

APPENDIX 2: CALCULATING THE POVERTY PREMIUM

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Overview of methodology

Our broad methodological design remains consistent with our previous calculations of the poverty premium in 2016, 2019 and 2022; but has been updated to reflect developments in the nature of poverty premiums that households in the UK incur or improvements in data availability that allow more sophisticated costings to be produced.

The methodology had three broad stages:

1. **Policy review and stakeholder engagement** – a review of documents related to key policy developments or changes within markets, as well as 8 interviews with stakeholders and experts across the relevant sectors and a focus group of 12 lived experience experts.
2. **Telephone survey** – representative survey of 6,159 people, screened to include only the 1,040 respondents whose household income was below 70% median income (after housing costs and equivalised for household size). This included a 20% ethnic minority boost.
3. **Desk-based costing exercise** – to establish the costs associated with each type of poverty premium and to assign these to the households in our survey dataset.

A steering group – comprised of academics, policy experts, members of industry and lived experience experts – met over the course of the project to guide the process and provide feedback on the research.

Policy review and stakeholder engagement

To understand the changes in the sectors since the previous study in 2022, we first undertook a rapid review of any evidence published in that time. We searched grey literature (such as policy papers and non-academic research reports) as well as academic literature. In total, we reviewed around 40 papers and reports, albeit with some less relevant than others. We also conducted interviews with eight stakeholders and experts from academia, trade bodies, and charities and campaigning organisations, across the insurance, credit and energy markets, or with an interest in those who may be unduly impacted by poverty. Finally, we conducted a two-hour focus group with 12 members of Fair by Design's lived experience panel, to understand their current experience of paying for goods and services, and where any issues lay.

Survey

Questionnaire design

Our starting point for questionnaire design was the questionnaire used in the previous poverty premium study in 2022. Following the policy review and stakeholder engagement, we updated the questionnaire to reflect the changing context or any additional data that would be useful for calculating poverty premiums. This included:

- More information on heating type, primarily to enable us to distinguish between those who were and weren't on the mains gas grid – as the poverty premiums we measure apply only to those on Ofgem regulated tariffs.
- New question on type of gas or electricity tariff, to replace a question on switching behaviour.
- New questions on different types of insurance held; and if not held, was this due to not needing it, not being able to afford it or not feeling it was good value for money.
- New types of credit asked about, such as early wage access, credit repair services and BNPL late fees.
- Additional question on monthly credit repayments to help us assess approximate amount of credit held.
- Questions on other experiences, such as use of foodbanks, experience of being declined for credit, and types of support received (such as benefits or social tariffs).
- Question on digital exclusion, based on extent to which internet is used for different tasks.

The broad content of the questionnaire therefore included: screening questions used to assess equivalised household income after housing costs; energy-related questions; paper billing; insurance questions; groceries questions; and use of ATMs and credit. Standard demographics were also collected.

Screening questions cover: responsibility for household bills; number of people aged under and over 14 in the household; period that rent or mortgage covers; amount paid in rent or mortgage; and whether household income is above or below the 70% median income threshold (for their household size, after housing costs are deducted, using the previous questions). The income calculations were based on results from the [Household Below Average Income](#) (HBAI) dataset, which gave a median after-housing costs weekly income of £562 for a couple with no children in financial year-end 2024, 70% of which is £393. This is equivalent to approximately £1,700 per month, after housing costs are deducted. While this is slightly higher than the usual 60% median income threshold used in poverty calculations, we use 70% to ensure all those in or near poverty are surveyed and to account for any wage inflation that had happened since the HBAI dataset was collected. OECD multipliers were used to equivalise this threshold, depending on the number of adults and children in the household.

Data collection

Ipsos were commissioned to deliver the fieldwork for this survey, via their CATIbus – a nationally representative sample of adults in Great Britain, conducted by Computer-Assisted Telephone Interviewing (CATI). This was conducted using a blend of random digit dialling (RDD) of landlines proportional to the number of households within each postcode sector and of mobile phones,

as well as targeted mobile sampling. This meant each eligible landline telephone number across the UK had a probability of selection proportionate to the population distribution.

