sep	0.49	0.00	-0.04	0.01	-0.03	-0.03	0.01	0.03	0.50	0.03	0.02	-0.01	0.06	0.06	0.01	0.14	0.04	0.01	0.02	0.06	0.01	0.05	0.00
Oct	0.24	0.00	-0.09	0.01	-0.08	-0.02	0.00	0.00	0.33	0.05	-0.01	-0.04	0.02	0.03	0.03	0.12	0.00	0.02	0.02	0.04	0.01	0.04	0.00
Nov	0.04	0.00	-0.08	0.02	-0.10	0.01	0.00	0.00	0.11	0.01	-0.03	-0.03	-0.01	-0.02	0.04	0.05	0.01	0.03	0.03	0.02	-0.01	0.03	0.00
Dec	-0.02	0.00	-0.07	-0.02	-0.10	0.04	0.00	-0.06	0.11	-0.04	-0.03	0.01	-0.03	-0.04	0.05	0.05	0.05	0.03	0.04	0.00	0.02	0.01	0.00
2019 Jan	-0.04	0.00	-0.10	-0.02	-0.11	0.02	0.01	0.01	0.05 0.18	-0.07	-0.02	0.03	-0.10	-0.06	0.04	0.00	0.09	0.02	0.06 0.07	0.00	0.04	0.00	0.00
Feb Mar	0.12 -2.16	0.00 0.00	-0.06 -0.19	-0.02 -0.02	-0.01 -0.10	-0.04 -0.09	0.01 0.00	0.00 -0.10	-1.87	-0.03 -0.33	0.01 -0.17	0.02 -0.29	-0.10 -0.15	-0.01 0.03	0.06 0.04	0.03 -0.03	0.08 -0.16	0.02 0.01	-0.35	0.00 -0.32	0.04 -0.04	0.00 -0.09	0.00 0.00
Apr	-10.71	-0.02	-0.19	-0.02	-0.95	-0.09	-0.04	-1.06	-8.44	-1.58	-0.72	-0.29	-0.13	-0.06	-0.10	-0.55	-0.86	0.01	-0.33	-0.32	-0.33	-0.38	-0.05
May	-18.74	-0.03	-2.04	-0.09	-1.72	-0.14	-0.06	-1.83	-14.81	-2.52	-1.22	-2.00	-0.72	-0.16	-0.28	-1.22	-1.51	0.01	-2.01	-1.89	-0.62	-0.65	-0.09
Jun	-20.35	-0.03	-2.24	-0.07	-1.93	-0.14	-0.07	-2.15	-15.90	-2.11	-1.23	-2.24	-0.86	-0.25	-0.43	-1.67	-1.64	0.02	-1.94	-2.04	-0.72	-0.74	-0.12
Contribution to growth, late	est 3 months on same	3 months a yea	r ago																				
	EDMY	EDMZ	EDNA	EDNB	EDNC	EDND	EDNE	EDNF	EDNG	EDNH	EDNI	EDNJ	EDNK	EDNL	EDNM	EDNN	EDNO	EDNP	EDNQ	EDNR	EDNS	EDNT	EDNU
2018 Jun	1.63 1.84	-0.02 -0.03	0.19	0.04 0.04	0.18	-0.05 -0.06	0.02 0.04	-0.01 0.05	1.48 1.61	0.33 0.43	0.06	0.06 0.07	0.26	-0.07 -0.09	0.11	0.40 0.38	0.26	0.01 0.03	0.03 0.04	-0.02	0.03	0.01	0.01 0.00
Jul Aug	1.84	-0.03	0.20 0.23	0.04	0.19 0.18	-0.08	0.04	0.05	1.01	0.43	0.10 0.12	0.07	0.26 0.29	-0.09	0.12 0.11	0.38	0.22 0.23	0.03	0.04	-0.01 0.01	0.03 0.03	0.02 0.02	0.00
Sep	1.93	-0.03	0.15	0.05	0.10	-0.03	0.04	0.05	1.76	0.42	0.12	0.08	0.38	-0.09	0.11	0.37	0.19	0.08	0.04	0.03	0.03	0.02	0.00
Oct	1.93	-0.03	0.04	0.04	0.00	-0.03	0.03	0.08	1.84	0.38	0.11	0.10	0.40	-0.08	0.11	0.38	0.19	0.08	0.06	0.07	0.03	-0.01	0.01
Nov	1.91	-0.02	-0.07	0.02	-0.07	-0.03	0.02	0.10	1.91	0.39	0.12	0.12	0.40	-0.08	0.09	0.38	0.18	0.07	0.08	0.09	0.04	-0.02	0.01
Dec	1.75	-0.02	-0.12	0.06	-0.14	-0.04	0.02	0.00	1.89	0.41	0.14	0.12	0.38	-0.09	0.08	0.36	0.16	0.06	0.10	0.10	0.04	-0.01	0.02
