

# Economic Review, November 2013

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## Abstract

This note draws together key economic stories from National Statistics produced over the latest month. This is in order to paint a coherent picture of the UK's economic performance using recent economic data.

## Key points

- The UK's economic recovery appears to have strengthened during Q3 2013. The preliminary estimate of Gross Domestic Product (GDP) indicated that output grew by 0.8% during the three months to September.
- The extent of the contraction in construction output during the downturn was cushioned by a large increase in public sector and infrastructure activity. This effect is reduced in more recent periods, when construction output has instead been supported by a pick-up in private sector new housing activity.
- The economic position of households remains under pressure. Following relatively strong growth in Real Households' Disposable Income (RHDI) during the downturn, RHDI has been broadly flat since Q3 2009, despite cumulative real GDP growth of 4.2% over this period. This analysis suggests that this relationship between RHDI and GDP growth during a period of economic recovery is broadly similar to previous experience.
- The proportion of household income accounted for by expenditure on 'essential' household goods has risen from 19.9% in 2003 to 27.3% in 2013. The proportion accounted for by gas and electricity has risen from 1.8% in 2003 to 3.1% in 2013, despite very little overall change in the volume of household energy consumption.

## Introduction

The UK's economic recovery appears to have strengthened during the third quarter of 2013 according to a wide range of indicators. Estimates of output in the services and construction industries both show an acceleration between the second and third quarters, while retail sales volumes grew at the fastest quarterly rate since the start of 2008. The labour market continued its recent improvement, with employment and hours rising and unemployment falling. Following a period of relatively flat output growth during 2011 and 2012, the UK economy has now grown for three consecutive quarters, although output remains 2.6% below its pre-downturn peak.

However, the economic position of households remains under pressure as prices continue to rise more quickly than earnings. This Review highlights the recent weakness in household income growth compared with the growth of total output, although the two variables have behaved in a broadly similar manner to that in previous economic downturns. Real Household Disposable Income (RHDI) has changed little since Q2 2009, despite cumulative real GDP growth of 4.2% over this period.

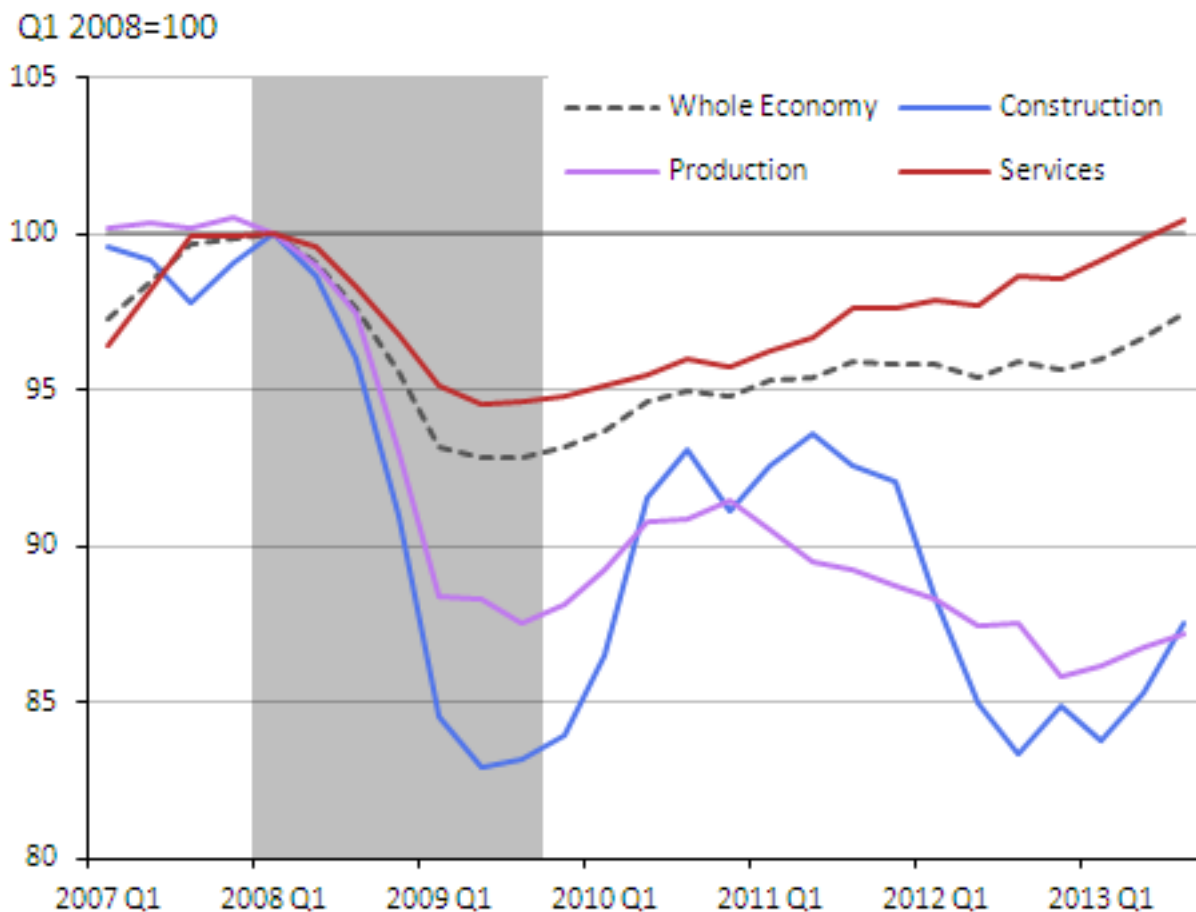
This Review also examines the squeeze placed on household budgets by recent increases in the prices of essential items. In particular, the proportion of households' disposable income which is accounted for by expenditure on gas and electricity has risen from 1.8% to 3.1% between 2003 and 2013, while the volume of these household purchases has changed little.

## **Preliminary estimate of GDP**

The preliminary estimate of Gross Domestic Product (GDP) in the three months to September indicated that total output grew by 0.8%. All the three main sectors made positive contributions to growth for the second consecutive quarter. The output of the services sector grew by 0.7 % (contributing 0.6 percentage points to total output), while the production and construction sectors both contributed 0.1 percentage points to quarterly growth. The last time all three sectors expanded simultaneously for two consecutive quarters was in mid-2010.

