

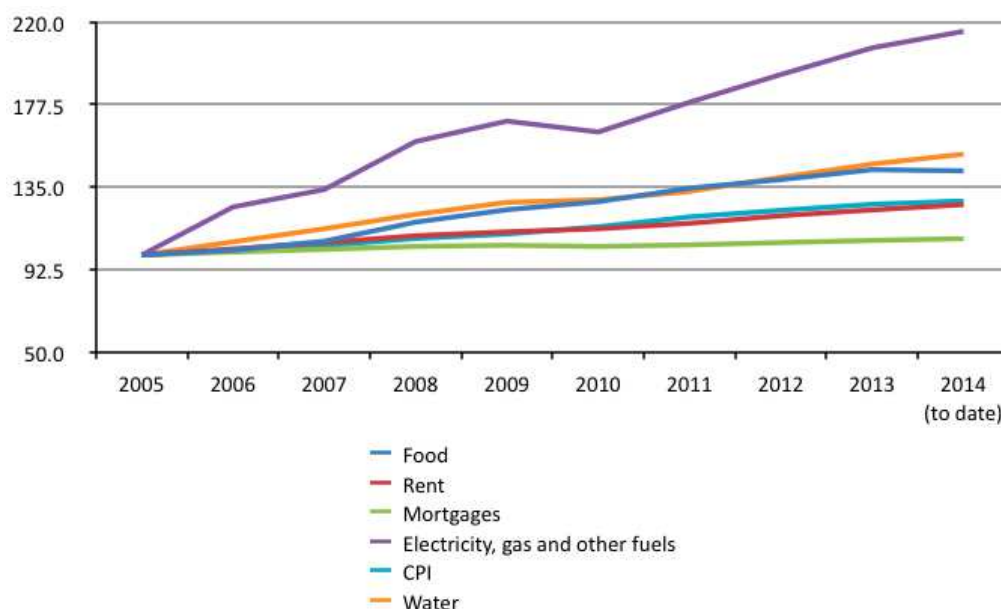
Real Britain Index (RBI) explained

Contents

Contents.....	2
Executive Summary.....	3
1. Inflation and CPI.....	6
2. The Real Britain Index	10
3. RBI and income	15
Conclusion.....	19
Appendix	20

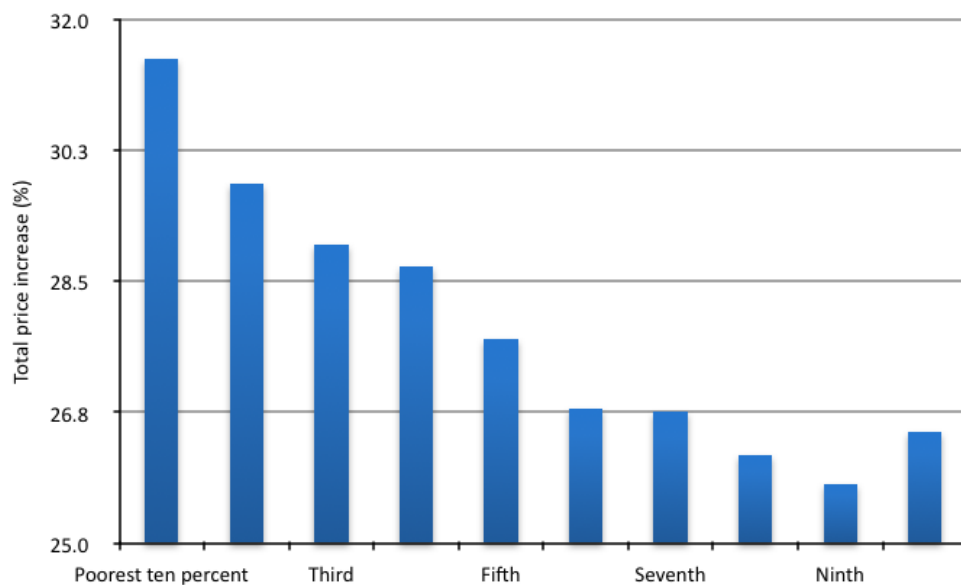
Executive Summary

1. Despite a return to economic growth over the last year or more, standards of living for most people are still declining. Prices are rising ahead of increase in wages, resulting in a fall in real incomes across most of the population.
2. The government's preferred measure of inflation is the Consumer Prices Index (CPI). This attempts to capture the "average" experience of price increases across the population.
3. But CPI is flawed as a measure of real living standards. To measure price increases, it uses a "basket of goods", constructed to reflect typical consumption patterns. The contribution of price changes in each good and service in the basket is weighted by the proportion the average household spends on it.
4. However, there is no such thing as an "average" household. What households buy varies, depending not only on who is in the household, but also how much money the household has. In particular, poorer households spend proportionately more on essentials than do richer. Spending money on housing, food, and utilities is unavoidable and so poorer households devote more money, proportionately, to them.
5. But it is these essentials that have seen some of the biggest increase in prices over recent years. Whilst the price of (for example) electronic goods have fallen dramatically, and likewise overseas travel, essentials have seen a large increase in prices. These increases, as a result, will hit poorer households harder than the better off.



6. Food prices are up 43% since 2006. Water bills have risen 52%. And prices of electricity and gas have gone up by 115% since then. Only housing costs, outside of London, have been relatively more restrained.

7. The CPI measure shows average prices increasing only 26% over this period. Since average (median) money incomes have risen 19%, even this implies a 7% decrease in median earnings.
8. But once we allow for the variation in spending patterns by those on different incomes, the pattern becomes even more stark. We can show this impact by recalculating the rate of inflation for different income groups. The graph below shows the total increase in prices each 10% of the population, grouped from poorest to richest, have faced since 2006.
9. This is the “Real Britain Index” – an alternate measure of inflation, comparable to CPI, that makes allowance for the fact that those on different incomes spend their money differently.



