

How much does the official measure of child poverty under-estimate its extent by failing to take account of childcare costs?



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1 The Problem

Relative income poverty counts the number of people in households with incomes below 60 per cent of the median. Incomes are adjusted by household composition through equivalisation, a process that applies weights to adults and children according to their number and age. However, one imperfection of this measure is that it fails to account fully for variations in what different households need to spend to reach an equivalent living standard. As well as household composition, large variations can be caused, for example, by the costliness of housing in a given part of the country, by disability and by the generation of a particular income level requiring large expenditures on childcare in order for the family to work.

Any poverty measure will always be an approximation; it would never be possible to match up each individual household's situation and detailed costs with their income. However, the three factors mentioned above – housing, disability and childcare – are hard to ignore when discussing poverty measurement. Each can impose huge differences in costs. Moreover, in the UK, costs associated with each of these factors can generate additional income from state transfers (housing benefit, DLA/PIP, childcare element of tax credits/Universal Credit). Perversely, this means that an additional cost can in some cases *increase* a household's income relative to the median, when their disposable income (after the paying for the cost in question) is in fact the same as or lower than someone without this additional cost (depending on whether the benefit payment partially or fully covers the cost).

This problem has been dealt with in the case of housing costs by the reporting of income both before housing costs (BHC) and after housing costs (AHC), as DWP's Households Below Average Income does. Disability costs would be harder at present to deal with in this way because they are difficult to identify precisely, and cannot be estimated through an income survey (except, very indirectly, via the level of disability

benefits). On the other hand, childcare costs are reported in the Family Resources Survey (FRS), which is used to measure the income distribution and poverty. However, to the best of our knowledge, childcare costs have not been taken into account for producing a poverty measure in a similar way that AHC has been produced.

2 The measure

This paper introduces a new income measure: *income after housing and childcare costs* (AHCC). This builds on the AHC analysis of the FRS, subtracting not just housing costs but also reported childcare costs to look at the distribution of disposable income once these items have been paid for. The paper compares poverty rates between the AHC and the AHCC measures, to estimate how much the consideration of childcare affects poverty rates in these terms. There may be some under-estimation of childcare costs in the FRS: half of families with children in the survey report having childcare (paid or unpaid), and it is uncertain how many of the rest have no childcare and how many fail to report it. In this context, the results reported here can be seen as reflecting the extent to which *known* childcare costs reduce disposable income to below the poverty line; there may also be some additional, unmeasured, effect.

In compiling this new measure, the distribution of income was re-analysed on an AHCC basis using FRS data. The poverty line is based on the equivalised median income of the whole population. The median income AHCC is slightly lower than AHC (£371 vs £374). This is because some households just above the AHC median have childcare costs (not many, relative to the whole population, with and without children); these costs bring their net income below the AHC median, so the median household is now someone a bit lower down the distribution than before. This causes the poverty line to be lower too, though not by much: for example, by £2.70 a week for a couple with two children aged five and 14 and £1.40 for a lone parent with one child aged five (a proportionate reduction of the poverty line of 0.8 per cent). Table 1 summarises the monetary values of AHC and AHCC median and poverty lines for the whole population.

Table 1 Median and 60 per cent median AHC and AHCC, 2012/13 (all households, equivalised)*

	AHC	AHCC
Median	£374.00	£371.00
60% median	£224.40	£222.60

*The figures represent the median income of all households, after they have been adjusted to an equivalent income for the benchmark household type – a couple with no children. For a household comprising a couple with two children, for example, to be at this median level, its income would need to be 40 per cent higher than shown here.

3 Overall comparison between AHC and AHCC poverty

Figure 1 illustrates how the development of an AHCC poverty line causes some children to be reclassified as being in poverty, while others are shown as being just above the poverty line rather than just below it. Even though the change in the poverty line is very small, 52,000 children are in families very close to the line and are therefore affected in this second way. Nevertheless, a substantially greater number, 133,000 children, are in families whose childcare costs cause them to be reclassified as in poverty once these are taken into account. Thus the overall number in poverty is 81,000 higher on this measure.

