

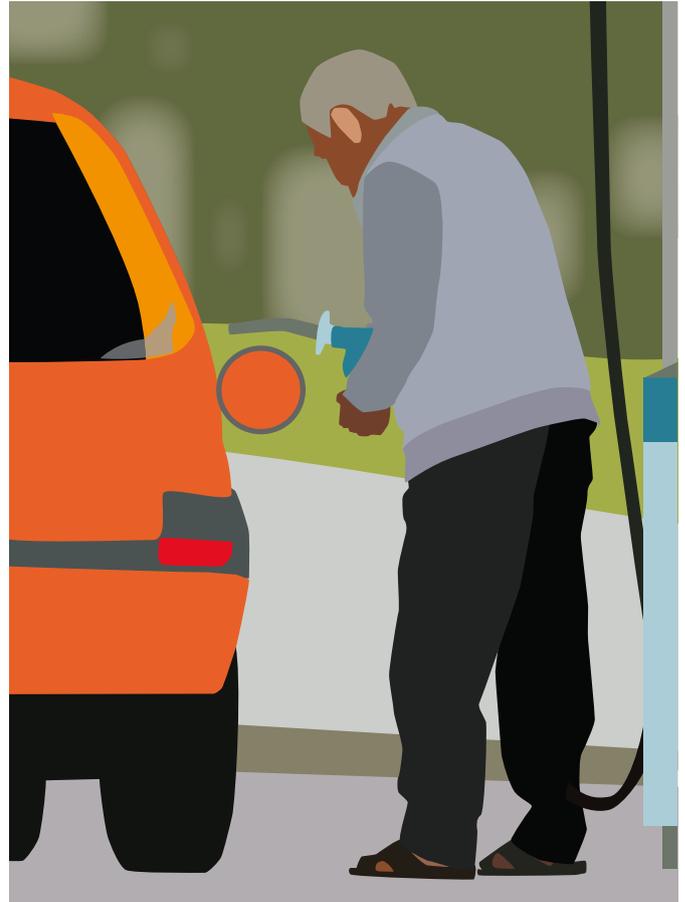
RESEARCH INSIGHT

CAR RELATED ECONOMIC STRESS

IS THERE A TRANSPORT EQUIVALENT OF FUEL POVERTY?

Key points

- 9% of UK households, and large areas of the country, are in a state of 'car-related economic stress', with a low income but high expenditure on running motor vehicles
- For households, the affordability of transport is not the only barrier to having access to essential services – affordability is only a subset of a broader 'transport poverty' problem
- Fuel poverty concepts and metrics should not be applied directly to transport, as travel is different from home energy consumption in several respects
- Metrics of 'economic stress' can be calculated based on actual rather than modelled expenditure on transport



Introduction

Official methods exist for calculating the affordability of domestic energy but not transport – despite the significance of household transport expenditure. However, the notion of 'transport poverty' makes an analogy between 'fuel poverty' and transport affordability issues. Our research critically explored the similarities and differences between transport and domestic energy affordability, and proposed metrics to quantify the economic stress related to car use.

Questions

- To what extent can concepts and metrics of fuel poverty be applied to transport?
- How many households spend disproportionate amounts of income on running motor vehicles?
- What are the distinguishing features of households in car-related economic stress?
- Which parts of the country are more likely to be in stress?

Findings

Fuel poverty debates generally assume that lack of warmth is the result of an inability to afford energy costs, partly as a result of inefficient building and heating systems. By contrast, lack of access to key services and opportunities has numerous influences, many of which are non-economic in nature. (e.g. outright lack of infrastructure, disability, low travel horizons). Affordability is only one of the many reasons why people are unable to travel where they need to get to.

In England, fuel poor households are defined as having high required domestic energy costs and low income, with 'required' energy consumption modelled based on standards of energy service and patterns of 'normal' energy use (see DEMAND Research Insight 5). Crucially, this is a way of identifying 'underspending' by households who 'under-heat' their homes. Adopting a similar approach for transport is not advisable, as travel needs are highly individualised and context-specific, making it too complex to define and model what transport is 'required'. It is nonetheless possible to identify households actually spending disproportionate amounts on their transport, and therefore likely to be underspending in other essential areas.

