Briefing

Resolution Foundation

Shrinking Support: what Universal Credit indexation means for living standards

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Measuring inflation: which price index best captures changes in the cost of living?

In Budget 2010, the Chancellor announced that the uprating of benefits, tax credits and public service pensions would, from April 2011, be made with reference to the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI) or Rossi Index.[1] Because CPI tends to give a lower measure of inflation than the other two indices,[2] the shift was projected to save the government £10.6 billion a year by 2015-16 (with this figure continuing to compound over time). However, the government also justified the move by arguing that CPI provides "a more appropriate measure of benefit and pension recipients' inflation experiences than RPI" because of differences in both methodology and coverage.[3] In this note, we consider the merits of the case set out by the government, before turning in the next section to consider the distributional impact of the shift with specific reference to the forthcoming system of Universal Credit.

The formula effect

In terms of methodology, the government's preference for the CPI over the RPI stems from its belief that it more accurately captures behavioural changes. The technical explanation is complicated[4] but, in simple terms, the CPI calculation implies substitution by consumers in reaction to price rises to brands or varieties which become relatively cheaper, while the RPI process assumes no such change in behaviour.

Mathematically, this 'formula effect' always produces a bigger figure for RPI than for CPI, even if precisely the same commodities are measured. What's more, the gap has grown in recent years. Before 2010, the methodological differences contributed around 0.5 percentage points to the CPI-RPI gap – around half of the overall disparity; following a shift towards more detailed collection procedures for clothing items in 2010, the contribution of the formula effect has increased to an average of 0.9 percentage points.[5]

All of which might suggest that RPI overstates changes in the cost of living and that the shift to CPI for uprating benefits is therefore a sensible one. But, as the Royal Statistical Society (RSS) has highlighted, the CPI formula is not without its limitations. It assumes, for instance, that consumers make no change in their overall spending on an item when prices change, simply altering the quantity and/or quality of their consumption. Nor are they believed to experience any additional cost when switching retailers or shopping around. The CPI approach also fundamentally fails to reflect consumer behaviour in cases where price changes are demand (because of new preferences and trends) rather than supply (because of production costs and pricing strategies) driven.[6]

The inflation basket

More contentious still is the government's assertion that the CPI's coverage is more appropriate than the RPI's. While a variety of disparities exist in the basket of goods included in the calculations, the primary difference is that the CPI excludes most owner occupier housing costs, such as mortgage interest payments. For some low income families, living in social housing and in receipt of Housing Benefit and Council Tax Benefit, CPI may indeed better capture the prices that matter to them than RPI does.

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[1] A variant of RPI, with the main difference being the exclusion of rent costs.

[2] Annual CPI inflation has been 0.9 percentage points lower than RPI inflation on average since CPI was introduced in 1996.

[3] HMT, *Budget 2010*, para 1.106

[4] Technically, the CPI is based on a geometric mean (which multiplies the prices of n goods together before taking the nth root), while the RPI is calculated via an arithmetic mean (in which the sum of all prices are simply divided by the number of cases in the sample).

[5] ONS, *International Comparison of the Formula Effect Between the CPI and RPI, 2012*, March 2012

[6] J Leyland, "RPI versus CPI – the definitive account", *significance: statistics making sense*

However, this is patently untrue for a large number of those in receipt of state support, particularly those on low to middle incomes who qualify for Child Benefit or in-work transfers via tax credits. Work by the IFS has shown for example that two-thirds to three-quarters of working-age households in receipt of benefits are exposed to mortgage interest payments or Council Tax, with the proportion rising sharply among those households in receipt of tax credits.[7]

Measuring changes in the cost of living

What is clear is that neither the RPI nor the CPI can claim to be an index of the cost of living faced by families (indeed, neither tries to[8]). While the RPI fails to account for changes in consumer behaviour in reaction to price changes and therefore potentially overstates inflationary pressures, the CPI omits some highly significant areas of spending and so potentially underplays the price increases faced by many households.