Figure 1 Illustrative representation of families falling below AHC and AHCC poverty lines

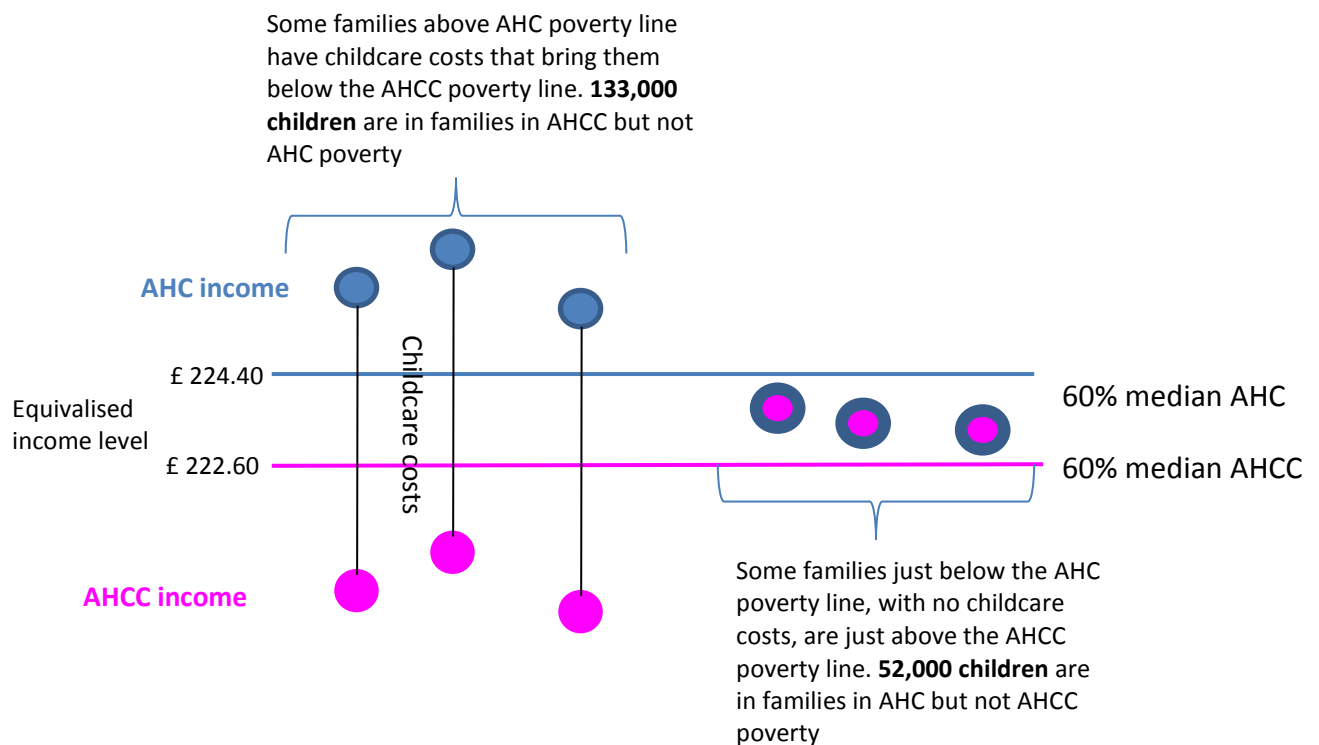
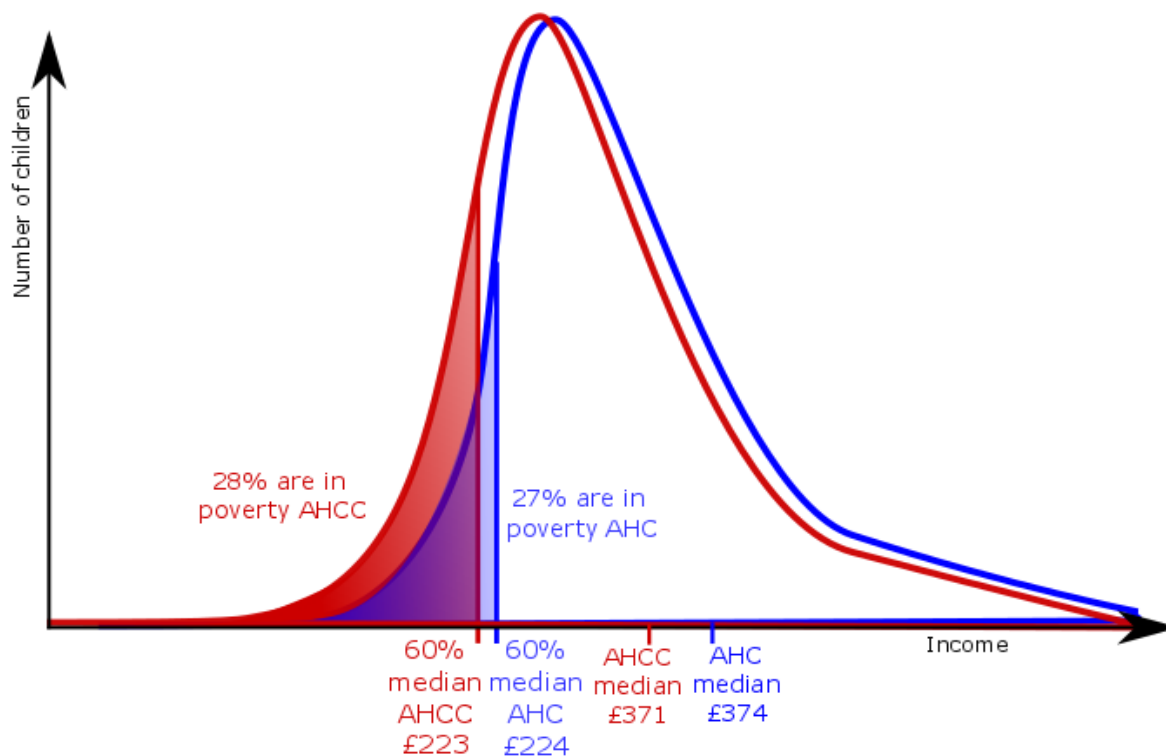


