

Poverty gaps and poverty rates

There has always been a debate in the world of poverty measurement about whether we should be more concerned about poverty rates (the proportion below a poverty threshold) or poverty gaps (how far people in poverty are below the poverty threshold). Is it better for a country to have many children a little way below the poverty threshold or few children below the poverty threshold, but a long way below it?

The UK has tended in the past to have comparatively high poverty rates but comparatively low poverty gaps. This has been thanks to a fairly comprehensive, but quite low, minimum income scheme provided through the social security system. But since 2010 our minimum income scheme has been undermined by benefit caps, the 'two-child limit', the 'bedroom tax', local rent limits, real-terms cuts to benefit levels, the failure to uprate child tax credit and child benefit, the localisation of council tax benefit, and sanctions.¹ Indeed, in many cases, the cuts made have been targeted at families already at high risk of being in poverty – especially the two-child limit and the benefit cap – so are guaranteed to increase poverty depth.

The most recent *Households Below Average Income* (HBAI) statistics for 2016/17,² based on the Family Resources Survey and produced by the Department for Work and Pensions, show an increase in relative child poverty rates (after housing costs). However, the HBAI series has never included poverty gap data, though the EU Statistics on Income and Living Conditions (SILC) database, which also uses the Family Resources Survey, has done.

Nevertheless, poverty gaps are important, as they tell us about likely levels of hardship for those living below the poverty line. Poverty rates may be falling when poverty gaps are rising and vice versa.

There are a variety of possible measures of the poverty gap. In this analysis, we have produced results using four measures:

1. The median gap, in £ per week, between the poverty threshold and the incomes of households with children who live below the threshold.
2. That amount as a proportion of the poverty threshold.
3. The percentage of households with children who are 5 per cent, 10 per cent, and so on,

UK child poverty gaps are still increasing

The UK child poverty rate has been rising for several years. But it is also important to understand how far families and children are falling below the poverty line. Deeper poverty generally means greater hardship and more profound consequences for children. Jonathan Bradshaw and Antonia Keung **analyse the official data using eight different measures, to show that not only is the child poverty rate rising, but the depth of child poverty is too.**

below the poverty threshold. This is the form of presentation of poverty gaps adopted by the Social Metrics Commission.³

4. The number of households with children below that threshold multiplied by the average (mean) amount they are below the poverty threshold. This is an indication of the amount of money that these families would need to be lifted out of poverty.

We have produced these estimates using two poverty thresholds:

- the contemporary 60 per cent of median threshold – the relative poverty threshold;
- the 2010/11 threshold uprated by movements in the Consumer Prices Index (CPI) – the so-called absolute poverty threshold.

The relative poverty gap analysis

We have analysed trends in the relative poverty gaps for households with children from 2010/11 to 2016/17.

Figure 1 presents the results of the poverty gap in £ per week before and after housing costs.

It is best to focus on the median poverty gap rather than the mean (because the distribution is skewed). There has been an increase in the

median £ per week poverty gap for households with children, both before and after housing costs. In 2010/11, the median poverty gap before housing costs was £42.80 per week, but by 2016/17 it had increased to £58.40 per week. After housing costs, the increase was from £52.80 per week in 2010/11 to £67.00 per week in 2016/17.

In other words, not only is the number of children in poverty increasing but households with children are now living, on average, further below the poverty line than they did seven years ago.

Figure 2 shows the same results, but as a proportion of the relative poverty threshold in each year. Again, the relative poverty gap has risen as a percentage of the threshold both before and after housing costs.

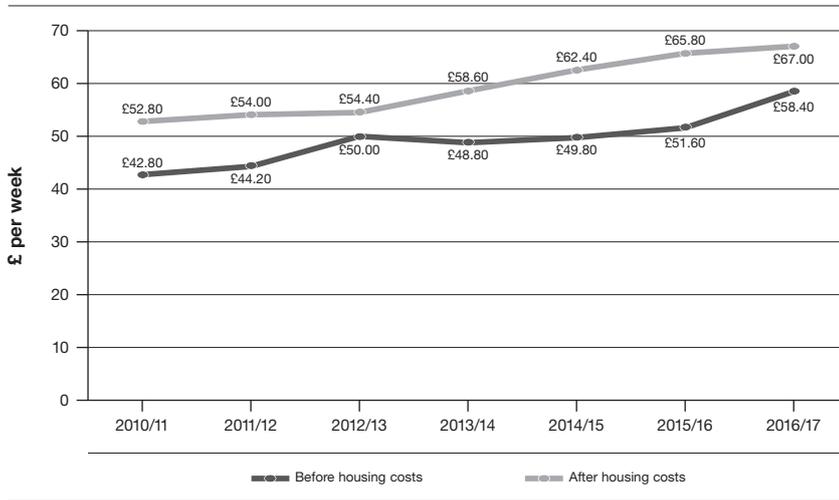
Tables 1 and 2 give the distribution of those below the poverty thresholds, before and after housing costs. The analysis of the distributions here provides a quick overview about how deep the poverty these households generally experienced. Table 1 shows that roughly two-fifths of the poor households with children experienced life more than 25 per cent below the poverty line (before housing costs). This figure rises to about one in two households when housing costs were taken into account (see Table 2).