Reform is on its way, with the ONS currently developing a new variant of the CPI which will include housing costs (CPIH) while at the same time seeking to better understand the drivers of the formula effect. The RSS has advocated going one step further, with the development of a specific index or group of indices that reflects the household budget and therefore forms a true measure of changes in the cost of living.

Progress is likely to be slow, but we are heading in the right direction. Prior to the arrival of a new index that more accurately captures the experiences of ordinary families, however, it is difficult to accept the government's theoretical case for moving to CPI indexation. While the associated savings mean that a potentially convincing argument might have been constructed against the backdrop of fiscal consolidation, the stated preference for the methodology and coverage of the CPI is harder to justify.[9]

The issue is of particular importance when the distributional impact of the switch is considered. Clearly, a measure that reduces the value of benefits and state support will hit those on the lowest incomes hardest. The cuts will also accelerate over time, with potentially small differences in benefit payments in year one being compounded in subsequent years.

In the following section we provide the first assessment of the implications for payments made under the forthcoming Universal Credit regime.

[7] IFS, *The distributional effect of tax and benefit reforms to be introduced between June 2010 and April 2014: a revised assessment*, Table 5.2

[8] The CPI is explicitly considered to be a measure of inflation at the macroeconomic level, consistent with National Accounts principles. By contrast, the RPI was introduced and developed as a guide for salary and pension uprating, though its purpose has changed over time and the former Retail Prices Advisory Committee specifically rejected the notion that the RPI should be a cost of living index.

[9] Although not considered in this note, the same argument holds in relation to the government's subsequent announcement that direct tax thresholds would also be increased in line with CPI rather than RPI from April 2012.

The impact of CPI indexation under Universal Credit

In November 2010, the government announced its intention to integrate a range of in- and out-of-work benefits and tax credits into a single 'Universal Credit' payment for working-age adults.[10] While some details are still to be resolved, roll out will begin in 2013 and the government hopes that the new system will make it easier for claimants to navigate, increase work incentives and reduce administrative costs.[11]

The basics of Universal Credit

Under the new system, households can qualify for:

- a 'standard allowance' reflecting their age and family status;
- a 'child element' covering the extra costs associated with having children (with an additional award for disabled children);
- a 'housing element' to help with the costs of (social and private sector) rents; and
- payments for 'other needs' including a carer element and a childcare costs element.

Depending on their composition, families will have some of their income disregarded.[12] Beyond this point, entitlements will be reduced by 65p for every £1 of after-tax income. Because the taper is applied to *net* income, the withdrawal rate is steeper for basic rate taxpayers (76 per cent) than for non-taxpayers. Lower income households currently in receipt of out-of-work support will therefore tend to experience a reduction in their marginal tax rate, while many low to middle income households currently in receipt of tax credits will face an increase in theirs. In addition, while Universal Credit is explicitly designed to boost work incentives for first earners, it will reduce incentives for (potential) second earners in families.

While assessments of the new system suggest that it will produce a complex mix of winners and losers however,[13] the baseline against which outcomes are compared assumes that state support is uprated in line with CPI rather than RPI. Below we take an alternative approach by isolating the distributional impact of using the CPI instead of RPI/Rossi under Universal Credit.

The distributional impact of the switch to CPI indexation

We assume that the system is fully functional from 2013-14 onwards (while in reality it will be phased in) and consider family incomes (in 2012-13 prices) across the equivalised[14] working-age distribution after five years. In our baseline we assume that all of the Universal Credit payments other than the child element are increased in line with the Rossi Index, while the child element and all other benefits are increased in line with RPI. In our alternative scenario, we uprate all benefits in line with CPI. The inflation rates we use are drawn from the OBR's March 2012 projections. Earnings and other non-state income are also increased in line with the OBR's figures.

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[10] Principally, Universal Credit will replace income-related Jobseeker's Allowance, income-related Employment and Support Allowance, Income Support, Housing Benefit, Working Tax Credit and Child Tax Credit.

