Essential potential

Exploring the benefits and challenges of social tariffs across essential markets

An analytical briefing prepared by the Institute for Public Policy Research as part of a partnership with Citizens Advice and abrdn Financial Fairness Trust

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Key findings:

- Households in the lowest equivalised income decile are spending around two fifths (41%) of their disposable income (after housing costs) on energy, water, broadband and car insurance bills - compared to 11% for those in the fifth decile and 5% for those in the tenth decile.
- Even with the price rises and cost-of-living pressures of recent years, the range of expenditure on water and energy within income groups is greater than the variation across income groups. This suggests that expenditure on utilities is driven primarily by the needs of individual households, meaning those on low incomes have limited ability to bring down these bills by cutting down their usage when price shocks hit.
- Broadband is increasingly being viewed as a household essential, and household spending data bears this out: across the income distribution, the overwhelming majority of households have a direct internet connection. While lower income households are more likely to have no internet connection, or to rely on mobile only, this still represents a small minority.
- Social tariffs across these markets could make a significant difference: a 25% discount on these four bills would save the average low income household £13 a week, or £680 per year. This would be equivalent to a boost of disposable income by around a tenth for a typical household in this group.
- Defining eligibility for social tariffs exclusively in relation to receipt of means-tested benefits targets need quite poorly: around 19% of middle income households are eligible for support with this approach, whilst around a third of households (32%) in the lowest 10% of the income distribution miss out. Defining eligibility in relation either to Pension Credit receipt or the £7,400 earnings threshold used for free school meals eligibility in England would much more effectively target those most in need of support - but would still leave significant numbers in the 2nd and 3rd income deciles ineligible for support. A hybrid approach, that uses both an income threshold and/or receipt of means-tested benefits to define eligibility, may be most appropriate.

Introduction

Spending on utilities has been rising – placing huge pressure on household budgets, particularly amongst those on the lowest incomes. Social tariffs are a means to provide targeted bill support for those who need it the most but are currently small-scale and piecemeal.

A cross-market suite of social tariffs across water, energy, broadband and car insurance has potential to provide essential support for struggling households at low cost to government through cross-subsidisation. This paper uses modelling to assess the potential such a scheme could have, and explores some of the challenges in targeting support.

The paper is structured as follows:

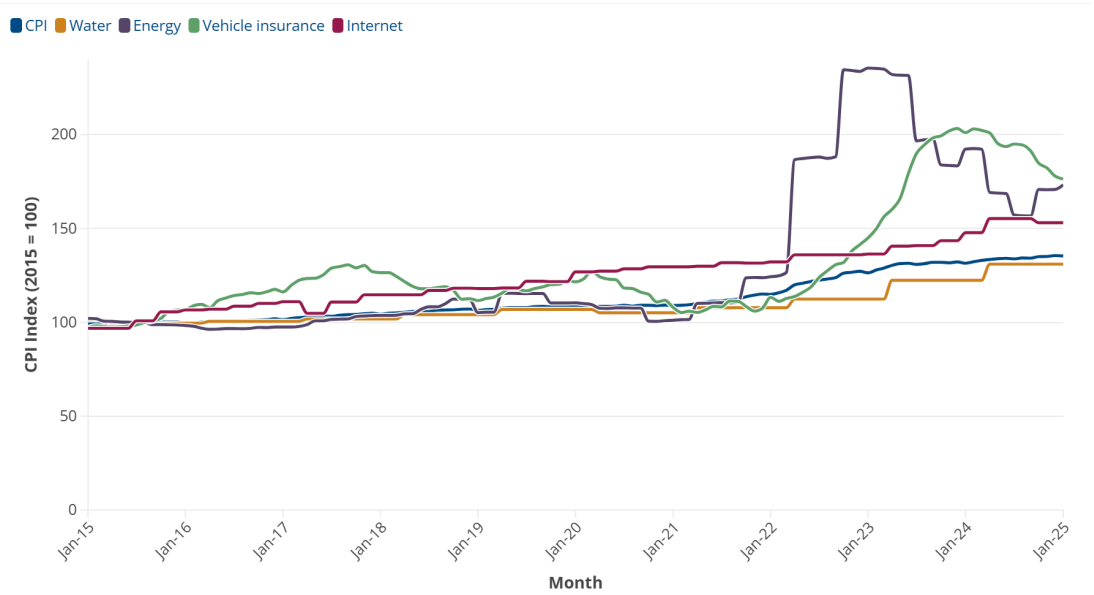
- Firstly it considers the issue of affordability of utilities over time and the broader context
- It then considers market specific insights across: water, broadband, energy and car insurance
- It then seeks to understand the potential cash savings which could be generated for beneficiaries of a cross-market social tariff.
- Finally it considers the challenges inherent in targeting support effectively

Utility affordability over time

Low-income households have been squeezed as the cost of essentials have risen

By examining ONS data on components of inflation, we know that household bills have seen a considerable spike across the board in recent years. Although energy and car insurance costs have begun to come down, they still remain considerably higher than a few years ago: and it is unpredictable where they may go in future.

