## NATIONAL INSTITUTE OF ECONOMIC AND SOCIAL RESEARCH ESTIMATES OF MONTHLY GDP

### Embargo until 15.00 hours on 09<sup>th</sup> September 2014

Our monthly estimates of GDP suggest that output grew by 0.6 per cent in the three months ending in August after growth of 0.5 per cent in the three months ending in July 2014. This implies the UK economy has grown around 2.9 per cent when compared to the same period in 2013.

This estimate is consistent with the ONS' latest official quarterly estimate of GDP yet does not take account of the partially revised series released for the period 1997-2012. Once the complete revised series has been released later this month we will incorporate it into our next estimate on the 7th of October 2014.

NIESR's latest quarterly forecast (published 5<sup>th</sup> August 2014) projects GDP growth of 3 per cent per annum in 2014 and 2.3 per cent in 2015.

<u>Notes</u>

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 0.234% point (for the full sample period 1999Q3-2013Q4) when compared to the first estimate produced by the ONS. For the period 2008Q1 to 2013Q4 the RMSE is 0.334% 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 0.195% point, and for 2008Q1 to 2013Q4 the RMSE is 0.258% 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: http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0297

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 inter-war Britain', *Explorations in Economic History*, Vol. 49, No. 4, pp. 543-556. Available from: <u>http://www.journals.elsevier.com/explorations-in-economic-history/</u>

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.

For more information please telephone NIESR on 020 7222 7665.

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				3 months ending in		Quarterly Growth %		
	Monthly Data		month shown		per quarter			
	Industry	GDP	Industry	GDP	Industry	GDP		
Jan-13	94.7	101.5	95.0	101.5	-0.6%	0.1%		
Feb-13	95.4	102.5	95.2	101.8	0.6%	0.4%		
Mar-13	95.5	102.3	95.2	102.1	0.4%	0.5%		
Apr-13	95.4	102.3	95.4	102.4	0.5%	0.9%		
May-13	95.4	102.6	95.4	102.4	0.3%	0.6%		
Jun-13	96.6	103.1	95.8	102.7	0.6%	0.7%		
Jul-13	96.7	103.3	96.2	103.0	0.8%	0.6%		
Aug-13	95.8	103.3	96.4	103.2	1.0%	0.8%		
Sep-13	96.8	104.2	96.4	103.6	0.7%	0.8%		
Oct-13	96.8	103.8	96.5	103.8	0.2%	0.8%		
Nov-13	96.7	104.2	96.8	104.1	0.4%	0.8%		
Dec-13	97.1	104.9	96.9	104.3	0.4%	0.7%		
Jan-14	96.9	104.6	96.9	104.5	0.4%	0.7%		
Feb-14	97.8	105.4	97.3	104.9	0.5%	0.8%		
Mar-14	97.9	105.4	97.5	105.1	0.7%	0.8%		
Apr-14	98.2	106.0	98.0	105.6	1.1%	1.0%		
May-14	97.5	105.8	97.9	105.7	0.6%	0.7%		
Jun-14	97.8	106.3	97.8	106.0	0.3%	0.8%		
Jul-14	98.3	106.3	97.9	106.1	-0.1%	0.5%		
Aug-14	98.3	106.5	98.1	106.4	0.3%	0.6%		

# Table 1: Summary Table of Quarterly Growth Rates2010=100

### Table 2: Output by Sector (2010=100)

				Private	Public		
	Industry	Agriculture	Construction	Services	Services	GDP(B)	GDP
Jan-13	94.7	101.5	92.8	103.6	101.6	101.6	101.5
Feb-13	95.4	100.1	92.6	105.2	101.9	102.6	102.5
Mar-13	95.5	100.2	92.9	104.6	102.1	102.4	102.3
Apr-13	95.4	101.9	93.7	104.7	102.1	102.5	102.3
May-13	95.4	102.9	94.6	105.3	101.7	102.8	102.6
Jun-13	96.6	103.3	95.6	105.8	101.6	103.4	103.1
Jul-13	96.7	103.1	96.7	105.7	101.9	103.5	103.3
Aug-13	95.8	103.0	97.3	105.8	102.1	103.5	103.3
Sep-13	96.8	102.9	97.6	106.9	102.6	104.4	104.2
Oct-13	96.8	102.9	97.4	106.1	103.0	103.9	103.8
Nov-13	96.7	103.1	97.5	106.9	102.9	104.3	104.2
Dec-13	97.1	103.5	97.9	108.0	102.9	105.0	104.9
Jan-14	96.9	104.1	98.7	107.3	103.2	104.7	104.6
Feb-14	97.8	104.4	99.2	108.5	103.2	105.6	105.4
Mar-14	97.9	104.4	99.4	108.5	103.2	105.6	105.4
Apr-14	98.2	104.2	99.2	109.4	103.2	106.2	106.0
May-14	97.5	104.1	99.1	109.1	103.5	106.0	105.8
Jun-14	97.8	104.0	99.0	109.9	103.6	106.5	106.3
Jul-14	98.3	104.0	99.0	109.8	103.7	106.5	106.3
Aug-14	98.3	104.0	99.0	110.0	104.0	106.7	106.5