[11] DWP, *Universal Credit: Welfare that Works*, November 2010

[12] Unearned income (mainly income from pensions and maintenance payments from divorcees' former partners but not interest from savings) is not included in the disregard, meaning that Universal Credit recipients with such income face a pound for pound reduction in their entitlement. While this is similar to the approach already in place for out-of-work benefits, current tax credit claimants are not subject to such treatment, meaning that some individuals will face a significant reduction in their entitlement.

[13] See for example, IFS, "Universal Credit: A Preliminary Analysis of Its Impact on Incomes and Work Incentives", *Fiscal Studies: The Journal of Applied Public Economics*, 2012

[14] That is, incomes are adjusted for family size, using the modified-OECD scale.

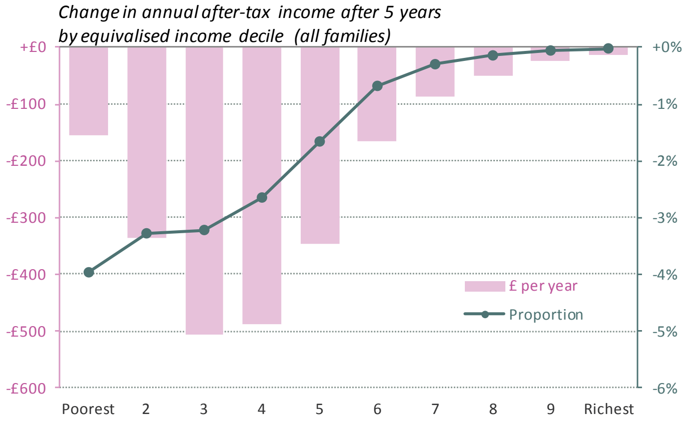

Figure 1:Distributional impact of switch to CPI after five years (all families)

Source: RF analysis of FRS, *Family Resources Survey 2009-10*

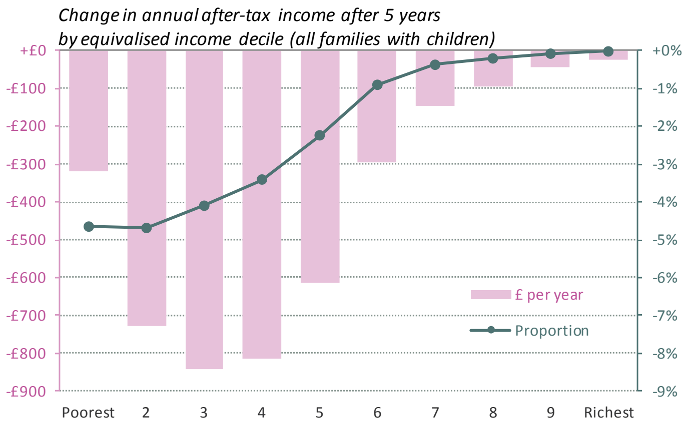

Figure 2:Distributional impact of switch to CPI after five years (families with children only)

Source: RF analysis of FRS, *Family Resources Survey 2009-10*

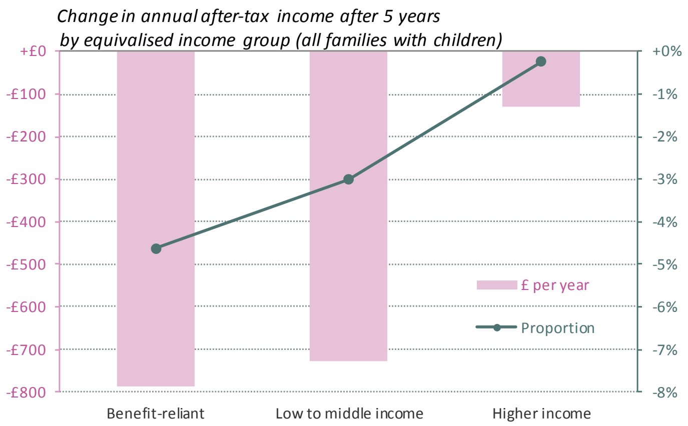

Figure 3:Distributional impact of switch to CPI after five years (families with children only)

Source: RF analysis of FRS, *Family Resources Survey 2009-10*

Figure 1 shows that the use of CPI rather than RPI/Rossi is set to reduce average incomes across all parts of the working-age income distribution. In cash terms, the impact will be greatest in deciles 3 and 4, with families in the third decile losing £505 a year in the fifth year of Universal Credit.