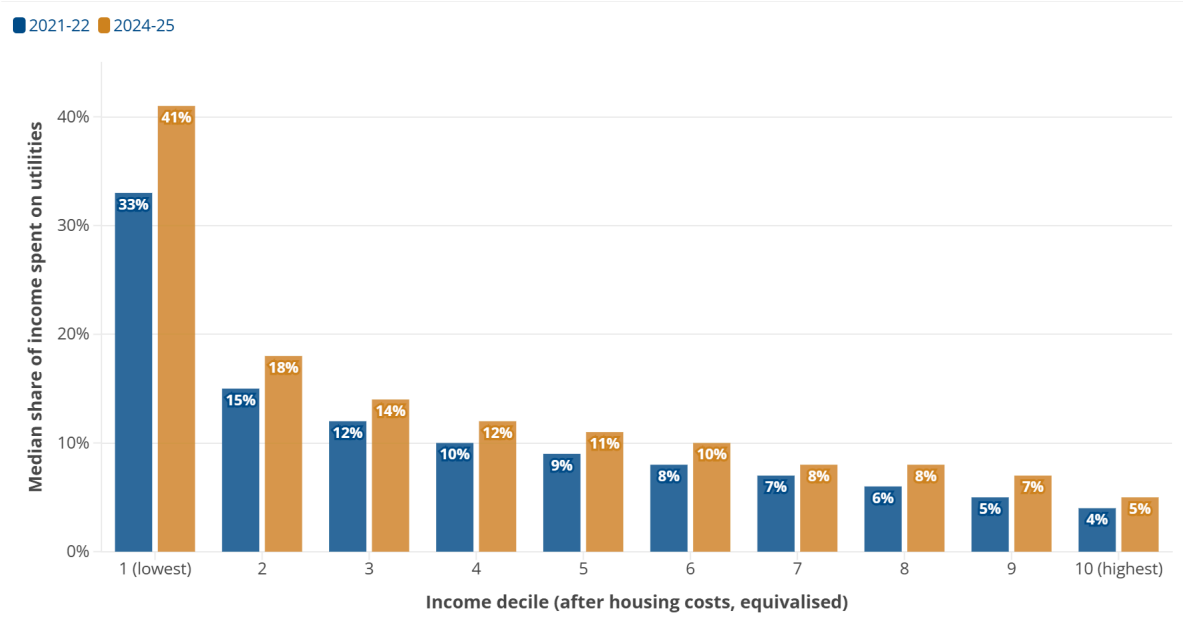
Fig 2: The rising cost of essentials over time



Source: IPPR analysis of ONS CPI indices

This means that low-income households in particular have to spend a growing proportion of their disposable income on utility bills. These households have less capacity to absorb rising costs. These households have less capacity to absorb rising costs. Our modelling suggests that, with recent bill increases, the poorest 10% of households will be spending two fifths (41%) of their disposable income (after housing costs) on core bills at the median, compared to 5% amongst the richest households.

Fig 3: Modelled proportion of spending on essentials by equivalised income decile after housing costs: 2021/22 – 2024/25



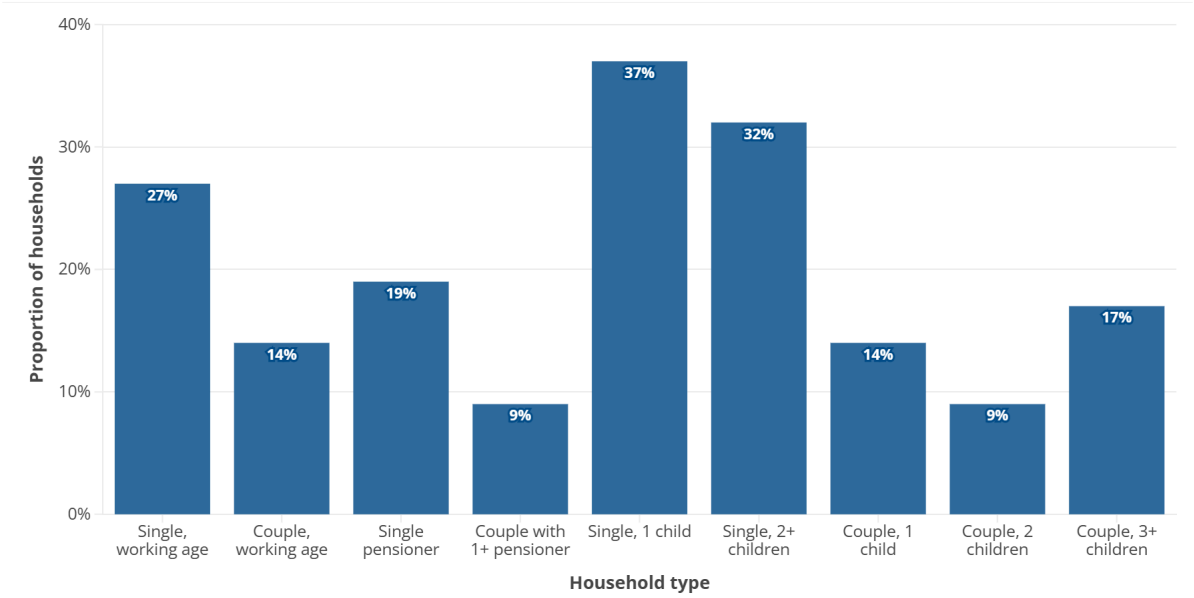
Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