Quotas were set based on age, gender, working status and standard geographical regions, while a 20% ethnic minority boost was also conducted to improve sample size among certain, less common ethnic groups. The results were post-weighted to match the profile of adults in Britain using key demographic variables: gender by age, working status, region, social grade and education.

Targets for quotas and weights are historically taken ONS, RAJAR and from the PAMCo (Audience Measurement for Publishers), a random probability F2F survey conducted annually with 22,000 adults. PAMCo's methodology integrates print readership and demographic data from a high-quality survey of 22,000 participants per year with digital audience estimates supplied by Ipsos Iris. All information collected on CATIbus is weighted to correct for any minor deficiencies or bias in the sample. CATIbus uses a 'rim weighting' system which weights to the latest set of census data or midyear estimates and NRS defined profiles for age, social grade, region and working status – within gender. The idea of rim weighting is to provide the 'best weighting', or least distorting, by using computing power to run a large number of solutions from which the best is chosen.

Fieldwork was conducted over five weeks in December 2025 and January 2026. 6,159 went through the screening questions and 1,108 were initially assessed as being below or near to the 70% median income threshold. These respondents were then asked the remaining questions in the survey, while others were screened out. After receiving the dataset from Ipsos, the research team further filtered the sample, based on additional gross household income data asked as part of the wider omnibus; those whose gross household income greatly exceeded the 70% median income threshold for a household of their size were removed from further analysis. This left 1,040 cases.

Data analysis

In addition to the above data cleaning, a variety of variables were derived, capturing either household/respondent characteristics or their experience of different poverty premiums. Costs incurred were also calculated, as described in the section below.

Various cross-tabulations and descriptive statistics were produced, with testing of statistical significance undertaken at the 95% confidence level ($p < 0.05$). A series of binary logistic regression models were also used to understand relationships between different household/respondent characteristics and certain premiums. These models included the following explanatory variables/controls: respondent age, household composition, tenure, work status, nation, ethnic group, income tercile within age group, benefit receipt, area deprivation and digital exclusion.

Calculating costs incurred

The aim of the costing exercise is to determine the price paid by low-income households for services, relative to a benchmark cost for the typical household that is not on a low-income. This is achieved via a desk-based costing exercise, rather than asking households directly,

because households may be cutting consumption of certain products or services as a result of the poverty premium / financial pressures they face, resulting in an inaccurate comparison. A desk-based exercise meanwhile enables a more like-for-like comparison. We provide more detail on the approach taken within each market below.

Energy

To calculate energy-related poverty premiums, we obtained daily standing charges and unit rates from [Ofgem](#) for the period January to March 2026. These covered those on default energy price-capped tariffs, paying by either direct debit, prepayment or standard credit (on receipt of bill). Charges and unit rates were captured for each of the 14 electricity distribution regions in Britain, but these differed to the ‘Government Office Regions’ captured within the survey data, meaning that in some places it was necessary to take averages across two regions. For example, a whole Scotland average was taken from combining the Northern Scotland and Southern Scotland distribution regions.

Separately, price comparison websites were used to obtain the percentage saving that could be achieved by switching to the best fixed deal at the time, for those on a given payment method. This was done for direct debit and standard credit payment, as no or limited deals were available to those paying by prepayment.

Turning then to the survey data, we were able to identify payment method and tariff type for each responding household and, knowing what region they were in, were able to assign them the unit rates and standing charges that they were likely to currently be facing, and also those that they would face if on the cheapest possible deal (a fixed deal paying by direct debit). We then used what we know about their household composition to estimate annual usage, based on [Ofgem usage profiles](#) (shown below).