For those who were below the poverty threshold before housing costs, a generally higher proportion of them experienced poverty at the level of 10.1–25 per cent below the line. This is followed by those at 25.1–50 per cent below the line. The proportions of 50+ per cent were the lowest in most of the observed years, but still represent between a tenth and a fifth of households with children in poverty but there is a slight worrying sign that the proportion of 50+ per cent below the line may be beginning to rise.

But after housing costs were taken into account, the proportions of those over 50 per cent below the poverty line had significantly increased, from between 12–18 per cent to between 21–25 per cent. Over the observed periods, an increasing trend can also be noted.

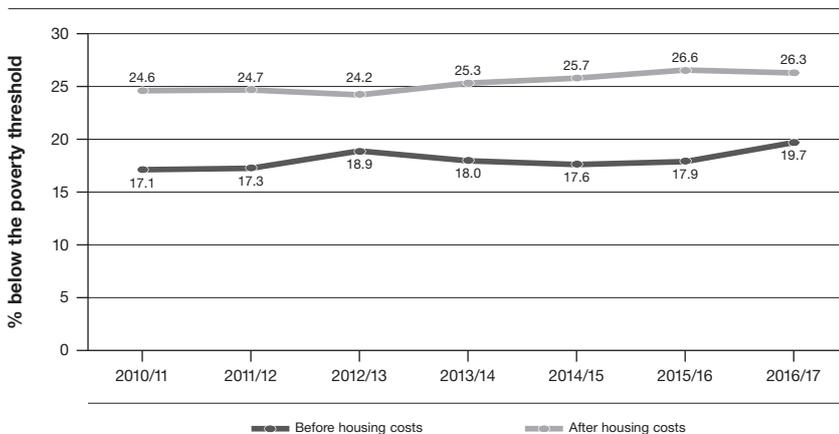
Table 3 gives the total poverty gaps – that is, the mean poverty gap times the number of households with dependent children below the poverty threshold in each years. The amount needed to lift those below the poverty threshold out of poverty has increased from £153.9 million per week to £201.8 million between 2010/11 and 2016/17. Note the gap between the before and

Figure 1: **Changes in the poverty gap for households with children**



Note: Own analysis of HBAI

Figure 2: **Changes in the poverty gap for households with children**



Note: Own analysis of HBAI

Table 1: **Distribution of households with children below the relative poverty threshold before housing costs**

	Number of households with children in poverty	0.1–5%	5.1–10%	10.1–25%	25.1–50%	>50%
2010/11	1302693	18.5	15.5	28.8	21.9	15.4
2011/12	1265778	17.5	16.2	30.6	24.0	11.8
2012/13	1290302	14.7	15.4	31.2	20.3	18.5
2013/14	1262713	15.1	17.5	27.7	26.2	13.4
2014/15	1391756	18.2	14.4	30.5	22.2	14.7
2015/16	1432522	17.3	16.5	28.6	23.4	14.3
2016/17	1388540	16.5	14.0	28.0	25.8	15.7

after housing costs and figures, indicating the proportion of the poverty gap that is due to housing costs.

Absolute poverty gaps

The analysis of the relative poverty gap produced in a previous version of this analysis⁴ was criticised by the Department for Work and Pensions because it failed to take account of inflation – the argument being that a gap of £x in 2016/17 is not the equivalent of a gap of £y in 2010/11. It is a relative indicator, just as the 60 per cent of contemporary median is a relative threshold. (Though the relative threshold is the one Eurostat uses for its estimates of the poverty gaps based on EU SILC). However, as it is arguable whether a relative or so-called absolute poverty threshold is to be preferred for poverty rate calculations, so it is arguable whether an absolute or relative poverty gap figure is to be preferred for poverty gap analysis.