It is perhaps unsurprising then that Citizens Advice data has shown a concerning rise in the number of households running 'negative budgets' - where essential expenditure exceeds income. In 2019, just over a third of people who came to Citizens Advice for debt advice were in a negative budget. But for the last few years this rate has been steadily rising - and since the end of 2022, the rate has been consistently around 50%. As of January 2025, the average debt client was £15 short of what they needed each month to cover their essential bills.

Some households are more exposed than others

We find that certain household types are more likely to be exposed to changes in utility prices. Households spending a large proportion of their income on utilities see a more rapid squeeze on their remaining money when prices go up. While this obviously applies to households with low income, it affects households of different sizes in different ways. The amount a household spends on utilities generally does not increase in proportion to the number of people in the home, as there are many fixed costs. That leaves smaller households, particularly those relying on one adult's income, particularly exposed. We find single-parents are most exposed (32-37% of households spend over a fifth of their disposable income on utilities), followed by single working age adults (27%) and then single pensioners.

Fig 4: Proportion of households with high bill spend (20%+) as a proportion of income after housing costs



Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

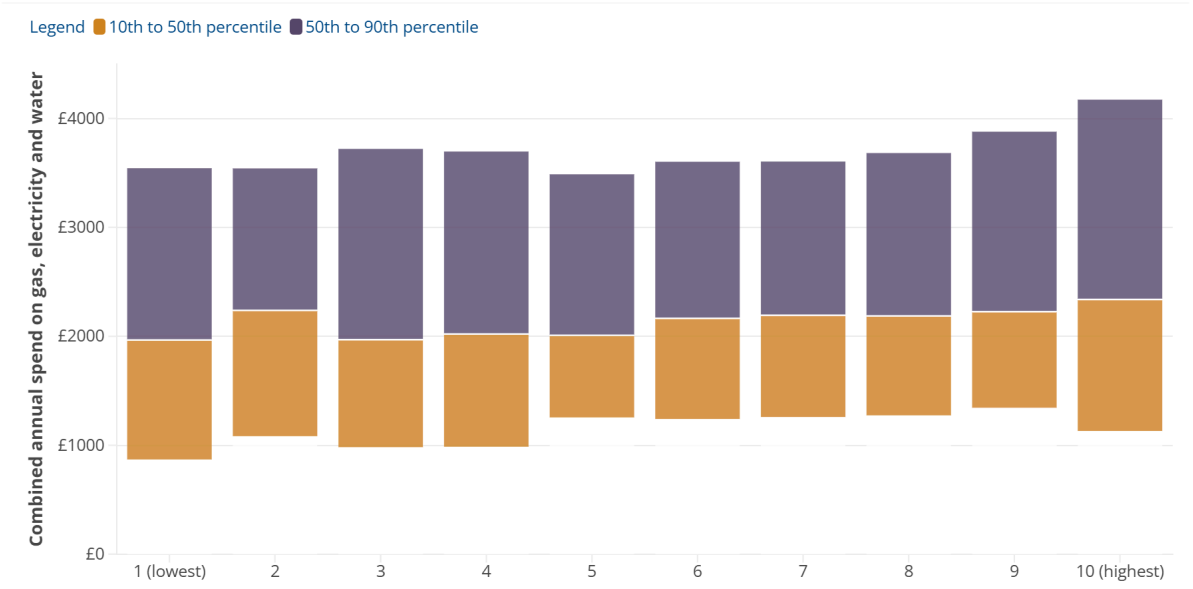
Market-specific insights

Energy and water

Utilities provide essential services. As such, the amount a household needs to consume is mostly driven by their basic needs and the characteristics of their home (for example, larger older properties need more energy to keep warm than a smaller well insulated house).

This means that income tends not to be a significant predictor of a household's demand for utilities. Figure 5 illustrates this for spending on water and energy, showing the range of modelled expenditure within each income decile. At the median (where the colour bars meet) a slight upward trend is apparent as incomes increase from left to right. But this trend is dwarfed by the range of expenditure *within* each income group. That is, we do *not* observe that high consumption households tend to be higher income, nor that lower income households tend to have lower consumption.

Figure 5. The range of expenditure on water and energy within income groups is greater than the variation across income groups.