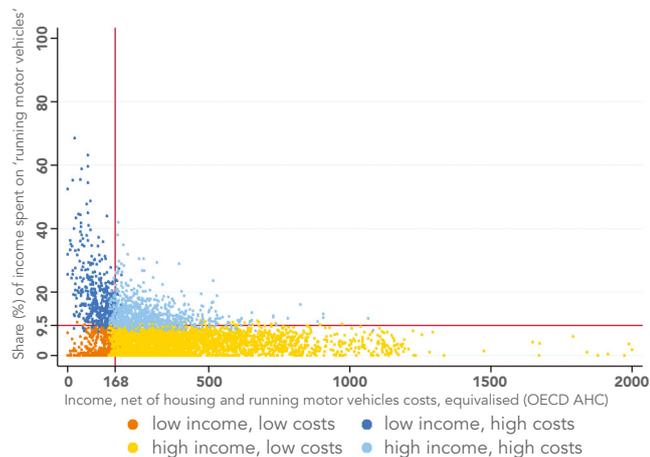


Figure 1
Income spent on car use and residual income in the UK, 2014

Our research used UK family expenditure data (LCFS) to identify such households, based on an adapted version of the official English indicator of 'fuel poverty'. The blue dots in Fig. 1 correspond to households with 'high' spending on running motor vehicles (more than 9.5% of their income, twice the median value in 2006) and 'low' residual income (below 60% of the median). In 2014, 9.2% of UK households were in this condition of 'car-related economic stress'. These householders are more likely to be in their 30s-40s, employed, and to own a (semi-)detached house, when compared to others on a low income.

Fig. 2 shows spatial patterns in England based on government statistics. High stress areas are defined by low income, high expenditure on fuel relative to local income, and poor accessibility to essential services by public transport or walking. Rural and peri-urban areas, particularly in the North, show high levels of stress.

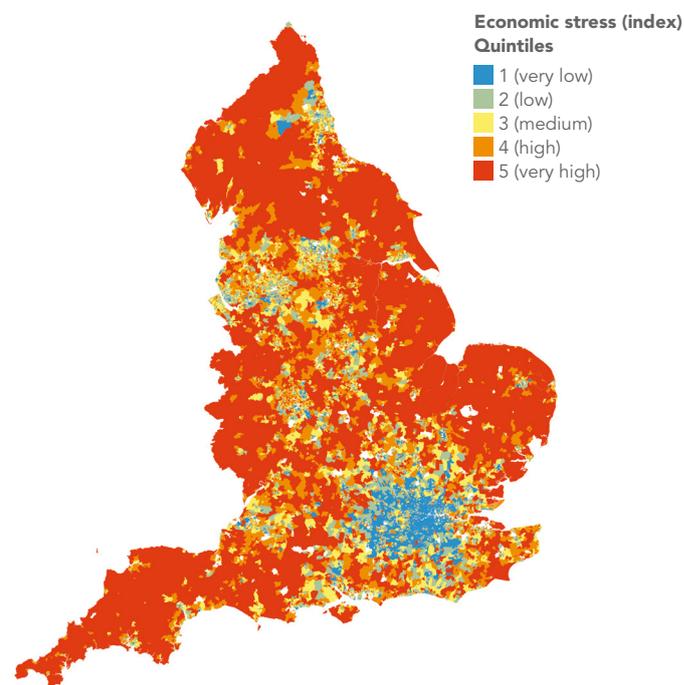


Figure 2
Car-related economic stress in England, 2011

Significance

- The parallel between issues of affordability in domestic energy and transport is instructive, but care should be taken in directly transferring concepts, frameworks and metrics.
- Our research estimates that in 2014 9.2% of UK households, i.e. 2.5 million households, were in car-related economic stress – in the same ballpark as official estimates of fuel poverty.
- The number of households finding it difficult to afford transport is likely to be much higher than this, as it would include 'underspending' households, those unable to afford a car, and those struggling with the cost of public transport.
- So far transport affordability has attracted much less policy and research attention than fuel poverty. However, households clearly trade-off expenditure across a range of goods and services which include both transport and energy.
- Both the geographical and the social characteristics of car-related economic stress need to be recognised. Certain types of households (e.g. working poor) and certain areas of the country are more vulnerable.

Implications

- Transport affordability is a problem for many households in the UK. It deserves more attention from practitioners and policy-makers and those interested in 'fair and just energy transitions'.
- While fuel poverty policy relies on a single affordability metric, the same cannot be done for transport. A variety of concepts and multi-layered measurement approaches is needed to grasp the multiple facets of transport poverty.
- However, survey data and government statistics could be used by government and NGOs to monitor car-related economic stress over time and as low carbon transport policies evolve.
- Since 2010, subsidies to local public transport have been cut in many areas. This may well be exacerbating existing problems of car dependence and related economic stress.
- Significant public resources are still invested in enabling free public transport for older people, regardless of income. These resources may be better spent targeting 'transport poor' groups, including those in car-related economic stress.