Jan	1.59	-0.02	-0.10	0.06	-0.13	-0.04	0.02	-0.04	1.76	0.44	0.15	0.12	0.42	-0.15	0.07	0.25	0.14	0.08	0.12	0.09	0.03	-0.03	0.01
Feb Mar	1.73	-0.02	-0.08	0.08	-0.09	-0.07	0.03	0.03	1.78	0.44	0.16	0.13	0.48	-0.22	0.06	0.22	0.17	0.10	0.14	0.08	0.03	-0.03	0.01
	2.08	-0.01 -0.01	0.02 -0.05	0.06 0.05	0.04 -0.01	-0.09 -0.11	0.03 0.03	0.21 0.27	1.86 1.82	0.50 0.50	0.19 0.20	0.13 0.12	0.49 0.49	-0.29 -0.32	0.06 0.05	0.20 0.21	0.22 0.23	0.13 0.14	0.15 0.15	0.08 0.09	0.03 0.01	-0.04 -0.04	0.00 -0.01
	202	-0.01		0.05	-0.01	-0.11	0.03	0.27	1.62	0.30	0.20	0.12	0.49	-0.32	0.05	0.21	0.23	0.14	0.15	0.09	-0.01	-0.04	-0.02
Apr	2.03 1.71	-0.01	-0.06		-0.07		0.03	0.23	1.33	0.44	0.11	0.08	0.43	-0.28	0.00	0.15	0.20	0.13	0.15	0.10	-0.01	-0.04	-0.02
	2.03 1.71 1.37	-0.01 -0.01	-0.06 -0.17	0.01	-0.21	0.02								-0.23	0.07	0.19	0.16						-0.03
Apr May	1.71				-0.21 -0.20	0.02	0.02	0.08	1.43	0.23	0.10	0.07	0.50	-0.23		0.19	0.10	0.09	0.15	0.14	0.00	-0.02	
Apr May Jun Jul Aug	1.71 1.37 1.33 1.25	-0.01 0.00 0.00	-0.17 -0.18 -0.27	0.01 0.00 -0.02	-0.20 -0.23	0.02 -0.02	0.02 0.01	0.08 0.07	1.45	0.21	0.08	0.07	0.45	-0.17	0.07	0.22	0.14	0.08	0.15	0.15	0.02	-0.01	-0.03
Apr May Jun Jul Aug Sep	1.71 1.37 1.33 1.25 1.19	-0.01 0.00 0.00 0.00	-0.17 -0.18 -0.27 -0.29	0.01 0.00 -0.02 0.00	-0.20 -0.23 -0.25	0.02 -0.02 -0.04	0.02 0.01 0.01	0.08 0.07 0.10	1.45 1.38	0.21 0.22	0.08 0.08	0.07 0.05	0.45 0.36	-0.17 -0.15	0.07 0.09	0.22 0.20	0.14 0.16	0.08 0.07	0.15 0.15	0.15 0.16	0.02 0.01	-0.01 0.02	-0.03 -0.03
Apr May Jun Jul Aug Sep Oct	1.71 1.37 1.33 1.25 1.19 1.07	-0.01 0.00 0.00 0.00 -0.01	-0.17 -0.18 -0.27 -0.29 -0.26	0.01 0.00 -0.02 0.00 -0.01	-0.20 -0.23 -0.25 -0.24	0.02 -0.02 -0.04 -0.03	0.02 0.01 0.01 0.01	0.08 0.07 0.10 0.04	1.45 1.38 1.29	0.21 0.22 0.25	0.08 0.08 0.05	0.07 0.05 0.03	0.45 0.36 0.29	-0.17 -0.15 -0.13	0.07 0.09 0.10	0.22 0.20 0.20	0.14 0.16 0.12	0.08 0.07 0.08	0.15 0.15 0.15	0.15 0.16 0.14	0.02 0.01 0.00	-0.01 0.02 0.04	-0.03 -0.03 -0.03
Apr May Jun Jui Aug Sep Oct Nov	1.71 1.37 1.33 1.25 1.19 1.07 0.88	-0.01 0.00 0.00 -0.01 -0.01	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25	0.01 0.00 -0.02 0.00 -0.01 0.01	-0.20 -0.23 -0.25 -0.24 -0.26	0.02 -0.02 -0.04 -0.03 0.00	0.02 0.01 0.01 0.01 0.02	0.08 0.07 0.10 0.04 0.02	1.45 1.38 1.29 1.11	0.21 0.22 0.25 0.19	0.08 0.08 0.05 0.01	0.07 0.05 0.03 0.01	0.45 0.36 0.29 0.26	-0.17 -0.15 -0.13 -0.14	0.07 0.09 0.10 0.11	0.22 0.20 0.20 0.16	0.14 0.16 0.12 0.11	0.08 0.07 0.08 0.10	0.15 0.15 0.15 0.15	0.15 0.16 0.14 0.12	0.02 0.01 0.00 -0.01	-0.01 0.02 0.04 0.05	-0.03 -0.03 -0.03 -0.03