Appendix Table 1 - Assumed usage profiles (source: Ofgem)

	Low usage	Medium usage	High usage
Gas	7500 kWh	11500 kWh	17000 kWh
Electricity	1800 kWh	2700 kWh	4100 kWh
Description	Small property with 1 to 2 occupants	Medium-sized property with 3 to 4 occupants	Large property with 5 or more occupants

Knowing all this, it was possible to estimate a household’s annual electricity and gas costs (for those on mains gas) and calculate the poverty premium, defined against what they would have paid if on the cheapest deal.

For each of gas and electricity, we effectively assigned households to five groups:

- Baseline: direct debit, switched to best fixed rate;
- Paying by direct debit, but on default energy price cap tariff;
- Paying by standard credit, switched to best fixed rate;
- Paying by standard credit, but on default energy price cap tariff;
- Prepayment meter, and therefore unable to switch to a cheaper tariff

Where households did not know what tariff they were on, we assumed they were on the energy price cap; while those who were on multi-rate tariffs were assumed to be on the best tariff.

Limitations of this approach include that we are unable to take into account energy efficiency or actual property characteristics into our usage assumptions, and that we are effectively assuming a static picture of fixed rates versus the energy price cap over time. In reality, fixed rates are likely to be a reflection of energy suppliers' expectations of energy costs in a longer time horizon than the three-month energy price cap. It so happens that those who had fixed in early 2026, prior to the Israel-US-Iran war, are likely to see even higher savings than we estimate because the price cap is now likely to rise again; however, had energy prices gone in the expected direction at the time, then savings may have been more limited.

Insurance

Our insurance-based poverty premiums cover: motor insurance; home contents insurance; and insurance for individual items (appliances and mobile phones). The poverty premiums for motor and contents insurance are made-up of the additional costs of 1) premium finance, for paying monthly rather than annually; and 2) living in a deprived area.

Premium Finance poverty premiums

To calculate the extra cost of paying monthly rather than annually for motor and home contents insurance, we base our calculations on the [FCA's market study into premium finance](#). As appendix table 2 shows, the FCA analysis suggests that someone with a £400 motor insurance policy could expect to pay an additional £41 per year if using premium finance, while someone with a £200 home insurance policy would pay £15. These figures were equivalent to 10% and 8% of the original price respectively.

Appendix Table 2 – FCA Premium Finance prices 2026 (source: FCA)

	Motor insurance	Home insurance
Policy cost	£400	£200
Price of Premium Finance	£41	£15
<i>As % of policy cost</i>	<i>10.2%</i>	<i>7.7%</i>

Rather than just assigning a poverty premium of £41 for those paying monthly for their motor insurance, we apply the percentage difference to the average annual motor insurance premium (fully comprehensive) for different age groups, based on data from [MoneySuperMarket](#) [accessed in February 2026]. These values and the implied pay monthly premium is given below, with each value then multiplied by 1.25 to account for the fact that approximately a quarter of car-owning low-income households have multiple cars ([ONS, 2025](#)) (as our survey and poverty premium calculations are at household- rather than individual-level). The final column of appendix table 3 therefore gives the poverty premium incurred, depending on respondent age.

Appendix Table 3 – Implied pay monthly premiums for motor insurance, by age (source: MoneySuperMarket and author calculations using FCA and ONS data)

Age group	Average annual fully comp. motor insurance cost	~10% premium for paying monthly	Final premium after adjustment for households with multiple cars (x1.25)
17-19	£1,423	£145	£181
20-29	£1,013	£103	£129
30-39	£644	£66	£82
40-49	£522	£53	£66
50-59	£419	£43	£53
60 and over	£374	£38	£48

For home insurance, the FCA Premium Finance study is based on joint contents and buildings insurance. As a lower proportion of our low-income sample were likely to be homeowners, we focus our calculations purely on contents insurance (rather than buildings), so use a lower assumed policy cost. This was taken from the [Association of British Insurers \(ABI\)](#) who report that the average contents-only insurance premium costed £122 annually in 2025. 8% of this cost works out at a poverty premium of £9.33 per year, which we apply to all those in our survey who were paying monthly for contents insurance (regardless of factors such as household size).

