

Box D: Measuring the effect of the cost-of-living crisis on low-income households

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With wages failing to keep up with spiralling prices, poorly-timed tax rises, a benefits squeeze in real terms and government support schemes failing to cushion the income and inflation shocks, millions of households are facing a cost-of-living crisis.

We have highlighted in our previous Outlook how a more than 50 per cent rise in spending on energy bills now dominates the budgets of households least able to cope with them (Bhattacharjee et al., 2022). Following this analysis clear questions of how households adapt to these rising prices emerge. In particular, are households having to live without adequate nutrition or heating as a consequence? Such questions are difficult to answer. However, the aim of this box is to offer a tractable and relatively easily measurable indicator of the effect the cost-of-living crisis is having at the household level.

NIESR has been using destitution as a concept to measure extreme poverty (Bhattacharjee and Lisauskaite, 2020; Bhattacharjee et al., 2022). Specifically, the income component of the Joseph Rowntree Foundation's definition (Fitzpatrick et al., 2020) is used as a benchmark, whereby a single person household is considered destitute when their income falls below £70 per week, with any additional adult requiring another £30 per week and a child needing £20 per week. This measure assumes a fixed basket of necessities at the destitution threshold, which is clearly inadequate in the current context where low-income households are often having to choose between skipping a meal or switching their heating off (Richardson, 2022).

A clear way to present the effect the current crisis has had on households by determining whether the dilemma many households face between choosing to eat or to heat their homes is leaving many of them hungry and/or cold. A standard measure of food poverty is based on caloric intake below the minimum needed to sustain good health (Eli and Li, 2015).

However, it is not as straightforward to extend this to measure fuel poverty. To identify the minimum level heating necessary for a particular household, we would need to know key characteristics, such as the size and age of the dwelling along with the composition of its occupants. The UK Government uses a related Low Income Low Energy Efficiency (LILEE) metric to measure fuel poverty, whereby a household is defined as being poor if it is living in a property with a low energy efficiency rating (Bands D, E, F or G), and its disposable income (after housing costs [AHC] and energy needs) is below the poverty line, that is, 60 per cent of the national median AHC (ONS, 2022).

The income component of this measure is relatively fixed and also relies on a fixed consumption basket; therefore, it is not suitable for the high inflationary period we are currently in. Furthermore, the measure requires additional information on energy efficient housing, which is difficult to obtain, particularly in relation to the energy needs of households. Therefore, the measure is not only less relevant for current economic conditions, but its data intensive nature makes it particularly cumbersome to provide immediate results as the situation unfolds.

The Resolution Foundation has recently proposed a simpler alternative, whereby a household is considered as suffering 'fuel stress' if their energy bills exceed 10 per cent of their household budget (Corlett and Marshall, 2022). Although the proportion spent on energy correlates with income, it does not do so perfectly, as it is possible for rich households to exceed this threshold by increasing their energy consumption.

NIESR proposes a potential solution that is both practical and better suited to identifying the effect the cost-of-living crisis is having on households. We focus on the households' budget constraint, which poses a hard upper limit on the amount one can normally spend on necessary and non-necessary goods. Then, following Moore (2009, 2012), fuel poverty can be defined as the situation when fuel costs needed for heating exceeds disposable income, after minimum living costs - including food expenditures, and other housing costs - have been deducted.

While energy prices have substantially increased, fuel poverty only captures one side of the cost-of-living equation. Alongside increased energy prices, food prices have surged as well. In the terminology of Moore (2012), this would entail not just fuel costs increasing, but also minimum living costs rising simultaneously. To account for this dual pressure, our measure allows to incorporate the effect of rising costs of other necessity goods by focusing on households whose minimum living costs are already higher than their income. To distinguish from fuel poverty and fuel stress as used elsewhere, we refer to these households as “hardest hit households” within the context of the cost-of-living crisis.

This definition, in the spirit of Moore (2012), captures the effect of inflation by assessing the capacity of a household to pay for necessities with their disposable income. For many, their disposable income will not cover these essential items, especially as prices continue to rise. The resulting decisions that household will have to make are likely to have significant social repercussions, particularly the health consequences of cold homes and irregular meals.

Beyond this, there is the potential for lower productivity, slower growth and even social and political unrest (Bellemare, 2015; mudlark121, 2020). Chapter 2 of the UK Outlook reports that in 2022-23 1.5m households are facing choices between eating and heating, which reflects both the reality of increasingly unstable conditions and relevance of this measure for a substantial proportion of UK households.

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