



Discretionary income and living cost changes in Northern Ireland

A Cebr report for Consumer Council

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Contents

1. Typical spending and discretionary incomes in Northern Ireland
2. Impacts of changes in the cost of essentials on households in Northern Ireland
3. Comparison with the UK as a whole
4. Demographics

Executive summary

In this report Cebr analyses data on household income, taxes and spending to understand how increases in cost of essential products and services impact the discretionary income of households in Northern Ireland.

The main findings are:

- In Northern Ireland, the average household spends £397 a week on essential items.
- Looking at households split according to their gross weekly income, the lowest 25% of earners in Northern Ireland spend £193 a week, while the highest 25% of earners spend £636 a week on average.
- The average weekly discretionary income of the lowest 25% of earners in Northern Ireland is -£8.69 a week. These households must therefore take out loans or use overdrafts to pay for essential goods and services.
- Cebr has modelled the impact on discretionary incomes of a 5%, 10% and 20% rise in the prices for certain essential items assuming that households consume the same quantities of these goods and services.
- A 10% rise in energy bills would cost £1.02 per week for the poorest quartile, taking the average weekly discretionary income deficit to £9.71.
- A 20% rise in transport spending causes the weekly discretionary income deficit of the lowest earning quartile of households to widen by 21%.
- A 20% rise in the cost of food spending for the average Northern Irish household would cause discretionary income to fall by £19.85 a week, a 11% decrease.
- A 20% rise in the cost of financial services causes the discretionary income deficit of the lowest earning quartile of households in Northern Ireland to widen by 19%.

Methodology

- The purpose of this analysis is to understand how much money households in Northern Ireland have over at the end of each week, after taxes and essential spending. This is called discretionary income. Cebr analyses how discretionary income changes as a result of price increases which cause essential spending to rise.
- The main data source used for this analysis is the Living Costs and Food Survey (2017/18), published by the UK Data Service.
- The analysis is broken down by income quartiles. We, therefore, have four groups of households of approximately equal size, separated by income levels, where the bottom quartile represents the lowest 25% of income earners, the top quartile represents the top 25% of income earners and the second and third quintiles represent the 25% of income earners on either side of the median of the income distribution.
- The source data set is based on a representative sample of households in the UK. The sample sizes for the groups relevant to our analysis are shown in the table below:

Household income quartiles	Number of survey observations, NI	Number of households this represents, NI	Number of survey observations, UK	Number of households this represents, UK
1 (lowest earners)	100	189,626	1,378	6,785,791
2	100	188,975	1,406	6,787,370
3	101	188,544	1,340	6,783,223
4 (highest earners)	95	188,773	1,283	6,782,397

- Cebr’s list of essential spending items is consistent with that used for the ASDA Income Tracker. It includes items and services from all major consumption categories, excluding certain recreational goods and services, restaurants and hotel stays, holidays and other leisure spending. A complete list can be made available upon request.
- We analyse the impact of price rises in four expenditure categories to understand how a higher cost of essential spending affects discretionary incomes. These categories are:
 1. Energy: electricity, gas, other energy spending including oil, paraffin, coal and coke, wood and peat
 2. Transport: car fuels (petrol/diesel), public transport tickets
 3. Food: all spending on food items consumed at home
 4. Financial services: insurance (vehicle, medical, structure, etc), mortgage payments (interest/principle) and bank charges (bank & building societies charges, credit card charges, etc)

Typical spending
and
discretionary
incomes in
Northern Ireland





Average weekly income after tax is £574 in Northern Ireland

- This analysis will calculate the discretionary income of households in Northern Ireland. This is defined as:

$$\text{Discretionary Income} = \text{Gross Household Income} - \text{Taxes} - \text{Cost of essentials}$$

- This section of the report analyses incomes, post-tax incomes and spending by income quartile, before presenting discretionary incomes by quartile.
- Gross incomes of the lowest earners in Northern Ireland stand at £188 on average, while the highest Northern Irish earners see £1,322 a week.
- For the lowest earners, very little is paid in tax, there is only a £4 difference in incomes before and after tax for the first quartile in Northern Ireland. However, the difference for the highest earning quartile is £225 a week.

Total average weekly incomes before and after tax in the UK and Northern Ireland, by gross income quartile

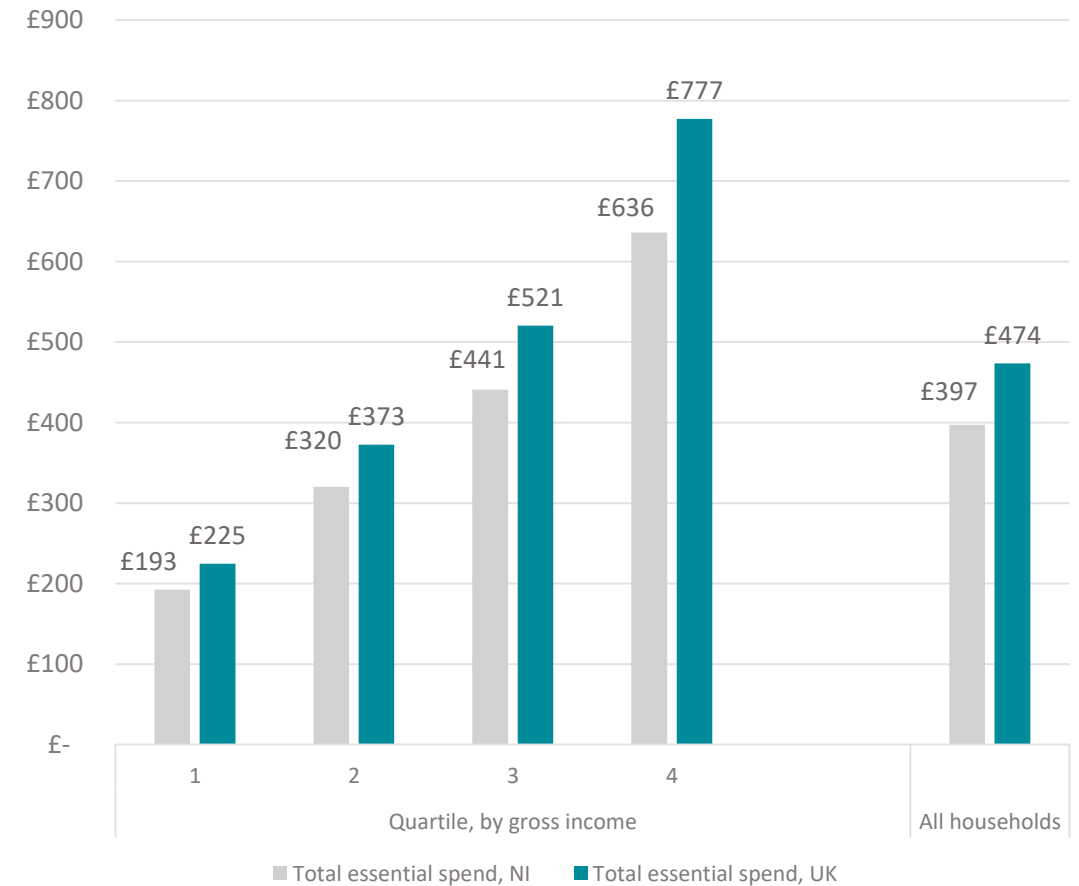


Source: Cebr analysis, UK Data Service

Essential spending in Northern Ireland is lower than the UK-wide average

- In Northern Ireland, the average household spends £397 a week on essential items, which include housing, bills, food, transport, clothing and other consumer goods and services which nearly all households need to purchase.
- This is significantly lower than the £473 average weekly spend on essential items for the UK as a whole.
- Looking at households split according to their gross weekly income, the lowest 25% of earners in Northern Ireland spend £193 a week, while the highest 25% of earners spend £636 a week on average on essentials.
- In the UK average essential spending for the lowest 25% of earners is £225 a week, compared to £777 a week for the top 25% of earners.