The data also indicated that UK output growth continues to be driven largely by the performance of the services sector. Taken together, Business Services & Finance and Distribution, Hotels & Restaurants accounted for more than half of the growth recorded during the three months to September, and services output as a whole is now above its pre-downturn peak (Figure 1).

**Figure 1: UK output, by industry and in aggregate, Chain-Volume Measure (CVM), seasonally adjusted (SA), Q1 2008=100**



Source: Office for National Statistics

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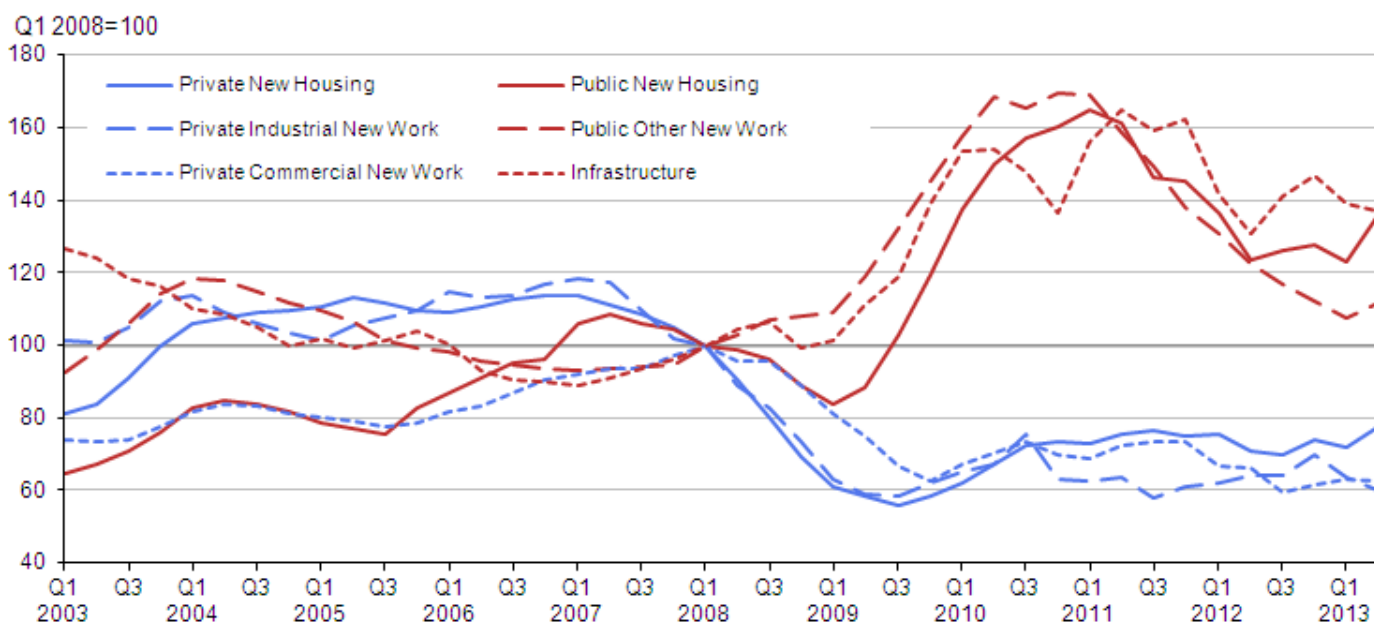
Despite a contraction during August, output in the production industries made a positive contribution in the quarter. Mining & Quarrying raised production output during the quarter, while output in the utilities industries fell at its fastest rate since early 2003. Manufacturing – which accounts for more than two-thirds of production output – contracted by 1.2% during August, yet made a positive contribution to overall GDP growth in the quarter of 0.1 percentage points. Much of the monthly decline in August was due to weakness in pharmaceuticals production, food production and the output of computing and electronic machinery, while the metal products industry expanded relatively strongly. This mixed performance means that output in the production and Manufacturing industries remains 12.8% and 9.0% below their pre-downturn peaks respectively.

## Construction

The path of output in the construction sector has fluctuated more than the other main sectors since the start of the economic downturn in 2008. Following a sharp fall in output during 2008 and 2009, the sector recovered strongly in 2010 and 2011, before falling into a renewed contraction in 2012. Stronger activity in the housing market during 2013 has helped to raise the level of construction output by 4.9% since Q3 2012.

Figure 2 shows the new work components of construction output indexed to their level in Q1 2008, and suggests that public sector and infrastructure construction output increased sharply following the onset of the economic downturn. In particular, the volume of infrastructure output increased by more than 50% between Q1 2008 and Q1 2010, as policy-makers sought to cushion the impact of the economic downturn by bringing forward public sector investment plans and as preparations for the Olympic & Paralympic Games progressed. However, this effect has been less evident since 2011. In Q2 2013, infrastructure output was 17.0% below its peak level in Q2 2011, albeit well above the average level between 2004 and 2008.

**Figure 2: Volume of new work output in the construction sector by component, Chained-Volume Measure (CVM) Seasonally adjusted (SA), Q1 2008=100**