Apr May Jun Jul Aug Sep Oct Nov Dec	1.71 1.37 1.33 1.25 1.19 1.07 0.88 0.87	-0.01 0.00 0.00 -0.01 -0.01 -0.01	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25 -0.24	0.01 0.00 -0.02 0.00 -0.01 0.01 -0.01	-0.20 -0.23 -0.25 -0.24 -0.26 -0.26	0.02 -0.02 -0.04 -0.03 0.00 0.02	0.02 0.01 0.01 0.02 0.02	0.08 0.07 0.10 0.04 0.02 0.03	1.45 1.38 1.29 1.11 1.09	0.21 0.22 0.25 0.19 0.15	0.08 0.08 0.05 0.01 0.00	0.07 0.05 0.03 0.01 0.01	0.45 0.36 0.29 0.26 0.23	-0.17 -0.15 -0.13 -0.14 -0.14	0.07 0.09 0.10 0.11 0.12	0.22 0.20 0.20 0.16 0.17	0.14 0.16 0.12 0.11 0.13	0.08 0.07 0.08 0.10 0.10	0.15 0.15 0.15 0.15 0.15	0.15 0.16 0.14 0.12 0.12	0.02 0.01 0.00 -0.01 0.00	-0.01 0.02 0.04 0.05 0.06	-0.03 -0.03 -0.03 -0.03 -0.03
Apr May Jun Aug Sep Oct Nov Dec 2019 Jan	1.71 1.37 1.33 1.25 1.19 1.07 0.88 0.87 0.80	-0.01 0.00 0.00 -0.01 -0.01 -0.01 -0.01	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25 -0.24 -0.29	0.01 0.00 -0.02 0.00 -0.01 0.01 -0.01 0.01	-0.20 -0.23 -0.25 -0.24 -0.26 -0.26 -0.31	0.02 -0.02 -0.04 -0.03 0.00 0.02 -0.01	0.02 0.01 0.01 0.02 0.02 0.04	0.08 0.07 0.10 0.04 0.02 0.03 0.08	1.45 1.38 1.29 1.11 1.09 1.00	0.21 0.22 0.25 0.19 0.15 0.10	0.08 0.08 0.05 0.01 0.00 -0.01	0.07 0.05 0.03 0.01 0.01 0.01	0.45 0.36 0.29 0.26 0.23 0.10	-0.17 -0.15 -0.13 -0.14 -0.14 -0.11	0.07 0.09 0.10 0.11 0.12 0.13	0.22 0.20 0.16 0.17 0.19	0.14 0.16 0.12 0.11 0.13 0.16	0.08 0.07 0.08 0.10 0.10 0.09	0.15 0.15 0.15 0.15 0.15 0.15	0.15 0.16 0.14 0.12 0.12 0.12	0.02 0.01 0.00 -0.01 0.00 0.02	-0.01 0.02 0.04 0.05 0.06 0.07	-0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.02
Apr May Jun Jul Aug Sep Oct Nov Dec 2019 Jan Feb	1.71 1.37 1.25 1.19 1.07 0.88 0.87 0.80 0.75	-0.01 0.00 0.00 -0.01 -0.01 -0.01 -0.01 0.00	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25 -0.24 -0.29 -0.29	0.01 0.00 -0.02 0.00 -0.01 0.01 -0.01 0.01 0.00	-0.20 -0.23 -0.25 -0.24 -0.26 -0.26 -0.31 -0.30	0.02 -0.02 -0.04 -0.03 0.00 0.02 -0.01 -0.03	0.02 0.01 0.01 0.02 0.02 0.04 0.04	0.08 0.07 0.10 0.04 0.02 0.03 0.08 0.02	1.45 1.38 1.29 1.11 1.09 1.00 1.02	0.21 0.22 0.25 0.19 0.15 0.10 0.10	0.08 0.05 0.01 0.00 -0.01 -0.01	0.07 0.05 0.03 