Premium for insurance in deprived area

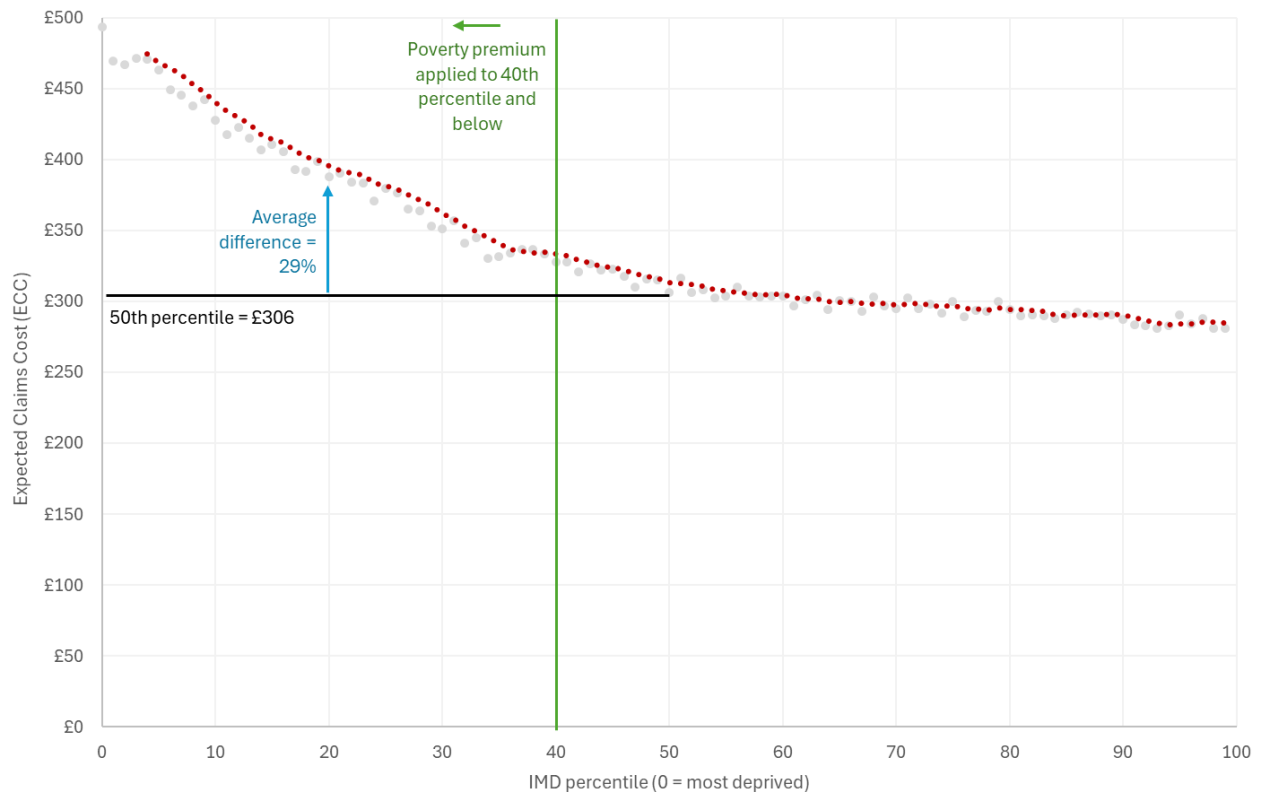
To calculate the poverty premium for contents insurance in a deprived area, we use a mystery shopping exercise using a price comparison website (Compare the Market) to obtain as like-for-like as possible insurance quotes for similar properties in areas of different levels of deprivation. 75 quotes were obtained across 12 areas, and quotes for properties in the bottom 40% most deprived areas were compared with those at around the 50th percentile (i.e a median level of deprivation). This gave a small premium of 4.8%, which we apply to the average contents-only premium from the ABI mentioned above (£122), resulting in a poverty premium of £5.80 per year.