In our opinion, they both have merits and for that reason both were included for poverty rate measurement in the Child Poverty Act targets.

So, to meet this criticism, we have estimated absolute poverty gaps between 2010/11 and 2016/17 using the CPI deflators used in the HBAI User Guide 2016/17, page 3.

Absolute poverty rates in households with children have fallen from 26 per cent in 2010/11 to 24 per cent in 2016/17 (after housing costs). However, Figure 3 shows that the absolute poverty gap has increased from £43 to £57 per week (before housing costs) and from £53 to £63 (after housing costs), even after taking account of inflation.

Figure 4 shows the same results, but as a proportion of the absolute poverty threshold in each year. Again, the relative poverty gap has risen as a percentage of the threshold both before and after housing costs.

Tables 4 and 5 give the distribution of households below the absolute poverty threshold. Table 4 shows that, before housing costs, the proportions of poor households that fell further below the poverty line have increased recently; increases can be seen in the 25.1–50 per cent and the over 50 per cent groups, while the proportions of less than 5 per cent and 10 per cent groups decreased. Taking housing costs into account, Table 5 shows that the proportions of the over 50 per cent group has increased quite markedly between 2010/11 and 2016/17.

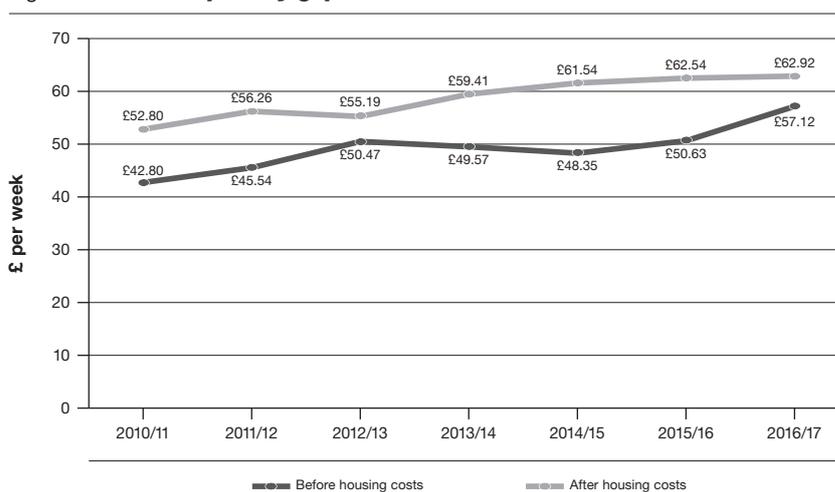
Table 2: **Distribution of households with children below the relative poverty threshold after housing costs**

	Number of households with children in poverty	0.1–5%	5.1–10%	10.1–25%	25.1–50%	>50%
2010/11	2039116	7.9	11.0	31.5	27.5	22.2
2011/12	2001385	11.6	10.4	28.4	28.4	21.2
2012/13	2098016	11.0	12.5	27.0	25.7	23.7
2013/14	2087259	11.3	9.5	29.2	27.5	22.5
2014/15	2183292	10.2	9.4	29.7	27.8	22.9
2015/16	2206876	10.0	9.1	27.9	28.0	25.0
2016/17	2217873	12.0	10.4	25.6	28.5	23.6

Table 3: **Total poverty gaps in £million per week, not adjusted for inflation**

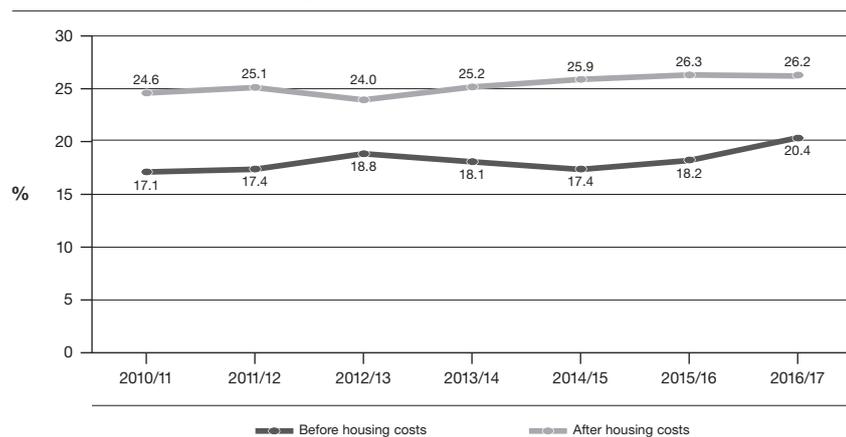
	Before housing costs £million per week	After housing costs £million per week
2010/11	82.8	153.9
2011/12	78.4	147.3
2012/13	94.9	166.6
2013/14	87.5	165.8
2014/15	98.7	184.2
2015/16	104.1	198.6
2016/17	113.0	201.8