Measured as a proportion of the after-tax income in the baseline case however, the losses associated with the switch to CPI look more straightforwardly regressive. Families in decile 1 face a reduction of 4 per cent, falling to less than half of 1 per cent for those in the top half of the income distribution.

The situation is even starker if we focus just on families with children, reflecting the additional eligibility for such families to Child Benefit and the child element of Universal Credit. Figure 2 shows that the distributional shape looks much the same, but that families in decile 3 here lose £845 in year five, while those in decile 1 face a reduction of 4.7 per cent of their after tax income.

In Figure 3 we consider the impact across three broad income groups: 'benefit-reliant', 'low to middle income' and 'higher income'.[15] It shows that the cash impact is broadly similar across the benefit-reliant and low to middle income groups, with the switch to CPI reducing average annual incomes by £790 and £725 respectively. In contrast, higher income families face an average reduction of £130. Once again the impact looks entirely regressive when measured as a proportion of income.

[15] The introduction of Universal Credit means we are unable to apply our usual means-tested benefit filter to these definitions. Instead, the benefit-reliant group covers families receiving more than four-fifths of their income from the state; the low to middle income group comprises families in the bottom half of the income distribution who do not fall into this category; and the higher income group includes those above median income.

In aggregate, our analysis suggests that the government can expect to save over £5 billion a year (in 2012-13 prices) in Universal Credit payments by year five, an average of £220 per working-age family. Of the total savings, 84 per cent will come from families in the bottom half of the equivalised working-age distribution. More specifically, 59 per cent of the savings will come from families with children in the bottom half. Low to middle income families will account for half (49 per cent) of the total savings, despite representing just one-third (33 per cent) of the overall working-age population.

The impact of the switch on income projections

Taken in isolation then, the indexation shift is set to significantly reduce the level of state support across the working-age income distribution. Moreover, the impact will be largest in the bottom half of the distribution and comes during a period in which wages are continuing to record sluggish growth at best. To highlight the significance of the move, we consider below the average value and composition of after-tax income (in 2012-13 prices) in each of the three income groups described above at the start and end of this five year period under both indexation scenarios.

Figure 4:Average after-tax income and composition by income group (all families)

Source: RF analysis of FRS, *Family Resources Survey 2009-10*

Figure 4 shows that, based on OBR projections for average earnings and inflation, average after-tax incomes in the benefit-reliant group would fall slightly even if benefits were once again uprated in line with RPI/Rossi (from £10,400 a year to £10,200).[16] The decline in income is larger (falling to £9,800) when the switch to CPI indexation is accounted for.

The importance of the change is even more evident in relation to the low to middle income group. Here, a slight increase in earnings and other forms of non-state income[17] more than offsets the fall in benefit payments observed under the RPI scenario. However, if we instead consider CPI indexation, incomes in the group *fall*.

State support accounts for a tiny fraction of overall income among higher income families. As such, the move from RPI to CPI has very little effect on projected incomes. Under both scenarios, the slight fall in benefit receipt is more than offset by increases in original income.

[16] This occurs both because RPI (which we use here to deflate the prices to 2012-13 levels) is expected to rise more quickly than Rossi and because the effects of relatively high RPI inflation in 2012-13 are incorporated in our deflation calculation but not in our benefit uprating estimate because the base year (year zero) is 2013-14.

[17] In truth, we might expect earnings in the low to middle income group to grow more slowly than the projected rate for average earnings.

The Resolution Foundation

The Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low-to-modest incomes – who we refer to as low-to-middle earners (LMEs) – by delivering change in areas where they are currently disadvantaged. We do this by:

- undertaking research and economic analysis to understand the challenges facing LMEs;
- developing practical and effective policy proposals; and
- engaging with policy makers and stakeholders to influence decision-making and bring about change.

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