Source: Office for National Statistics

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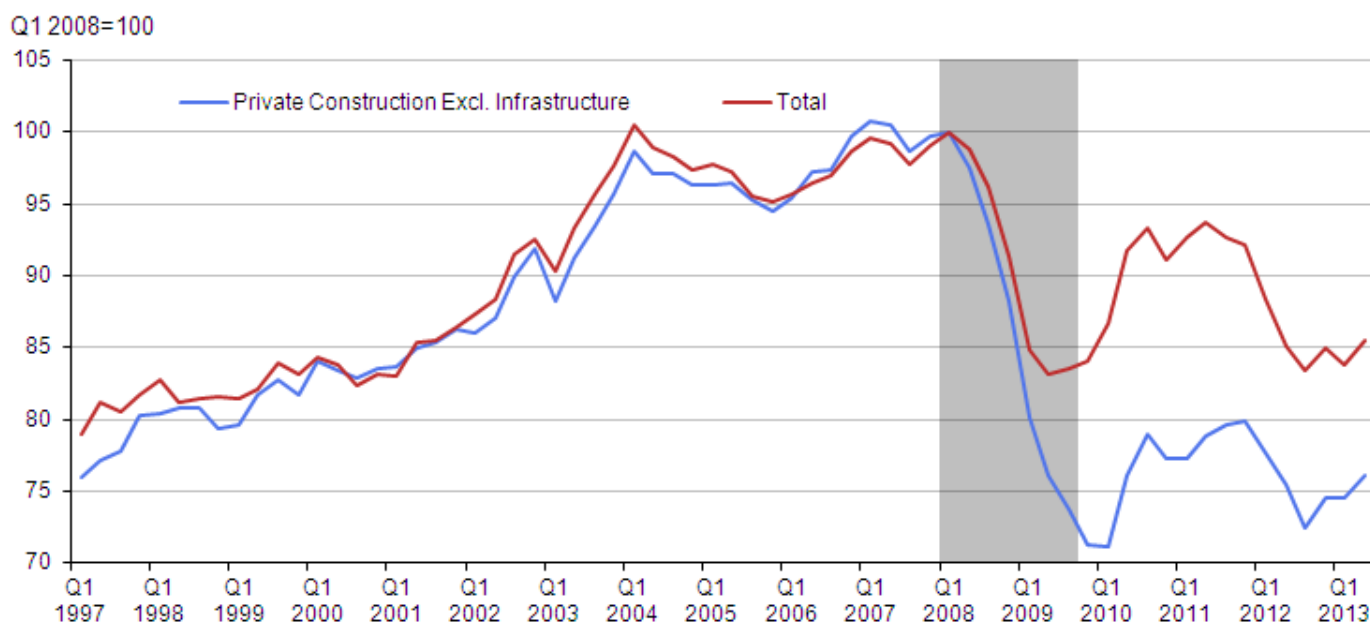
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By contrast, the volume of private construction new work fell sharply following the onset of the economic downturn. Private housing construction, the construction of private industrial and private commercial premises each declined by between 30% and 45% between the start of 2008 and Q3

2009. This reduction came about as businesses sought to reduce their investment in light of the weaker economic outlook.

The effect of this divergent behaviour on the aggregate level of construction output was substantial and is shown in Figure 3. Private sector activity excluding infrastructure declined by more than a quarter in real terms between Q1 2008 and Q3 2009, contracting at an average quarterly rate of 4.9% during these six quarters. However, the expansion of public sector and infrastructure projects cushioned the fall of construction output overall. Total construction output fell by a smaller amount as a consequence (16.7% compared with 26.2%), declining at a lower quarterly rate between Q1 2008 and Q3 2009 (-3.0% compared with -4.9%). In the period since Q3 2009, this effect has been reversed as private sector construction projects have grown more quickly (0.5% on average per quarter) than aggregate construction output (0.1% per quarter).

**Figure 3: Output of the construction industry, total and including selected sectors, Chain-Volume Measure (CVM), Seasonally Adjusted (SA), Q1 2008=100**



Source: Office for National Statistics

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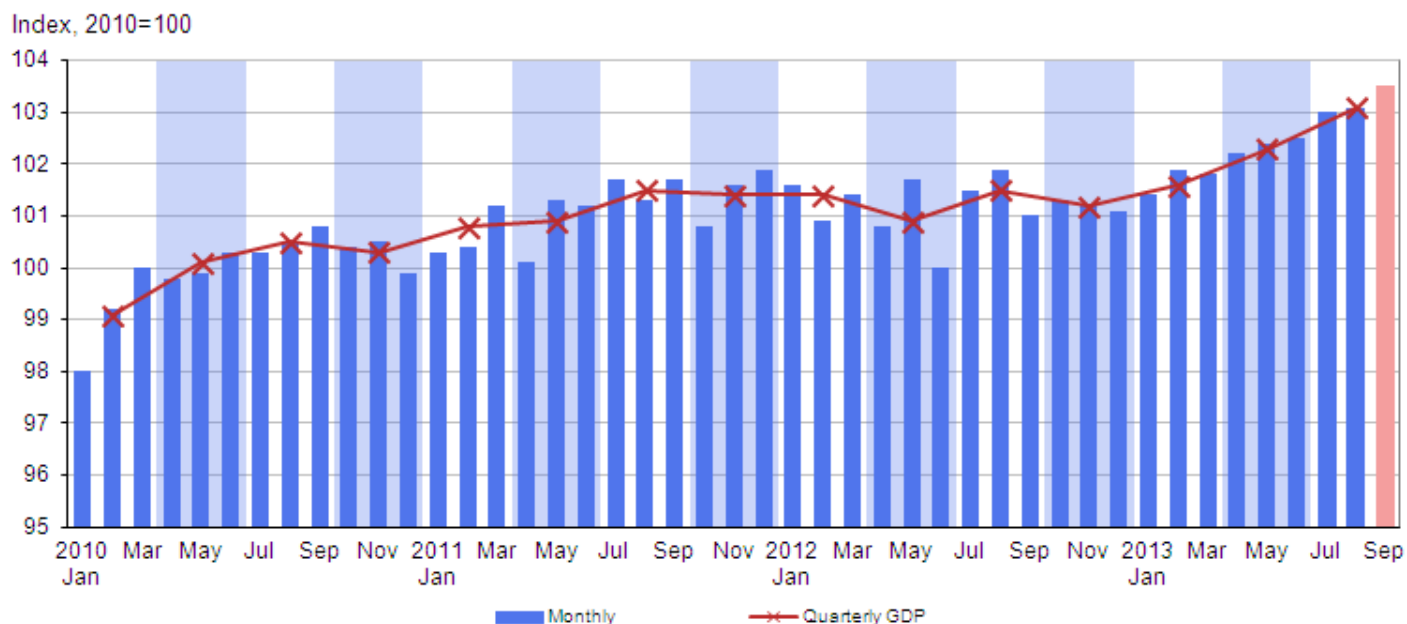
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### Monthly output estimates

While both construction and production have made positive contributions to output growth during 2013, the services sector has been the main driver of growth. According to the monthly Index of Services, output in the services sector has grown each month during 2013, in contrast to the more mixed performances of construction and production. In particular, the monthly surveys for August suggested that while services output grew, production (-1.1%) output contracted.