The overarching methodology for the extra cost of motor insurance in a deprived area is similar to that of contents insurance, but differs in terms of the data source. Here, we use data collected by the FCA as part of their [analysis into the relationship between local area ethnicity and motor insurance pricing](#). Colleagues at the FCA provided the research team with unpublished aggregate results based on analysis of around 6 million insurance policies, giving average ‘Expected Claims Cost’ (ECC) for each deprivation percentile, at the lower-layer super output area (LSOA) level. As the FCA’s published analysis suggests, ECC acts as a good proxy for the ultimate cost to the consumer, so we use it to estimate the percentage difference in policy costs given different levels of deprivation. (For a full description of the data, please read the [FCA research annex](#).)

Following our previously used methodology, we primarily compare the cost of insurance for the 40% most deprived areas with the median area (50th percentile). As shown in appendix figure 1, the ECC for the 50th percentile was £306, while it was £388 at the 20th percentile (a 26%

increase) and £396 for the entire bottom 40% (a 29% increase). For the most deprived 1% of areas, it increases to as much as £494 – a more than 60% increase.

*Appendix Figure 1 – Expected Claims Cost for motor insurance, by LSOA deprivation percentile
(Source: FCA analysis of insurance industry pricing data for ~6 million policies)*



It is interesting to note that, while we have moved away from the use of price comparison websites for this analysis – in part due to industry feedback that fraud detection systems may affect results obtained in this manner and partly as a result of the opportunity to use the substantially larger dataset collated by the FCA – the findings of our [2024 research](#) using such an approach found a similar magnitude of poverty premium, with the average quote being 29% higher in more deprived areas than in the average non-deprived area.

To calculate actual premiums, however, rather than use ECC, we return to the average fully comprehensive motor premiums reported by MoneySuperMarket and used in our earlier pay monthly poverty premium calculations. To these, we use a conservative estimate of the poverty premium of 22.5% (rather than the 26-29% implied by the FCA data). This estimate is used to account for any double-counting present in the averages used as a result of younger people being slightly more likely to live in deprived areas, i.e. meaning that the averages reported by MoneySuperMarket may be slightly influenced by younger adults living in deprived areas, while the FCA data may also be influenced by this pattern. We used analysis of 2022 Census data to inform this approach, based on the magnitude of the correlation between age and deprivation; however, our assessment is that using 22.5% is more likely to err on the side of over-correcting for this, rather than under-correcting. We therefore believe that our calculation of this poverty

premium is on the conservative side, but broadly reflective of the additional costs that those in deprived areas are likely to face.

As with the previous motor insurance poverty premium, we multiple the end result by 1.25 to account for households with multiple cars. This results in the poverty premium figures given in appendix table 4, which range from £400 per year for a young adult in a deprived area to £105 for those aged 60 and over.

Appendix Table 4 – Implied poverty premium for motor insurance for living in a deprived area, by age (source: MoneySuperMarket and author calculations using FCA and ONS data)

Age group	Average annual fully comp. motor insurance cost	Conservative estimate of 22.5% premium for living in deprived area	Final premium after adjustment for households with multiple cars (x1.25)
17-19	£1,423	£320	£400
20-29	£1,013	£228	£285
30-39	£644	£145	£181
40-49	£522	£117	£147
50-59	£419	£94	£118
60 and over	£374	£84	£105

These premiums were then applied to survey respondents in each age group where they held motor insurance; however, only where they also lived in the bottom two quintiles of areas in terms of deprivation, i.e. the 40% most deprived areas. While the research team did not have access to the postcodes of respondents, Ipsos did have this information (for most respondents) and used it to link the survey responses to the Indices of Multiple Deprivation (for each nation of the UK). In the minority of cases where it had not been possible to add deprivation data, we assigned a plausible average premium to these households, equivalent to 28% of the premiums given in the final column of Appendix Table 4 (as 28% of households with deprivation data incurred this premium).