Figure 2, which is also illustrative rather than being drawn accurately, shows how this affects the reported income distribution. The AHCC distribution, shown in red, is further to the left to represent more children on lower incomes, but the threshold of

poverty also moves slightly to the left. Some families end up in poverty on one measure but not the other, and the net effect is an increase in the overall poverty rate by about one percentage point.

Figure 2 Illustrative representation of distribution of income AHC and AHCC



This is a significant but not very large overall change (it compares with a 10 percentage point difference between AHC and BHC). Only one in five children live in families that report paying for childcare, so it is not surprising that there is not a huge effect on the overall child poverty rate. Table 2 shows that there has not been any noticeable change in these numbers in recent years, despite childcare having become more expensive – possibly because while some people therefore pay more for childcare than before, others may have been pressurised into looking for informal arrangements or not working as many hours to mitigate higher costs. Table 3 suggests some move towards proportionately greater use of unpaid childcare: fewer children are in households using paid childcare despite more being in households with childcare in total.

Table 2 Numbers of children poverty under AHC and AHCC measures, selected years 2008-13

	% of children			Number of children			Breakdown of difference	
	AHC	AHCC	Difference	AHC	AHCC	Difference	In poverty AHCC not AHC	In poverty AHC not AHCC
2012/13	27.3%	27.9%	0.6%	3,650,273	3,730,936	80,663	132,919	52,256
2010/11	27.3%	28.1%	0.8%	3,609,428	3,713,758	104,330	151,701	47,371
2008/09	30.3%	31.0%	0.7%	3,932,180	4,023,109	90,929	142,211	51,282

Table 3 Use of paid and informal childcare 2008 and 2012
Of children whose families report using childcare, percentage paying and not paying, as reported in Family Resources Survey

	2008/09		2012/13		Change in number of children
	%	Number of children	%	Number of children	
Pays for all childcare	21.0%	1,481,781	19.5%	1,357,453	-124,328
Pays for some childcare and gets some informally/free	23.6%	1,657,316	22.0%	1,547,210	-110,106
All childcare is informal/free*	55.4%	3,831,027	58.5%	4,294,775	463,748
Total	100%	6,970,124	100%	7,199,438	229,314

*In some cases this may include families using only the free 15 hours entitlement for three and four year olds.