Total average spending on essential items per week by households in the UK and Northern Ireland, by gross income quartile

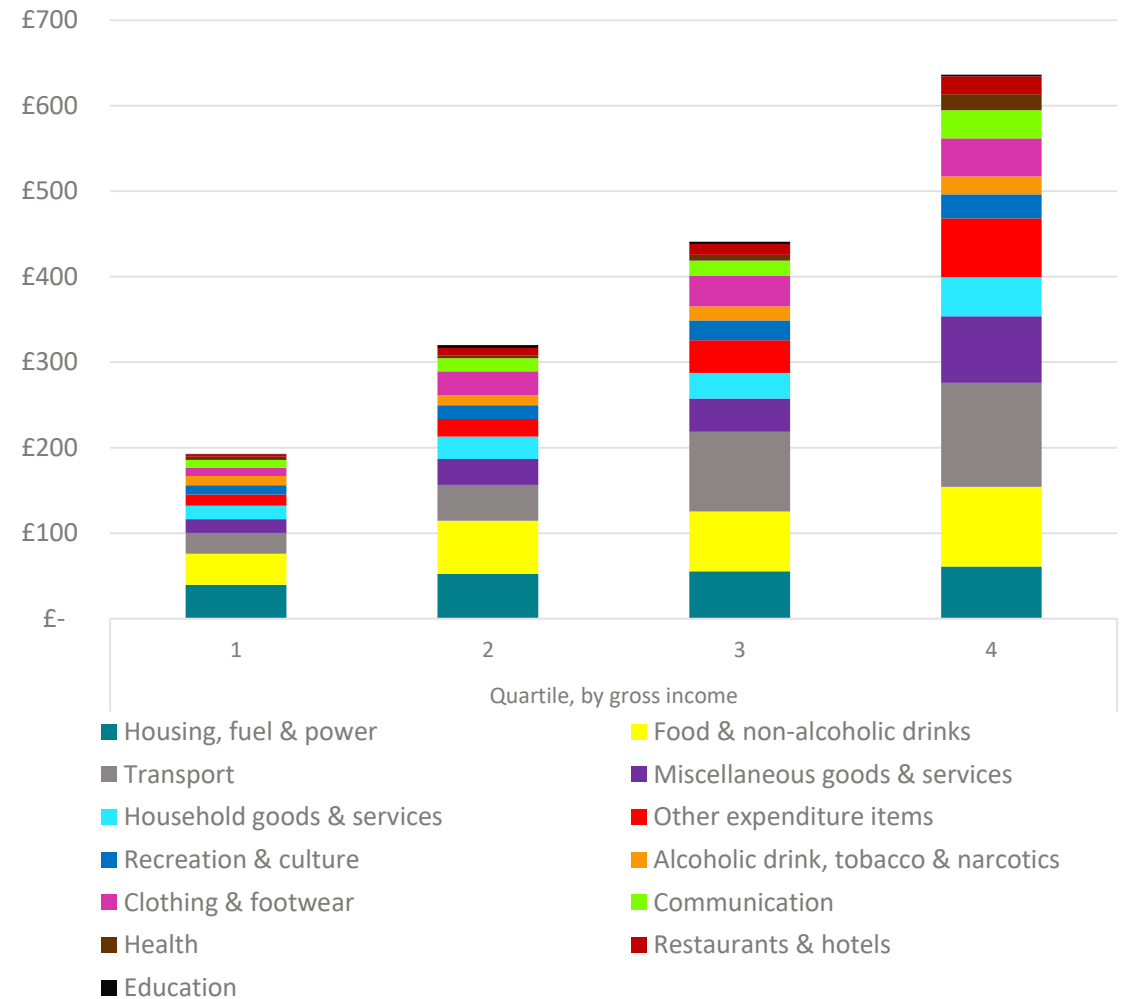


Source: Cebr analysis, UK Data Service

Housing, fuel & power is the biggest spending category for poorest households

- This chart shows the essential spending of each income quartile in Northern Ireland, split into the 13 main household spending categories.
- For the lowest 25% of earners, essential housing, fuel & power spending comes to £39 a week, making it the top spending category at 20% of total essential spending. This is followed by food, which comes to £37 a week, equivalent to 19%. Together, these two categories account for nearly two out of every five pounds spent on essential goods and services.
- For the average Northern Irish household, transport spending is the largest single expenditure category, accounting for 18% of total essential spending. This is followed by spending on food and housing and utilities with 16% and 13%, respectively.
- For the top 25% of earners, transport spending is the top essential spending category, coming to £122 a week on average or 19% of their total essential spending. The second biggest spending category is also food for the top earners, although they spend £93 a week on average. These two categories make up 34% of weekly essential spend for the top earners.

Total average spending on essential items per week by households in Northern Ireland, by gross income quartile, split by expenditure category



Source: Cebr analysis, UK Data Service

The poorest households in Northern Ireland have negative discretionary incomes

- Discretionary income is the remaining income after taxes and necessary expenditure on essentials have been subtracted. It is the amount of money households have left over to spend on leisure, to save or to invest.
- In Northern Ireland, the poorest households have nothing left over after essential items have been purchased. In fact the average weekly discretionary income of the lowest 25% of earners is -£8.69 a week. These households must therefore take out loans or use overdrafts to pay for essential goods and services.
- In the whole of the UK, discretionary incomes for the lowest 25% of earners stand at £3.78 a week on average.
- For the top earnings quartile, discretionary income comes to £461 a week in Northern Ireland and £553 for the UK average.

Total average weekly discretionary income for households in the UK and Northern Ireland, by gross income quartile

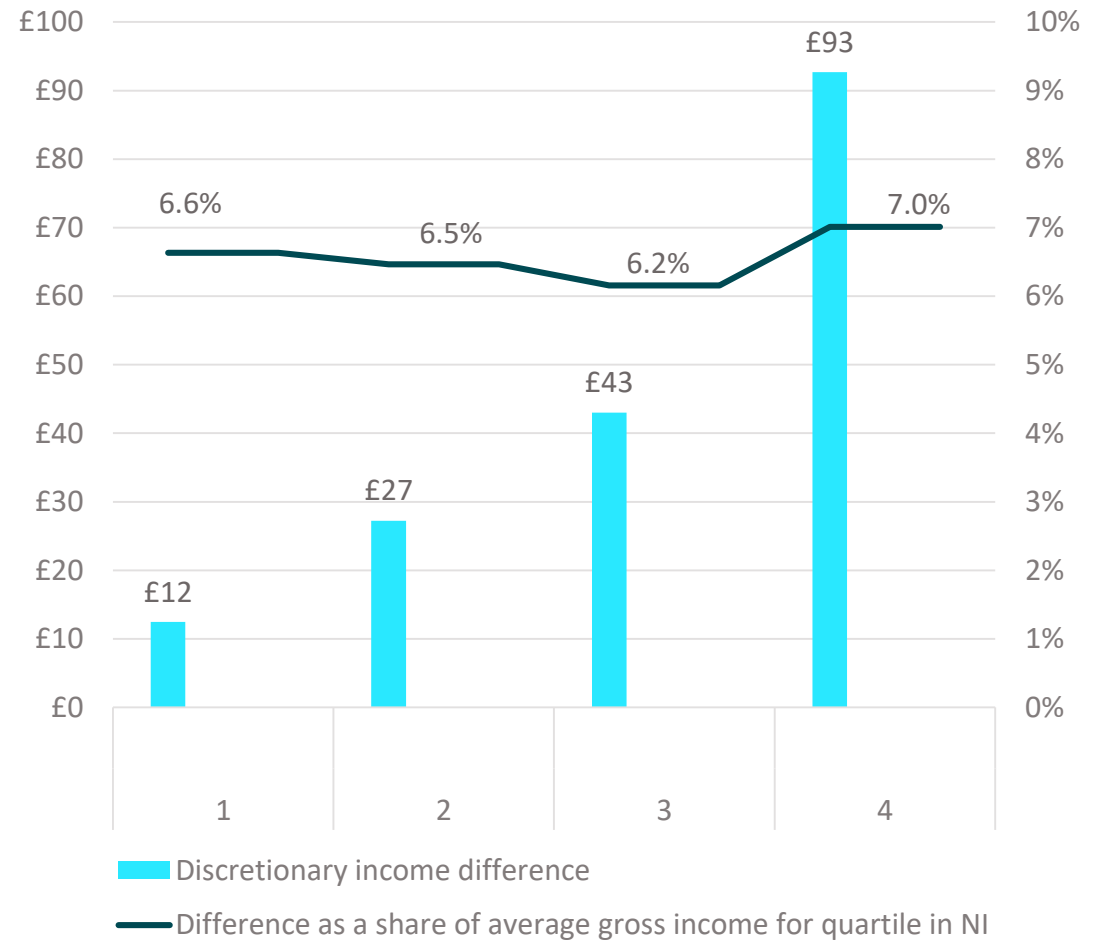


Source: Cebr analysis, UK Data Service

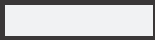
Lowest quarter of earners in the UK have £12 more left over at the end of the week than Northern Irish counterparts

- The difference in discretionary incomes between the lowest 25% of earners in Northern Ireland compared to the whole of the UK is £12 a week.
- Meanwhile the discretionary income differential between Northern Ireland and the UK for the highest earning 25% of households is much larger, at £93 a week.
- However, the discretionary income differential is proportional to the average gross income for each quartile. The £12 differential for the first quartile of earners is equal to 6.6% of the average earnings of households in that quartile in Northern Ireland. Meanwhile, the equivalent statistic for the highest earners is very similar, at 7.0%.

