

Objective vs. Subjective Fuel Poverty and Self-Assessed Health

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Manuel Llorca, Ana Rodríguez-Álvarez, Tooraj Jamasb

Abstract. Policies towards fuel poverty often use relative or absolute measures. The effectiveness of the official indicators in identifying fuel poor households and assessing its impact on health is an emerging social policy issue. In this paper we analyse objective and perceived fuel poverty as determinants of self-assessed health in Spain. In 2014, 5.1 million of her population could not afford to heat their homes to an adequate temperature. We propose a latent class ordered probit model to analyse the influence of fuel poverty on self-reported health in a sample of 25,000 individuals in 11,000 households for the 2011-2014 period. This original approach allows us to include a ‘subjective’ measure of fuel poverty in the class membership probabilities and purge the influence of the ‘objective’ measure of fuel poverty on self-assessed health. The results show that poor housing conditions, fuel poverty, and material deprivation have a negative impact on health. Also, individuals who rate themselves as fuel poor tend to report poorer health status. The effect of objective fuel poverty on health is stronger when unobserved heterogeneity of individuals is controlled for. Since objective measures alone may not fully capture the adverse effect of fuel poverty on health, we advocate the use of approaches that allow a combination of objective and subjective measures and its application by policy-makers. Moreover, it is important that policies to tackle fuel poverty take into account the different energy vectors and the prospects of a future smart and integrated energy system.

Keywords Fuel poverty in Spain; self-assessed health; latent class ordered probit model.

JEL Classification C01, C25, I14, I32, Q43.

Contact Durham University Business School, Mill Hill Lane, Durham, DH1 3LB, UK.
Tel. +44 (0) 191 33 45741. Email: manuel.llorca@durham.ac.uk

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