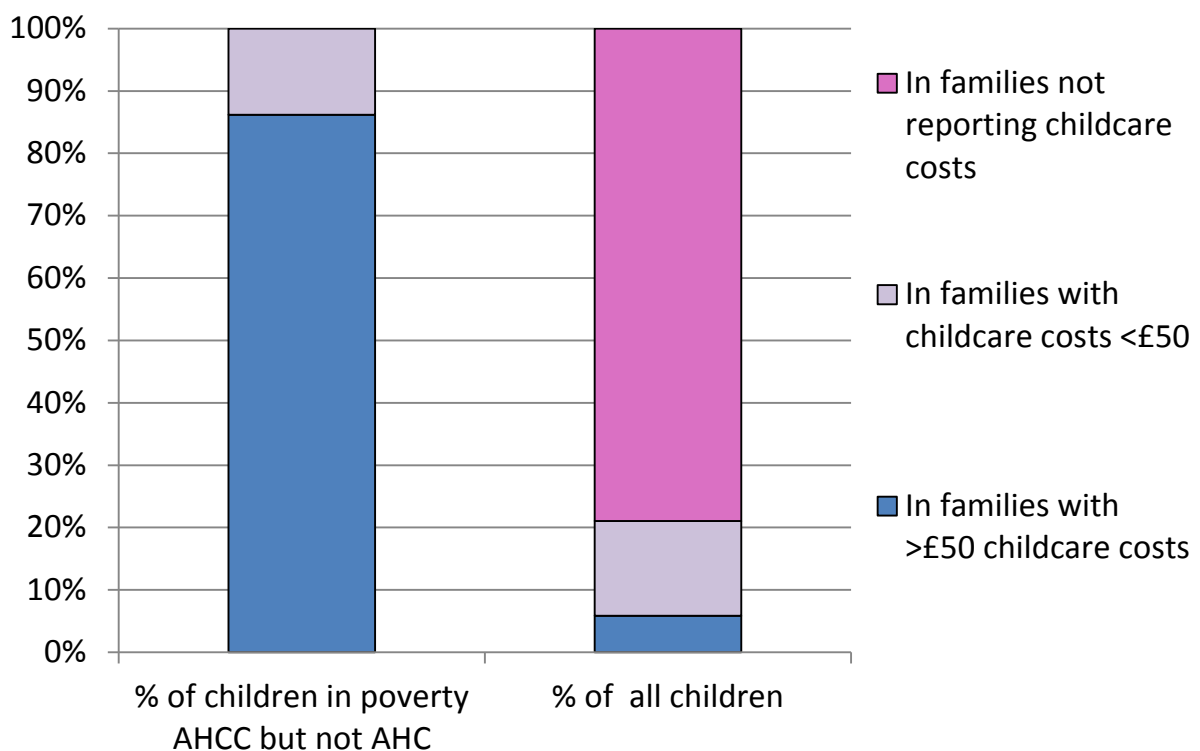
Regardless of the limited overall effect on poverty, it is worth looking more closely at the effect that childcare costs has on the poverty risk of those who do pay for it, as well as on particular sub-groups. This can help us both to understand the impact on disposable incomes for such families and to reflect on the barrier that childcare costs create, explaining why many families do not feel able to take them on in the first place.

3.1 The impact by group

Not surprisingly, the effect on poverty rates of deducting childcare costs is greater for families reporting that they pay for childcare, and particularly for those reporting that they pay relatively large amounts, than for the overall child poverty rate. Figure 3 illustrates this by showing which groups, by childcare and working/family status, account for the additional poverty cases, and comparing this distribution to the overall characteristics of all children. Figure 4 then looks at which groups face significant increases in poverty risk as a result of taking childcare costs into account. Table 4 gives a fuller account of various categories of family, ordered by the impact on poverty risk.