Difference in total average weekly discretionary income for households in Northern Ireland compared to the UK, shown by total difference as difference as a share of incomes



Source: Cebr analysis, UK Data Service



Impacts of changes in the cost of essentials on households in Northern Ireland



A 10% rise in the cost of energy reduces the discretionary income of the average NI household by £1.81 a week

- Cebr has modelled the impact on discretionary incomes of a 5%, 10% and 20% rise in the amount households in Northern Ireland need to spend on certain essential item categories.
- Energy spending is made up of household gas and electricity, as well as some spending on other household energy sources such as oil or coal. The effects in a rise in electricity and gas bills individually are shown on the next slide.
- A 10% rise in energy bills costs £1.02 per week for the poorest quartile, taking the average discretionary income deficit to £9.71.
- A 20% rise in energy costs for the highest earning quartile reduces their discretionary income by 1.2% a week.

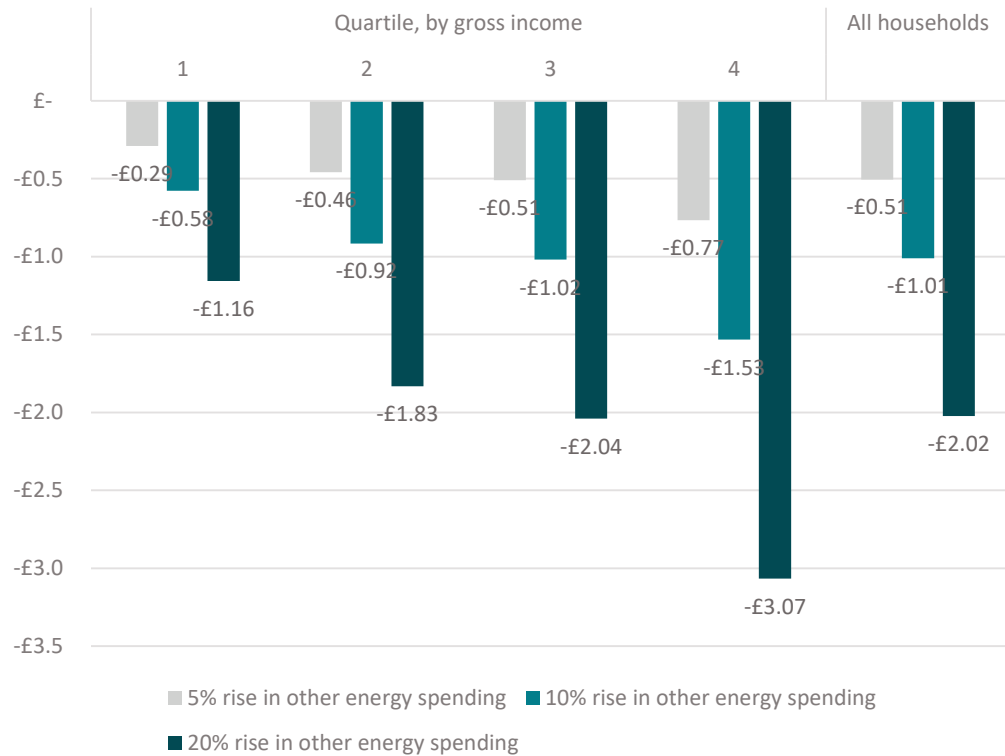
Effect on total weekly discretionary income of a rise in household energy bills spending



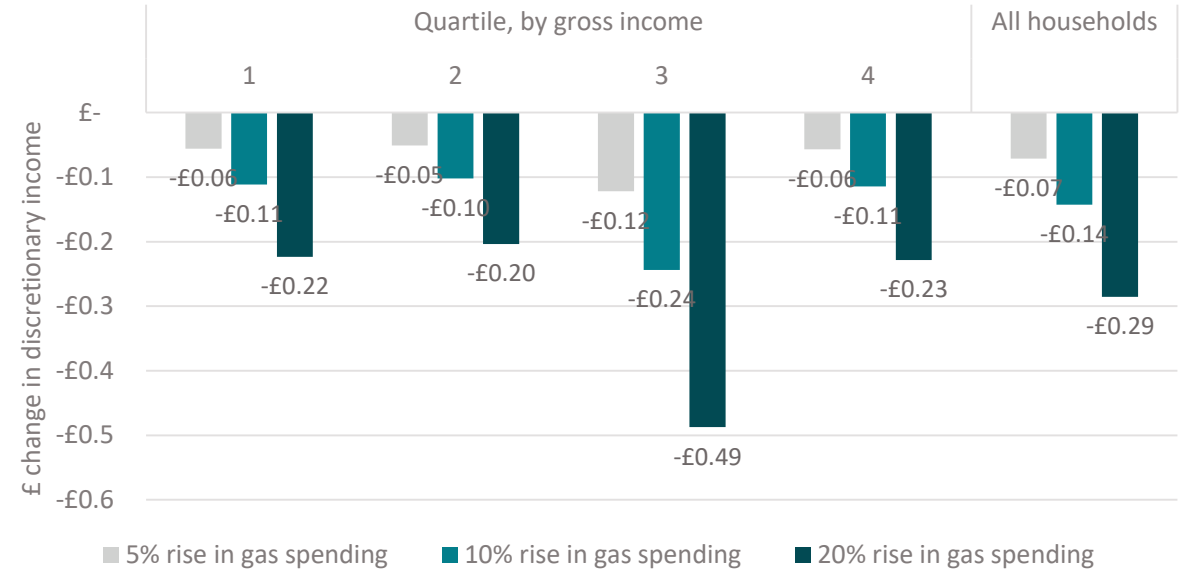
Source: Cebr analysis, UK Data Service

Energy bills subcategories

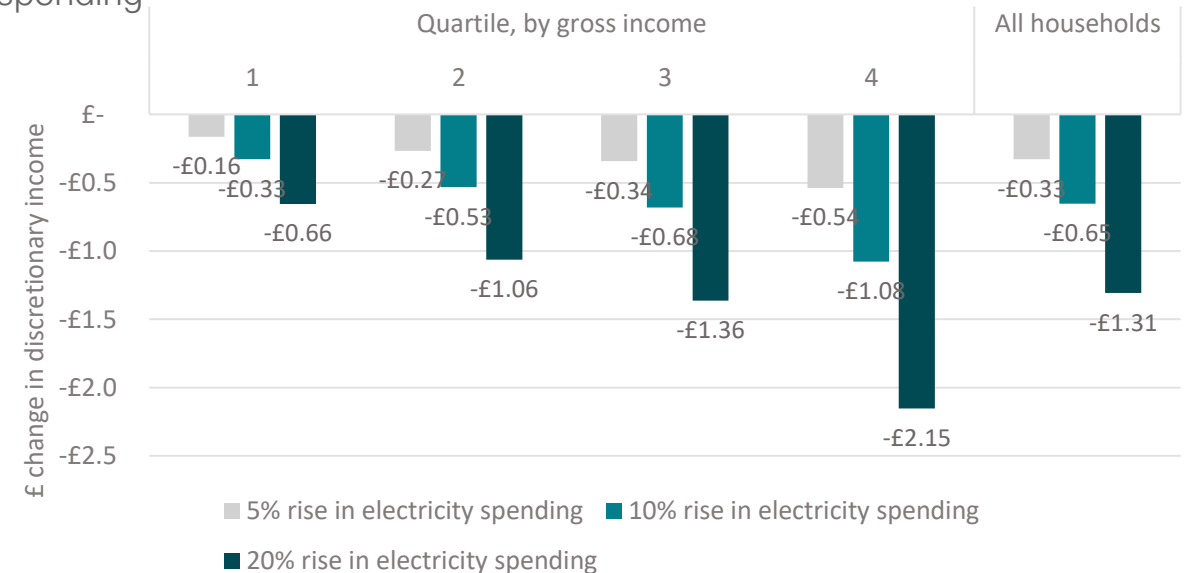
Effect on total weekly discretionary income of a rise in other energy spending (includes oil, paraffin, coal, coke, wood and peat)



Effect on total weekly discretionary income of a rise in household gas spending



Effect on total weekly discretionary income of a rise in household electricity spending