10. Very consistently, the poorest have faced higher inflation than the richest. (The slightly higher rate for the richest 10% seems to be substantially the result of rapid increases in school fees!). These new rates more accurately capture the experience of rising prices for those on different incomes.
11. Using data on earnings from the Office for National Statistics (ONS), we can then compare these new inflation rates with changes in money incomes for each group. We show the cumulative effects of price and money earnings changes for each tenth of the population, sorted by income, since 2006.
12. It is very clear that the period 2010-13, following the general election, represents a break with not just the years pre-crash, but also the years immediately following the crash, during which time incomes at the lower end of the population, in particular, held up comparatively well.
13. It is also apparent that the largest recent squeeze on incomes occurs somewhat above the squeezed middle, from the fifth to the eighth deciles. This covers those earning average pay from roughly £19,700 to £43,400 a year.

14. To give some sense of what these figures mean, a typical civil servant, earning the median pay for the civil service of £24,000, would face an RBI inflation rate of 2.36%. A typical nurse, again earning the median pay, would face an inflation of 2.37%. With CPI at 1.6%, it is clear that pegging pay increases to CPI would lead to a real loss of income.

Changes to post-tax income, selected periods, 2005-2013

	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
2006-8	-9.5%	-0.2%	-1.0%	2.2%	2.9%	0.5%	1.2%	4.1%	-3.7%	-4.2%
2008-10	21.6%	9.5%	1.8%	1.6%	-1.4%	2.0%	-1.9%	-2.2%	2.0%	1.9%
2010-13	-14.8%	-5.3%	-2.1%	-5.1%	-9.6%	-9.0%	-8.2%	-9.9%	-7.5%	-6.7%

15. However, if we look at the last year for which data is available, it is also apparent that the bias of income changes is strongly favouring the wealthy. Whilst the very poorest saw a shocking 14.8% drop in their income *in a single financial year*, driven by welfare changes, the richest 10% saw their real incomes increase by 3.9%, after some years of decline.

Change in post-tax real income, 2011/12-2012/13

	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
2011-13	-14.8%	0.1%	-0.9%	3.4%	-2.2%	-3.3%	-1.8%	-1.9%	-1.0%	3.9%

16. Inequality appears to be rising again, and the effects of the inflation difference will exaggerate this.

17. There are a number of barriers that can be raised against the worst effects of this differential. A freeze on utility prices, in particular, will have a redistributive effect. More effective, however, will be a drive to increase money earnings, particularly in the lower 70% of the income distribution.

1. Inflation and CPI

The British economy, we are told, is on the mend. After years of stagnation, the Organisation of Economic Co-operation and Development (OECD) estimates that it will be the fastest growing large, developed economy in the world in 2014.¹ Employment is rising, with the Coalition government boasting of 1.7m new jobs created since it came to power.

Yet scratch a little beneath the surface, and it is clear that this cheery picture does not match experience for many of us. A return to economic growth has not, yet, turned into a widespread feeling of prosperity. 45% think the economy is recovering, but only 18% expect to be better off next year.²

The reason for this disparity is not hard to find. Since the crash of 2008, wages and salaries for most people have not kept pace with price rises. On the usual measure, average real incomes – after taking account of price increases – have fallen by 8.5% since then, and the decline has continued into this year.³ The situation is unprecedented for generations: you need to go back to the 1870s to find a similar period of sustained decline in most people's standard of living.

Official inflation figures show that inflation remains at historically low levels. Currently, on the Consumer Price Index (CPI) measure, inflation is 1.6%. This is well below the government's target rate of 2%, and has been for some time.

But the headline rate of inflation is itself only an *average*. It aims to capture how prices have changed, over a year, on average. It reflects an overview of the whole experience. That overview, however, need not match up to any particular individual or household's experience. Different people buy different things, and the prices of these different things change at different rates. Over the last few years, this has become an obvious political issue: whilst average prices, as measured by CPI, have risen by 1.6%, domestic gas bills have risen by 5.1%. Cumulatively, over time, these differences can become substantial: overall average prices, since 2005, have risen 25%, on the CPI measure. But domestic gas bills have much more than doubled.

An inflation measure needs to reflect at least of these differences. To do so, the CPI, like any other inflation measures, looks at what the "average" household consumes over a year to create a typical "basket of goods". This should, ideally, contain all items relevant to a cost of living, and include them in proportion to their size in the family budget. Food is a substantial item of expenditure; "carpets and other floor coverings" (to pick a CPI category) generally less so. Food is weighted more significantly, in proportion to its average consumption, than are carpets and rugs.

However, because people buy different things, in different amounts, that typical basket of goods will generally not match their experience. This would not be a problem, if the different amounts people spent on different products altered fairly randomly. In general, we would expect these differences to more-or-less cancel out.