Source: IPPR analysis of LCFS data (ONS 2023b) with IPPR Tax-Benefit Model. Bills are estimated for 2024/25

This has implications for the design of a social tariff if it is to be cost-neutral to the government (i.e. savings for some households' bills are paid for by higher bills for other households), and whether the impact is progressive. We cannot assume that an increase to bills will mean higher income households contribute more to the total. Instead, the distributional impact of a social tariff will depend primarily on the extent to which it is effectively targeted at lower income households. The more lower income

households who are ineligible for the tariff, the greater the risk it will put counterproductive pressure on a subset of families at the bottom of the income distribution.

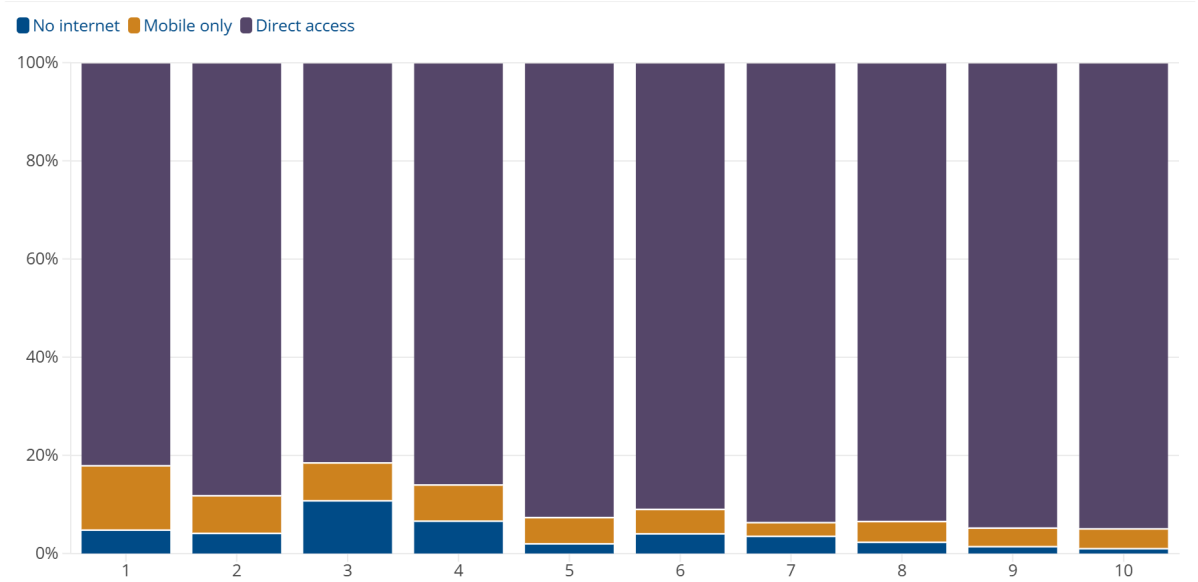
That these utilities represent essential consumption is underscored by Citizens Advice data on household bills. Last year Citizens Advice helped more than 90,000 people with energy debts, more than any other year on record. Whereas as in 2019, 28% of Citizens Advice debt clients had an energy debt, in 2024 it was 51%. And there's a similar, if less dramatic, trend for water: in 2019 30% of debt clients had water arrears; in 2024 it was 38%. This suggests that, as prices have increased, households have not been able to cut back consumption to keep their bills down.

Broadband

One potential concern about social tariffs is that they might not benefit those whose needs are greatest. For example, if the lowest income households are priced out of a market, even with a social tariff, they will see no benefit, and instead the system will subsidise those whose needs are less acute.

A broadband internet connection may be thought to fall into this category. However, our analysis shows that across the income distribution, the overwhelming majority of households have a direct internet connection. While lower income households are more likely to have no internet connection, or to rely on mobile only, this still represents a small minority. A social tariff would be of benefit to the vast majority of low income households.

Figure 6. Across all income deciles, over 80 per cent of households have a direct internet connection



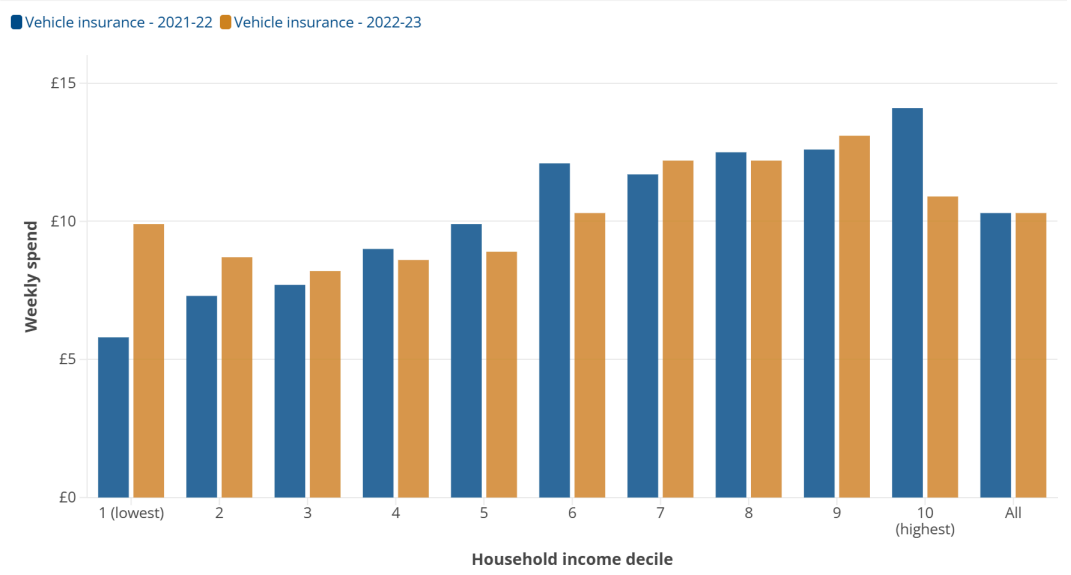
Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

