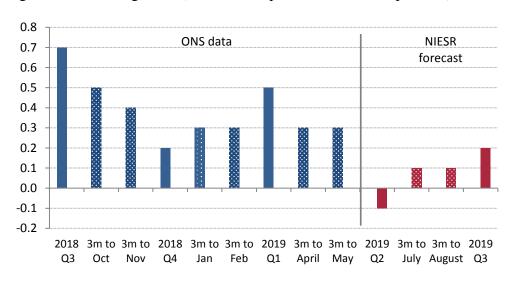


NIESR MONTHLY GDP TRACKER: July 2019

UK economy narrowly avoids recession

Figure 1: UK GDP growth (3 months on previous 3 months, per cent)



Source: NIESR, ONS

Note: the solid bars show the 3m/3m growth rate for complete calendar quarters and the shaded areas show rolling 3m/3m growth rate for the intervening months. There may be inconsistencies in the growth rate arising from rounding.

Main points

- The UK economy is on course to contract by 0.1% in the second quarter of 2019. Two quarters of contraction would mean that the economy is in a technical recession, but the initial outlook for the third quarter of 2019 is for growth of 0.2% (figure 1). If correct, that would still imply that the economy has lost significant moment since the first quarter.
- According to new ONS data published this morning, the UK economy expanded by 0.3 per cent in the three months to May. This outturn was higher than the 0.1 per cent that we forecast last month for the same period due to higher than expected electricity production.

Janine Boshoff, Economist in the Macroeconomic Modelling and Forecasting team, said "Our latest estimate implies that the economy will narrowly avoid a technical recession in the middle quarters of this year. That said, the latest ONS data and recent surveys suggest that the economy has lost considerable momentum since the first quarter. This reflects the impact of Brexit-related uncertainty and slower growth in the global economy outside of the United States. The near-term outlook for the UK economy continues to depend on the outcome of the Brexit negotiations."

Forecast news

Figure 2 shows how our short-term forecasts for recent quarters have changed as new information has become available. The latest monthly data was stronger than we had expected last month, and we have revised our estimate for a contraction in the second quarter of 2019 to 0.1 per cent from -0.2 per cent. Even after considering the upward revision, this is a deteriorating trajectory compared to the positive outcomes recorded in quarter one.

Figure 2: Evolution of the NIESR quarterly GDP forecast (3 months on previous 3 months, per cent)

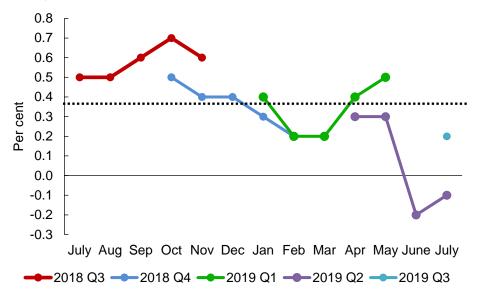


Figure 3 shows a heat map of the data surprises across sectors in the monthly data, highlighting the sectors where the surprises are large relative to the volatility of the output data. In the production sector, electricity production surprised to the upside, with all other sectors performing in line with expectations.