Figure 4 summarises the results of these recent surveys in the form of a series of monthly estimates of output between January 2010 and August 2013, which is consistent with quarterly GDP estimates. These monthly estimates are calculated by weighting the seasonally adjusted volume series from the Index of Production, the Index of Services and the Monthly Survey of Construction by each sector's share in total output.

**Figure 4: Monthly output estimates, Chain-Volume Measure (CVM), Index 2010=100**



Source: Office for National Statistics

#### Notes:

1. Weighted monthly output estimates. September 2013 based on early survey returns and forecast data consistent with the preliminary estimate of GDP growth in the third quarter.

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As monthly indicators tend to be more volatile than quarterly aggregates, the series shown in Figure 4 should be used with care. It suggests that the economy grew by 0.5% in July before slowing with growth of only 0.1% in August, when growth was held back by a sharp fall in Manufacturing output. Estimates for September, which are based on early survey returns and forecasts consistent with the preliminary estimate of GDP growth in the third quarter, show monthly output growth of 0.4%.

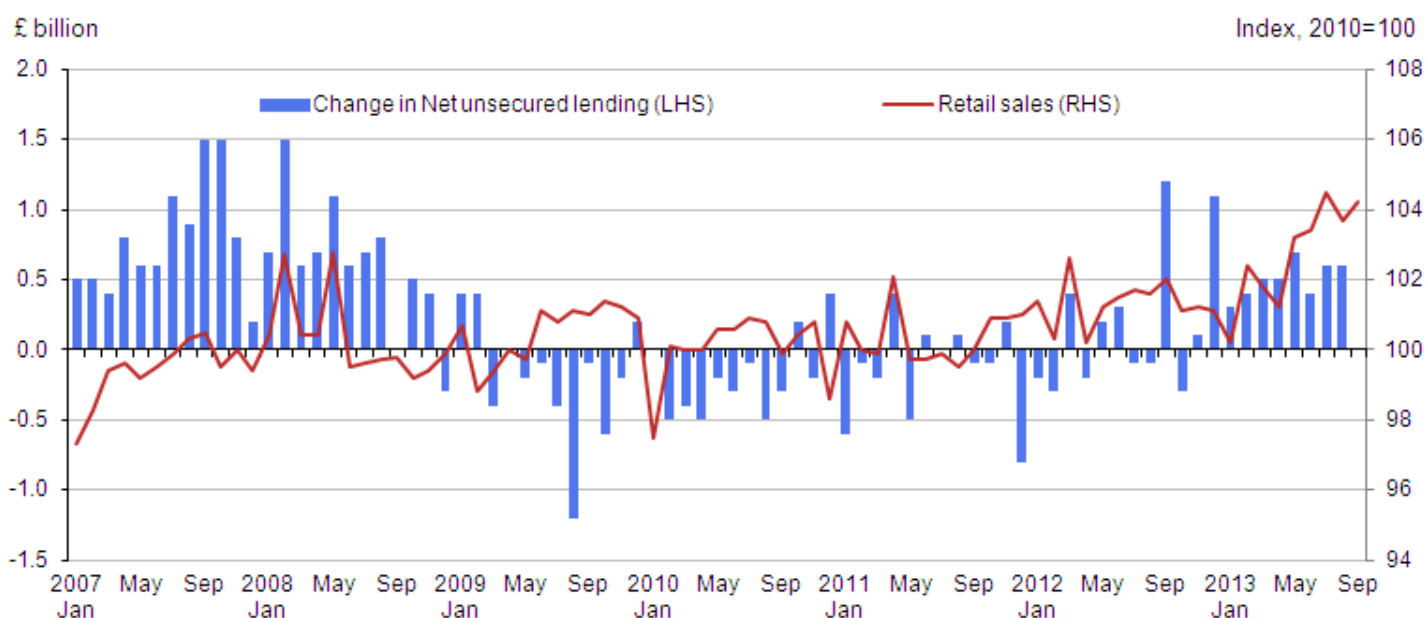
#### Broader economic indicators

Both the preliminary estimate of GDP and these monthly output estimates reflect a broad strengthening of the UK's economic performance on a range of indicators. The employment rate in the three months to August 2013 was 71.7%, 0.3 percentage points higher than between March

and May 2013 (see Reference Table One). Both the unemployment rate and the number of people claiming Jobseeker's Allowance (JSA) fell during the most recent reporting period.

The strength of the output and employment data was also reflected in UK retail sales (see Reference Table 2). Figure 5 plots the volume of retail sales including automotive fuels since 2007. It shows that following a period of stable retail sales between 2008 and 2011, volumes have grown considerably during the first nine months of 2013. The quarterly change in retail sales was the largest since March 2008, with most of this strength coming from non-food stores and non-store retailing.

**Figure 5: Net change in unsecured lending to households, Volume of retail sales (incl. fuel), Chain-Volume Measure (CVM), Seasonally Adjusted (SA)**



