Sergio Tirado Herrero FUEL POVERTY AND UNEMPLOYMENT IN SPAIN

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Overview

In spite of their milder climates, Southern countries of the EU like Portugal Greece and Spain have reported in the past high percentages of population unable to keep their homes adequately warm in the winter (Healy, 2004). Spain – the Member State with the largest unemployment rate of the EU – offers a particularly suited case for exploring the relationship between fuel poverty and unemployment as well as for understanding the impact of the global financial crisis on domestic energy deprivation. On the other hand, domestic energy efficiency as the only-long-term solution to fuel poverty is thought to be a source of potential direct employment for laid-off workers of the construction sector, the most affected by crisis. The study thus reports a self-obtained estimate of the direct employment creation potential of thermal retrofits in Spain.

Method

The paper first estimates fuel poverty rates (i.e., the percentage of households and population in fuel poverty) in Spain based on objective and subjective indicators obtained from the analysis of the Spanish Household Budget Survey (HBS, 2006-2010) and the EU Survey on Income and Living Conditions (EU SILC, 2004-2010), following the two main approaches identified in the literature (Healy, 2004). Based on these two widely recognized measuring approaches, it is considered that a household is in fuel poverty when: i) spends a disproportionate share of its annual income (10%, twice the national average) on energy, based on data from HBS; ii) states to be unable to keep its home adequately warm in the winter according to EU SILC results. Results are then disaggregated by the situation of the active members of the households in relation to the labor market. Additionally, data from the Survey on Households and Environment 2008 and the *barometer* of the Spanish Center of Sociological Research (*Centro de Investigaciones Sociológicas* – CIS) are also reviewed from a fuel poverty-unemployment perspective.

The paper also provides an updated calculation of excess winter mortality rates in Spain for the period 1997-2010 following the methodology and results of Healy (2004). Based on that, an estimate of fuel poverty-related annual excess winter deaths has been also produced.

The estimate of the direct employment creation potential of thermal retrofits is based on a specific survey (the first of its kind in the country) for which 400 firms and entities of the construction/building retrofit sector were contacted. The results are based on the valid 25 case studies reporting real data from completed retrofit projects with an energy efficiency component.

Results

- A substantial fraction of the Spanish population (around 10% of all households, equivalent to some 4 million people) are experiencing difficulties to afford an adequate amount of domestic energy services or are forced to pay an . This proportion is increasing steadily since 2008 as a result of the financial and economic crisis.
- Households with their members unemployed perform worse in practically all fuel poverty indicators analyzed. The crisis is not only making the number of fuel poor households and unemployed people grow; it is also increasing at a faster pace the proportion of unemployed households that are in fuel poverty.
- Spain's current relative excess winter mortality rate (20.5%) is still as high as in the 1990s and one of the highest among western countries. It is estimated that fuel poverty may be the cause of between 2,300 and 9,300 excess winter deaths, a larger figure than the one recorded for road traffic accidents in the latest year with available data (1,480 deaths in 2011).
- Residential building retrofits with an energy efficiency component generate in Spain nearly 17 full-time employments per million Euros of the year 2010 invested (or 47 full-time employments per 1,000 square meters retrofitted)

Conclusions

Fuel poverty is a primarily domestic and spatially diffuse issue closely interrelated to other forms of poverty and social exclusion, and therefore a phenomenon almost invisible to decision-makers, NGOs, companies and other relevant stakeholders. In this context, the study provides the first comprehensive estimate of fuel poverty rates in Spain based on objective and subjective indicators, as well as an updated estimate of fuel poverty-related excess winter deaths. It then explores the differential impact of unemployment (as a household attribute) on fuel poverty, illustrating how the global financial and economic crisis is having an impact on the affordability of domestic energy services. In connection to the high unemployment rates reported in the Spanish construction sector since 2008, the paper also quantifies the direct employment creation potential of thermal retrofits as the only long-term solution to fuel poverty.

References

Healy, J.D. 2004. Housing, fuel poverty, and health: a pan-European analysis. Aldershot: Ashgate Publishing