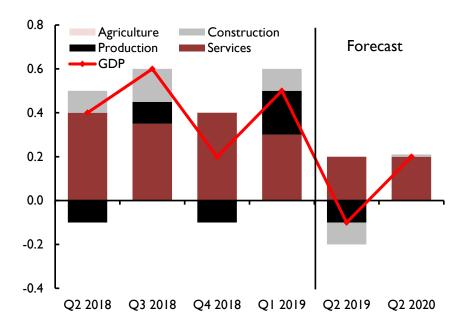
Figure 3: Surprises in monthly data

	Business services and finance	Government	Distribution , Hotels and Restaurants	Transport, Storage and Communication	Manufacturing	Electricity	Extraction	Water Supply, Sewerage, Waste Management	Construction	Agriculture
Jun-18	-1.7	0.0	0.0	0.7	0.1	-0.3	-0.8	1.9	0.9	-0.8
Jul-18	1.1	-1.5	0.7	-1.3	-0.1	0.5	1.4	-0.2	-0.1	0.2
Aug-18	-0.6	-0.7	-0.5	0.7	-0.4	1.5	2.3	0.7	-0.9	-0.2
Sep-18	-0.6	0.7	-1.9	0.4	0.0	-0.6	0.8	-1.0	0.7	0.2
Oct-18	1.1	1.5	0.1	-1.8	-1.5	-1.3	1.6	-0.9	-0.3	0.2
Nov-18	-0.6	0.0	1.0	0.0	-0.1	-1.8	-0.3	-0.5	0.0	0.2
Dec-18	-0.6	0.0	-0.7	-0.4	-1.6	-1.3	0.6	0.7	-2.1	0.5
Jan-19	-1.4	-0.7	1.3	1.1	0.6	-0.8	0.6	-1.0	1.1	-2.5
Feb-19	0.3	1.5	0.7	0.9	1.6	-0.8	1.8	-0.7	0.5	0.8
Mar-19	0.0	-0.7	0.1	-1.2	2.3	0.1	1.8	-1.2	-1.2	0.0
Apr-19	-1.4	-1.8	-0.1	0.6	-5.1	3.1	-0.8	-0.2	-0.8	0.0
May-19	-0.6	-0.1	-0.1	-0.8	-0.9	3.6	0.1	0.8	0.2	0.0

Note: Cells shows forecast errors as a fraction of the standard deviation of errors for each series. Cells coloured red are when outturns are more than one standard deviation lower than expected and cells coloured green are when outturns are more than one standard deviation higher than expected.

Sectoral detail

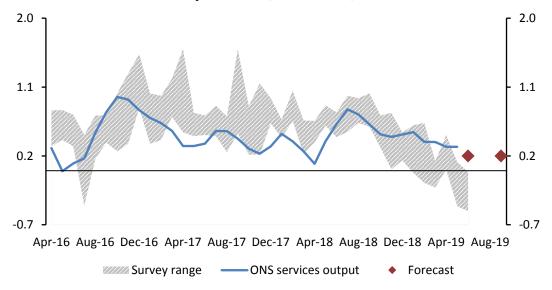
Economic contraction of 0.1 per cent in the second quarter is expected to be mainly driven by the production and construction sectors, with a small positive contribution from the service sector (figure 4). The reduced positive contribution of the service sector points to some underlying weakness in the economy.



Services (80 per cent of GDP)

According to ONS, growth in the service sector was 0.3 per cent in the three months to May, 0.2 percentage points higher than our previous estimate. Within the service sector, official data shows that wholesale, retail and the motor trade sectors made positive contributions to growth in the three months to May.

Figure 5: ONS service sector growth (3 months on previous 3 months, per cent) compared with swathe of business survey balances (standardised)



Note: The shaded swathe shows the highest and lowest values each month of a range of business survey balances that have been standardised so that they have the same mean and standard deviation as the quarterly growth of the ONS series. Source: ONS, CBI, Markit, Bank of England Agents, EC, NIESR calculations.

We expect the service sector to have grown by 0.2 per cent in the second quarter, as a fairly strong performance in quarter one has been followed by lower growth in April and May and likely stagnation in June (figure 5). The headline business activity balance in the IHS

Markit/CIPS UK services PMI survey fell from 51 in May to 50.2 in June, the lowest reading since the 48.9 recorded in March this year, when confidence dipped ahead of the original Brexit departure date. This fall in the UK services PMI reflects a similar weakness in global services activity which has also eased over this period as reflected by the J.P. Morgan Global Services PMI survey.

The EU-collected UK services confidence indicator also points to the possibility of an imminent contraction in the second quarter. The indicator remained in negative territory for the eighth consecutive month, posting -14.4 in June. This represents the longest negative run in the indicator history since the global financial crisis. Based on recent trends we expect service sector growth to remain at around 0.2 per cent in the third quarter of 2019.

Production (14 per cent of GDP)

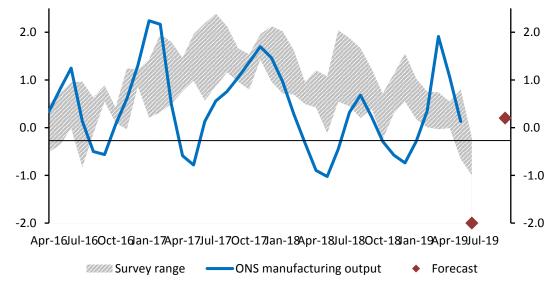
Production output rose by 0.4 per cent in the three months to May. The outturn was much stronger than the forecast of zero per cent growth that we published last month.