0.01 0.01 0.01 0.00	0.45 0.36 0.29 0.26 0.23 0.10 0.03	-0.17 -0.15 -0.13 -0.14 -0.14 -0.11 -0.05	0.07 0.09 0.10 0.11 0.12 0.13 0.15	0.22 0.20 0.16 0.17 0.19 0.25	0.14 0.16 0.12 0.11 0.13 0.16 0.14	0.08 0.07 0.08 0.10 0.10 0.09 0.07	0.15 0.15 0.15 0.15 0.15 0.16 0.16	0.15 0.16 0.14 0.12 0.12 0.12 0.11 0.09	0.02 0.01 0.00 -0.01 0.00 0.02 0.03	-0.01 0.02 0.04 0.05 0.06 0.07 0.08	-0.03 -0.03 -0.03 -0.03 -0.03 -0.02 -0.02 -0.02
Apr May Jun Jul Aug Sep Oct Nov Dec 2019 Jan Feb Mar	1.71 1.37 1.33 1.25 1.19 1.07 0.88 0.87 0.80 0.75 -1.82	-0.01 0.00 0.00 -0.01 -0.01 -0.01 -0.01 0.00	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25 -0.24 -0.29 -0.29 -0.29 -0.55	0.01 0.00 -0.02 0.00 -0.01 0.01 0.01 0.01 0.01 0.00 -0.03	-0.20 -0.23 -0.25 -0.24 -0.26 -0.26 -0.31 -0.30 -0.51	0.02 -0.02 -0.04 -0.03 0.00 0.02 -0.01 -0.03 -0.05	0.02 0.01 0.01 0.02 0.02 0.04 0.04 0.04	0.08 0.07 0.10 0.04 0.02 0.03 0.08 0.02 -0.17	1.45 1.38 1.29 1.11 1.09 1.00 1.02 -1.10	0.21 0.22 0.25 0.19 0.15 0.10 0.10 0.10 -0.30	0.08 0.08 0.05 0.01 0.00 -0.01 -0.01 -0.20	0.07 0.05 0.03 0.01 0.01 0.01 0.00 -0.31	0.45 0.36 0.29 0.26 0.23 0.10 0.03 -0.04	-0.17 -0.15 -0.13 -0.14 -0.14 -0.11 -0.05 0.01	0.07 0.09 0.10 0.11 0.12 0.13 0.15 0.13	0.22 0.20 0.20 0.16 0.17 0.19 0.25 0.20	0.14 0.16 0.12 0.11 0.13 0.16 0.14 -0.10	0.08 0.07 0.08 0.10 0.10 0.09 0.07 0.06	0.15 0.15 0.15 0.15 0.15 0.16 0.16 -0.26	0.15 0.16 0.14 0.12 0.12 0.12 0.11 0.09 -0.24	0.02 0.01 0.00 -0.01 0.00 0.02 0.03 -0.03	-0.01 0.02 0.04 0.05 0.06 0.07 0.08 -0.02	-0.03 -0.03 -0.03 -0.03 -0.03 -0.02 -0.02 -0.02
Apr May Jun Jul Aug Sep Oct Nov Dec 2019 Jan Feb	1.71 1.37 1.25 1.19 1.07 0.88 0.87 0.80 0.75	-0.01 0.00 0.00 -0.01 -0.01 -0.01 -0.01 0.00	-0.17 -0.18 -0.27 -0.29 -0.26 -0.25 -0.24 -0.29 -0.29	0.01 0.00 -0.02 0.00 -0.01 0.01 -0.01 0.01 0.00	-0.20 -0.23 -0.25 -0.24 -0.26 -0.26 -0.31 -0.30	0.02 -0.02 -0.04 -0.03 0.00 0.02 -0.01 -0.03	0.02 0.01 0.01 0.02 0.02 0.04 0.04	0.08 0.07 0.10 0.04 0.02 0.03 0.08 0.02	1.45 1.38 1.29 1.11 1.09 1.00 1.02	0.21 0.22 0.25 0.19 0.15 0.10 0.10	0.08 0.05 0.01 0.00 -0.01 -0.01	0.07 0.05 0.03 0.01 0.01 0.01 0.00	0.45 0.36 0.29 0.26 0.23 0.10 0.03	-0.17 -0.15 -0.13 -0.14 -0.14 -0.11 -0.05	0.07 0.09 0.10 0.11 0.12 0.13 0.15	0.22 0.20 0.16 0.17 0.19 0.25	0.14 0.16 0.12 0.11 0.13 0.16 0.14	0.08 0.07 0.08 0.10 0.10 0.09 0.07	0.15 0.15 0.15 0.15 0.15 0.16 0.16	0.15 0.16 0.14 0.12 0.12 0.12 0.11 0.09	0.02 0.01 0.00 -0.01 0.00 0.02 0.03	-0.01 0.02 0.04 0.05 0.06 0.07 0.08	-0.03 -0.03 -0.03 -0.03 -0.03 -0.02 -0.02 -0.02