But what people buy does not vary randomly across the population. The proportions of their income that different people will spend on different things will vary systematically. Households with small children will, for obvious reasons, spend more on children's

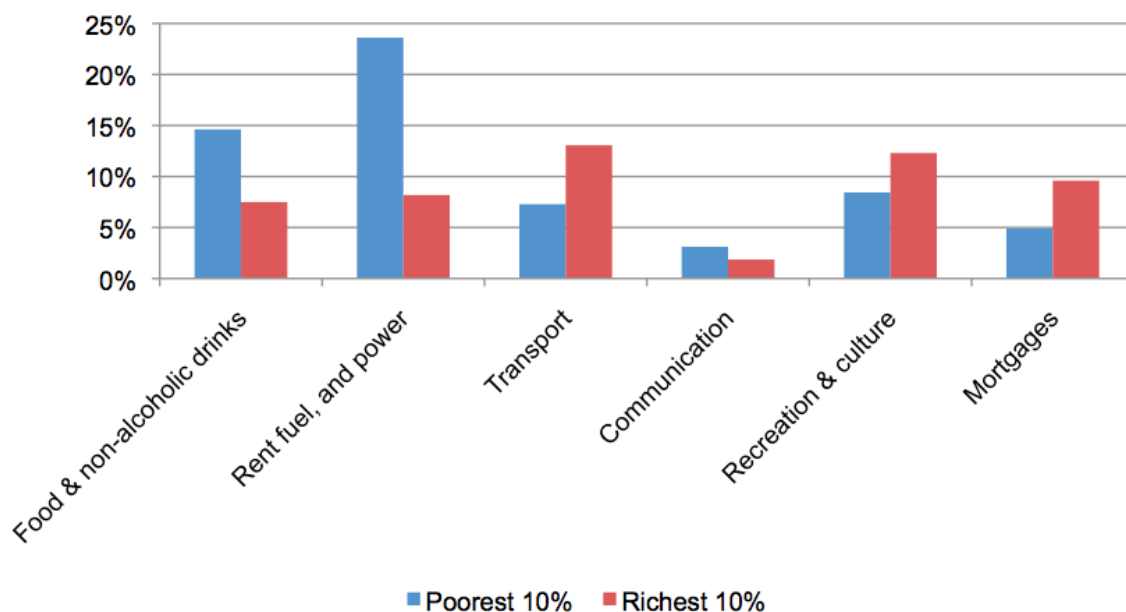
goods than those without. Similarly, pensioners' consumption patterns tend to be distinct from the young.

However, we want to focus here on something under-reported. Proportions of total expenditure on different items will also vary with different incomes. The poor buy different things to the rich, and, where they buy similar things, they spend different proportions of their income. The reasons for this are simple.

First, there is a minimum level of consumption that is necessary to survive: food, shelter, and utilities clearly fall into this category. Given this necessary minimum, it should be clear that those on lower incomes will spend a greater proportion of their income on essentials than those on higher. They have no choice: these expenditures are essential. This relationship was first suggested for food spending by the statistician Ernst Engel, in 1857. He noted that the proportion of income spent by any individual or household on food tended to fall as income increased – even if absolute expenditure increased. Engel's Law, as it is known, is one of the rare examples of a very robust empirical law in economics, and has been confirmed repeatedly. Our data confirm it once more: the poorest 20% of the population spend 15% of their income on food. The richest 20% spend 8%.

Second, even allowing for this minimum expenditure, it will in general be easier for the richer end of the population to respond to price increases. Because they have more money, they can find it easier to substitute amongst different goods: have covered essential spending easily, they have a great deal of cash left essentially for discretionary items. If the price rises for something that is not necessary, they have the option to spend elsewhere. Looking at our figures, we can see that discretionary expenditure is higher for the wealthy, with "Recreation and culture" accounting for 14% of the richest 10%'s budget, but only 8% for the poorest. The graph below shows these difference for the poorest and the richest deciles, in the most recent year for which we have data.

Shares of household expenditure for richest and poorest, 2012



In other words, our “average” measure of inflation may be skewed by variations in income. What one person experiences as the rate of inflation – as the impact on their standard of living, given their income – will differ, depending on how much they earn. This matters especially under two conditions: first, where inequality is significant, meaning the dispersion of different inflation impacts may also be substantial; second, where the costs of essentials have risen more than other items, hitting the poorest, hardest.

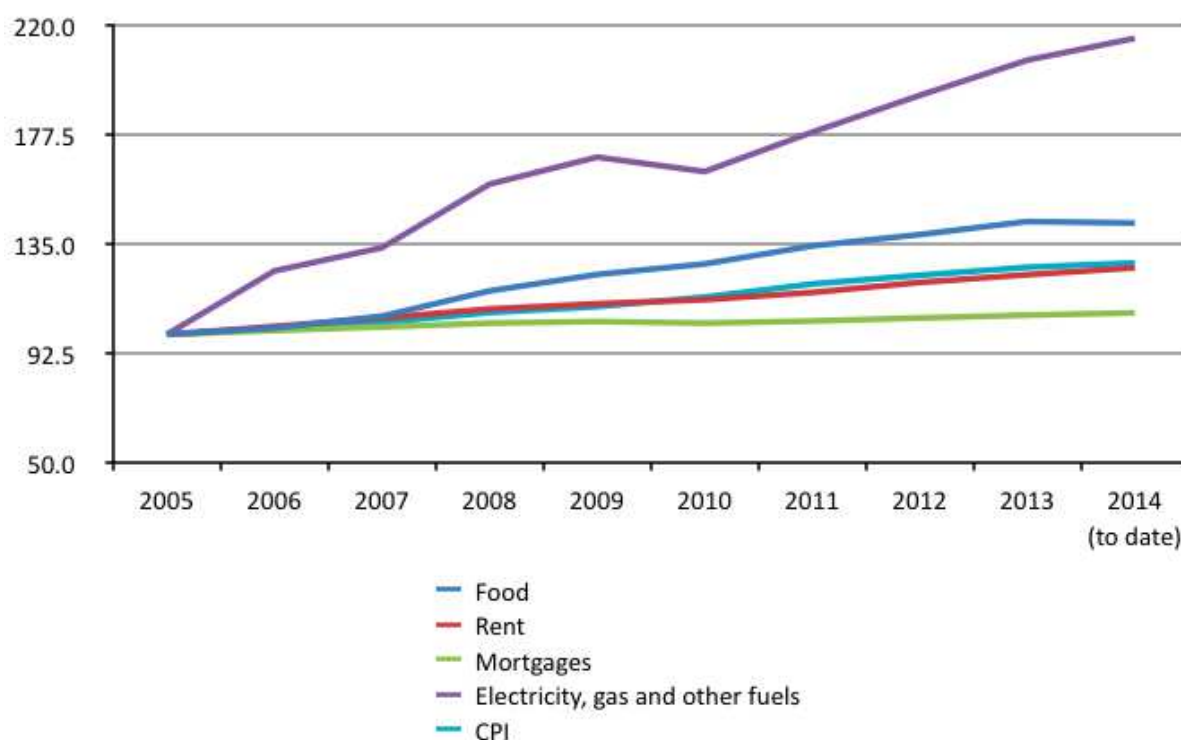
Both conditions have applied to the UK over the recent past. As noted, gas is now 2.5 times more expensive than it was in 2005. Over the same period of time, however, the price of cameras and photographic equipment (clearly not an essential item), on a like-for-like basis, has dropped to 12% of its 2005 level. Inequality, meanwhile, has risen sharply over the last three decades. Taken together, both of these factors could produce a worsening skew in the headline rate of inflation: it could be drifting further, and further, from most people’s experiences of price increases.