The production sector comprises manufacturing; mining and quarrying; electricity gas, steam and air conditioning; water supply and sewerage; and oil and gas extraction. The largest of these sectors is manufacturing, worth 10 per cent of GDP.

Manufacturing (10 percent of GDP)

Within production, output in the manufacturing sector rose by 0.1 per cent in the three months to May, in line with what we had pencilled in last month.

Figure 6: ONS manufacturing sector growth (3 months on previous 3 months, per cent) compared with swathe of business survey balances (standardised)



Note: The shaded swathe shows the highest and lowest values each month of a range of business survey balances that have been standardised so that they have the same mean and standard deviation as the quarterly growth of the ONS series. Source: ONS, CBI, Markit, Bank of England Agents, NIESR calculations

The latest ONS data shows a moderation in output throughout the manufacturing sector that has moved more in line with the survey evidence (figure 6). For June, the IHS Markit/CIPS UK manufacturing PMI balance fell to its lowest level since February 2013. The index fell to 48.0 in June, down from 49.4 in May, where a balance above 50 is indicative of growth. The steady decline is linked to the unwinding of earlier pre-Brexit stockpiling, as manufacturers and their clients are scaling back output and new orders due to already high stock levels. It is expected that manufacturing output will contract by 2 per cent in the second quarter with the weakness partly due to comparison with what now appears to be an erratically strong first quarter. The J.P.Morgan Global Manufacturing PMI paralleled the negative manufacturing environment, falling to its lowest level in almost seven years. In June, the composite index declined to 49.4 from 49.8 in May.

Mining and quarrying

Mining and quarrying is a small and erratic component of the industrial production sub-component. Output in the three months to May was 0.2 per cent lower than in the previous three months, much weaker than the 1.2 per cent increase we had forecast last month.

Construction (6 per cent of GDP)

Construction output has been relatively flat since the start of the year until May. More recently though, on a three-month comparison, it was 1 per cent lower in May compared to the previous three months but not as weak the 0.7 per cent fall we had forecast last month.

The latest reading from the IHS Markit/CIPS construction PMI survey signals a sharp loss of growth momentum, with the headline business activity balance at 43.1 in June, a significant decline from the 48.6 reported in May. The decline represents the steepest reduction in construction output since April 2009 as survey respondents indicated that Brexit uncertainty continues to delay project start-ups.

Outlook for the whole economy in 2019

NIESR publishes a comprehensive global and UK macroeconomic forecast each quarter. Under the central scenario of our May forecast, which was conditioned on a soft Brexit, we were expecting GDP growth of 1.4 per cent in 2019. We emphasised in our latest report that the risks to that forecast were tilted to the downside because of economic and political uncertainties related to Brexit negotiations. This uncertainty continues to act as a drag on investment spending and is also a key risk going forward according to the Bank of England Decision Maker Panel.

Health warning:

The NIESR GDP Tracker provides a rolling monthly forecast for GDP growth. Our first estimate of growth for any particular quarter starts in the first month of that quarter and is then updated each month until the first official release in the second month of the following

quarter. So, for example, our first estimate of growth in the third quarter of 2019, is published this month and will then be updated three times (in August, September and October) before the ONS publishes its first estimate for the third quarter of 2019 in November. In other words, we publish four estimates of GDP for any particular quarter before the official release and change them as new evidence becomes available.

NIESR's short-term predictions of monthly GDP growth are based on bottom-up analysis of recent trends in the monthly sub-components of GDP. These predictions are constructed by aggregating statistical model forecasts of ten sub-components of GDP. The statistical models that have been developed make use of past trends in the data as well as survey evidence to build short-term predictions of the sub-components of monthly GDP. These provide a statistically-based guide to current trends based on the latest available data. Each month these predictions are updated as new ONS data and new surveys become available.

