ELSEVIER

Contents lists available at SciVerse ScienceDirect

Energy Policy

journal homepage: www.elsevier.com/locate/enpol



Definitions of fuel poverty: Implications for policy

Richard Moore*

Independent consultant, 40 The Avenue, Cheam, Sutton, Surrey, SM2 7QE, UK

ARTICLE INFO

Article history: Received 16 March 2011 Accepted 25 January 2012 Available online 2 March 2012

Keywords: Fuel poverty Definitions Policy implications

ABSTRACT

This paper outlines why the definition of fuel poverty is important in policy formulation and describes how the Government's current definitions evolved from the original concept. It discusses the determination of income and fuel costs and the possibilities for a relative and common European measure. It examines problems inherent in assessing fuel costs as a percentage of income and puts forward the arguments for a 'budget standard' approach. The paper illustrates how the size of the problem depends on the definition and chosen threshold and suggests advantages for a rating scale. It illustrates how the income composition and thresholds also govern the distribution of the target populations and the relative importance of the main causal factors, and examines the consequent policy implications. It explores the definition of vulnerable households and the importance of severity and questions whether the UK fuel poverty strategy is targeted at households least able to afford their fuel costs (as the name implies) or primarily those at risk from excess winter and summer mortality and morbidity. Finally, after examining the role of supplementary indicators, it looks at the opportunities for changing the definition and comments on the Government review of the definition and targets.

© 2012 Elsevier Ltd. All rights reserved.

1. Introduction

The definition of fuel poverty is important for policy formulation; for determining the scale and nature of the problem, targeting a strategy and monitoring progress. A distinction needs to be made, however, between the definition required for policies at a national or regional level and those required for identifying the fuel poor on the doorstep. This paper focuses on the former and analyses data from the 2008 English Housing Survey (EHS) data and previous annual English House Condition Surveys (EHCS) to explore the implications for policy. It concludes that the Government's current preferred definition is not directed at those most in need.

2. The government definitions and their evolution

While "fuel poverty" had been named and defined in broad terms by at least the early 1980s (Bradshaw and Hutton, 1983), it was defined specifically in Brenda Boardman's book of 1991 to cover households whose fuel expenditure on all energy services exceeded 10% of their income (Boardman, 1991). This was what the poorest 30% of households were then spending on fuel and, at twice the median expenditure, was a threshold above which spending was considered 'disproportionate'. To determine the

 $\hbox{\it E-mail address:} \ rpmoore@blueyonder.co.uk$

scale of the problem of 'affordable warmth', the 1991 EHCS Energy Report adopted the 10% of income threshold for fuel (DOE, 1996). However, rather than actual fuel expenditure, it used the fuel costs required to achieve either a minimum heating regime to safeguard health or a standard regime to provide thermal comfort, plus adequate lighting, cooking and typical appliance use.

The 1996 Energy Report further revised the definition by requiring 'satisfactory' heating (DETR, 2000). This comprised a full, standard or partial heating regime, depending on the household type and level of occupancy. As well as using basic income as in the 1991 EHCS, fuel poverty was now measured using full income, including Housing Benefit (HB) and Income Support for Mortgage Interest (ISMI). For trends between 1991 and 1996, the 1991 statistics were re-calculated using the 1996 definition, but only for basic income, as the 1991 survey had not collected or modelled HB and ISMI. The 1996 EHCS estimates of fuel poverty were used to underpin the UK Fuel Poverty Strategy of 2001, with the use of full income becoming the Government preferred 'target' definition (DTI, 2001).

Both the 1991 and 1996 EHCS definitions used the actual fuel prices of households to calculate fuel costs. However, the 2001 EHCS dropped the fuel consumption and tariff survey and since then the calculation of fuel poverty has been based on average regional fuel prices, broken down by payment type. In 2001, fuel costs were also based on modelled occupancy rates and by 2003, as well as HB and ISMI, mortgage payment protection insurance (MPPI) had been included in full income.

^{*}Tel.: +44 0 20 8661 2630.

Following a 2005 Government initiated peer review on the methodology for measuring fuel poverty, the computation of household incomes from any additional benefit units was improved and Council Tax (net of any CT benefit) omitted from all full incomes (Sefton and Chesshire, 2005). The fuel costs for hot water and lights and appliance use were also updated and rebased on actual occupancy. Subsequently, the EHCS based incomes were made more compatible with those from the Family Resources Survey and a fourth 'partial-standard' heating regime was added.

3. Incomes after housing costs

In poverty statistics, net (disposable) household income is measured either before housing costs are deducted (BHC) or after housing costs are deducted (AHC). Since the UK fuel Poverty Strategy, the Government has published annual statistics on fuel poverty using both the full and basic income definitions. Both definitions include housing costs, but because basic income omits HB, ISMI and MPPI, it nevertheless provides an after housing cost measure for those on full benefit. It is sometimes regarded as 'a half way house', but being an 'historical expedient' is unique to fuel poverty (Baker, unpublished). Both income measures also assume that households who own their home outright pay no housing costs.