seasonally adjusted 2016=100

The GVA output is designated as a National Statistic.
 Estimates cannot be regarded as accurate to the last digit shown.
 A complete run of data is available on the ONS website.
 Contributions are based on output GVA growth
 Please use additional caution when aggregating individual contributions for April - June 2020, as the larger-than-usual growth rates mean that, when summed, the rounded contributions may not accurately represent the higher level contribution being calculated.

Sources: For further information on these data please telephone 01633 456724 or E-mail gdp@ons.gov.uk

## **CONTRIB 2** Monthly GDP based on GVA (Gross Value Added)<sup>1</sup> Contributions to growth of gross value added at basic prices <sup>2,3,4,5</sup>

	Contributions	to growth of gro										Industry section	easonally adjusted	2010-100									
	Total						Water			Wholesale and retail:		Accommodation		_		Professional,	Administrative	Public					Activities of households
	GVA at basic prices	Agriculture, forestry and fishing	Total production industries	Mining & quarrying I	Manufacturing	Electricity gas, steam and air	supply, sewerage etc	Construction	Total service industries	repair of motor vehicles and motorcycles	Transport and storage	and food service activities	Information and Communication	Financial and insurance activities	Real estate activities	scientific and technical activities	and support and service activities	and	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities	as employers, undifferentiated goods and services
Section	A-T	А	B-E	В	С	D	E	F	G-T	G	Н	1	J	К	L	М	N	0	P	Q	R	S	T
2016 weights	1000	7	138	10	100	17	10	60	796	104	43	30	63	73	138	75	48	47	59	75	15	21	4
Contributon to growth, late	test month on previ	ious month																					
	EDKH	EDKI	EDKJ	EDKK	EDKL	EDKM	EDKN	EDKO	EDKP	EDKQ	EDKR	EDKS	EDKT	EDKU	EDKV	EDKW	EDKX	EDKY	EDKZ	EDLA	EDLB	EDLC	EDLD
2018 Jun Jul	0.31 0.27	0.00 0.00	0.14 0.04	0.00 0.04	0.07 -0.02	0.04 0.04	0.03 0.00	0.05 0.01	0.12 0.22	-0.01 0.12	0.04 0.01	0.02 0.02	0.01 0.01	-0.03 -0.03	-0.01 0.00	-0.01 0.10	0.08 -0.01	0.02 0.02	0.01 0.00	0.00 0.00	0.00 -0.02	0.01 -0.01	0.00 0.00