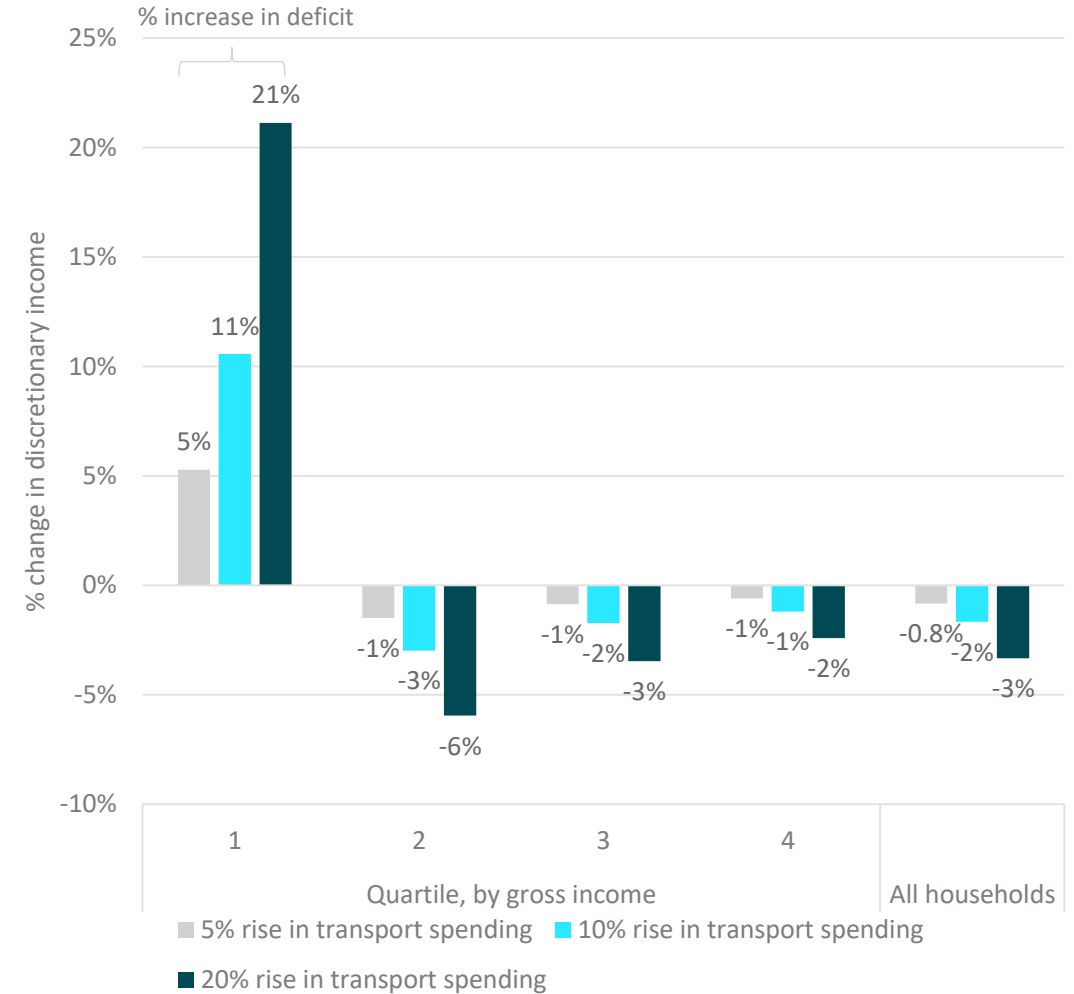
Please note scales are different on each chart

Source: Cebr analysis, UK Data Service

Income deficit grows for poorest households as transport spending costs rise

- Transport spending in this analysis is made up of costs for public transport as well as petrol and diesel spending. The individual effects of price increases for public transport and fuel are shown on the next slide.
- A 20% rise in transport spending causes the weekly discretionary income deficit of the lowest earnings quartile of households to widen by 21%.
- Petrol prices have the largest impact out of the three transport subcomponents for the lowest earning quartile, as a 20% rise in petrol prices causes the discretionary income deficit of these households to widen by 13%.
- A 20% rise in diesel prices causes discretionary incomes of the highest earning quartile to fall by 1.5%, while a 20% rise in petrol prices only causes a 0.8% fall in discretionary incomes for this group.

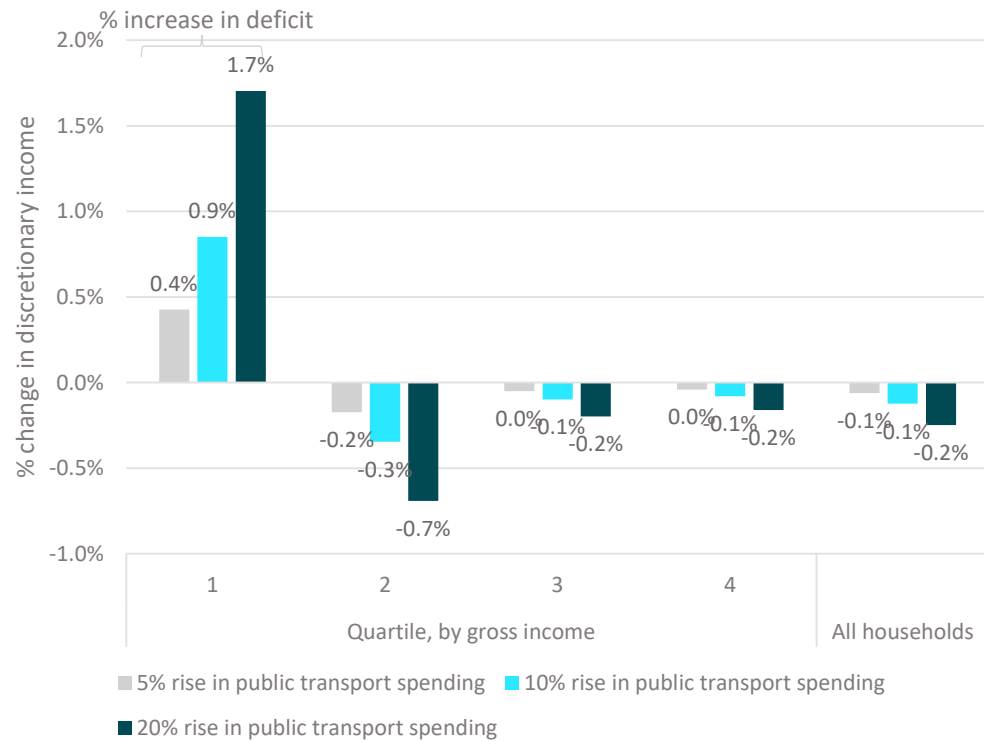
Effect on total weekly discretionary income of a rise in household transport spending