The case for omitting net housing costs from income in the definition of fuel poverty appears self evident. Households cannot spend their housing costs on fuel, any more than they can so spend the national and local taxes which are specifically excluded from income. In theory, income poverty can be measured before housing costs are deducted, as it can be argued that households who own or rent properties that are above their incomes are taking the cost benefits in better accommodation. However, DWP's Households Below Average Income series (HBAI) recognises that this is not always the case in practice:-

Therefore, HBAI presents analyses of disposable income on two bases: Before Housing Costs (BHC) and After Housing Costs (AHC). This is principally to take into account variations in housing costs that themselves do not correspond to comparable variations in the quality of housing (DWP, 2010).

Unlike income poverty, however, fuel poverty is specific to the households existing home. Whatever their housing quality, the ability of the household to actually afford the fuel costs for their particular home will be dependent on their disposable income after housing costs, and not before. The housing benefit included in the full income definition may, in practice, be paid directly to the landlord and, without the omission of housing costs, households can be taken out of fuel poverty merely because of an increase in rent.

4. Equivalised incomes

Whether including or excluding housing costs, definitions of income poverty generally use equivalised household incomes. Equivalised incomes reflect the fact that larger households need a higher income than smaller households to achieve a comparable standard of living. Since 2005/2006, the HBAI series has used the OECD Modified and 'Companion' scales to, respectively equivalise BHC and AHC incomes, in place of the previous, more complex McClements scales (DWP, 2005).

Whether equivalised incomes should be used in defining fuel poverty is controversial. Some argue that if you equivalise incomes, then fuel costs would also need to be equivalised, thus

Table 1Income measures and an example of their affect on fuel poverty.

Source: EHS 2008 case data.

	Income measures	Couple with 2 children and fuel costs of £1,106 pa	
	and income components	Annual income, HB etc.	% fuel cost/ income
	Basic income	£12,259	9.0%
+	Housing benefit (or ISMI and	£4,784	
	MPPI)		
-	Council tax less any CT	£838	
	benefit		
=	Full income, BHC	£16,205	6.8%
-	Gross housing costs	£8,788	
=	Residual income, AHC	£7,417	14.9%
1	Equivalence factors (OECD)	0.58 + 0.42 + 0.2 + 0.2 = 1.4	
=	Equivalised income, AHC	£5,298	20.9%

negating the effect of equivalisation (DECC, 2009). Others suggest that 'partial equivalisation' of the fuel costs may be needed. However, as the space and water heating costs, cooking, lighting and appliance use costs in the existing definition are all calculated using the actual dwelling and household size, others argue that equivalising the fuel costs is not necessary. But, as fuel poverty is specific to the households existing housing, however costly and disproportionate to their income that is, it may be more appropriate to equivalise incomes after housing costs.

Table 1 shows how the different income measures are related and how, for example, these affect significantly the calculated severity of fuel poverty for a young, low income family renting in London, claiming Housing Benefit and with typical fuel costs.

5. Determining fuel costs

Despite early references to 'affordable warmth', fuel poverty in England has always been defined using total fuel costs. That households should be able to afford the fuel costs necessary for cooking, adequate lighting and essential appliances, as well as satisfactory heating, can be clearly justified on the grounds of health, safety and well being. To avoid excess seasonal mortality, homes need to be kept cool in summer as well as warm in winter and, in many dwellings, this may increasingly require some form of mechanical air-conditioning.

As with incomes, however, there are questions about the way total fuel costs are measured. Despite improvements, the 'algorithms' used for calculating the non-space heating costs are still too generalised. The Government's use of average fuel prices is also likely to significantly under-estimate fuel poverty as those at risk tend to be on higher than average tariffs for their region and payment type. However, the ongoing 2011 EHS Energy Follow-up Survey (EFUS) should enable any under-estimation to be assessed (CLG, 2010a).

There are also concerns regarding the partial 'half-house' heating regimes specified for households under-occupying their homes, particularly the additional fourth 'partial/standard' regime, as this may be insufficient to prevent condensation and mould growth in unheated rooms. Scotland uses just two heating regimes in calculating fuel poverty, full heating for elderly and infirm household, but with a higher living room temperature (23 °C rather than 21 °C), and the standard heating regime for everyone else (Pither and Moore, 2006). This and other methodological differences result in comparatively higher estimates of fuel poverty in Scotland, irrespective of any real differences.

Download English Version:

https://daneshyari.com/en/article/7405597

Download Persian Version:

https://daneshyari.com/article/7405597

<u>Daneshyari.com</u>