Car insurance

Citizens Advice research published in December last year estimated that 900,000 people had been priced out of the car insurance market in the previous 12 months. But it also found evidence of a hidden affordability crisis in the market: 18% of drivers reported having to borrow money, fall behind on other bills or cut back on other essentials to cover the cost of car insurance in the previous 12 months, and more than 1 in 4 reported reducing their level of cover in order to bring costs down.

Whereas energy and water bills show little variation across the income spectrum, car insurance does show more of an income gradient. Higher income households are more likely to have a car and to have a second car (or more). Figure 7 shows the distribution of average household spend on vehicle insurance. Strikingly, in 2022-23 the lowest income households saw the greatest increase in insurance costs. As these households are most exposed to volatility in utility spend, this concentration of cost increases will have been particularly challenging.

Figure 7. Lower income households saw a steep rise in vehicle insurance spending in 2022-23



Source: ONS (2023a) and ONS (2024)

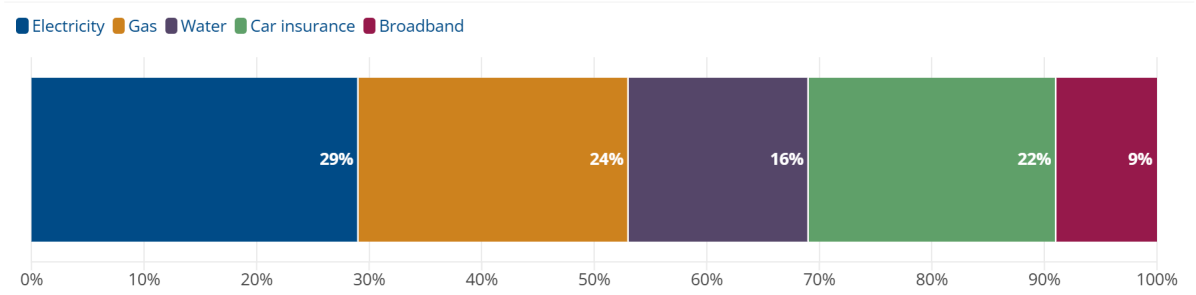
Social tariffs could have huge potential to make a difference for low-income households

Social tariffs have the potential to bring down bills for those most exposed. Our analysis suggests an average household in the poorest decile would save around £13/week at the median or £680/year if spending on these essentials were reduced by 25 per cent, and this would be equivalent to a boost of income (after housing costs) of around a tenth for a typical household in this group.

In the context of negative budgets amongst Citizens Advice clients, these savings are really significant. They would plug the average shortfall households are currently facing in covering their essential bills (£15 per month) and offer a modest cushion against unexpected expenses.

The greatest savings would materialise from electricity and gas spending (constituting around half of the savings on average) followed by car insurance, then water and finally broadband broken down as follows:

Fig 8: Breakdown of hypothetical social tariff savings for households in the bottom income decile



Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

There are targeting challenges in the delivery of any social tariff

For any tariff design, we want to target those households who are the poorest, but this is not just a case of considering household incomes alone – there are two key adjustments typically made when considering household incomes:

- Income is *equivalised*, that is adjusted for who lives in the household, because it makes a difference as to how many people the income is shared across. For example, a couple with 4 children would need to earn a lot more to be considered as well-off as a single adult with no dependents.
- Income is *after* housing costs - from a pure incomes perspective a household may appear to have a high income, but if a large proportion of this is then spent on housing costs then they could be much worse off than a household with much lower incomes overall but low or zero housing costs.

Introducing these two adjustments can lead to significant changes to where households rank in the income distribution. So for example, of those in the second decile before adjustments, just 18% are in the same decile *after* adjustments, with 65% of households appearing in higher deciles, and 18% below.