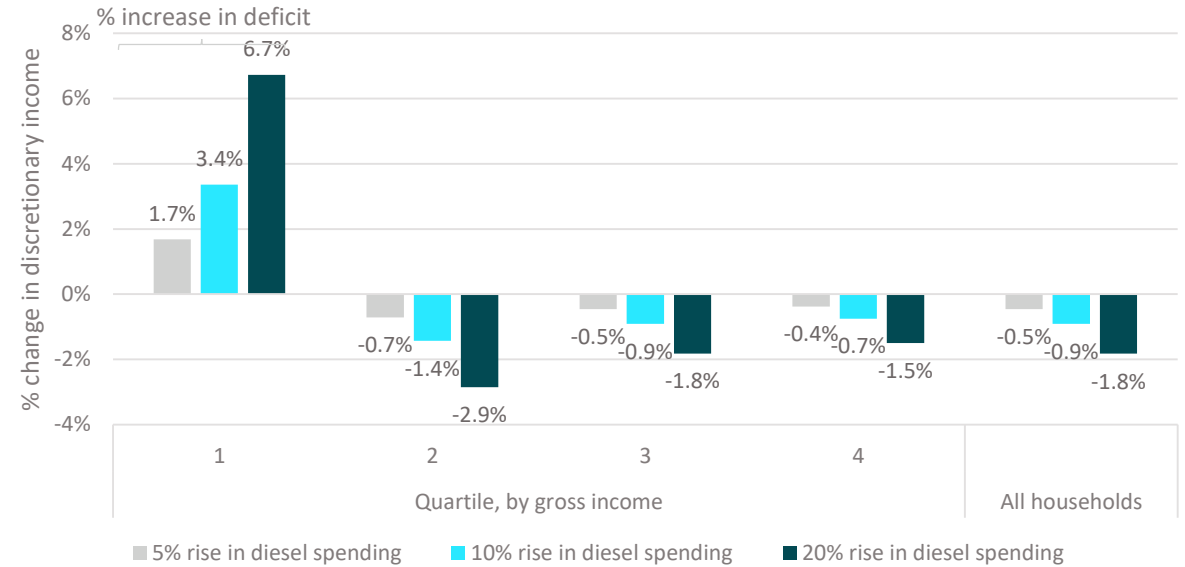
Source: Cebr analysis, UK Data Service

Transport spending subcategories

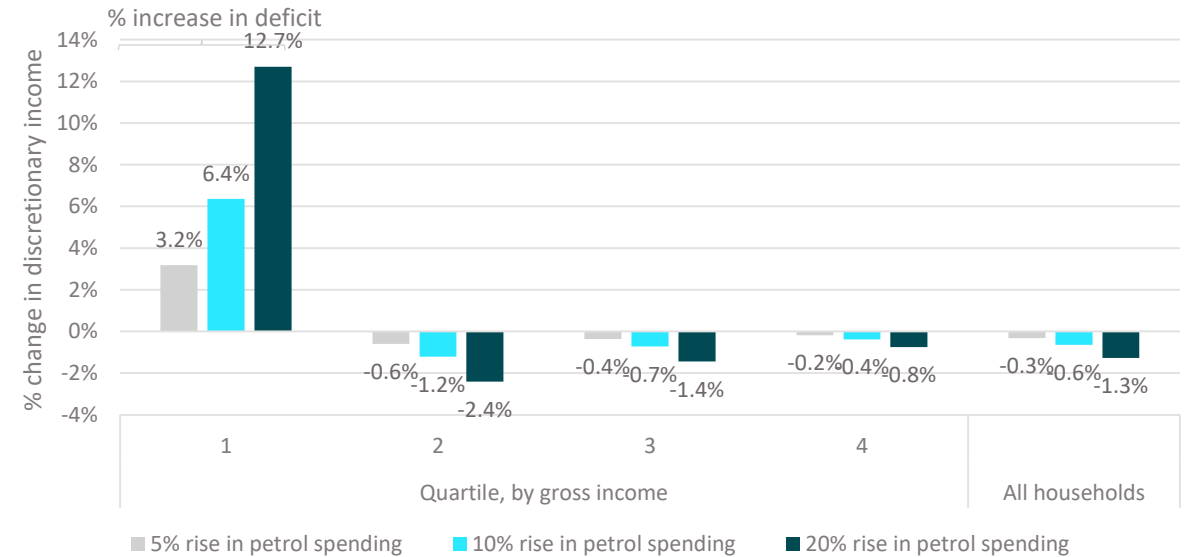
Effect on total weekly discretionary income of a rise in the cost of household public transport spending



Effect on total weekly discretionary income of a rise in the cost diesel spending



Effect on total weekly discretionary income of a rise in the cost of petrol spending



Please note scales are different on each chart

Source: Cebr analysis, UK Data Service

The poorest households would see their weekly deficit double following a 20% increase in food prices

- As food spending makes up an average of 16% of essential spending for Northern Irish households, price changes in this category can have large impacts on levels of discretionary income.
- A 5% rise in food spending makes the discretionary income deficit of the lowest earning quartile £2.37 a week larger, a 27% rise. A 20% rise in food spending causes the deficit to increase by £9.48, a rise of 109%.
- In comparison, a 20% rise in necessary food spending for the top earning quartile of households causes discretionary incomes to fall by £31 a week, a 7% decrease.
- Following a 10% increase in the price of food, the average Northern Irish household would see their discretionary incomes reduced by £19.85, or 11%.

Effect on total weekly discretionary income of a rise in the cost of household food spending

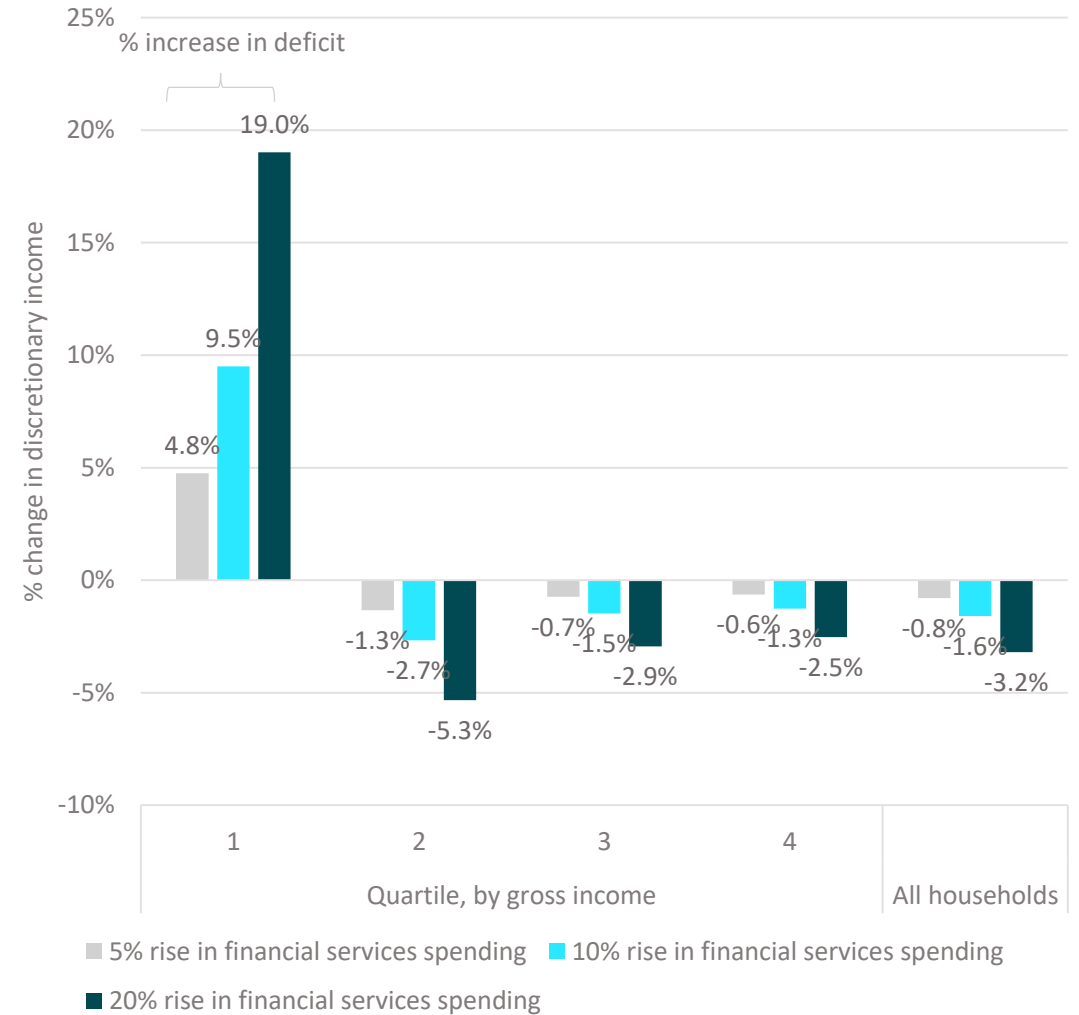


Source: Cebr analysis, UK Data Service

10% rise in cost of financial services spending would cause average household discretionary income to fall by 2%

- Financial services spending in this analysis is made up of bank charges (including credit card charges), insurance costs and mortgage costs. The effects of an increase in the costs for each category individually are shown on the next slide.
- A 20% rise in financial services spending costs would cause the discretionary income deficit of the lowest earnings quartile of households in Northern Ireland to rise by 19%.
- Meanwhile, a 20% rise in costs of services in this spending category causes discretionary incomes of the second lowest earnings quartile to fall by 5%.
- For the average Northern Irish household, a 10% increase in the cost of financial services would lead to a £2.82 decline in their weekly discretionary incomes, equivalent to a fall of 1.6%.

