

## GDP growth of 0.5 per cent in 2017Q1

Embargo until 13.00 hours on 7<sup>th</sup> April 2017

Our monthly estimates of GDP suggest that output grew by 0.5 per cent in the three months ending in March 2017 after growth of 0.5 per cent in the three months ending in February 2017.

James Warren, Research Fellow at NIESR, said "We estimate growth slowed slightly in the first quarter of 2017 to 0.5 per cent. A key component of this moderation has been relatively weak retail sales in the first two months of this year. Consumption is expected to moderate further this year as increasing inflation erodes households' purchasing power. We expect the Bank of England to look through this temporary shock to inflation and for monetary policy to remain accommodative."

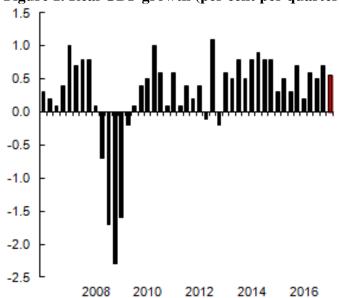


Figure 1. Real GDP growth (per cent per quarter)

Source: ONS, NIESR. Note: red bar indicates NIESR estimate for 2017Q1.

NIESR's latest quarterly forecast (published 1<sup>st</sup> February 2017) projected GDP growth of 1.7 per cent per annum in 2017 and 1.9 per cent in 2018 (see <a href="here">here</a> for the associated press release).

**Technical notes:** Our track record in producing early estimates of GDP suggests that our projection for the most recent three-month period has a root mean squared error (RMSE) of 0.224% point (for the full sample period 1999Q3-2015Q4) when compared to the first estimate produced by the ONS. For the period 2008Q1 to 2015Q4 the RMSE is 0.290% point. The impact of the adverse weather in 2010Q4 is a noticeable outlier. Excluding 2010Q4 from the analysis, the RMSE for the full sample period is 0.188% point, and for 2008Q1 to 2015Q4 the RMSE is 0.231% point. These comparisons can be made only for complete calendar quarters. Outside calendar quarters the figures are less reliable than this.

A paper describing the methodology used to produce the data was published in the February 2005 volume of the *Economic Journal*:

Mitchell, J. Smith, R. J., Weale, M. R., Wright, S. and Salazar, E. L. (2005) 'An Indicator of Monthly GDP and an Early Estimate of Quarterly GDP Growth', *Economic Journal*, No. 551, pp. F108-F129.

- Available from: <a href="http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0297">http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0297</a>

A paper describing the methodology used to produce the data for the inter-war period was published in the October 2012 volume of *Explorations in Economic History*:

Mitchell, J., Solomou, S. and Weale, M. (2012) 'Monthly GDP estimates for interwar Britain', *Explorations in Economic History*, Vol. 49, No. 4, pp. 543-556.

- Available from: <a href="http://www.journals.elsevier.com/explorations-in-economic-history/">http://www.journals.elsevier.com/explorations-in-economic-history/</a>

From April until October 2006 our estimates were computed using the Index of Services published by ONS. However this monthly series shows considerable volatility which has caused us some problems in estimating GDP. From our November 2006 press release we have therefore reverted to using a model of private services output based on indicator variables. This means that, while all our figures for calendar quarters are fully coherent with ONS data, our estimates of monthly private service output are not. The series can be thought of as indicating the underlying value of the ONS series.

**Notes for editors:** For further information please contact the NIESR Press Office or Luca Pieri on 020 7654 1931/1.pieri@niesr.ac.uk

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Table 1: Summary Table of Quarterly Growth Rates (2013=100)

			3 months ending in		Quarterly G	rowth %
	Monthly Data		month shown		per quarter	
	Industry	GDP	Industry	GDP	Industry	GDP
Jan-16	102.3	106.6	102.2	106.3	-1.2%	0.5%
Feb-16	102.1	106.1	102.0	106.2	-1.2%	0.2%
Mar-16	102.6	106.2	102.3	106.3	-0.3%	0.2%
Apr-16	105.0	106.9	103.2	106.4	1.0%	0.1%
May-16	104.4	106.7	104.0	106.6	2.0%	0.4%
Jun-16	104.4	107.1	104.6	106.9	2.2%	0.6%
Jul-16	104.5	107.4	104.4	107.1	1.1%	0.6%
Aug-16	104.2	107.5	104.4	107.3	0.3%	0.7%
Sep-16	103.9	107.6	104.2	107.5	-0.4%	0.5%
Oct-16	102.7	107.7	103.6	107.6	-0.8%	0.5%
Nov-16	105.1	108.7	103.9	108.0	-0.5%	0.6%
Dec-16	106.0	108.2	104.6	108.2	0.4%	0.7%
Jan-17	105.7	108.5	105.6	108.5	1.9%	0.8%
Feb-17	105.0	108.9	105.6	108.5	1.6%	0.5%
Mar-17	105.2	109.1	105.3	108.8	0.7%	0.5%