Essentials have risen enormously in price

Taking housing costs, utility bills, and food as unavoidable, essential items of expenditure, the graph below shows what has happened to the prices of each since 2005. Also included is the Consumer Price Index (CPI) measure of inflation, which attempts to show the average behaviour of prices. Taking 2005 as the base year, it is immediately clear that price increases of both fuel and electricity, and of food, has been very significant over this period of time. Food prices have risen by 43%; water charges by 51%; and electricity and gas bills by 115%.

Housing costs, meanwhile, and particularly for mortgage holders, have been significantly more restrained. For owner-occupiers, low historically interest rates since 2009 have undoubtedly helped restrain the cost of their housing; for those in rent the situation is more complex, with renters in London facing sharper increases than the rest of the country. (The ONS data we have here do not, unfortunately, allow us to make this level of disaggregation.) Nor does the data capture changes in the quality of housing, with those renting potentially pushed into lower quality homes by price rises.⁴

Prices of selected items, 2005-2014



Nonetheless, it should be immediately clear that the extent to which any individual has to spend proportionately more of their income on essentials, they will be harder hit by price increases that are significantly above the headline rate of inflation.

Problems with the CPI

Decisions about what to include, or exclude, from the basket of goods will obviously affect the measurement of inflation. CPI became the official measure of UK inflation in 2003, replacing the earlier Retail Prices Index (RPI), as part of a drive to harmonise inflation measurement across the European Union. Along with some changes to mathematical method used to generate the index,⁵ CPI also tweaked the basket of goods it uses as a reference. One of these tweaks is highly significant: CPI excludes owner-occupied housing costs, specifically mortgage payments, whilst RPI made an attempt to include them. (Both have always included rent.)

Housing is a very substantial part of any individual or household's expenditure. And around 70% of all households in the UK are owner-occupiers. Most of these hold mortgages, on which monthly payments are due for a long period of time. Excluding these costs, therefore, is excluding a major part of what most of the country experiences. ONS have recognised this, providing also a "CPIH" measure that includes owner-occupied housing costs. With interest rates remaining historically very low, the differences between the two are not huge: about 0.1% separates them, on the most recent figures. Nonetheless, with the prospect of interest rate increases in the future, a fair measure of the cost of living must look to include all housing costs, including mortgage payments.

2. The Real Britain Index

Introducing the Real Britain Index

The Real Britain Index (RBI) is an attempt to correct for some of the inevitable biases in the official inflation figures, by showing how the inflation rate differs across the population. It is based on the same ONS figures as the official CPI rate, and uses a similar methodology for calculation. It should, then, as far as possible, be directly comparable to the official measure, but is intended to better reflect the impact of price rises on those with different incomes.

RBI divides the population up by income into decile groups, each covering ten percent of the total population, from the poorest to the richest. Using data from successive ONS Family Spending surveys, it constructs a basket of goods for each decile, based on its average spending in a given year. (These weights are given in the Appendix.)

The complication at this point is the fact that expenditure on different items will not (and does not) vary only with income: relative prices will also affect relative consumption. The rate of price increases for different goods will change people's consumption patterns, as they substitute (as far as they are able) amongst different products in response. But this means that the expenditure weights we would wish to use could vary over time, as different income groups substitute different goods in response to price increases.

The impact of this substitution effect, over the period currently covered by the RBI, is not huge. Outside of housing costs (to which will return), the largest variations are, as expected, in the "Recreation and culture" category of expenditure, pre-eminently representing discretionary spending: the share spent by the poorest 10% on this has fallen by 2%; the share spent by the richest 10% has increased by nearly 2%. Already we can see the differential impact of price changes: discretionary spending by the poor has been squeezed, but the rich are enjoying more freedom.

Looking at housing, we find that whilst the share spent on rent and other housing costs (including utilities) has increased by 4% for the poorest, it has increased by only 1% for the richest decile. This shows the first impact at work, that of Engel's Law: rapid price increases in non-discretionary spending have resulted in an increase in the proportion this items take of the poorest income. The rich are squeezed less dramatically. The table below summarises the two changes we have highlighted.