Aug	0.12	0.00	-0.02	0.01	-0.02	0.00	0.00	-0.02	0.17	-0.01	0.01	-0.03	0.17	-0.02	-0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.00	0.00
Sep Oct	0.01 0.29	0.00 0.00	-0.08 -0.01	-0.03 0.02	-0.02 -0.05	-0.03 0.02	0.00 -0.01	0.05 0.03	0.03 0.26	-0.07 0.06	0.01 0.03	0.01 0.03	0.09 -0.08	-0.02 -0.01	-0.01 0.03	0.02 0.06	-0.02 0.10	0.00 -0.01	0.01 0.02	0.02 0.01	0.02 0.02	-0.03 0.00	0.00 0.00
Nov	0.29	0.00	-0.01	-0.02	-0.05	-0.02	-0.01	-0.03	0.20	0.00	0.03	0.03	0.05	-0.01	-0.01	0.08	0.01	0.00	0.02	0.01	-0.02	-0.02	0.00
Dec	-0.36	-0.01	-0.07	0.00	-0.05	-0.02	0.00	-0.12	-0.16	-0.12	0.00	-0.01	0.06	-0.03	0.02	-0.08	-0.04	0.02	0.02	0.01	0.02	-0.02	0.00
Jan Feb	0.46 0.35	0.00 0.00	0.11 0.02	-0.02 0.02	0.10 0.05	0.03 -0.05	-0.01 0.00	0.12 0.13	0.22 0.20	0.15 0.02	0.02 0.00	0.03 0.01	0.07 0.02	-0.05 -0.04	0.01 0.00	-0.07 0.08	0.06 0.04	0.03 0.02	0.02 0.02	0.01 0.01	-0.02 0.00	-0.02 0.02	-0.01 0.00
Mar	0.07	0.00	0.15	0.05	0.12	-0.01	0.01	-0.07	-0.01	0.04	0.00	-0.02	-0.05	-0.03	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	-0.01
Apr	-0.48	0.00	-0.43	-0.04	-0.43	0.05	0.00	0.00	-0.05	0.01	0.00	-0.02	0.09	-0.02	0.01	-0.04	-0.05	0.00	0.01	0.00	-0.03	-0.01	0.00
May Jun	0.20 0.21	0.00 0.00	0.13 -0.01	0.00 -0.01	0.09 -0.01	0.01 0.01	0.03 0.00	0.00 -0.10	0.06 0.32	0.01 -0.05	-0.02 -0.01	0.00 0.06	-0.03 0.10	0.01 0.04	0.02 -0.02	0.00 0.12	0.03 -0.02	0.00 0.00	0.01 0.02	0.02 0.03	0.00 0.05	0.02 0.01	-0.01 0.00
Jul	0.38	0.00	-0.02	-0.01	0.02	-0.02	-0.01	0.08	0.32	0.05	0.08	-0.02	0.03	0.03	0.01	0.04	0.08	0.00	0.00	0.02	-0.03	0.02	0.01
Aug	-0.14	0.00	-0.09	0.00	-0.08	-0.03	0.01	0.00	-0.05	0.03	-0.05	-0.04	-0.10	0.02	0.01	0.04	-0.04	0.01	0.00	0.02	0.04	0.01 0.01	0.00
Sep Oct	-0.02 0.21	0.00 0.00	0.00 0.05	0.06 -0.07	-0.04 0.06	-0.01 0.05	0.00 -0.01	0.03 -0.13	-0.06 0.29	-0.02 0.06	-0.03 0.04	-0.02 0.01	0.08 0.00	-0.04 0.02	0.01 0.03	-0.01 0.07	-0.02 0.03	0.01 0.02	0.01 0.01	0.00 -0.01	-0.04 0.00	0.01	0.00 0.00
Nov	-0.34	0.00	-0.12	0.02	-0.15	0.02	0.01	0.07	-0.30	-0.12	-0.06	0.03	-0.11	-0.07	-0.01	-0.07	0.05	0.00	0.03	0.01	0.05	-0.01	0.00
Dec 2019 Jan	0.18 0.16	0.00 0.00	-0.03 0.02	-0.02 0.01	0.01 0.06	-0.03 -0.06	0.01 0.01	-0.02 0.07	0.23 0.07	-0.02 0.13	0.02 0.04	0.01 -0.02	0.07 -0.19	0.00 0.03	0.03 0.03	0.06 -0.03	0.03 0.02	0.01 0.00	0.03 0.03	0.01 -0.01	0.00 0.01	-0.01 0.02	0.00 0.00
Feb	-0.04	0.00	0.02	0.00	0.08	-0.00	-0.02	-0.11	0.03	-0.07	-0.04	0.02	0.08	0.03	0.02	0.06	-0.06	0.00	0.00	-0.02	0.00	-0.01	0.00