Adjusting for household composition and housing costs makes a significant difference

		Equivalised decile, after housing costs									
		1	2	3	4	5	6	7	8	9	10
Unequivalised decile, before housing costs	1	61%	12%	16%	12%	0%	0%	0%	0%	0%	0%
	2	16%	20%	23%	11%	19%	11%	0%	0%	0%	0%
	3	11%	15%	15%	18%	10%	13%	17%	0%	0%	0%
	4	6%	12%	13%	16%	16%	5%	7%	20%	5%	0%
	5	4%	10%	9%	14%	17%	22%	3%	4%	16%	1%
	6	2%	5%	9%	14%	16%	11%	26%	2%	5%	10%
	7	1%	3%	5%	6%	14%	15%	12%	32%	2%	10%
	8	0%	1%	4%	6%	6%	14%	16%	15%	32%	6%
	9	0%	0%	1%	2%	4%	6%	15%	20%	24%	28%
	10	0%	0%	1%	0%	0%	3%	5%	10%	21%	61%

Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

These adjustments are well established and embedded in standard measures of income distribution, including critically the measurement of poverty. For these reasons we judge the progressivity of any proposals on the basis of equivalised household income after housing costs. Unfortunately, this is much harder to target through policy than variables that are more straightforward to assess/calculate, such as total household earnings or receipt of specific benefits.

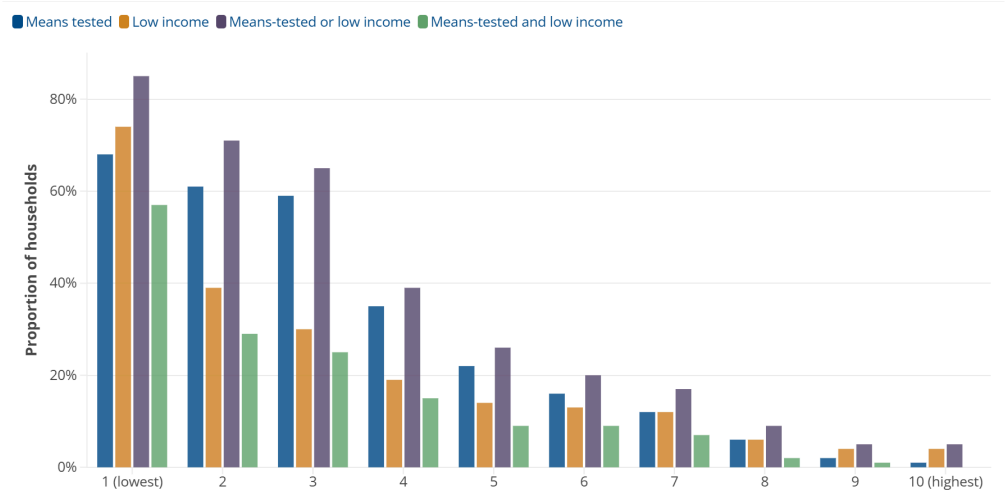
Targeting approaches

We consider a number of illustrative targeting approaches below:

(i) Receipt of means-tested benefits
(ii) Low household earnings from work (below £7,400 per year) or a pensioner household in receipt of pension credit
(ii) Combination of (i) and (ii), eligible if either apply
(iv) Combination of (i) and (ii), eligible only if both apply.

The figure below shows the percentage of winners under each potential targeting scheme:

Figure 9. Proportion of households eligible for a social tariff under different targeting schemes



Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

Because of issues with non-take up and eligibility, defining eligibility for social tariffs as receipt of means-tested benefits will miss out significant numbers of households on low-incomes at risk of poverty. This eligibility criterion would also mean many households higher up the (after housing costs equivalised disposable) income spectrum would also be eligible. To illustrate, around 19 per cent of households in the middle of the income spectrum (deciles 5 and 6) would be eligible.

If, instead, we defined eligibility according to earnings, using either pension credit receipt, or the £7,400 earnings threshold used for free school meals eligibility in England, social tariffs would be much more targeted. Only 13 per cent of households in the middle of the income spectrum would be eligible, and a higher proportion of households in the lowest income decile would be eligible than with means tested benefits determining eligibility (74 per cent vs 68 per cent). However, this would leave many households (66 per cent) ineligible in deciles 2 and 3, a group we know are also struggling.

Combining eligibility criteria (i.e. a household is eligible if they either receive means tested benefits or have low earnings) slightly mitigates for the fact that some low income households are not eligible for, or do not take up, means tested benefits. Increasing access to social tariffs in this way also increases access for households who are not at the lower end of the income spectrum – bringing 23 per cent of middle households into eligibility. Overall, 9 million households (33 per cent of the total) would be eligible under this eligibility approach. Restricting eligibility to those households who receive means tested benefits and have low income would mean 4.1 million households would be eligible (15 per cent of the total), but at the cost of excluding around two in five (43 per cent) of households in the bottom income decile. As discussed below, different eligibility criteria would lead to different bill increases for non-eligible households.