Difference between 2006 and 2012 expenditure shares by decile group (percentage points)

Decile group	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	All
Net rent, fuel & power	3.681	4.401	4.146	5.145	4.421	3.444	3.717	3.114	3.140	1.419	3.371
Recreation & culture	-2.035	-1.330	-0.649	-0.487	-0.661	-0.695	-0.750	-0.633	0.847	1.790	0.005

It is on mortgages, however, that the most glaring inequalities begin to appear. Broadly, the richer the decile group, the higher the average spending on mortgages, as we would anticipate. For 2012, this amounted to an average mortgage spend of £14.50 a week for the poorest 10%, and £99.10 for the richest 10%. As shares of expenditure, however, the variation was much less pronounced: from around 6% of all spending, on average, for the poorest, to around 10% for the wealthiest. The figure increases because there is also a substitution effect at work: whilst the poorest 10% spend, on average 12% of their total expenditure on rent, this falls to only 6% of the wealthiest.

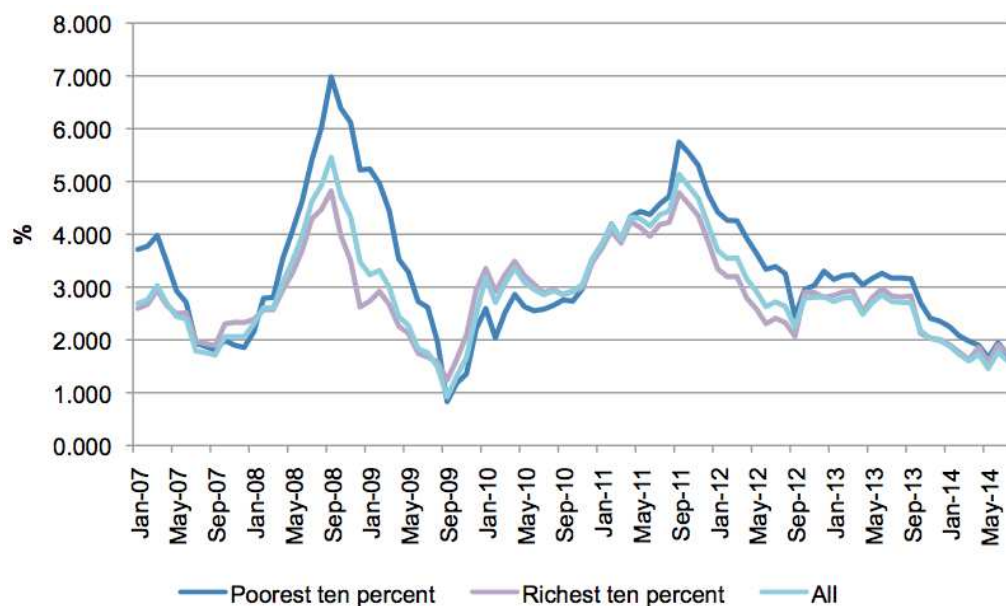
This capacity to substitute introduces some peculiar effects into the whole table. Because interest rates have been so low, and therefore mortgage repayments also low, there has been a distinct decline in relative housing costs for mortgage holders over the last few years. With housing both a necessary expenditure, and one where demand is generally fixed – most people have only one home, and stick with it – a declining relative price of housing is equivalent to an increase in disposable income. Since the benefits of this will be the greater, the greater share mortgages claim of total spending, it is another way in which the richest have benefitted from relative price changes over time. For those in the bottom half of the income distribution, less likely to hold mortgages (and less able to claim one), increases in the price of rents have had precisely the opposite impact over time, squeezing their real disposable income sharply.

On the other side, there are some categories of expenditure where the richest have lost out. Most glaring amongst these is education expenditure: whilst the poorest 50% of the population spend, on average, barely 1% of their total spending on education (including university tuition fees), this triples than 3% for the richest 10%. Spending on private education is overwhelmingly concentrated in the top fraction of the population, and university attendance remains skewed towards the wealthier end of society – if not quite as skewed. Education prices have more than doubled since 2005, hitting the wealthier. However, with the ONS price index falling by around 10% over the last year, the very wealthiest have seen a substantial fall in their overall level of inflation – excluding costs, even turning into deflation (falling prices) over summer this year.

How inflation has varied across the population

With the different impacts summated, we can generate an overall inflation rate for each of our decile groups. The graph below shows the RBI rate of inflation for the top 10%, the bottom 10%, and the average for all deciles since January 2007. It can be seen that a spread between top and bottom exists, and that, with some exceptions, the inflation rate for the richest is in general lower than for the poorest. However, the swings in the inflation rate for the poorest – its volatility – is almost much greater, ranging from a peak of 7.7% in September 2008, just before the crash, to a trough of 0.78% exactly one year later. This reflects the inability of those on lower incomes to substitute between different expenditure items – with a greater proportion of their income going on essentials, they little choice but to suck up whatever price increases occur.

Inflation rates by selected decile, 2007-2014



In the exceptional period in the aftermath of the crash, those on the lower end of the income distribution actually experience a lower rate of inflation. Between September 2009, and early 2011, the poorer half of the income distribution had persistently lower rates of inflation, on the RBI measure, than the richer half.

For the period as a whole, from January 2006, our RBI suggests that prices paid by the poorest 10% have risen by nearly 32%. For comparison, the official CPI measure suggests a price increase of just 20%. For the rich, meanwhile, prices have risen by 27%. From poorest to richest, the overall pattern is clear: the better-off you are, the less impact inflation has had. For the whole period, we can see four distinct parts: a sharp increase inflation up to the crash of 2008; a rapid fall in inflation during the very severe recession, for almost exactly a year; rising inflation with (and a little beyond) the slight recovery of 2010; and then a sustained decline in price rises, from the end of September 2011 to date. The table below summarises the total price increase for each of those periods, by income decile.