#### Notes:

1. Source: ONS & Bank of England

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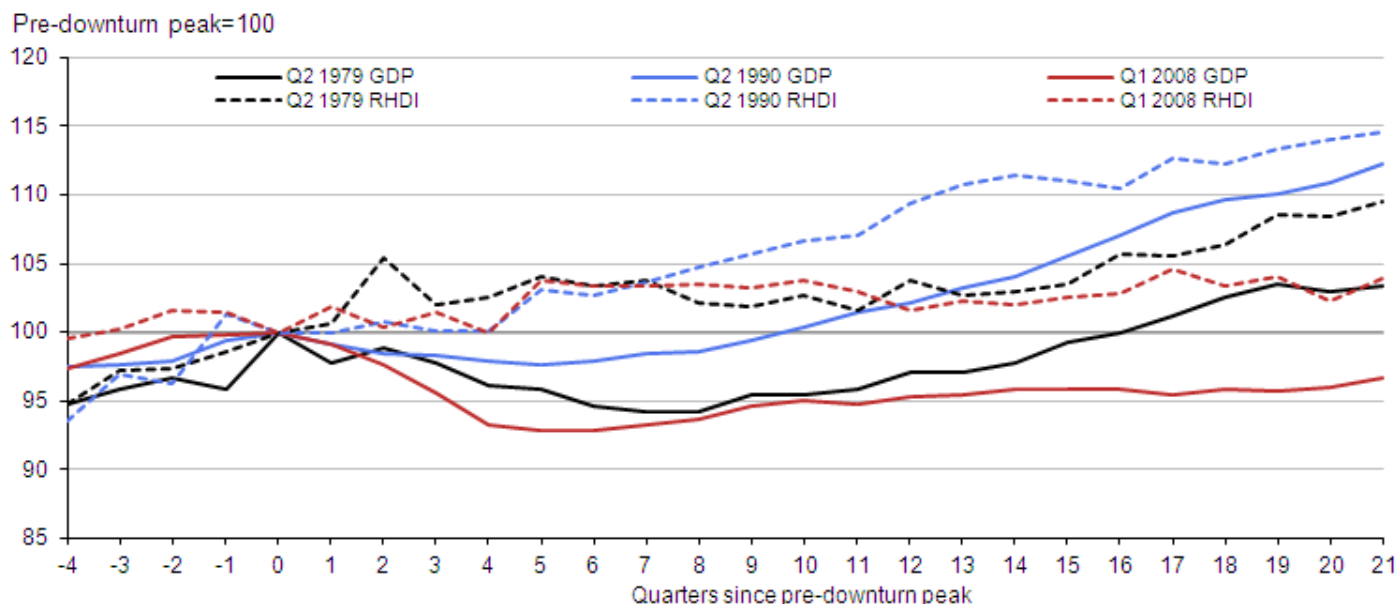
This pick-up in retail sales growth has followed an increase in net unsecured lending to consumers. The stock of unsecured credit fell between late 2008 and mid-2012, as households deleveraged in the light of the uncertain economic outlook. This trend reversed in early 2013, as households responded to the changed economic situation and a general easing of credit conditions by increasing their net borrowing.

#### Real household disposable income

While retail sales appear to have picked up during 2013, there is little evidence of a sustained improvement in the economic position of households. In particular, Real Households' Disposable

Income (RHDl) has changed very little since Q2 2009, despite cumulative real GDP growth of 4.2% over this period.

**Figure 6: Path of Real Household Disposable Income and GDP relative to pre-downturn peak, selected quarter=100**



Source: Office for National Statistics

#### Notes:

1. GDP refers to Gross Domestic Product
2. RHDl refers to Real Household Disposable Income

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Figure 6 shows the paths of RHDl and real GDP following three recent economic downturns. While the analysis is to some extent sensitive to the choice of starting point – taken here as the pre-downturn peak quarter in each case – some common features between the three periods are evident.

- In each case, the initial fall in real GDP was not matched by a fall in RHDl. This may reflect factors such as the lagged response of employment to changes in output, the impact of automatic stabilisers as taxes and benefits work to support incomes during a downturn, and the impact of lower interest rates on mortgage payments.
- As the economy subsequently recovered, RHDl grew more slowly than GDP – denoted by a convergence of each pair of lines in the chart. This is particularly evident in the downturns following the 1980s and 1990s.

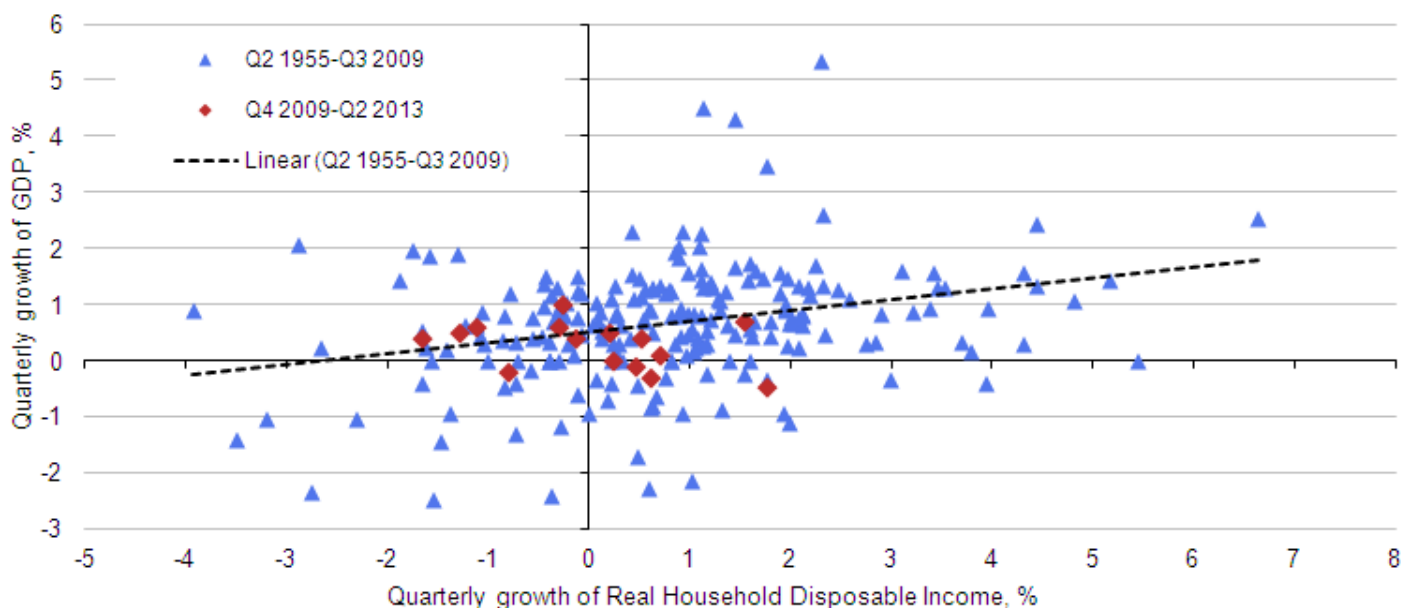
The latest downturn appears no different from the previous two in respect of the above. Despite a much sharper fall in GDP, RHDl remains above its pre-downturn level, 3.7% above the level in 2006,



and has lost less ground relative to GDP in the five years since 2008 than in previous economic downturns. However, most of this relative gain was secured during the recession itself, since when RHDl has been broadly flat.