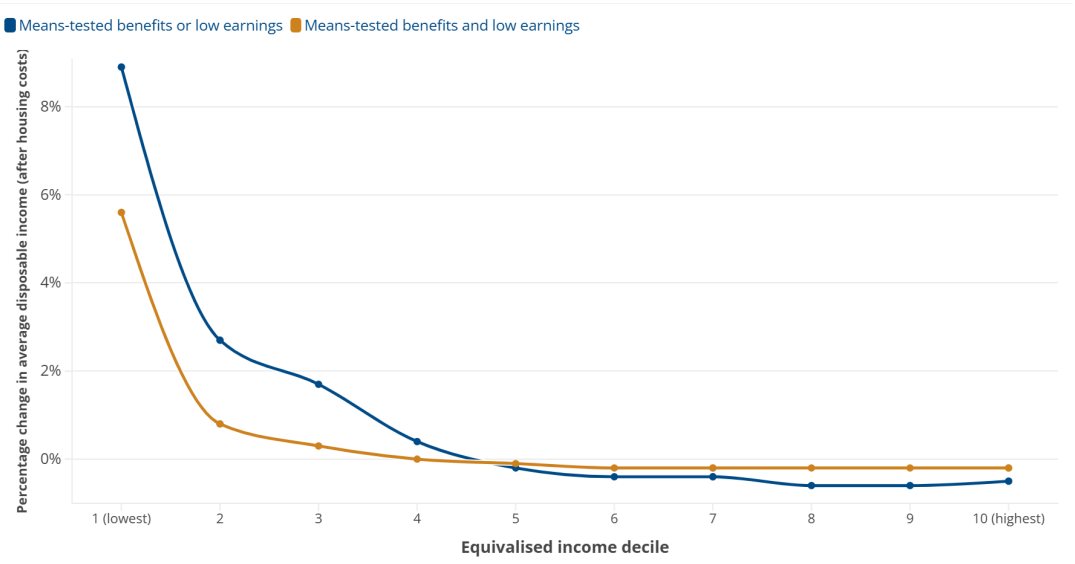
Ongoing work by HMRC on household income assessment could substantially improve the targeting of a social tariff scheme, but there would still need to be decisions made about where entitlement starts and ends. Having different thresholds based on who lives in the household could improve the quality of the targeting but adds complexity.

Social tariffs may create a complex pattern of winners and losers

If social tariffs are assumed to be cost neutral to government, then those who do not benefit from social tariffs must pay higher amounts to compensate for those who do.[1] This means that cost neutral social tariffs will generate a pattern of winners and losers depending on the targeting approach taken.

Assuming eligibility through means-tested benefits and/or low earnings, our modelling generates a clear progressive outcome overall, with those on the lowest incomes gaining the most on average in proportionate terms for different ways of defining eligibility.[2]

Fig 10: Distributional analysis of an illustrative 25% cost neutral tariff (savings to social tariff recipients funded by cross subsidy from other consumers, calculated for each market separately)



Source: IPPR analysis of LCFS data (ONS 2023b) with the IPPR Tax-Benefit model

[1] How this works in practice is not the subject of this paper, but given different consumer profiles amongst different suppliers within each market - there would need to be a mechanism to move money across suppliers within each market.

[2] The graph illustrative modelling of a 25% cross-market social tariff for those claiming means tested benefits or with household earnings below threshold. The tariff is paid for by everyone not receiving support.

However, this chart brushes over the "losers" in those lower income deciles who would not qualify for the social tariff, and so be included in the group seeing higher costs. As well as the number of low income households seeing higher costs, the choice of eligibility criteria affects the cost increase these households would see. For example, the additional cost for ineligible households could be around £110 [3]if eligibility is restricted to households who receive means tested benefits and have low earnings. Eligible households in this model would benefit by around £640 on average, but only around three fifths (57%) households in the lowest income decile would benefit. A wider eligibility definition, including households who either receive means tested benefits or have low earnings could reach over four out of five households in the lowest income decile (85%). While this would save eligible households £740 on average, the cost to other households would be higher, at around £370 on average.[4]

Clearly, social tariff design will need to strike a balance between coverage of low income households and costs passed on to ineligible households. The above calculations assume a social tariff discount of 25%. Were a lower discount to be offered, the impact on bills would be reduced. For example, a 10% discount for households who either receive means tested benefits or have low earnings would save recipients £300 (more than the average negative budget amongst Citizens' Advice's debt clients) while costing other households £150.

Any cost neutral tariff, given likely constraints on targeting, would have some people who are unfairly excluded from social tariffs who will end up paying more. This problem could be reduced by introducing a public subsidy to the tariff.

Conclusions

A social tariff approach clearly has potential to make a difference for low income households and would generate progressive outcomes overall. Using means-tested benefits alone as a criteria however would lead to many low-income "losers", households who do not claim benefits who would have to pay more under this system. This presents a significant policy and political challenge.

This problem can be ameliorated, at least in part, by making use of a household earnings assessment which exists outside the benefit system to improve targeting. By investing money in the system, the financial harm felt by "losers" could, in principle, be substantially reduced, though this would come at a cost to government budgets.

