

Institution: London School of Economics and Political Science

Unit of Assessment: 22 Social Work and Social Policy

Title of case study: Better measures of fuel poverty

## 1. Summary of the impact

Fuel poverty is a serious social problem. Research within the Unit has changed official understanding and measurement of fuel poverty. High quality work within the Unit examining poverty measurement, specific issues around fuel poverty, impacts of energy efficiency measures for housing, and of the distributional effects of energy price increases, resulted in the Government inviting Professor Hills, in 2011, to lead a review of how fuel poverty is measured. His March 2012 report recommended a new 'low income high costs' framework as the indicator for fuel poverty. In September 2012, the Government's consultation paper proposed that this be adopted for future official statistics. The Government confirmed this decision in July 2013 and published a Framework for Future Action on the problem, based on the review's analysis.

## 2. Underpinning research

Research Insights and Outputs: Since 1997, the Centre for Analysis of Social Exclusion (CASE) has examined the measurement and extent of poverty and the impact of policy on it, stressing its multi-dimensional nature [1]. It has taken a particular interest in housing, including the quality of the housing stock.

In the early 2000s, CASE research examined fuel poverty and the effectiveness of policies towards it, pointing to conflicts between official measures of who was classified as 'fuel poor' and the ways programmes were targeted [2]. It used data from the English House Condition Survey and the British Household Panel Survey to look at the extent to which being in fuel poverty persisted over time, and the effects of turnover in the housing stock [3].

Following this work, CASE was commissioned by government to carry out a 'peer review' of the methodology used in creating the official statistics [4]. Several of this review's suggestions for technical improvements were incorporated into the official statistics; the review also raised other issues, such as the treatment of housing costs. However, the review's terms of reference ruled out examination of the fundamental form of the measure, which was based on a ratio between required energy costs and income.

Since 2005, research within CASE has examined the impact and implementation of energy efficiency measures for the housing stock, and the lessons that could be drawn from experiences in other countries, such as Germany. It also examined the distributional impact of measures intended to mitigate climate change by increasing energy prices. This showed the regressiveness of policies that increase the price of domestic fuel, but also the existence of low-income losers – disproportionately high energy users – even if other tax and benefit measures removed this regressiveness between income groups on average [5].

In Spring 2011 Professor Hills was invited by the Secretary of State for Energy and Climate Change to undertake an independent review of how fuel poverty has been measured officially, examining the problem from first principles. He published an Interim Report in October 2011, exploring the reasons why 'fuel poverty' constitutes a distinct problem, pointing to flaws in the fundamental design of the existing measure, and suggesting an alternative approach [6]. Following public consultation and further analysis, he produced his final findings and recommendations in March 2012 [7].

Hills suggested that fuel poverty was a concern from three overlapping perspectives: health and well-being; compounding of hardship; and for climate change. At the core of the problem are people with both low incomes and disproportionately high energy requirements. However, this



situation is not what is captured by the existing official '10 per cent' measure, which sometimes includes relatively high income households as 'fuel poor' and can exclude others with low incomes and high energy costs. The picture it gives of the changing extent of the problem over time produces dramatic fluctuations unrelated to progress on the ground. The design of the existing measure can encourage a policy focus on those with the smallest problems.

Drawing on this analysis, Hills put forward an alternative approach, which replaced the official '10 per cent' measure by the combination of (i) an indicator of the extent of the problem, given by the number of people with both low income and relatively high energy requirements (the 'Low Income High Costs' indicator), and (ii) a new 'Fuel Poverty Gap' indicator capturing its depth. His final report [7] pointed not only to the gravity of the problem and the fact that it was likely to grow rather than be eliminated by 2016 under current policies, but also to the effectiveness and high social returns from energy efficiency measures aimed at those with low incomes living in the hardest-to-heat homes.

Key researchers: Professor John Hills has been at LSE since 1986; Mr Tom Sefton (Research Fellow, CASE, 1997-2009)

#### 3. References to the research

- [1] Hills J (2004) *Inequality and the State*. Oxford University Press, Oxford. LSE Research Online ID: 4299
- [2] Sefton, T (2002) 'Targeting fuel poverty: Is the government getting warm?', *Fiscal Studies*, 23 (3): 369-399. DOI: 10.1111/j.1475-5890.2002.tb00065.x
- [3] Sefton, T. (2004), Aiming High: An evaluation of the potential contribution of Warm Front towards meeting the Government's fuel poverty target, CASE report 28, London: LSE. LSE Research Online ID: 28322
- [4] Sefton, T and Chesshire, J. (2005) Peer review of the methodology for calculating the number of households in fuel poverty in England: final report to DTI and Defra. London: DTI and Defra. LSE Research Online ID: 51675
- [5] Hills, J (2009) 'Future pressures: intergenerational links, wealth, demography and sustainability' in J Hills, T Sefton and K Stewart (eds) *Towards a More Equal Society? Poverty, inequality and policy since 1997.* Bristol: The Policy Press. LSE Research Online ID: 31329
- [6] Hills, J (2011) Fuel Poverty: The problem and its measurement, CASE report 69. London: London School of Economics and DECC. LSE Research Online ID: 39270
- [7] Hills, J (2012) Getting the Measure of Fuel Poverty: Final report of the Fuel Poverty Review, CASE Report 72. London: London School of Economics and DECC. LSE Research Online ID: 43153

Evidence of quality: References [1] and [5] are books with well-respected publishers; [2] is a peer-reviewed journal article. The work of the Centre for Analysis of Social Exclusion was supported by the ESRC's grant to it as a Research Centre held by Hills and colleagues, with funding of £2.7 million in the period 1997-2008. The funding was secured from the ESRC's annual centres competition.