Figure 3: **Absolute poverty gaps for families with children**



Note: Own analysis of HBAI

Figure 4: **Absolute poverty gaps as a proportion of the poverty threshold**



Note: Own analysis of HBAI

Table 6: **Total expenditure needed to close absolute poverty gap**

	Before housing costs £million per week	After housing costs £million per week
2010/11	82.8	153.9
2011/12	85.4	158.1
2012/13	100.9	179.1
2013/14	91.1	173.9
2014/15	90.1	173.9
2015/16	89.3	176.8
2016/17	92.5	170.7

Table 4: **Distribution of households with children below the absolute poverty threshold before housing costs**

	Number of households with children in poverty	0.1–5%	5.1–10%	10.1–25%	25.1–50%	>50%
2010/11	1302693	18.5	15.5	28.8	21.9	15.4
2011/12	1366432	16.5	17.0	31.5	23.7	11.3
2012/13	1376739	15.3	13.4	32.6	20.9	17.7
2013/14	1310853	16.4	15.5	28.9	25.9	13.3
2014/15	1287819	19.2	13.8	29.5	23.0	14.6
2015/16	1254392	19.9	12.9	30.4	22.0	14.8
2016/17	1153097	16.3	10.9	30.0	25.5	17.4

Table 5: **Distribution of households with children below the absolute poverty threshold after housing costs**

	Number of households with children in poverty	0.1–5%	5.1–10%	10.1–25%	25.1–50%	>50%
2010/11	2039116	7.9	11.0	31.5	27.5	22.2
2011/12	2097547	11.5	11.2	26.6	29.8	20.9
2012/13	2233095	11.6	10.5	29.4	25.8	22.7
2013/14	2156542	11.2	9.9	28.4	28.1	22.4
2014/15	2098744	11.2	9.1	28.3	28.4	23.0
2015/16	2026024	10.1	10.8	26.7	26.3	26.1
2016/17	1898435	11.0	11.2	26.1	26.2	25.5

Table 6 gives the total expenditure needed to close the absolute poverty gaps. The amount needed to lift all households with children above the absolute after housing cost poverty thresholds, in real terms, has increased by nearly 11 per cent from £153.9 million per week in 2010/11 to £170.7 million per week in 2016/17. Although the numbers of poor households with children has decreased using an absolute

threshold, for those who were below the poverty line there is evidence to suggest that the level of poverty they experienced has got worse. Thus, if they were to be lifted out of poverty, more expenditure would be required to close the absolute poverty gap.

Conclusion

There can be no doubt that the poverty gap has increased for households with children since 2010/11. The poverty rate for households with children has only increased for the relative after housing costs measure. However, the poverty gap has increased using both a relative and absolute threshold, both before and after housing costs, both in £ per week and as a percentage of the thresholds, and measured as the total sum foregone by those in either relative or absolute poverty. The picture is consistent. We believe that urgent action is needed to address the growing poverty gap, and that the poverty gap should take a place in any portfolio of poverty measures adopted by the government, and be published alongside the existing HBAI measures plus the new one proposed by the Social Metrics Commission. ■

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Thanks to very helpful comments by **Professor Donald Hirsch** on an earlier version of this article who recommended the use of additional measures to explore poverty depth.

- 1 See <http://discoversociety.org/2015/01/03/the-erosion-of-the-uk-safety-net/>
- 2 <https://www.gov.uk/government/statistics/households-below-average-income-199495-to-201617>
- 3 Social Metrics Commission, *A New Measure of Poverty for the UK: a summary of the report by the Social Metrics Commission*, 2018
- 4 J Bradshaw and A Keung, *UK Child Poverty Gaps Still Increasing*, 2018, <http://www.cpag.org.uk/sites/default/files/uploads/UK%20child%20poverty%20gaps%20increasing%20again.pdf>