While Figure 6 suggests that real incomes and total output have followed broadly similar paths to each other in these three downturns, it is difficult to assess whether the relationship between GDP and RHDl growth has changed in recent periods. Figure 7 plots the quarterly growth rates of these two variables over a much longer time horizon and offers some broad conclusions. Firstly, between Q2 1955 and Q3 2009, periods of GDP growth were associated with periods of RHDl growth – although the relationship is not a strong one – as summarised by the upwards sloping trend line in Figure 7.

**Figure 7: Quarterly growth rates of Real Household Disposable Income and GDP, Q2 1955-Q2 2013, Chain-Volume Measure (CVM), Seasonally Adjusted (SA)**



Source: Office for National Statistics

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On average between Q2 1955 and Q3 2009, growth in real household income has been stronger than the growth of total output. However, in the period since Q3 2009, there is little evidence of a positive association between these two variables. Output growth has been relatively weak over this period, and real households' disposable income has changed relatively little, providing little evidence of any association.

## Household expenditure

The weakness of real household income growth since late 2009 in particular has put pressure on household budgets and limited the extent to which consumers have supported aggregate economic growth through consumption. Household budgets have been squeezed by recent increases in the price of household goods. In particular, demand for gas and electricity is relatively price inelastic, and as a result the recent increases in the cost of energy have taken a larger share of disposable incomes.

Table 1 shows the proportion of household disposable income (HDI) accounted for by several 'household essentials' between 2003 and 2013 in current price terms. It shows that the proportion of HDI accounted for by these goods has risen from around 19.9% in 2003 to 27.3% over this period. While the majority of this increase has been in the cost of housing – which has increased from 14.7% to 20.6% between 2003 and 2013 – there have also been increases in the proportion accounted for by gas, electricity and water & sewerage. The rise in these proportions has the effect of reducing household budgets for spending on other goods and products.

**Table 1: Proportions of household disposable income accounted for by spending on household essentials**

	Housing	Water & Sewerage	Gas	Electricity	Fuels & lubricants for personal transport equipment	Total
2003	14.7	0.7	0.8	1	2.6	19.9
2005	15.7	0.8	0.9	1.2	2.8	21.4
2007	16.5	0.8	1.2	1.3	3	22.9
2009	17.7	0.9	1.4	1.5	2.7	24.2
2011	19.4	0.9	1.3	1.4	3	26
2013	20.6	0.9	1.6	1.5	2.7	27.3

**Table source:** Office for National Statistics

**Table notes:**

1. The figures for 2013 are based on the first two quarters of available data

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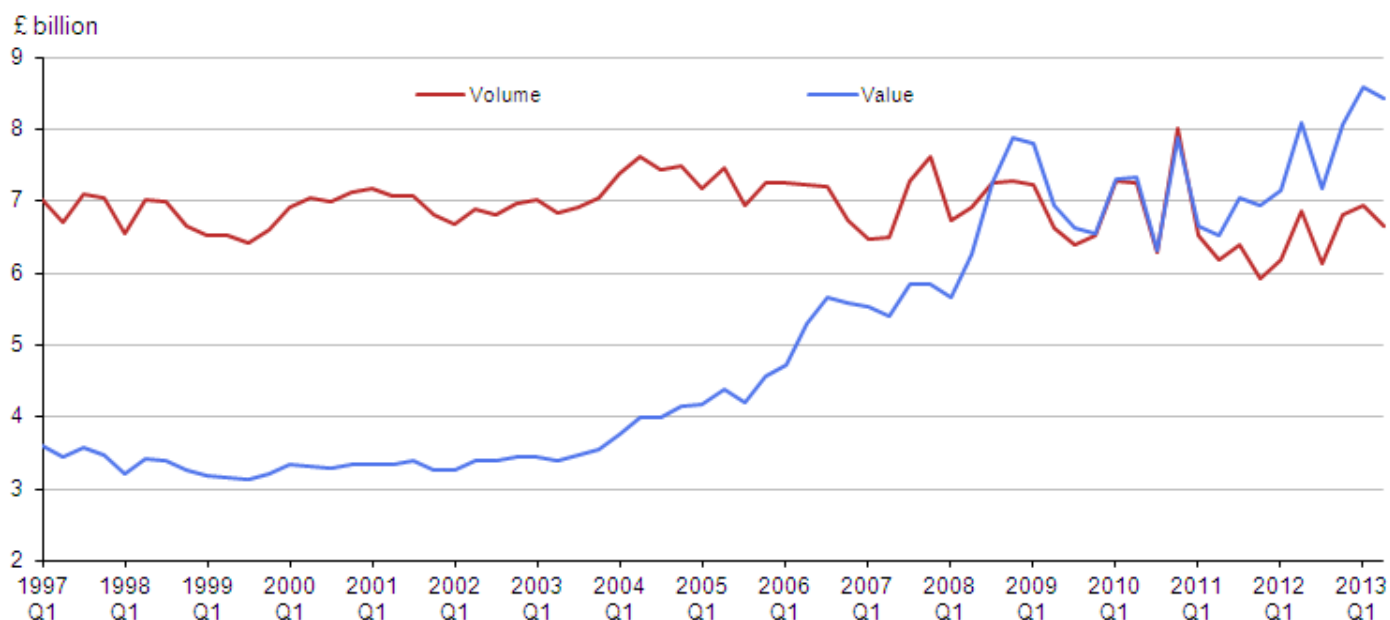
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Between 2003 and 2013, the proportion of HDI spent on gas and electricity has risen from 1.8% to 3.1%, largely as a consequence of higher prices, rather than greater household consumption. Figure 8 shows both the value and volume of household purchases of gas and electricity between 1997 and

2013. It indicates that while the volume of these purchases has changed very little over this period, the value (which takes into accounts changes in price) of those purchases has risen from around £3.5bn per quarter in 2003 to around £8.5bn per quarter in the first half of 2013.