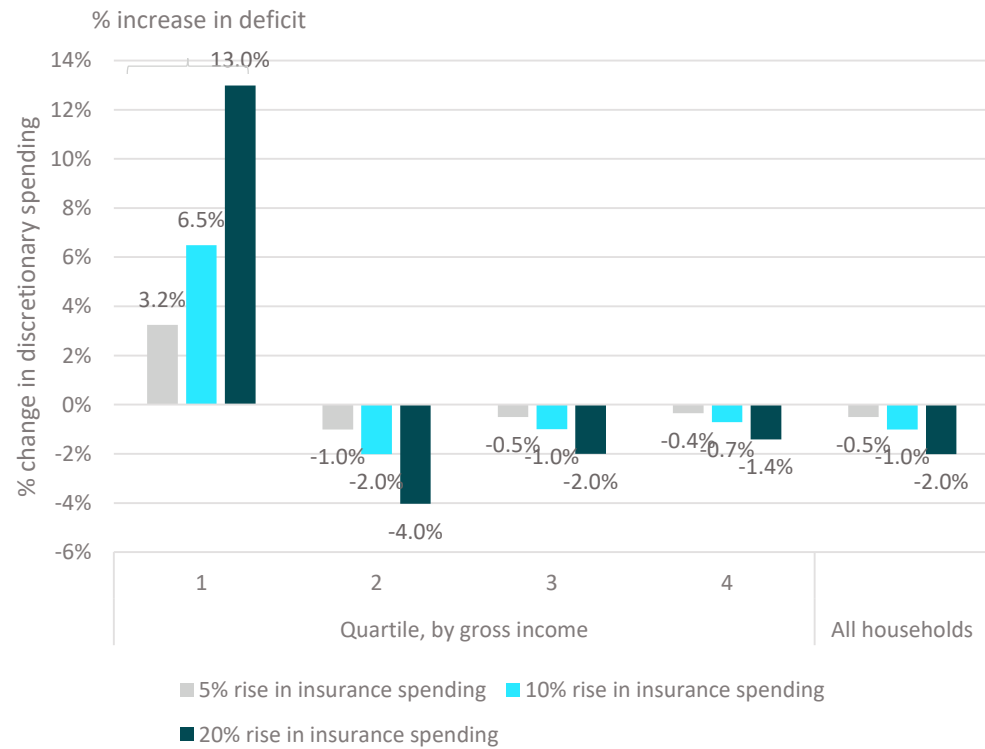
Effect on total weekly discretionary income of a rise in household financial services spending



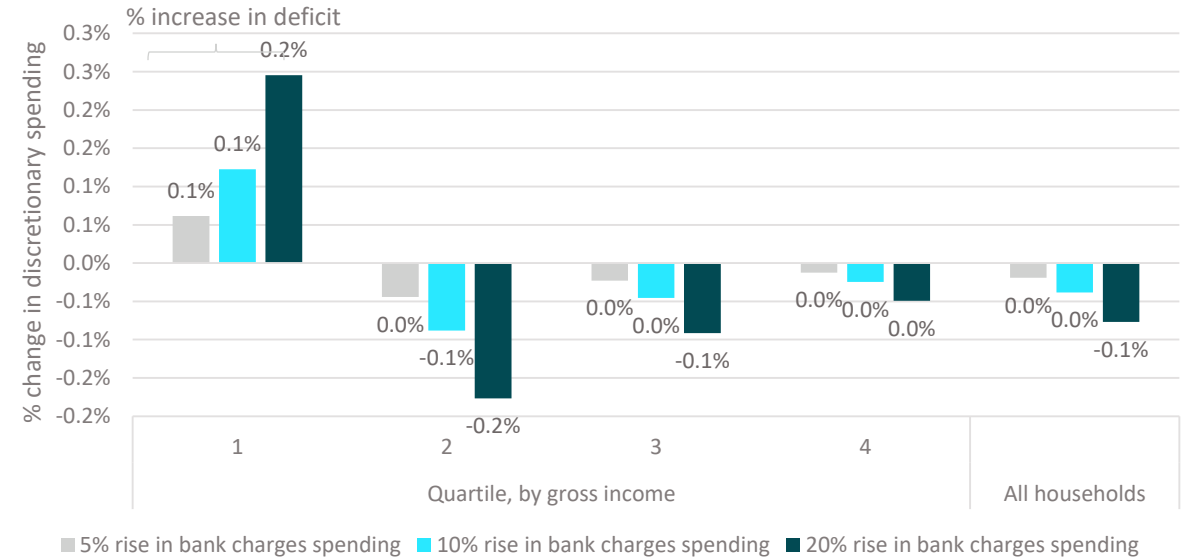
Source: Cebr analysis, UK Data Service

Financial services spending subcategories

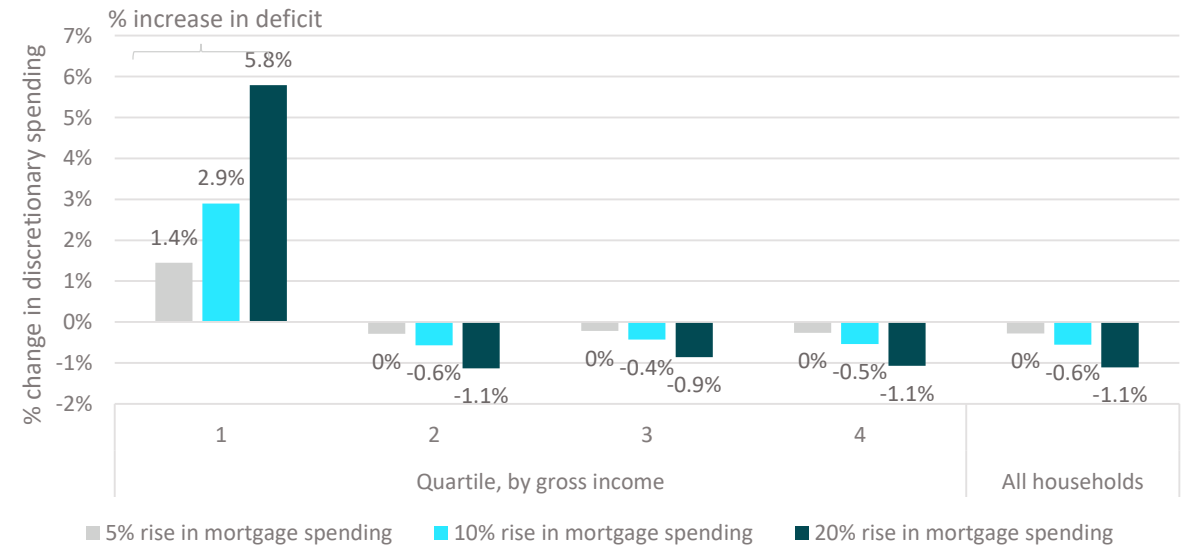
Effect on total weekly discretionary income of a rise in the cost of household insurance spending



Effect on total weekly discretionary income of a rise in the cost of bank charges



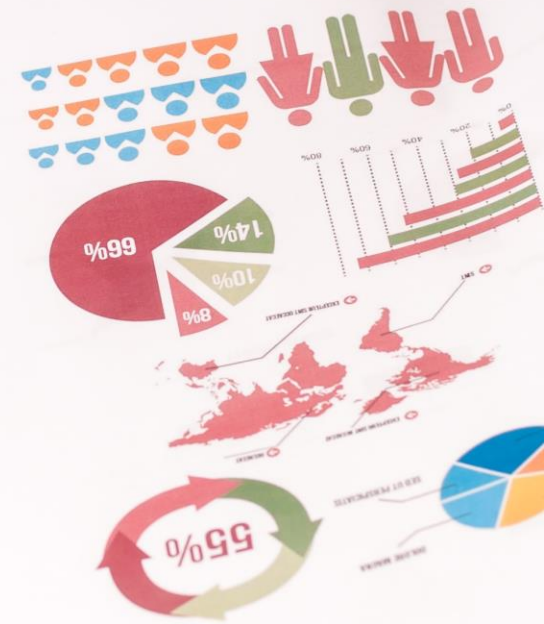
Effect on total weekly discretionary income of a rise in the cost of mortgage spending



