

Fuel Poverty: Potentially Inconsistent Indicators and Where Next?

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BACKGROUND

- Reducing fuel poverty has been a government objective in the UK for many years, and is generally seen through the lense of the government's official fuel poverty statistics. The measurement of fuel poverty is critical for judgements about the significance of the problem and the design of policies to address it.
- However, the challenges of identifying households in fuel poverty, and debates about different statistical definitions of fuel poverty are also well established.
- This paper compares the households identified as fuel poor according to three metrics: (i) the 10% indicator; (ii) the Low Income-High Cost (LIHC) indicator; and (iii) whether households self-report an inability to afford to keep their home adequately warm.

METHODOLOGY

- The analysis uses almost 56,000 observations from 10,500 UK households over the period 2001-02 to 2008-09 as recorded by the British Household Panel Survey.
- The construction of the 10% and LIHC indicators follows the methodology of the official fuel poverty statistics as closely as possible, but with reported energy expenditure replacing modelled (required) energy expenditure.
- First, descriptive statistics are presented on the prevalence of the different fuel poverty indicators over the time period and the extent of their overlap.
- Second, pooled cross-section logit regressions are used to identify the characteristics of households identified as fuel poor according to each fuel poverty indicator.
- Third, the panel nature of the data is used to provide descriptive statistics assessing the extent of persistence for each of the fuel poverty indicators.

KEY FINDINGS

- There is a striking lack of overlap between the different fuel poverty indicators, in particular, between those based on reported energy expenditures (the 10% and LIHC indicators) and those based on householders' perception of their home environment.
- Less than 6% of households reporting 10% or LIHC fuel poverty simultaneously reported an inability to afford adequate warmth in their home.
- Less than 45% of households reporting an inability to afford adequate warmth in the home were simultaneously identified as being in LIHC fuel poverty, with the equivalent figure for 10% fuel poverty being less than 30%.

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- Noticeably different types of households are identified as fuel poor according to each of the indicators (i)-(iii). Households headed by an individual aged 65 or over were negatively associated with reporting an inability to afford adequate warmth, showed no association with the 10% indicator, but a positive association with the LIHC indicator.
- The probability of a household exiting fuel poverty between survey waves is noticeably higher than for income poverty, i.e. fuel poverty appears less persistent than income poverty.

POLICY ISSUES

- These findings show that the prevalence of fuel poverty, and the households identified as warranting support, vary significantly according to the chosen fuel poverty indicator.
- We suggest this illustrates a lack of precision in the measurement of the real-world problems viewed as forming the heart of fuel poverty, such as living in the cold.
- For policy and research to move forward there is a need for large scale data collection efforts which combine fuel poverty indicators with recording households' temperature preferences and the in-home temperatures that they achieve.
- If fuel poverty has limited persistence, it may suggest that time-limited interventions, such as cash transfers, may be a more cost-effective tool to alleviate fuel poverty than permanent interventions, such as energy efficiency upgrades.

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