Total price increases, by period and income decile (%)

	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
January 2006- July 2014	31.5	29.8	29.0	28.7	27.7	26.8	26.8	26.2	25.8	26.5
January 2006- Sep. 2008	12.3	11.9	11.0	10.6	10.4	10.1	9.8	9.2	9.0	9.3
October 2008- Sep. 2009	0.9	0.6	1.1	1.1	0.8	0.8	0.8	1.2	1.4	1.4
October 2009- Sep. 2011	8.4	8.3	8.2	8.4	8.2	8.0	8.1	7.9	7.8	7.5
October 2011- July 2014	6.8	6.3	6.2	6.2	6.0	5.9	6.0	5.8	5.7	6.0

The general pattern – of lower incomes suffering greater inflation – breaks down only during the exceptional period in the aftermath of the 2008 crash. Inflation fell rapidly, but also became more evenly distributed – the richest 30% even having higher rates than the poorest 30%.

The table below shows the current rates of inflation (as of July 2014) as measured by RBI for each decile group. Allowing for some variation, the current rate of inflation falls pretty consistently as income rises.

Inflation rates by decile, July 2014

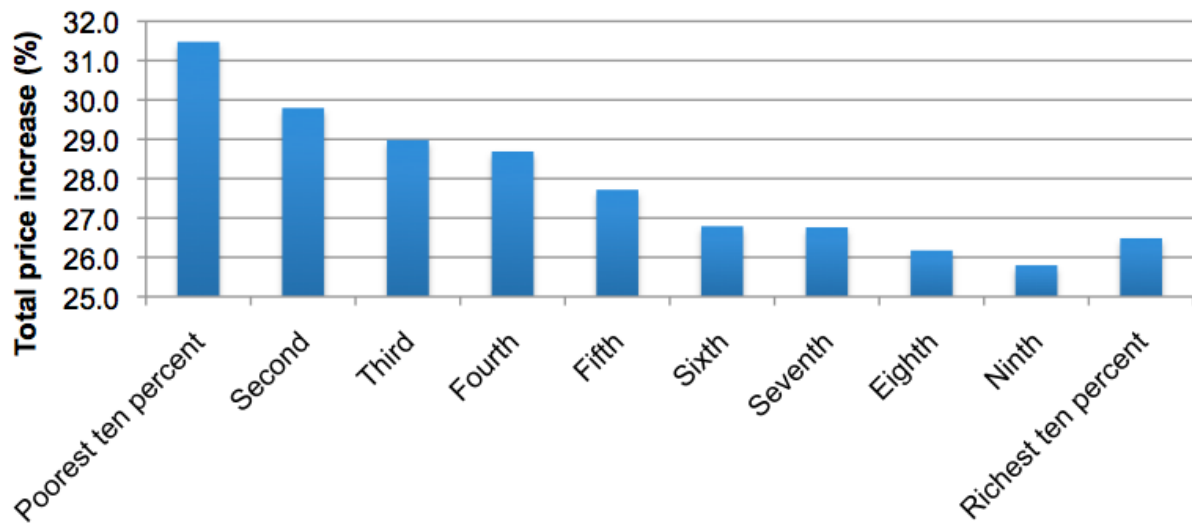
Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
3.04%	2.82%	2.68%	2.59%	2.53%	2.36%	2.37%	2.33%	2.32%	2.54%

To give some sense of what these figures mean, a typical civil servant, earning the median pay for the civil service of £24,000, would face an RBI inflation rate of 2.36%. A typical nurse, again earning the median pay, would face an inflation of 2.37%. The headline, CPI, rate of inflation is 1.6%; it can be seen immediately that, for example, pegging pay awards to CPI would result in a loss of real earnings for both these two. Of course, for any given individual, there would be additional impacts: consumptions change with age, and with household size, alongside idiosyncratic variations – different

people buy different things in ways we cannot immediately predict. RBI is a guide, and we think a better one than CPI, to actual experience, not a complete description of it.

With overall inflation low, the differences are not, on a month-by-month basis, especially great. Nonetheless, the effect over time can be substantial.

Cumulative inflation by income decile January 2006-July 2014



3. RBI and income

Effects on real incomes

The price increases themselves are only one part of the story. To understand what has happened to living standards over the last few years, we need to also look at how earnings have varied across the whole population. Using, again, recently published ONS data, we can find the average money earnings for each decile group, from poorest to richest.⁶ With our new inflation rates, we can then turn these money figures into “real terms”, assessing incomes today in terms of how much they would buy without the impact of inflation.

We find that pre-tax incomes in general are down on their pre-crash levels, with some anomalies: a sharp drop in earnings for the top 10% over 2011-12, apparently the result of a drop in self-employment earnings, and from which they have yet to recover fully; similarly, the poorest 20% have seen, on the ONS figures, their real incomes increase slightly on pre-crash levels. The graph below shows incomes for each decile, relative to its 2006 level.