Individual item insurance

We assign a premium for holding mobile phone insurance based on the cost of insuring a basic smartphone that meets the [Joseph Rowntree Foundation / Loughborough University minimum income standards](#); in 2026, this was an Alcatel 3x. We used the average annual quote given by three major phone insurers, and then multiplied this by 1.25 to account for households with more than one phone insured. This gave a premium of £72, which was applied to all those who reported holding mobile phone insurance – as this is potentially reflective of not being able to afford to replace a lost, stolen or damaged phone in an emergency.

A similar approach is used for appliance insurance, based on a representative example of insuring three major appliances: a fridge freezer (Amica FK1964 50/50 Fridge Freezer - White - A+ Rated), a washing machine (Beko WTG820M1W 8Kg Washing Machine with 1200 rpm - White - A+++ Rated), and a dual fuel cooker (Indesit Cloe ISFG4PHX 50cm Dual Fuel Cooker - Stainless

Steel - A Rated). Again, we obtained annual quotes from key insurers; the poverty premium is the average of these quotes, which was £194 per year.

High-cost credit

The high-cost credit premium is calculated as the cost of interest or fees associated with a range of different forms of higher-cost credit (or credit that is more typically used by those who are financially excluded, including loans from family or friends, and loans from credit unions or responsible finance providers). Survey respondents were asked if they had used certain forms of credit in the past 12 months, followed by a question on how much they typically make in repayments per month across all high-cost credit products. The latter helps to inform the approximately scale of a respondent's borrowing, without the survey becoming overly long or burdensome. From this, we estimate how much they may owe on each type of product, based on allocating their total monthly repayment to different product types using assumptions about the 'typical' monthly repayment for each product and plausible ranges for borrowing via a given product type. For example, we assume that the amount someone can borrow on a personal loan can increase by much more than the amount they would 'borrow' via a Christmas hamper scheme. We also calculate the estimated percentage of a monthly/annual payment on a given product type that is likely to be the cost of interest, and together use this to estimate the total annual cost of their borrowing on each product type (i.e. the poverty premium). Appendix Table 5 gives an overview of assumptions used. Our representative examples were informed by desk research, as well as analysis of open banking data provided by Dr Fiona Rasanga (Edinburgh University) and the lender *Stream*.

Appendix Table 5 – Assumptions used in high-cost credit analysis

Type of credit product	Term (months)	Cost of credit	Representative monthly repayment	Estimated percentage of payment that is interest
Buy-Now-Pay-Later (BNPL)	3	0%	£46	0%
Other retail finance: rent to own, mail order and catalogue credit	12	30% APR	£76	25%
Credit cards for people with a bad or limited credit rating	12	30% APR (assume 60% of these are revolvers)	£85	12%
Christmas hamper scheme	12	29% of repayment	£38	29%
Subprime personal loan	18	50% APR	£80	35%
Credit union / CDFI loan	12	30% APR	£61	16%
Payday loan / short-term loan (under 3 months)	3	1283% APR	£133	75%
Pawnbroking	6	158% APR	£53	40%
Borrowing from family or friends – with interest	12	5% APR	£63	3%

Home collected loan	3	100% APR	£100	30%
Logbook loan	18	400% APR	£80	60%
Local community organisation	12	13% APR	£61	7%

For other fees and charges related to credit, we use separate questions which ask about the number of times a given type of fee has been incurred. The cost of these is based on representative examples, which were informed by the aforementioned data sources. They are shown below in Appendix Table 6.

Appendix Table 6 – Assumed costs for fees and charges related to credit

Type of credit	Charge	Assumptions
BNPL late fees	£7.25 per time	Average charge across 4 major BNPL providers.
Credit card late fees	£12 per time	Average charge across 6 major credit card providers.
Unarranged overdraft fees	£4 per time	Assumes effective annual rates of 30-40% and overdraft of around £300 for 14 days in a month.
Early Wage access	£1.85 per time	Average fee, as provided by provider in this market.
Credit Repair service	£50 per time	Average transaction cost in analysis of open banking data by Dr Fiona Rasanga (Edinburgh University).