Mar	-6.92	-0.01	-0.57	-0.06	-0.50	-0.02	0.01	-0.33	-6.01	-1.05	-0.54	-0.89	-0.09	-0.01	-0.06	-0.17	-0.57	0.00	-1.23	-0.94	-0.21	-0.28	-0.01
Apr May	-20.04 2.39	-0.04 0.01	-2.76 0.84	-0.08 0.06	-2.39 0.76	-0.14 0.00	-0.09 0.01	-2.48 0.35	-14.73 1.20	-2.84 1.22	-1.16 0.20	-1.79 0.02	-0.94 -0.14	-0.36 0.12	-0.35 -0.10	-1.63 -0.30	-1.45 -0.05	0.01 0.01	-1.35 0.21	-1.54 0.07	-0.61 -0.11	-0.62 0.04	-0.13 0.00
Jun	8.68	0.02	1.30	0.09	1.06	0.07	0.06	1.14	6.21	2.77	0.59	0.25	0.54	0.10	-0.05	0.51	0.65	0.00	0.30	0.16	0.27	0.07	0.03
Contribution to growth, la	latest month on san	ne month a year	rago																				
	EDLE	EDLF	EDLG	EDLH	EDLI	EDLJ	EDLK	EDLL	EDLM	EDLN	EDLO	EDLP	EDLQ	EDLR	EDLS	EDLT	EDLU	EDLV	EDLW	EDLX	EDLY	EDLZ	EDMA
2018 Jun	1.78	-0.03	0.24	0.01	0.22	-0.06	0.06	0.06	1.51	0.34	0.13	0.10	0.17	-0.08	0.12	0.34	0.25	0.03	0.04	-0.02	0.05	0.03	0.00
Jul Aua	2.11 1.96	-0.03 -0.03	0.25 0.21	0.06 0.08	0.18 0.12	-0.02 -0.02	0.03 0.04	0.09 -0.01	1.80 1.80	0.50 0.42	0.11 0.12	0.05 0.07	0.28 0.41	-0.11 -0.09	0.12 0.10	0.41 0.38	0.23 0.21	0.07 0.08	0.04 0.04	0.01 0.03	0.02 0.01	0.03 -0.01	0.00 0.01
Sep	1.71	-0.03	-0.02	0.02	-0.01	-0.06	0.03	0.06	1.70	0.33	0.11	0.11	0.45	-0.09	0.11	0.33	0.15	0.08	0.05	0.06	0.03	-0.02	0.01
Oct Nov	2.11 1.92	-0.02 -0.02	-0.08 -0.11	0.03 0.00	-0.12 -0.09	-0.01 -0.04	0.02 0.02	0.20 0.04	2.01 2.01	0.39 0.46	0.12 0.15	0.13 0.14	0.35 0.41	-0.05 -0.09	0.10 0.07	0.43 0.39	0.21 0.18	0.06 0.06	0.08 0.10	0.12 0.11	0.04 0.04	-0.01 -0.01	0.02 0.02
Dec	1.92	-0.02	-0.16	0.00	-0.09	-0.04	0.02	-0.23	1.65	0.48	0.15	0.14	0.41	-0.09	0.07	0.39	0.10	0.00	0.10	0.09	0.04	-0.01	0.02
Jan	1.63	-0.02	-0.03	0.01	-0.09	0.02	0.03	0.06	1.61	0.47	0.15	0.12	0.49	-0.23	0.06	0.09	0.14	0.10	0.14	0.08	0.02	-0.05	0.00
Feb Mar	2.32 2.30	-0.01 -0.01	-0.04 0.12	0.05 0.12	0.02 0.18	-0.12 -0.17	0.03 0.02	0.27 0.31	2.09 1.87	0.45 0.57	0.19 0.22	0.16 0.12	0.58 0.41	-0.31 -0.33	0.05 0.05	0.28 0.23	0.27 0.25	0.13 0.14	0.15 0.15	0.09 0.09	0.03 0.02	-0.01 -0.05	0.00 -0.01
Apr	1.48	-0.01	-0.24	0.00	-0.22	-0.05	0.03	0.23	1.50	0.47	0.18	0.07	0.47	-0.33	0.06	0.11	0.17	0.14	0.14	0.10	-0.02	-0.05	-0.02
May	1.36	-0.01	-0.06	0.02	-0.17	0.06	0.04	0.15	1.27	0.28	0.11	0.05	0.42	-0.29	0.07	0.12	0.20	0.12	0.15 0.16	0.12	-0.03	-0.03	-0.02