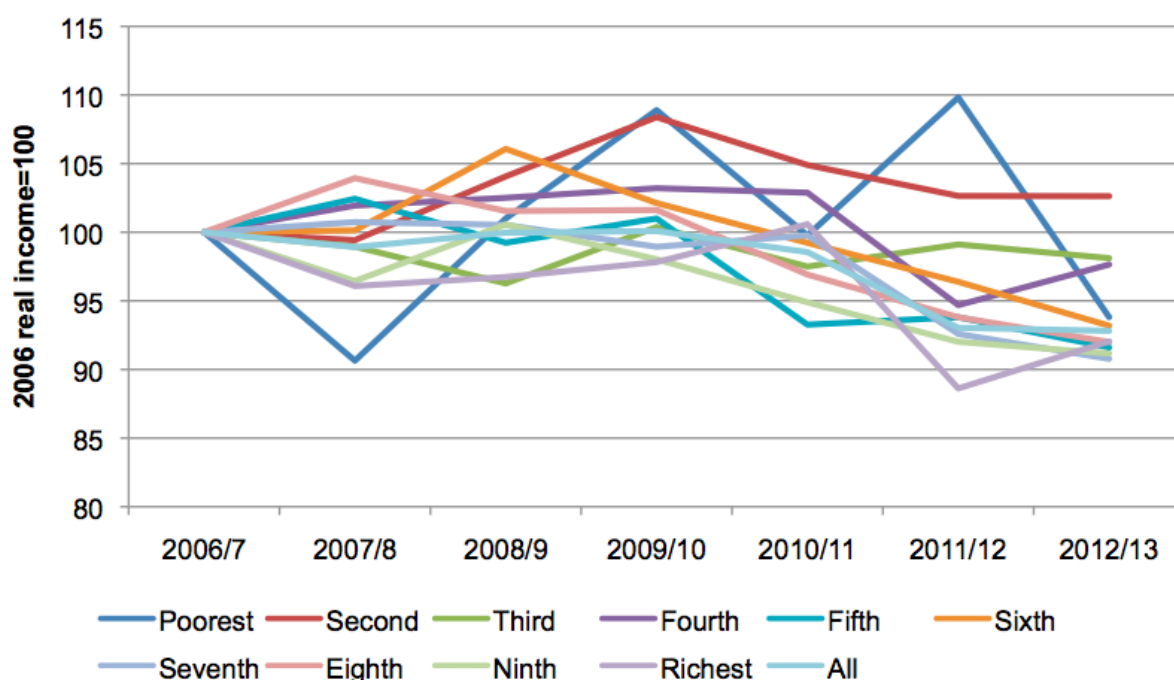
The greatest declines in pre-tax incomes have occurred around the middle of the distribution, for those on incomes between 30% and 80%. The table below shows the total changes in real, pre-tax, incomes across the population, from the start of the recession:

Changes in pre-tax incomes, after inflation, since 2007

Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
-3.5%	8.0%	-9.5%	-11.3%	-17.0%	-16.5%	-17.0%	-13.8%	-11.4%	-7.8%

If we make allowances for tax taken and benefits paid, again using the ONS data, we get a figure for real disposable incomes. Over the whole period, the net effect of taxes and benefits together is to somewhat flatten the income distribution, with benefits payments softening the impact of declining incomes in general for the poorer part of the population. Taking 2005 as our base year, as in the Consumer Price Index, this decline represents a loss of £1,616 for the middle (fifth) decile group.

Post-tax real incomes by decile, 2006/7-2012/13



To show the changes more clearly, we divide this up into the period pre-crash, from the crash until the election of May 2010, and then the period since May 2010. It is clear from the table below that 2010 represented a watershed in the behaviour of real incomes.

Changes to post-tax income, selected periods, 2005-2013

	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
2006-8	-9.5%	-0.2%	-1.0%	2.2%	2.9%	0.5%	1.2%	4.1%	-3.7%	-4.2%
2008-10	21.6%	9.5%	1.8%	1.6%	-1.4%	2.0%	-1.9%	-2.2%	2.0%	1.9%
2010-13	-14.8%	-5.3%	-2.1%	-5.1%	-9.6%	-9.0%	-8.2%	-9.9%	-7.5%	-6.7%

The net effect of the tax and benefit changes is to flatten the impact of falling real wages somewhat, reducing the spread between the largest declines (now further up the income scale) and the rest.

However, this total change in real disposable income over the last few years hides two disturbing features over the last year for which we have data. Over the last year, the richest 10% of the population saw their real incomes (on the RBI measure) increase by 3.8%. The poorest, meanwhile, directly as a result of falling benefits payments, have seen their income fall by a shocking 14% in a single year, as recorded in the ONS figures. For all other decile groups, except the fourth, last year has seen a decline in real incomes, with the fifth decile, covering the median income, down 2.35% on the year. We show this below.

Changes in post-tax real income, 2011/12-2012/13

	Poorest	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Richest
2011-13	-14.8%	0.1%	-0.9%	3.4%	-2.2%	-3.3%	-1.8%	-1.9%	-1.0%	3.9%

It is worth bearing in mind, too, that we are here capturing only income. Those with substantial assets – particularly property in London and the south-east in recent years – will have seen significant real gains, and, again, this are highly likely to be concentrated amongst high-income earners.

The differences between the CPI measure of inflation and our new RBI measure can be substantial – and, importantly, vary with income. The graph below shows how real income changed over the last period for which we have data, the 2012-13 financial year, for each income decile as measured by CPI and RBI.