ATMs

To calculate the poverty premium for using pay-to-use ATMs, we first obtain a sample of ATMs for four UK towns and cities from LINK's cash locator tool. These were Birmingham, Bradford, Brighton and Bristol. We recorded the average charge at pay-to-use machines in these areas, which gave an average charge of £1.84.

In the survey, respondents had been asked to estimate how many times, if at all, they (or someone in their household) had used a pay-to-use ATM in the past 12 months. £1.84 was then multiplied by the number of times it had been used to give the overall cash-related poverty premium.

Food

To calculate the extra cost of grocery shopping at convenience stores, we compare the likely spending of those buying more than half of their groceries from such stores against a household purchasing a 'typical' amount of groceries from such stores. This 'typical' baseline is buying 16% of groceries from convenience stores, which is a value taken from [ONS Living Costs and Food survey data](#) giving the average amount that all households in England and Wales spend on food and non-alcoholic drinks from such stores (Table A2 from the ONS). So, in essence, the poverty premium is the extra amount spent annually on groceries by those regularly purchasing

food from convenience stores, compared to what they would have spent if only buying 16% of their food from such shops.

The primary source of data used to calculate the premium comes from *Which?*, who collated data on the different costs of buying a basket of goods at convenience store versions of major supermarkets and their large supermarkets. The basket of goods was on average 13% more expensive at local stores, as shown in Appendix Table 7.

Appendix Table 7 – Cost of a basket of goods in convenience store version of major supermarkets, versus large supermarket stores (Source: [Which?, 2024](#))

Shop	Convenience store basket cost	Main store basket cost	% Difference
Sainsburys Local	£111.83	£100.83	14%
Tesco Express	£108.28	£98.28	11%
Morrisons Daily	£119.29	£103.29	15%
Average	£113.13	£100.80	13%

We then apply this to previously mentioned ONS data, which gives the amount spent per week on food and non-alcoholic drinks by households in different income quintiles (Table 3.1E5 from the ONS). We take the average of the bottom two quintiles, which was £59.35 per week when the data was collected in 2024 but would be equivalent to at least £62 by December 2025 when inflation-adjusted (or £3,225 annually).

From this, and the earlier figure of 16% being spent at convenience stores by a typical household, we can calculate how much extra is spent for households spending 50%, 75% or 100% of their grocery shopping at these stores (as per our survey question) compared with the baseline (16%). Finally, we take ONS data on food spending by households of different sizes and compositions (Table A23 from the ONS), using this to adjust the poverty premiums up and down depending on household size. (To do this, we create a multiplier based on taking an average between households with and without children, so, for example, a two-person household is the average between a two adult non-retired household, a two adult retired household, and a one adult-one child household.) This gives the figures presented in Appendix Table 8. These poverty premiums are then applied to the relevant households from the survey data, depending on proportion of groceries bought from convenience stores and household size.

Appendix Table 8 – Poverty premium for purchasing groceries from convenience stores, by number of people in the household

Proportion of groceries bought from convenience stores	One-person household	Two-person household	Three-person household	Four-person household
Baseline: 16%	£0	£0	£0	£0
50%	£85	£152	£196	£220
75%	£148	£264	£340	£381
100%	£211	£376	£485	£543

Paper billing

We looked at paper billing across three main sectors: broadband, mobile phones, and energy. We visited the websites of each major company/supplier within a given market and obtained the cost of a paper bill, multiplying this by an appropriate figure to give an annual cost (depending on whether billing is monthly, quarterly, etc). We then took a weighted average of companies, depending on their market share – with this estimated based on publicly available information about either market share or number of customers. In instances, where the market consisted of some companies that charged for paper billing and others that didn't, we assumed that consumers are price sensitive and therefore less likely to receive a paper bill from a company that charges. This reduces the overall poverty premium and gave us premiums of £28 for broadband, £28 for mobile phones, and £2.78 for energy. These were applied to all those who said they receive paper bills in each of these markets respectively. Respondents were not asked directly if they paid to receive paper bills as some may be unaware that they do so, as it would be incorporated into the overall cost of the bill that they pay.