### Table 3: Output in Quarter Ending in Month Shown (2010=100)

				Private	Public		
	Industry	Agriculture	Construction	Services	Services	GDP(B)	GDP
Jan-13	95.0	104.0	93.3	103.6	101.6	101.6	101.5
Feb-13	95.2	102.0	93.0	104.1	101.7	101.9	101.8
Mar-13	95.2	100.6	92.8	104.5	101.9	102.2	102.1
Apr-13	95.4	100.7	93.1	104.8	102.1	102.5	102.4
May-13	95.4	101.7	93.7	104.9	102.0	102.6	102.4
Jun-13	95.8	102.7	94.6	105.3	101.8	102.9	102.7
Jul-13	96.2	103.1	95.6	105.6	101.7	103.2	103.0
Aug-13	96.4	103.1	96.5	105.8	101.9	103.5	103.2
Sep-13	96.4	103.0	97.2	106.2	102.2	103.8	103.6
Oct-13	96.5	102.9	97.4	106.3	102.6	103.9	103.8
Nov-13	96.8	103.0	97.5	106.6	102.8	104.2	104.1
Dec-13	96.9	103.2	97.6	107.0	102.9	104.4	104.3
Jan-14	96.9	103.6	98.1	107.4	103.0	104.7	104.5
Feb-14	97.3	104.0	98.6	107.9	103.1	105.1	104.9
Mar-14	97.5	104.3	99.1	108.1	103.2	105.3	105.1
Apr-14	98.0	104.3	99.3	108.8	103.2	105.8	105.6
May-14	97.9	104.2	99.2	109.0	103.3	105.9	105.7
Jun-14	97.8	104.1	99.1	109.5	103.4	106.2	106.0
Jul-14	97.9	104.0	99.0	109.6	103.6	106.3	106.1
Aug-14	98.1	104.0	99.0	109.9	103.7	106.6	106.4

				Private	Public		
	Industry	Agriculture	Construction	Services	Services	GDP(B)	GDP
Jan-13	-2.4%	-8.5%	5.2%	0.6%	-2.4%	0.0%	0.3%
Feb-13	2.3%	-15.7%	0.6%	1.0%	-0.4%	1.1%	1.5%
Mar-13	1.7%	-18.3%	-2.5%	2.6%	1.2%	2.0%	2.4%
Apr-13	2.0%	-12.0%	-1.1%	4.8%	1.8%	3.5%	3.6%
May-13	1.1%	-1.2%	3.1%	3.0%	1.1%	2.5%	2.3%
Jun-13	2.5%	8.6%	8.0%	3.2%	-0.4%	2.8%	2.4%
Jul-13	3.4%	9.8%	11.3%	3.1%	-1.3%	2.9%	2.5%
Aug-13	4.0%	5.9%	12.5%	3.5%	-0.4%	3.5%	3.2%
Sep-13	2.7%	1.2%	11.5%	3.4%	1.6%	3.5%	3.6%
Oct-13	1.0%	-0.7%	7.9%	2.6%	3.3%	2.8%	3.0%
Nov-13	1.7%	-0.5%	4.0%	3.3%	3.7%	2.9%	3.3%
Dec-13	1.8%	0.8%	1.7%	3.2%	2.8%	2.3%	2.7%
Jan-14	1.8%	2.5%	2.6%	4.2%	1.7%	2.8%	3.0%
Feb-14	2.1%	3.9%	4.8%	5.0%	1.2%	3.5%	3.4%
Mar-14	2.8%	4.3%	6.3%	4.2%	1.2%	3.5%	3.1%
Apr-14	4.5%	3.0%	5.0%	5.3%	0.8%	4.3%	3.9%
May-14	2.5%	1.0%	2.4%	4.0%	0.6%	3.1%	2.9%
Jun-14	1.2%	-0.8%	0.0%	5.2%	0.8%	3.5%	3.5%
Jul-14	-0.4%	-1.2%	-0.8%	3.0%	1.5%	2.1%	2.1%
Aug-14	1.1%	-0.9%	-0.7%	3.4%	1.9%	2.5%	2.6%

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

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