Figure 3 Breakdown of main categories of children brought into poverty by childcare costs, and comparison with their representation in the general population

a) By childcare cost status



b) By work and family status (working families only)

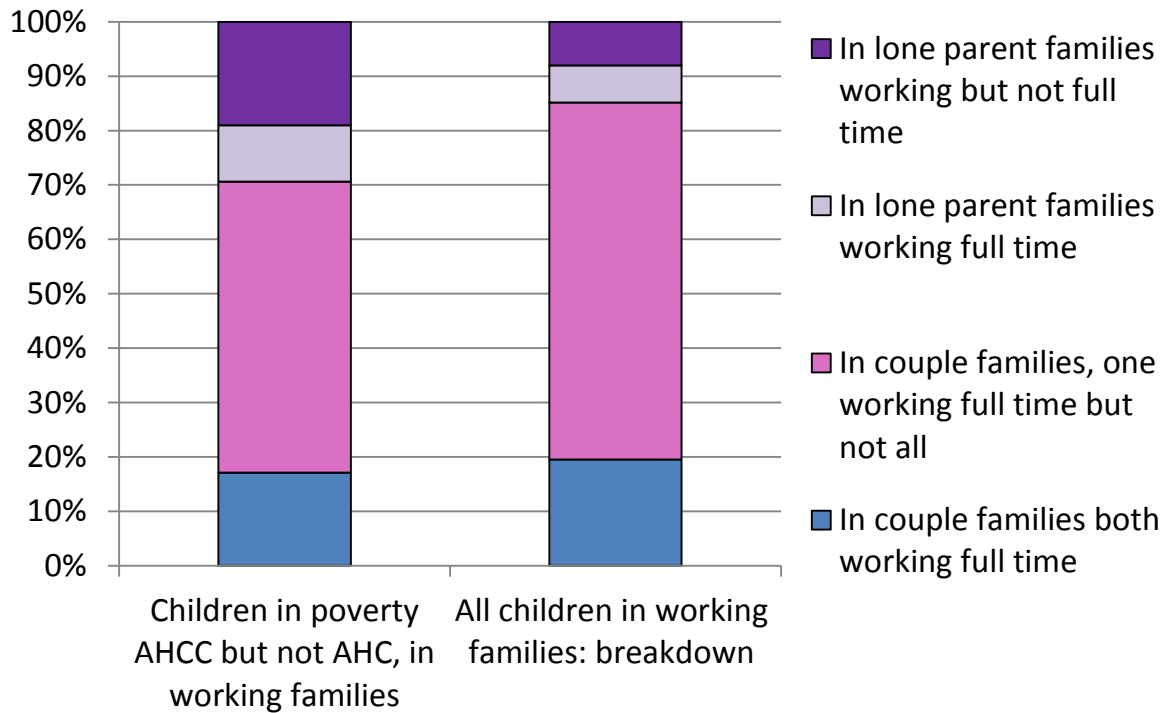


Figure 4 Poverty risk AHC and AHCC, 2012/2013 (Selected categories in order of how much higher poverty rates are after childcare costs)