Jun Jul	1.26 1.38	0.00 0.00	-0.21 -0.27	0.01 -0.03	-0.24 -0.20	0.03 -0.04	0.00 0.00	0.01 0.09	1.46 1.56	0.25 0.17	0.05 0.13	0.10 0.06	0.52 0.54	-0.23 -0.17	0.06 0.07	0.25 0.19	0.09 0.19	0.09 0.07	0.16	0.14 0.16	0.02 0.01	-0.03 0.00	-0.03 -0.03
Aug	1.12	0.00	-0.33	-0.04	-0.26	-0.06	0.02	0.11	1.34	0.21	0.07	0.05	0.27	-0.13	0.09	0.22	0.15	0.07	0.15	0.16	0.04	0.01	-0.03
Sep	1.09	-0.01	-0.26	0.06	-0.28	-0.03	0.01	0.09	1.26	0.27	0.03	0.03	0.27	-0.15	0.11	0.19	0.14	0.08	0.15	0.14	-0.01	0.04	-0.03
Oct Nov	1.01 0.53	-0.01 -0.01	-0.19 -0.29	-0.04 0.01	-0.17 -0.33	0.00 0.03	0.01 0.03	-0.07 0.03	1.28 0.79	0.27 0.05	0.04 -0.03	0.01 0.01	0.34 0.17	-0.12 -0.16	0.12 0.12	0.20 0.09	0.07 0.12	0.11 0.11	0.14 0.15	0.12 0.11	-0.04 0.02	0.05 0.06	-0.03 -0.03
Dec	1.08	0.00	-0.24	-0.01	-0.28	0.02	0.03	0.13	1.18	0.14	-0.01	0.03	0.19	-0.13	0.13	0.22	0.19	0.10	0.16	0.11	0.01	0.06	-0.02
2019 Jan Feb	0.78 0.39	0.00 0.00	-0.33 -0.30	0.02 0.00	-0.32 -0.29	-0.08 -0.03	0.06 0.03	0.08 -0.16	1.02 0.85	0.12 0.03	0.02 -0.03	-0.02 -0.02	-0.07 -0.01	-0.05 0.03	0.15 0.17	0.27 0.25	0.16 0.06	0.07 0.05	0.17 0.15	0.10 0.07	0.04 0.04	0.09 0.07	-0.02 -0.02
Mar	-6.62	0.00	-0.30	-0.11	-0.29 -0.91	-0.03	0.03	-0.16 -0.42	-5.17	-1.06	-0.03	-0.02	-0.01	0.03	0.17	0.25	-0.51	0.05	-1.09	-0.87	-0.18	-0.21	-0.02
Apr	-24.98	-0.04	-3.19	-0.14	-2.72	-0.23	-0.06	-2.75	-18.97	-3.75	-1.67	-2.56	-1.02	-0.26	-0.26	-1.42	-1.83	0.06	-2.37	-2.33	-0.73	-0.78	-0.14
May Jun	-23.33 -16.85	-0.04 -0.02	-2.68 -1.67	-0.10 -0.03	-2.23 -1.41	-0.23 -0.18	-0.08 -0.03	-2.49 -1.51	-18.10 -13.62	-2.84 -0.66	-1.49 -1.02	-2.53 -2.40	-1.10 -0.79	-0.19 -0.15	-0.36 -0.38	-1.64 -1.37	-1.89 -1.36	0.07 0.07	-2.22 -2.00	-2.29 -2.19	-0.80 -0.64	-0.77 -0.73	-0.12 -0.10
oun	10.00	0.02	1.07	0.00	1.41	0.10	0.00	1.01	10.02	0.00	1.02	2.40	0.10	0.10	0.00	1.01	1.50	0.01	2.00	2.10	0.04	0.70	0.10

seasonally adjusted 2016=100

The GVA output is designated as a National Statistic.
 Estimates cannot be regarded as accurate to the last digit shown.
 A complete run of data is available on the ONS website.
 Contributions are based on output GVA growth
 Please use additional caution when aggregating individual contributions for April - June 2020, as the larger-than-usual growth rates mean that, when summed, the rounded contributions may not accurately represent the higher level contribution being calculated.

Sources: For further information on these data please telephone 01633 456724 or E-mail gdp@ons.gov.uk