Table 2: Output by Sector (2013=100)

				Private	<b>Public</b>		
	<b>Industry</b>	Agriculture	Construction	<b>Services</b>	<b>Services</b>	GDP(B)	<b>GDP</b>
Jan-16	102.3	113.4	114.7	110.0	103.5	107.2	106.6
Feb-16	102.1	112.0	115.2	109.3	103.6	106.7	106.1
Mar-16	102.6	111.2	115.7	109.6	103.5	106.8	106.2
Apr-16	105.0	111.0	116.1	110.4	103.5	107.5	106.9
May-16	104.4	110.8	116.3	110.2	103.6	107.3	106.7
Jun-16	104.4	110.7	116.2	110.8	103.7	107.6	107.1
Jul-16	104.5	110.6	115.7	111.5	103.9	108.0	107.4
Aug-16	104.2	110.7	115.7	111.7	103.9	108.0	107.5
Sep-16	103.9	111.0	116.0	111.9	104.0	108.1	107.6
Oct-16	102.7	111.5	116.6	112.5	104.0	108.2	107.7
Nov-16	105.1	111.9	117.1	113.5	104.2	109.2	108.7
Dec-16	106.0	112.0	117.3	112.4	104.4	108.8	108.2
Jan-17	105.7	112.0	117.3	112.9	104.6	109.0	108.5
Feb-17	105.0	112.0	117.3	113.6	104.8	109.4	108.9
Mar-17	105.2	112.0	117.3	113.9	104.9	109.6	109.1

Table 3: Output in Quarter Ending in Month Shown (2013=100)

				<b>Private</b>	<b>Public</b>		
	<b>Industry</b>	Agriculture	Construction	<b>Services</b>	<b>Services</b>	GDP(B)	<b>GDP</b>
Jan-16	102.2	115.0	114.3	109.3	103.3	106.9	106.3
Feb-16	102.0	113.6	114.7	109.4	103.5	106.8	106.2
Mar-16	102.3	112.2	115.2	109.6	103.5	106.9	106.3
Apr-16	103.2	111.4	115.7	109.8	103.5	107.0	106.4
May-16	104.0	111.0	116.0	110.1	103.5	107.2	106.6
Jun-16	104.6	110.8	116.2	110.5	103.6	107.5	106.9
Jul-16	104.4	110.7	116.1	110.8	103.7	107.6	107.1
Aug-16	104.4	110.7	115.9	111.3	103.8	107.9	107.3
Sep-16	104.2	110.8	115.8	111.7	103.9	108.0	107.5
Oct-16	103.6	111.1	116.1	112.0	103.9	108.1	107.6
Nov-16	103.9	111.5	116.6	112.6	104.1	108.5	108.0
Dec-16	104.6	111.8	117.0	112.8	104.2	108.7	108.2
Jan-17	105.6	112.0	117.1	112.9	104.4	109.0	108.5
Feb-17	105.6	112.0	117.1	113.0	104.6	109.0	108.5
Mar-17	105.3	112.0	117.0	113.5	104.8	109.3	108.8

<u>Table 4: Growth in Quarter Ending in Month Shown over Previous Quarter (% at Annual Rate)</u>

				<b>Private</b>	<b>Public</b>		
	<b>Industry</b>	Agriculture	Construction	<b>Services</b>	<b>Services</b>	GDP(B)	<b>GDP</b>
Jan-16	-4.7%	-3.6%	4.8%	4.4%	3.5%	2.1%	2.1%
Feb-16	-4.7%	-9.2%	5.1%	3.1%	3.3%	0.9%	0.9%
Mar-16	-1.2%	-12.8%	5.0%	3.0%	2.0%	0.8%	0.8%
Apr-16	4.1%	-12.0%	5.0%	1.6%	0.8%	0.5%	0.5%
May-16	8.1%	-8.8%	4.6%	2.3%	0.0%	1.5%	1.4%
Jun-16	9.2%	-4.9%	3.5%	3.0%	0.4%	2.3%	2.3%
Jul-16	4.7%	-2.5%	1.4%	4.0%	0.8%	2.3%	2.5%
Aug-16	1.4%	-1.1%	-0.6%	4.8%	1.1%	2.3%	2.7%
Sep-16	-1.5%	0.0%	-1.4%	4.6%	1.2%	1.9%	2.3%
Oct-16	-3.2%	1.5%	0.2%	4.4%	0.8%	1.7%	2.0%
Nov-16	-1.8%	2.9%	2.5%	4.7%	0.9%	2.3%	2.5%
Dec-16	1.5%	3.7%	4.2%	3.9%	1.2%	2.6%	2.6%
Jan-17	7.9%	3.1%	3.5%	3.2%	1.8%	3.3%	3.3%
Feb-17	6.6%	1.9%	1.7%	1.2%	2.1%	2.1%	2.0%
Mar-17	2.8%	0.8%	0.0%	2.5%	2.2%	2.2%	2.2%

**ENDS**