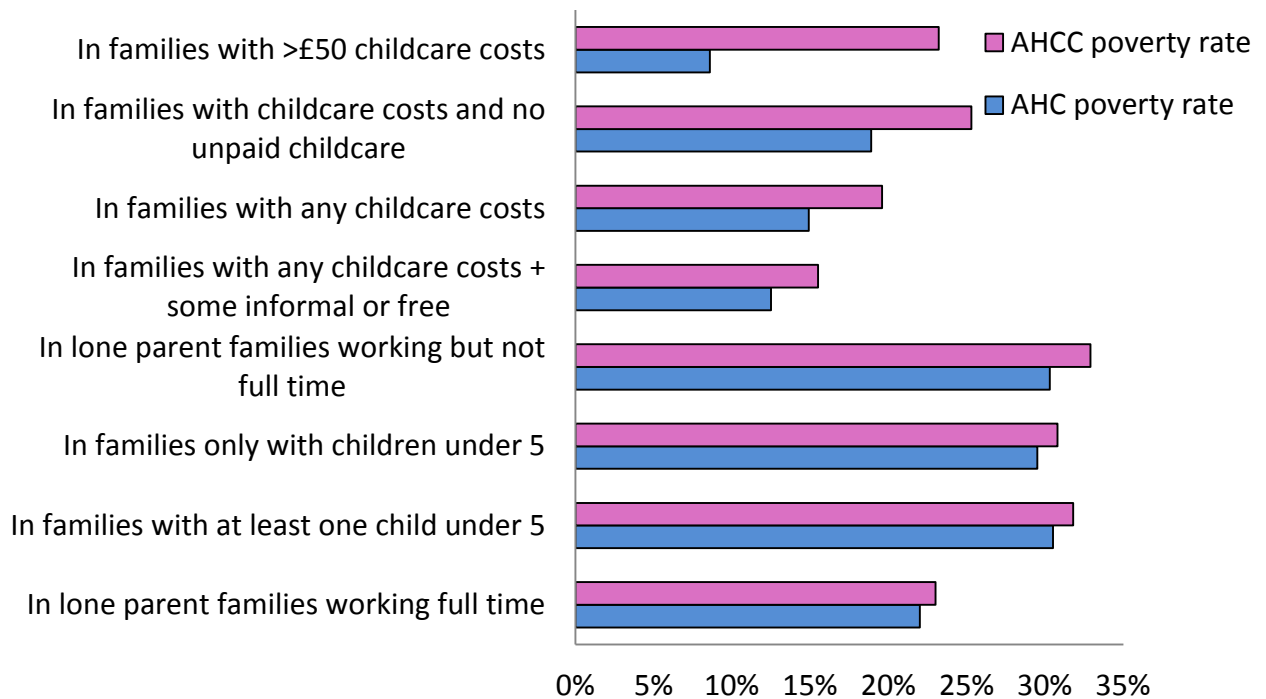


Table 4 Childcare costs and poverty rates by category

Category	Percentage point increase in poverty rate AHCC compared to AHC	AHC poverty rate	AHCC poverty rate	Number of additional cases	As % of the 133,000 additional cases		Category as a percent of children, by poverty status		
							Children in AHC poverty	Children in AHCC poverty	All children
In families with >£50 childcare costs	14.6%	8.6%	23.2%	114,554	86.2%	>£50 cc costs	1.8%	4.9%	5.8%
In families with childcare costs and no unpaid childcare	6.4%	18.9%	25.3%	87,310	65.7%	cc costs and no unpaid	7.0%	9.2%	10.2%
In families with any childcare costs	4.7%	14.9%	19.6%	132,919	100.0%	any cc costs	11.4%	14.8%	21.1%
In families with any childcare costs + some informal or free	3.0%	12.5%	15.5%	45,609	34.3%	any cc and some free	5.3%	6.4%	10.9%
In lone parent families working but not full time	2.6%	30.3%	32.9%	24,451	18.4%	lps working not ft	7.4%	7.8%	6.7%
In families only with children under 5	1.3%	29.5%	30.8%	42,793	32.2%	only children <5	19.9%	20.3%	18.4%
In families with at least one child under 5	1.3%	30.5%	31.8%	101,899	76.7%	At least 1 <5	48.4%	49.3%	43.4%
In lone parent families working full time	1.0%	22.0%	23.0%	13,320	10.0%	lps ft	4.6%	4.7%	5.7%
In lone parent families	0.7%	41.8%	42.5%	41,293	31.1%	lp families	35.8%	35.7%	23.5%
In couple families both working full time	0.7%	3.6%	4.3%	21,984	16.5%	cpls both ft	2.1%	2.5%	16.2%
In couple families, one working full time but not all	0.6%	23.7%	24.3%	68,733	51.7%	cpls one ft	47.3%	47.4%	54.6%
In couple families	0.5%	23.0%	23.5%	91,626	68.9%	cpl families	64.2%	64.3%	76.5%
In couple families: workless	-0.2%	71.1%	70.9%	909	0.7%	workless cpls	14.8%	14.4%	5.7%
In London families	-0.5%	36.5%	36.0%	5,898	4.4%	London	18.3%	17.7%	13.7%
In lone parent families: workless	-0.6%	58.6%	58.0%	3,522	2.6%	workless lps	23.9%	23.2%	11.2%