# 4. Details of the impact

Nature of the Impact

The Warm Homes and Energy Conservation Act 2000 committed government to publishing a



strategy to ensure that 'so far as reasonably practicable persons do not live in fuel poverty', its wording implying by 2016. The ensuing strategy document adopted a measure used in previous academic literature, that a household is 'fuel poor' if modelling of the energy efficiency of its home suggests more than 10 per cent of net income would have to be spent on fuel to reach particular temperature standards and meet other needs. There have been technical changes over time, including several following the Sefton/Chesshire 'peer review' [4], but this measure has continued to be used in the annual official fuel poverty statistics.

The 2010 Autumn Statement announced that government would commission an independent review of the fuel poverty measure from first principles. Professor Hills was subsequently asked to carry this out, supported by a team based in the Department of Energy and Climate Change (DECC). The review drew on insights from earlier research within CASE, from other institutions, and new analysis by the review team [7]. The report's statistical analysis shared the Royal Statistical Society's 2012 award for 'excellence in official statistics'.

On publication in March 2012, the government announced that later that year it would issue a consultation paper in response. Shortly afterwards, the Deputy Prime Minister announced that a further part of the resources which energy companies must provide to support energy efficiency measures under the Energy Company Obligation (ECO), equivalent to £190 million per year, would be ring-fenced for a 'Carbon Saving Communities Obligation'. This reacted to analysis in the report and by others pointing to the potential regressiveness of ECO as previously designed (because its costs will be met by consumers), unless a sufficient proportion of its benefits went to those with low incomes.

The consultation paper published in September 2012 welcomed the 'considerable insight that [Professor Hills' review] has brought to this issue, as well as the renewed focus the Review has generated on how we tackle the problem' [A, p.3]. Following the review's key final recommendation, it announced that an 'updated, refreshed' [A, p.3] strategy for tackling fuel poverty would be published in 2013. It committed the government to moving away from the current official definition and put forward a new framework for measurement. It stated that the government agreed with 'Professor Hills' assessment of the weaknesses of the current definition, and ... that the Low Income High Costs framework [developed by Hills] provides a better approach to understanding the issue of fuel poverty and intend to adopt it as the main measure of fuel poverty in future' [A, p.24].

In terms of technical construction of the indicator, the consultation proposed adoption of all but one of the review's detailed recommendations, including measurement of income after housing costs and adjusted for family size, how relative energy costs should be measured, and how thresholds for low income and high costs should be set (the exception was the treatment of certain disability benefits, although DECC later said that parallel statistics will be published reflecting both treatments). DECC's 2013 Fuel Poverty Statistics, which cited Hills' work extensively, included data on the new proposed basis, alongside the current measure [B].

In July 2013 the government published its response to the consultation, announcing that it will 'adopt the overall Low Income High Costs framework as the new indicator of fuel poverty. This will be used in future assessments of fuel poverty in England' [C, p.6].

It also published a 'framework for future action', announcing that it would be proposing amendments to the 2013 Energy Bill to underpin a future government strategy for fuel poverty (to follow enactment of the Bill). The document suggested that the 'new definition is a powerful tool' to 'design effective solutions' [D, p.5], using the basis of the 'outstanding work' undertaken by Professor Hills [D, p.5 and p.7].

Wider Implications: The citation for Professor Hills's knighthood in June 2013 stated that: 'His independent review of fuel poverty will help to target assistance at those who need it most, with a long-lasting impact through quality of life improvements for some of the most vulnerable in society'. The Unit's research therefore led to a significant change in official understanding and



measurement. In turn this has contributed to a change in the focus of policy and distribution of resources available for energy efficiency improvements, potentially leading to more effective policies benefiting several million people. This should have benefits in reducing hardship, health problems, and mitigating adverse side-effects of climate change policies.

# 5. Sources to corroborate the impact

All Sources listed below can also be seen at: https://apps.lse.ac.uk/impact/case-study/view/58

[A] Department for Energy and Climate Change (2012) Fuel Poverty: changing the framework for measurement Cm 8440. London: DECC. <a href="http://www.official-documents.gov.uk/document/cm84/8440/8440.pdf">http://www.official-documents.gov.uk/document/cm84/8440/8440.pdf</a>

[B] DECC (2013) Annual Report on Fuel Poverty Statistics 2013. London: DECC. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/199833/Fuel\_Poverty">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/199833/Fuel\_Poverty Report 2013 FINALv2.pdf</a>

[C] DECC (2013) Fuel Poverty: changing the framework for measurement Government response. London: DECC.

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/211135/government response fuel poverty consultation.pdf

[D] DECC (2013) Fuel Poverty: A Framework for Future Action. London: DECC. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/211180/FuelPovFramework.pdf">https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/211180/FuelPovFramework.pdf</a>

[E] Users/beneficiaries who could corroborate: The Deputy Director, Fuel Poverty, DECC and Secretary to the Fuel Poverty Inquiry