Please note scales are different on each chart

Source: Cebr analysis, UK Data Service

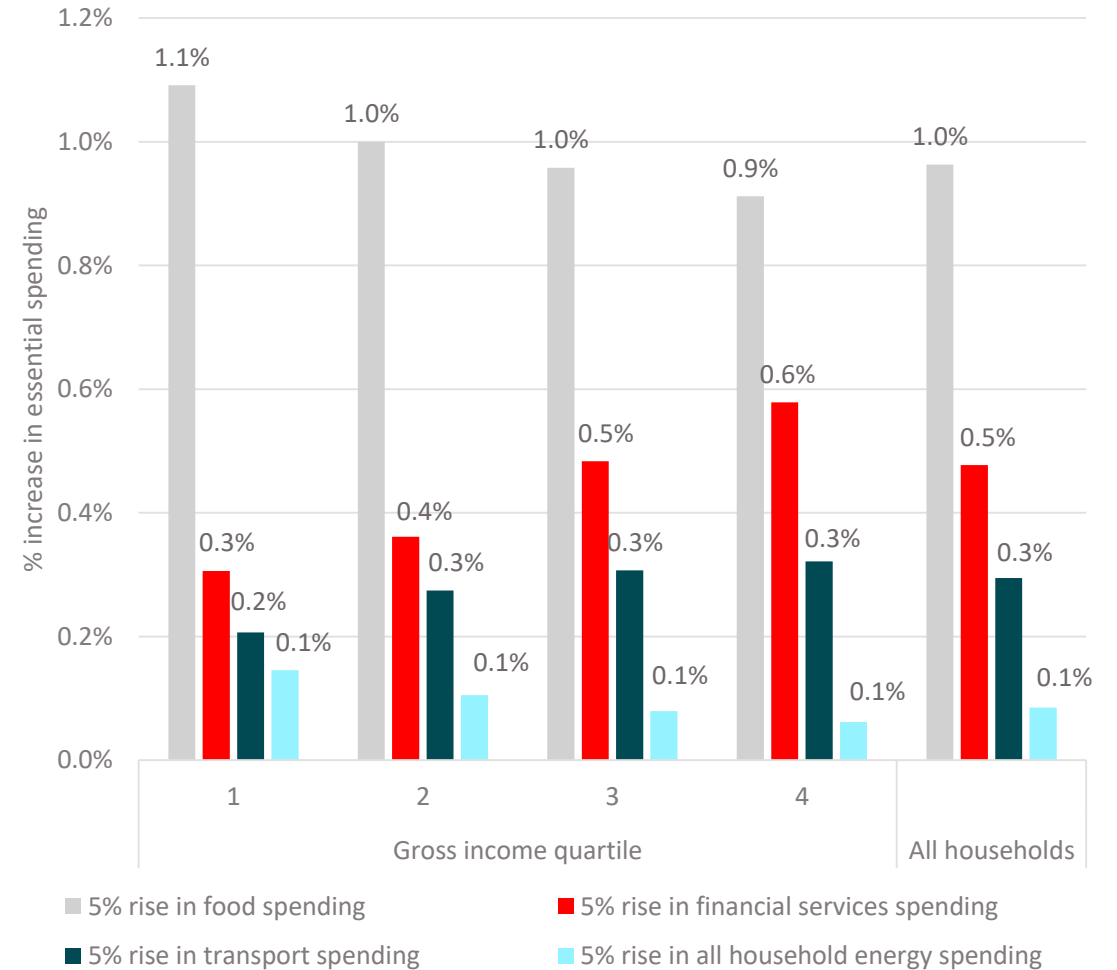
Comparison with the UK as a whole



An increase in the cost of food has the largest impact on essential spending

- The impacts of a 5% price increase in each of the four main spending categories studied in this report are shown on the chart. As in Northern Ireland, a rise in the cost of food spending has the largest impact on essential spending across household types.
- In the UK, a 5% price increase for food causes the cost of total essential spending to rise by 1.1% for the lowest earning quartile. Looking only at Northern Ireland, the effect is marginally larger, at 1.2%.
- For the top 25% of earners in the UK, a 5% increase in the cost of financial services spending causes essential spending to rise by 0.6%. Meanwhile, the equivalent statistic is 0.5% in Northern Ireland.
- All households in the UK see a 0.1% increase in essential spending costs on average from a 5% increase in energy prices, which is 0.2% looking only at Northern Irish households.

Effect on cost of total weekly essential spending of a 5% price increase in different household spending categories

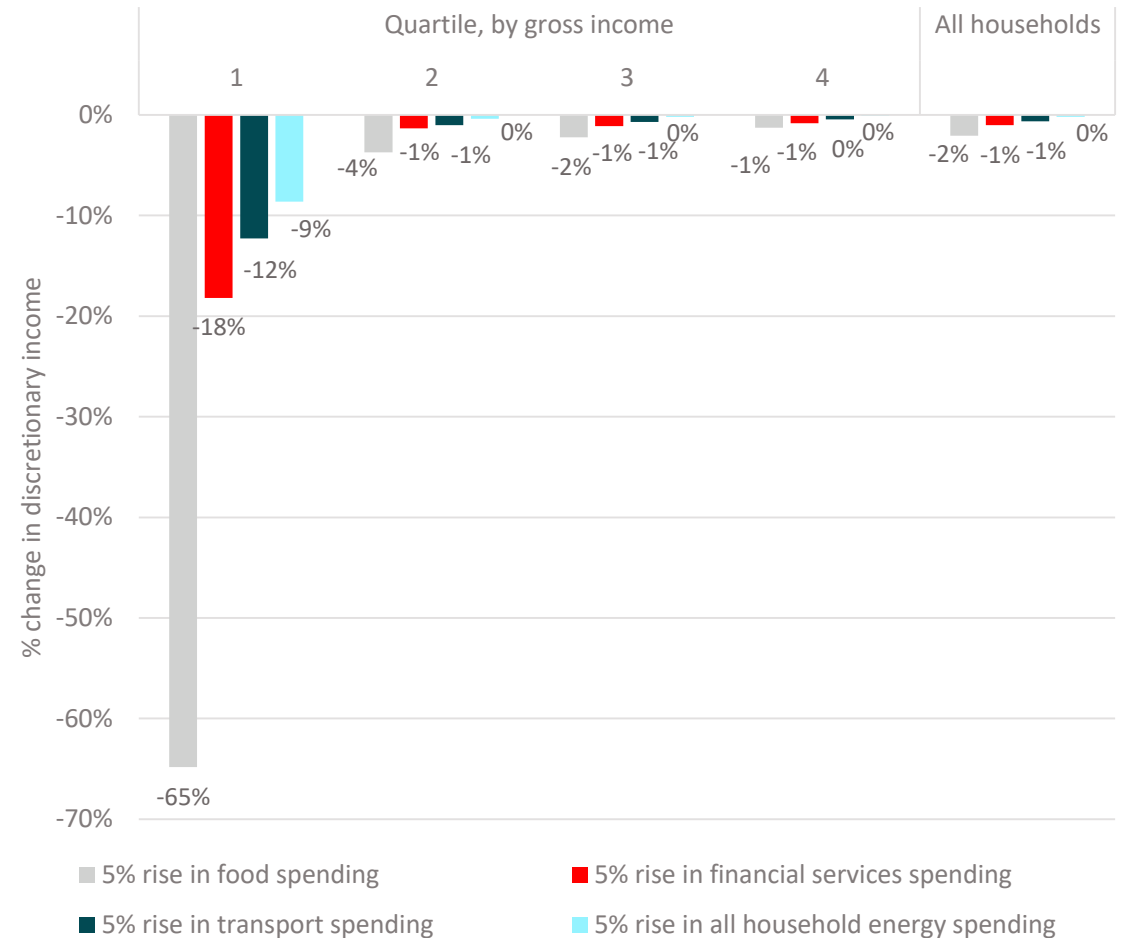


Source: Cebr analysis, UK Data Service

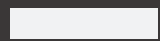
All UK households maintain a discretionary income surplus even after a 5% increase in food prices

- Across the UK as a whole, the lowest 25% of earners have £3.78 left over after essential spending. When food prices rise by 5%, this causes the discretionary income of people in this income category to fall to £1.33, a 65% decline. In Northern Ireland, the lowest earning quartile has -£11.06 in discretionary income after a 5% rise in the price of food.
- Across all households, a 5% rise in the cost of financial services spending has less of an effect on households in Northern Ireland than in the rest of the UK. This is mainly because households in Northern Ireland spend less on financial services. UK households see a 1.0% fall in discretionary income due to the higher prices, while households in Northern Ireland see a 0.8% fall.
- On the other hand, households in Northern Ireland are more exposed to increased cost for public transport, seeing a 0.8% fall in discretionary income from a 5% rise in spending on this category, compared to a 0.6% fall for the UK on average.