Real income changes with different inflation measures, 2011/12-2012/13

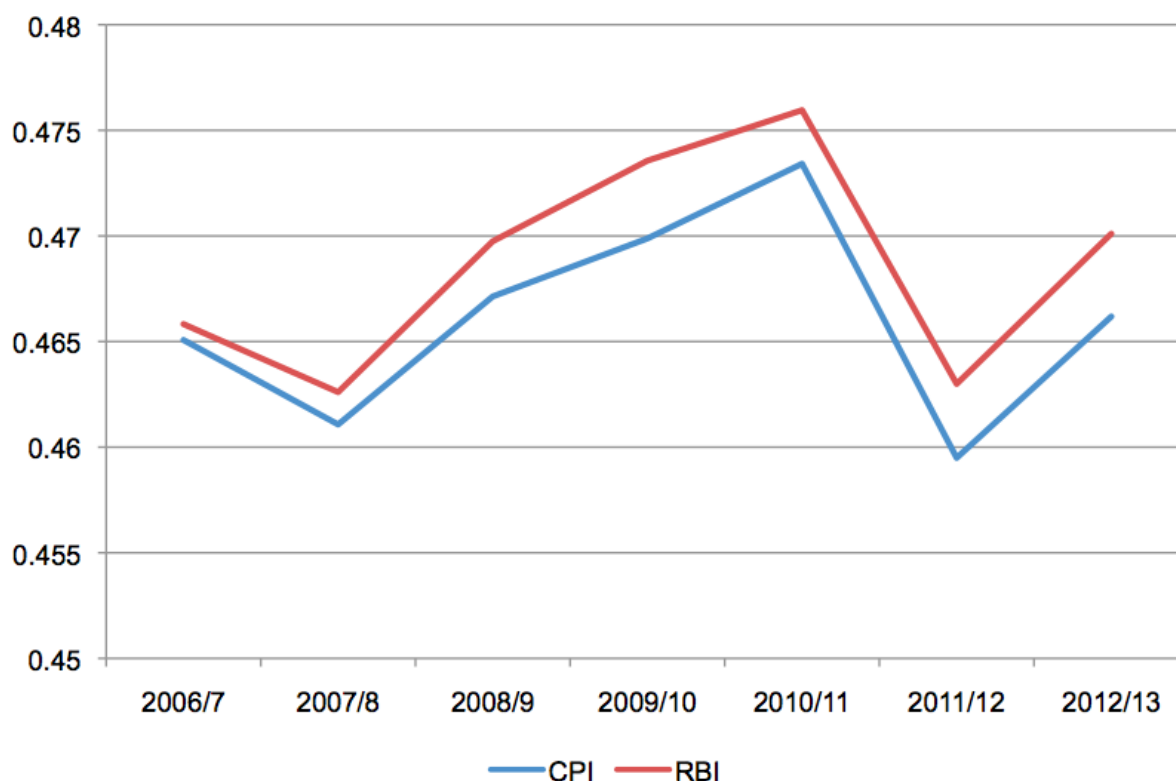
Assuming that our RBI measure is a better reflection of the true impact of price increases on different income groups, it can be seen that CPI consistently understates the impact of inflation on the poorer half of the population, but consistently overstates its impact on the wealthiest.

To give some sense of this effect, we show below how the different earnings of each group, relative to the base year (as taken in the CPI) of 2005.

Effects on inequality

We can assess the impact of this bias using a popular⁷ measure of inequality, the Gini coefficient. This attempts to assess the distribution of income or wealth relative to a situation of perfect equality: the closer the number is to zero, the closer the distribution is to complete equality. Conversely, as the Gini coefficient approaches one, the distribution it measures must also be approaching perfect inequality – one person owning everything, the rest owning nothing. The graph below shows the Gini coefficient for the UK over our time period for both the CPI and RBI measure of real incomes.

Gini coefficient, 2006/7-2012/13



As expected, with the RBI measure of real incomes (accounting for the differences in the impact of inflation rates across the population), we find the distribution is consistently more unequal than CPI suggests. The rise in inequality, post-recession, is somewhat steeper on the RBI measure and, over time, the distance between the two measures has somewhat widened. Although incomes fell, after the crash, the decline was steepest amongst the middle section of the population, resulting in a more unequal distribution overall. The sharp drop in both recorded over 2011/12 is largely the result of a steep decline in the recorded incomes of the very wealthiest which, as noted, appears to be the result of a sudden collapse in earnings from self-employment. It is not clear how far this represents a real change in the inequality picture, and much of this decline has of course been reversed, post-recession.

Conclusion

The current CPI measure of inflation does not properly reflect the impact of inflation since it fails to take account of the different spending patterns of different income groups. In addition, it ignores mortgage repayments which, whilst relatively low at present, are a major part of household spending. The Real Britain Index attempts to correct for that by providing a measure of inflation for each income decile in the population, from poorest to richest.

Using RBI as a measure shows that the experience of inflation for different income groups can vary pretty significantly from the official measure. In particular, poorer households will in general suffer a high rate of inflation than richer; and households in general will experience a higher rate, as CPI misses the substantial expenditure of mortgage payments. In a period of low inflation, as now, the differences both between income groups, and between the official and unofficial inflation measures, may not be especially great. But over time, these differences stack up, and in any case attempting to set pay increases based on the official CPI inflation measure will lead to a persistent decline in real living standards. Worse, this hidden decline will be more significant the poorer the individual or the household. As a matter of simple justice, pay awards for the lower paid should aim above the official rate of inflation, simply in order to correct for this in-built bias.

Endnotes

¹ Reuters, 12 March 2014, “British economy set to be fastest growing among G7”

² YouGov/Sunday Times, 15 Jun 2014. [Full data](#).

³ ONS, 5 April 2013, “Real wages down 8.9% since 2009”

⁴ See, for example, Davies, B. and Turley, A. (2014), *Back to Rising Damp: addressing housing quality in the private rented sector*, Newcastle: IPPR North

⁵ Technically, CPI uses a geometric rather than arithmetic mean, on the grounds that this is less prone to an upwards bias over time.

⁶ Data is taken from ONS, “The Effects of Taxes and Benefits on Household Income, 2012/13”, Table 14a

⁷ If imperfect – see comments in Thomas Piketty (2014), *Capital in the 21st Century*, Cambridge, MA.: Harvard University Press