**Figure 8: Household expenditure on gas and electricity, Current Prices (CP) and Chain-Volume Measure (CVM), Seasonally Adjusted (SA)**



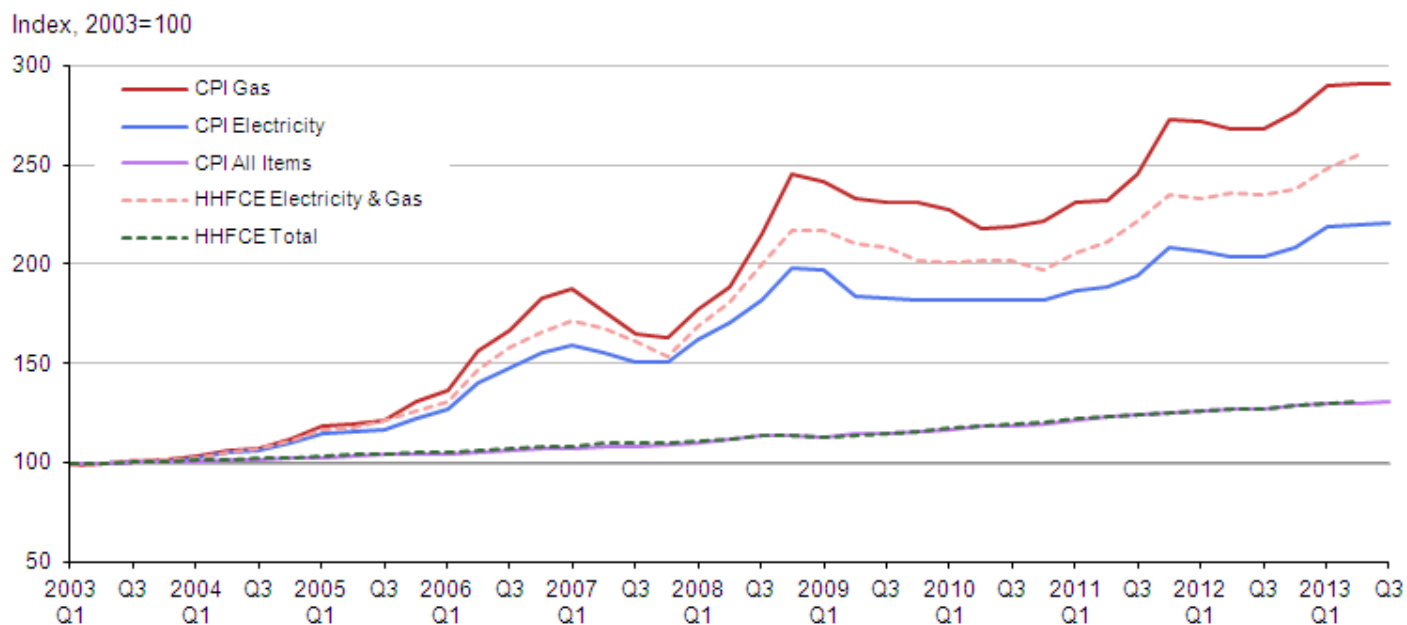
Source: Office for National Statistics

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The strength of the value of spending relative to volume in Figure 8 indicates that the average price of these purchases has risen rapidly over this time period. Figure 9 unpacks these price effects by showing the path of electricity and gas prices from the Consumer Prices Index (CPI) alongside the path of the all-item CPI. It also shows the implied deflator for household purchases of gas and electricity (calculated as the ratio of the value and volume series shown in Figure 8) and the implied deflator for all household spending.

**Figure 9: Consumer Prices Index (CPI) indices for electricity, gas and all items, Implied deflators for household electricity and gas and all household goods, Seasonally Adjusted (SA), Index 2003=100**



Source: Office for National Statistics

**Notes:**

1. CPI refers to Consumer Prices Index
2. HHFCE refers to Household Final Consumption Expenditure

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Figure 9 suggests that while the headline CPI and the average price of household goods and services increased by just over 30% between 2003 and Q2 2013, the prices of electricity and gas have risen by 120.5% and 190.5% respectively over the same time period: it is this change in relative prices which has driven the increase in the proportion of household budgets accounted for by household energy consumption.

Following a period of relative stability between 1997 and 2003, household gas and electricity prices have increased in three distinct phases since 2003. During 2006, household electricity and gas prices increased at an average quarterly rate of 8.3% (compared with 0.9% CPI inflation per quarter). In the course of 2008, household prices increased by 8.7% per quarter (compared with 1.1% CPI inflation per quarter). In the third phase, household gas and electricity prices again increased faster than the CPI index, rising by 4.6% and 1.0% respectively.

## Reference Table

Reference Table 1: Supply side indicators

	CDID	2012	2013	2013	2013	2013	2013	2013	2013
			Q1	Q2	Q3	Jun	Jul	Aug	Sep
<b>Labour Market</b>									
<i>Employment Rate</i> <sup>1, 2</sup>	LF24	71.1	71.4	71.5		71.5	71.6	71.7	
<i>Unemployment Rate</i> <sup>1, 3</sup>	MG SX	7.9	7.8	7.8		7.8	7.7	7.7	
<i>Inactivity Rate</i> <sup>1, 4</sup>	LF2S	22.6	22.4	22.3		22.3	22.3	22.2	
<i>Claimant Count Rate</i> <sup>7</sup>	BCJE	4.7	4.6	4.5	4.2	4.4	4.3	4.2	4.0
<i>Total Weekly Earnings</i> <sup>6</sup>	KAB9	£469	£468	£479		£475	£475	£474	
<b>CPI</b>									
<i>All-item CPI</i> <sup>5</sup>	D7BT	2.8	2.8	2.7	2.8	2.9	2.7	2.7	2.7
<i>Transport</i> <sup>5</sup>	D7C2	2.3	1.7	0.9	1.3	1.6	1.5	1.2	1.2
<i>Recreation &amp; Culture</i> <sup>5</sup>	D7C4	0.2	1.2	1.5	0.8	1.3	0.7	0.9	0.9
<i>Utilities</i> <sup>5</sup>	D7BX	5.0	4.1	4.2	4.3	4.4	4.4	4.2	4.2
<i>Food &amp; Non-alcohol. Bev.</i> <sup>5</sup>	D7BU	3.3	3.8	4.2	4.0	3.8	3.8	4.1	4.3
<b>PPI</b>									
<i>Input</i> <sup>8</sup>	K646	1.4	1.6	1.8	2.8	4.0	5.1	2.4	1.1