It is important to stress that the timelier NIESR guide to quarterly GDP growth is less reliable than the subsequent ONS data releases as its data content is lower, particularly for estimates of the current quarter which in some months will be based only on forecasts rather than hard data. To mitigate this issue, NIESR provides a guide to average errors based on past performance. NIESR also provides clear guidance on how the latest news has caused its estimates of GDP growth in the current and preceding quarter to change and thereby quantify how the short-term outlook is being affected by recent data releases.

As the bottom-up methodology for producing estimates of GDP growth for the current and preceding quarters is new, we do not yet have a long track record of estimates produced by this approach. To check how our methodology would work in real time we went back to late 2016 to produce judgement-free forecasts of GDP growth in future months based on the monthly data series available for the components in November 2016 (this is the earliest vintage currently available on the ONS website) and in each subsequent three months. These are shown in the table below, which has been updated to include estimates since we started producing the GDP Tracker in July 2018. We calculate the forecast quarter-on-quarter growth rates for the current quarter and compare these to the ONS first estimates of quarterly growth. The average absolute error for the quarters considered was 0.19 % points. The largest error was for 2018Q1 when our GDP tracker methodology would have expected growth to be 0.5%, 0.4% points higher than the ONS first estimate of GDP growth that was published in April 2018.

Forecast Error Analysis: Quarterly GDP growth (%)

Oughton	ONS first	ONS latest	NIESR nowcast*	Error in NIESR	ONS latest	
Quarter	estimate	estimate	INIESK HOWCAST.	nowcast**	– first	
2016Q4	0.6	0.9	0.7	-0.1	0.3	
2017Q1	0.3	0.4	0.6	-0.3	0.1	
2017Q2	0.3	0.3	0.4	-0.1	0.0	
2017Q3	0.4	0.5	0.4	0.0	0.1	
2017Q4	0.5	0.4	0.4	0.1	-0.1	
2018Q1	0.1	0	0.5	-0.4	-0.1	
2018Q2	0.4	0.4	0.0	0.4	0.0	
2018Q3	0.6	0.7	0.5	0.1	0.1	
2018Q4	0.2	0.2	0.4	-0.2	0.0	
2019Q1	0.5	0.5	0.2	0.3	0.0	
Average						
absolute				0.20	0.09	
error						

 $[\]ensuremath{^{*}}\xspace$ Made in the second month of the quarter, 3 months ahead of ONS first estimate

^{**} ONS first estimate - NIESR estimate

Notes for editors: For further information please contact the NIESR Press Office or Luca Pieri on 020 7654 1931/ l.pieri@niesr.ac.uk

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Table 1: Summary Table of GDP growth (2016=100)