[3] These figures are annual figures, at the median, rounded to the nearest £10

[4] These figures assume a 25 per cent level of discount, subsidies are balanced by higher costs within each market separately, and full take up among eligible households

Future work will consider different tariff options and their implications for households in further detail.

References:

ONS (2023a) Family spending workbook 1: detailed expenditure and trends, FYE 2022 edition

ONS (2023b) Living Cost and Food Survey 2021/22, dataset. Accessible via UK Data service.

ONS (2024) Family spending workbook 1: detailed expenditure and trends, FYE 2023 edition

ONS (2025) Components of CPI indexed series, various.

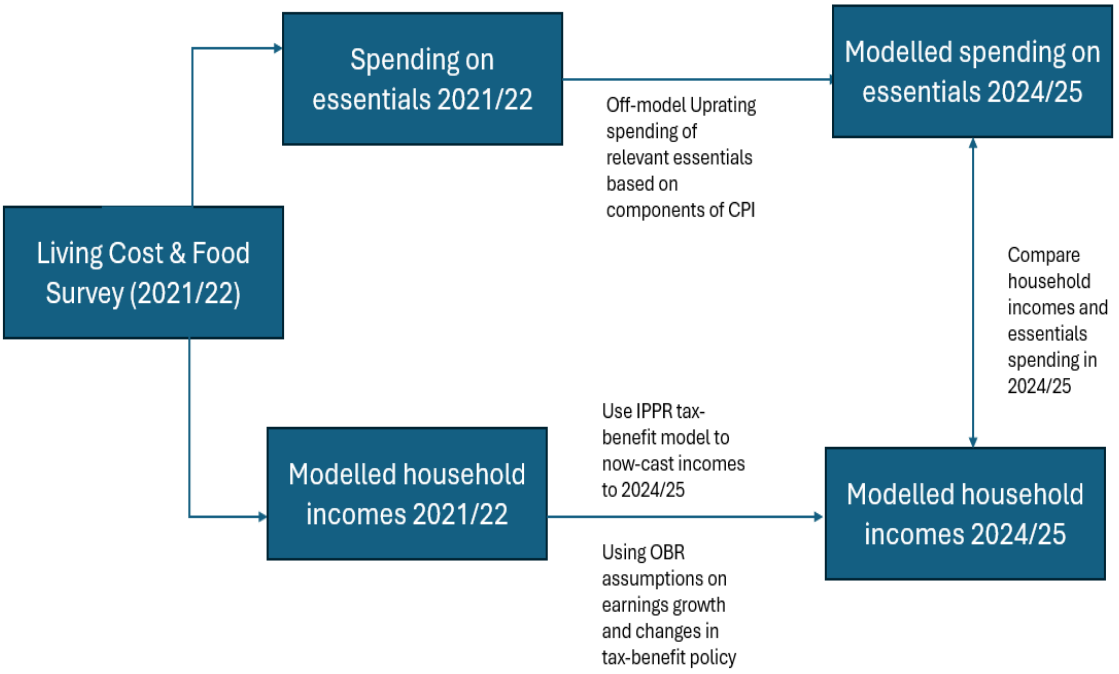
Annex: Overview of analytical approach

This analysis uses the Living Cost and Food Survey (LCFS) in conjunction with the IPPR tax-benefit model to understand how bill affordability is evolving over time. It considers spending on: energy, water, car insurance and Broadband costs.

Broadband costs are not explicitly available in the LCFS data, so we assume a common "core" cost of £28/month for those who report having a direct internet connection. This means, when we model a social tariff for broadband, it is effectively the same discount (in pounds and pence) for all eligible broadband customers. Further work will explore options for how a broadband social tariff could be implemented and its relationship with social tariffs in other markets, such as gas and electricity, where there is less product differentiation.

The research seeks to to produce an up-to-date picture using a now-casting approach as outlined in Fig 1

Fig 1: Modelling approach



Source: Author's analysis

One limitation of this approach is that it implicitly assumes that consumption is unchanged between the period where the data covers and today, despite changes in prices. However, we expect that demand for essentials will be relatively inelastic to price

changes, given they are necessities, and so it is still useful to understand the current picture, despite this limitation.[5]

We note that ONS estimates of spending on energy in 2022/23 did not increase by as much as the energy component of the CPI index. While this may reflect a degree of household rationing, other factors likely play a role also. During times of significant price volatility, household expenditure on utilities (which the LCFS records) may not be an accurate reflection of the costs a household incurs in that period, particularly in energy. Households who pay a fixed direct debit, for example, may incur debt for a period when prices rise, with payments increasing at a later date. Our approach, inflating costs from a time when prices were relatively stable, allows us to estimate the cost households face in receiving the same utility services.

[5] There will be some scope for households to reduce their consumption not captured in this modelling and that is a limitation in any analysis which relies on survey data which is subject to time delay.