<i>Output</i> <sup>8</sup>	<i>JVZ7</i>	2.8	2.1	1.4	1.6	2.0	2.1	1.7	1.2
<b>HPI</b> <sup>8</sup>	<i>WMPQ</i>	1.7	2.2	2.9		3.0	3.3	3.7	

**Table source:** Office for National Statistics

**Table notes:**

1. Monthly data shows a three month rolling average (e.g. The figure for May is for the three months ending in May)
2. Headline employment figure is the number of people aged 16-64 in employment divided by the total population 16-64
3. Headline unemployment figure is the number of unemployed people (aged 16+) divided by the economically active population (aged 16+)
4. Headline inactivity figure is the number of economically active people aged 16 to 64 divided by the 16-64 population
5. Percentage change on previous period a year ago, seasonally adjusted
6. Estimates of total pay include bonuses but exclude arrears of pay (£)
7. Calculated by Job Seeker Allowance (JSA) claimants divided by claimant count plus workforce jobs
8. Percentage change on previous period a year ago, non-seasonally adjusted

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Reference Table 2: Demand side indicators

CDID <sup>7</sup>		2012	2013	2013	2013	2013	2013	2013	2013
			Q1	Q2	Q3	Jun	Jul	Aug	Sep
<b>GDP<sup>1</sup></b>	ABMI	0.1	0.4	0.7	0.8				
<b>Index of Services</b>									
<i>All Services<sup>1</sup></i>	S2KU	1.2	0.6	0.6	0.7	0.0	0.3	0.4	
<i>Business Services &amp; Finance<sup>1</sup></i>	KI7L	1.8	0.1	0.7	1.0	0.4	0.2	0.5	
<i>Government &amp; Other<sup>1</sup></i>	KI7T	1.1	0.5	0.0	0.3	-0.2	0.2	0.3	
<i>Distribution, Hotels &amp; Rest.<sup>1</sup></i>	S2MV	0.8	1.3	1.8	1.3	-0.1	0.6	0.4	
<i>Transport, Stor. &amp; Comms.<sup>1</sup></i>	KI7B	0.1	1.7	0.2	0.2	-0.5	0.4	-0.1	
<b>Index of Production</b>									
<i>All Production<sup>1</sup></i>	K222	-2.5	0.5	0.8	0.5	1.4	0.1	-1.1	
<i>Manufacturing<sup>1</sup></i>	K22A	-1.7	0.0	0.9	0.9	2.0	0.2	-1.2	
<i>Mining &amp; Quarrying<sup>1</sup></i>	K224	-9.8	3.9	1.5	0.4	0.8	-0.3	-0.6	
<b>Construction<sup>1</sup></b>	K2N8	-7.9	-1.3	1.9	2.5	-1.1	2.8	-0.1	
<b>Retail Sales Index</b>									

<i>All Retailing</i> <sup>1</sup>	J5EK	1.0	0.4	1.1	1.5	0.2	1.1	-0.8	0.6
<i>All Retailing, excl. Fuel</i> <sup>1</sup>	J467	1.4	0.5	1.0	1.6	0.2	1.1	-0.8	0.7
<i>Predom. Food Stores</i> <sup>1</sup>	EAPT	0.0	0.2	-0.5	1.7	0.2	2.7	-2.5	-0.2
<i>Predom. Non-Food Stores</i> <sup>1</sup>	EAPV	1.7	-0.3	2.0	1.0	0.3	-0.5	0.4	1.8
<i>Non-Store Retailing</i> <sup>1</sup>	J5DZ	9.8	7.6	3.7	4.2	0.3	2.0	1.5	-0.9
<b>Trade</b>									
<i>Balance</i> <sup>2,3</sup>	IKBJ	-34.6	-6.3	-5.5		-1.6	-3.5	-3.3	
<i>Exports</i> <sup>4</sup>	IKBH	1.8	-0.2	4.9		4.1	-9.2	2.0	
<i>Imports</i> <sup>4</sup>	IKBI	3.5	-2.7	2.8		2.0	-1.9	0.1	
<b>Public Sector Finances</b>									
<i>PNSB-ex</i> <sup>5,8</sup>	J5II	24.6	13.3	-11.7	1.8	4.8	-1.1	1.9	1.0
<i>PNSB-ex, ex RM &amp; APF</i> <sup>6,8</sup>	L65P	-3.4	6.8	4.6	1.3	0.9	-1.6	1.9	1.0
<i>PNSD-ex as a % GDP</i> <sup>8</sup>	HF6X	74.6	74.1	74.7	75.9	74.7	74.4	74.6	75.9

**Table source:** Office for National Statistics

**Table notes:**

1. Percentage change on previous period, seasonally adjusted, constant prices



2. Levels, seasonally adjusted, current prices
3. Expressed in £ billion
4. Percentage change on previous period, seasonally adjusted, current prices
5. Public Sector net borrowing, excluding the impact of financial interventions. Level change on previous period a year ago, non-seasonally adjusted
6. Public Sector net borrowing, excluding the impact of financial interventions, the Royal Mail Pension Plan and transfers from the Bank of England Asset Purchase Facility. Level change on previous period a year ago, non-seasonally adjusted, current, Financial Year
7. Where applicable, CDIDs refer to the index series on which the growth rates are based.
8. 2012-13 Financial year

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## Background notes

1. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

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