		Index of Services - Components						Index of Production - Components					
2016=100	GDP	Index of	Business	Governme	Distribution,	Transport,	Index of		Electricity,		Water Supply,	Index of	Agriculture
	index	Services	services	nt and	Hotels and	Storage and	Production	Manufactu	gas, steam	Mining and	Sewerage and	Construction	Agriculture
			and finance	other services	Restaurants	Communicati ons		ring	and air conditioning	Quarrying	Waste Management		
	1000	793					140					60	7
Latest weights	1000	,,,,	334	220	133	106	170	101	12	17	10		, i
Nov-18	104.7	104.9	104.4	101.6	107.0	110.7	102.3	103.1	96.5	103.9	102.0	108.7	101.0
Dec-18	104.4	104.7	104.2	101.5	106.0	111.4	101.9	102.5	96.3	104.7	102.3	106.0	100.2
Jan-19	104.9	105.0	104.0	101.7	107.4	111.7	102.6	103.7	96.9	102.8	101.3	109.6	99.7
Feb-19	105.1	105.1	104.2	101.8	107.6	111.9	103.0	104.6	92.1	106.4	101.1	110.4	99.2
Mar-19	105.2	105.2	104.3	101.7	107.7	112.2	104.4	106.2	92.7	108.2	101.9	108.8	
April-19	104.9	105.3	104.2	101.6	107.7	113.4	101.4	101.8	96.1	105.2	102.2	108.3	99.0
May-19	105.1	105.3	104.3	101.6	107.8	113.2	102.8	103.2	98.2	105.6	103.1	109.0	99.0
Jun-19	105.1	105.3	104.3	101.5	107.8	113.4	102.6		95.8	106.0	103.1	108.4	
Jul-19	105.2	105.4	104.5	101.4	107.9	113.9	102.4	103.0	95.9	105.3	103.2	109.1	99.4
Aug-19	105.3	105.6	104.6	101.4	108.0	114.2	102.4		96.4	104.5	103.4	109.2	
Sep-19	105.4	105.6	104.7	101.4	108.0	114.3	102.4	103.0	96.9	103.9	103.5	109.3	99.6
Percentage change, 3 months on previous 3 months													
Feb-19	0.3	0.4	0.0	0.3	0.8	1.0	0.0	-	-1.9	0.2	-0.8	-0.5	1
Mar-19	0.5	0.4	-0.1	0.2		1.0	1.1	1.9	-2.8	1.0	-0.8	1.5	1
April-19	0.4	0.3	0.0	0.1	0.8	1.1	0.7	1.1	-3.0	2.7	-0.1	1.0	
May-19	0.3	0.3	0.1	0.0	0.7	1.1	0.4	0.1	0.6	1.6	0.8	0.0	
Jun-19	-0.1	0.2	0.1	-0.2	0.2	1.3	-1.0	-2.0	3.0	-0.2	1.3	-0.9	
Jul-19	0.1	0.1 0.2	0.1 0.2	-0.2 -0.2	0.1	0.9	-0.4 -0.4	-1.0 -0.6	3.2 0.4	-0.9 -1.0	1.4 0.8	-0.3 0.2	
Aug-19 Sep-19	0.1	0.2	0.2	-0.2	0.1	0.8	0.1	0.2	-0.3	-1.0	0.6		
3ep-13	0.2	0.2	0.3	-0.1	0.2	0.7	0.1	0.2	-0.5	-1.0	0.0	0.0	0.4
Percentage change, month on same month in previous year													
Feb-19	2.0	2.3	1.2	1.4	4.3	5.4	-0.1	0.7	-8.4	4.3	0.1	3.6	-1.7
Mar-19	2.1	2.1	0.9	1.1	4.6	4.8	1.5	2.7	-10.3	9.4	0.6	4.1	-1.5
April-19	1.5	1.9	0.7	1.0	3.8	5.7	-1.0	-1.0	-3.9	-0.7	1.9	3.1	-1.4
May-19	1.6	1.6	0.8	1.0	2.4	4.8	1.0	0.0	3.7	3.9	1.9	1.8	-1.3
Jun-19	1.1	1.5	0.7	0.8	2.3	4.1	-0.2	-0.9	0.9	3.2	0.0	0.4	-0.8
Jul-19	1.0	1.3	0.5	0.7	1.4	4.4	-0.9	-0.7	-2.9	-0.8	-0.1	0.9	-0.5
Aug-19	0.9	1.2	0.7	0.4	1.7	3.7	-0.8	-0.5	-2.0	-2.4	0.1	1.0	-0.5
Sep-19	1.0	1.4	0.9	0.3	2.6	3.3	-0.4	-0.6	-0.2	0.2	0.7	-0.4	-0.9
		ge change, m					1	1				1	ا ا
Feb-19	0.2	0.1	0.2	0.1	0.2	0.2	0.4	0.9	-5.0	3.5	-0.2	0.7	
Mar-19	0.1	0.1	0.1	-0.1	0.1	0.3	1.4	1.5	0.7	1.7	0.8	-1.4	1
April-19	-0.4	0.1	-0.1	-0.1	0.0	1.1	-2.9	-4.1	3.7	-2.8	0.3	-0.5	1
May-19	0.3	0.0	0.1	0.0	0.1	-0.2	1.3	1.4	2.2	0.4	0.9	0.6	
Jun-19 Jul-19	0.0	0.0	0.0	-0.1 0.0	0.0 0.1	0.2 0.5	-0.2 -0.2	0.1 -0.2	-2.4 0.0	0.4 -0.7	0.0	-0.5	
	0.1	0.1	0.1									0.6	
Aug-19	0.1	0.1 0.1	0.1 0.1	0.0	0.1	0.2	0.0	0.0 -0.1	0.6	-0.8 -0.6	0.2	0.1	
Sep-19	0.1	0.1	0.1	0.0	0.0	0.1	0.0	-0.1	0.5	-0.6	0.2	0.1	0.1

Note: There may be inconsistencies in the growth rates arising from rounding.