The following observations can be made from Figures 3 and 4 and Table 4:

- For the minority of families who do have childcare costs, and especially where they exceed £50 a week, the official figures do indeed greatly understate the poverty risk. The risk increases by a third for all those with childcare costs and nearly triples for those with high childcare costs.
- However, even those with high childcare costs have a slightly lower than average risk of being in poverty, 23 per cent rather than 28 per cent, even once these costs are taken into account. The population who pay for childcare are generally more likely to be better off, and therefore able to afford this cost.
- Nevertheless, a substantial minority are having to meet childcare fees from a low income. While poverty is reported in the AHC measure as affecting only one in ten families paying over £50 a week for childcare, taking account of those costs raises the proportion to one in four. In some cases, such families will only seem to be above the poverty line because their income is boosted by support for childcare through tax credits. This is likely to be the case for a high proportion of those receiving tax credits, who comprise nearly two thirds (63 per cent) of the families brought below the poverty line by childcare costs above £50 a week.
- Among groups defined in ways other than their childcare status, the most significant increase in poverty risk is for lone parents who work, but not full time, whose poverty risk increases from 30 to 33 per cent under the after childcare cost measure. Even though a lone parent is likely to face higher childcare costs working full time than part time, these costs raise poverty rates less for the full-timers because their work produces higher incomes and therefore childcare costs are less likely to take them below the poverty line. Median household income of children with lone parents working full time is 45 per cent higher than for all lone parents, and 75 per cent higher among those paying for childcare. For this last group, even once childcare costs are deducted, median income remains 55 per cent higher than for all children of lone parents.

- Among families that do not work, and are unlikely to have substantial childcare costs, the net effect is a slight reduction in poverty risk, because some families without childcare costs are reclassified as being below the poverty line as referred to above. Even though the effect on working lone parents' risk is slightly greater than for working couples, the greater proportion of lone parents who do not work helps explain why the overall impact on poverty risk is similar for couples and for lone parents.
- The largest single group by family and economic status among the additional families brought below the poverty line by childcare costs is couples where one but not both partners works full-time. However, while they account for about half of these cases, the effect on their risk is minor because of the above-mentioned offsetting effect.
- Taking childcare costs into account has no significant effect on poverty risks in London. Even though childcare costs there are very high compared to other parts of the country, this deters many low income families from taking on paid childcare. This is explained by looking at the income levels of families with children: median household income of those paying for childcare is higher than median income of London families with children overall. Among those paying for childcare in London, median income is 35 per cent higher AHC than the average for London, and even after deducting childcare costs it is 31 per cent higher. Among those paying at least £50 for childcare per week, these figures are 69 and 59 per cent. In other words, most families paying significant amounts for childcare in London are too well-off to be brought below the poverty line by these costs.

4 Comment

These calculations have shown that while childcare costs do not contribute much to the overall number of children whose families have low disposable incomes, they greatly mask the true extent of poverty among those whose childcare costs are more than £50 a week. In particular, families with modest incomes and significant childcare expenses are not mainly shown as being in poverty in the official figures, despite having low residual incomes once they have paid for childcare. If your family pays more than £50 a week for childcare you are three times as likely to be shown as being in poverty after than before childcare is taken into account.

Moreover, these figures do not show directly what is almost certainly a much bigger impact that childcare costs have on poverty: the prevention of families from realising their earnings potential because their earnings opportunities are restricted by the lack of affordable childcare. The fact that if you do take on expensive childcare it has such an impact on your poverty risk helps explain why such a relatively small number of families actually do so. A mother who only works school hours, or who decides not to work at all because after childcare costs she would be little or better off, has low income that is linked to high childcare costs in much the same way as someone who does take these on. In light of future plans to bring childcare costs down through additional free childcare hours and more generous support under Universal Credit, it will be worth monitoring the figures shown in this paper to see how much they change.

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