Effect on total weekly discretionary income of a 5% rise in different household spending categories, UK households



Source: Cebr analysis, UK Data Service



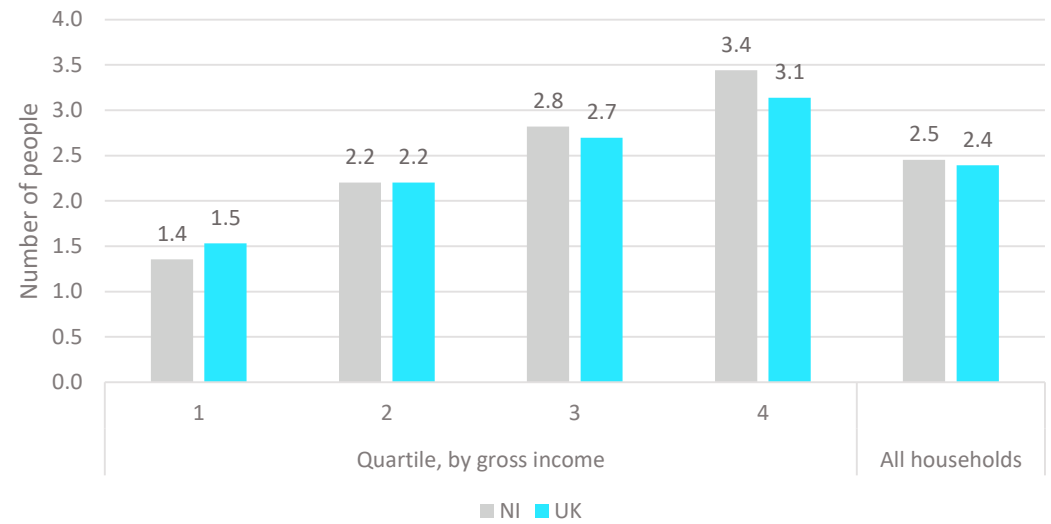
Demographics



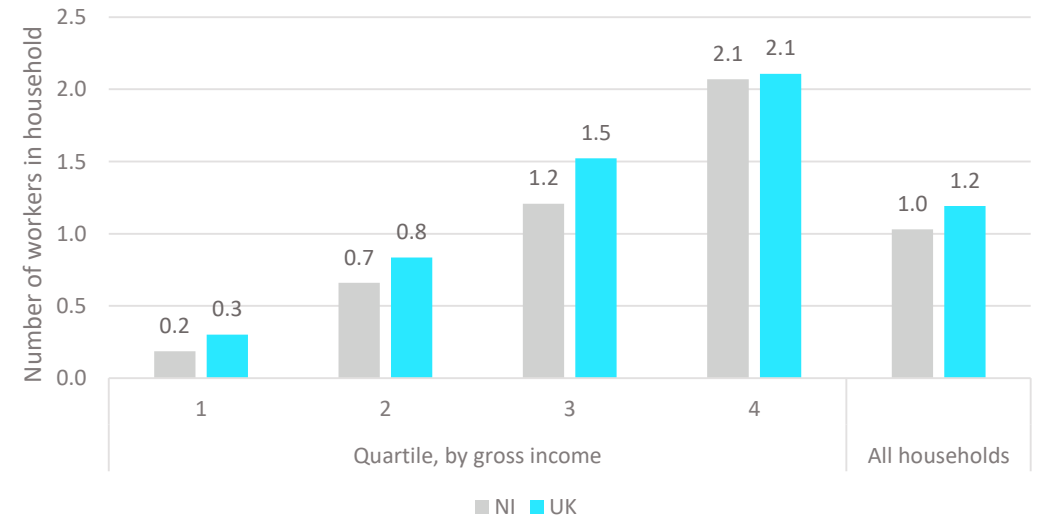
Higher income households tend to be larger

- Cebr conducted demographic analysis of each income quartile for the UK and Northern Ireland to see how the make up of households tends to differ by income.
- Northern Irish households in the lowest income quartile have an average of 1.4 people, of which 0.2 are in paid employment (meaning roughly one in five households in this category has someone with an income from a job).
- As incomes rise, so does household size, and the average household size for the highest earning households is 3.4 people in Northern Ireland, and 3.1 people in the UK. On average, 2.1 of these people are in paid employment.
- Not only are there more people earning in households in the highest income quartile, but those earners also work in roles which are higher paid. In Northern Ireland, the lowest earning households tend to work in routine operations, while the highest earners work in technical roles.

Average number of people in household by quartile



Average number of people in paid employment in household by quartile



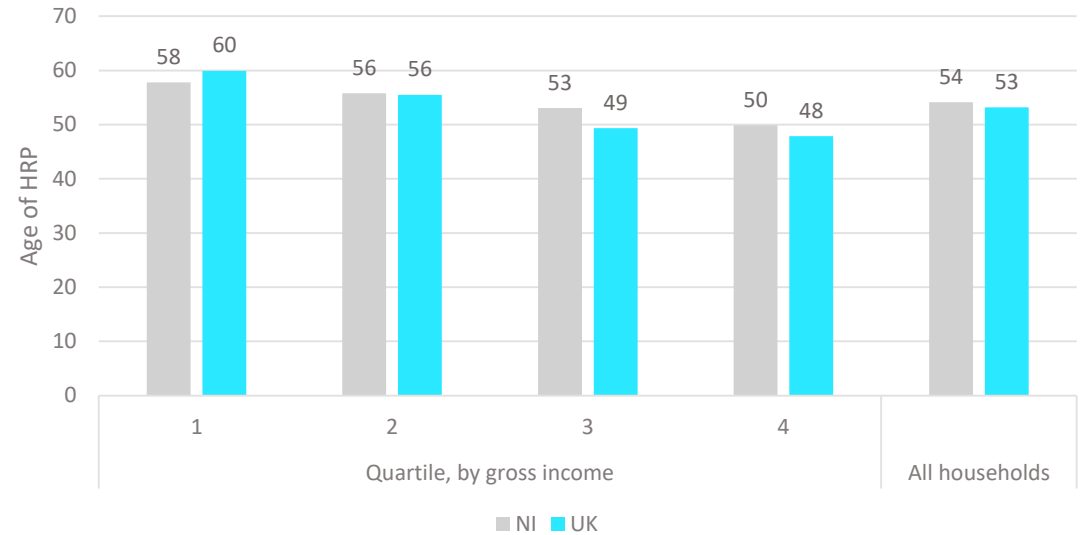
Source: Cebr analysis, UK Data Service



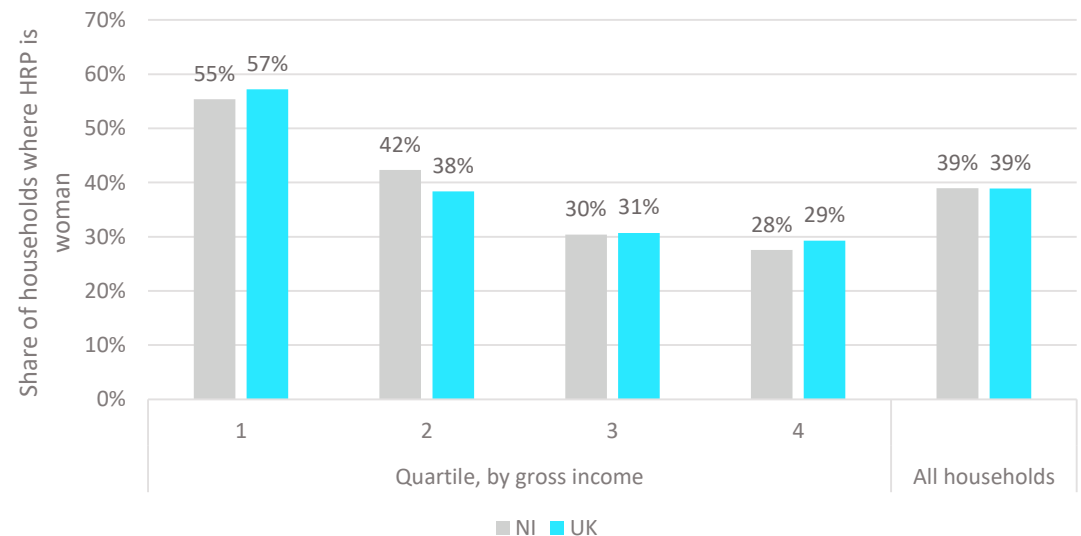
Lowest earning households tend to be older

- The household reference person (HRP) is legally responsible for the household. Where there is more than one person who is legally responsible, the HRP is the person with the highest income. If there is more than one person with the same income, the eldest member of the household becomes the HRP.
- On average, the age of the HRP tends to be lower for higher earning household groups. The higher average age in the lower income quartiles can be partly explained by the fact that many pensioners will have lower incomes than households of working age.
- The average age of the HRP in Northern Ireland is 58 in the first earnings quartile, and 50 for the highest earnings quartile.
- The HRP is also much more likely to be a woman in the lowest earning quartile than the highest earning quartile. 55% of HRPs in the lowest earning quartile in Northern Ireland are women, while only 28% of HRPs in the highest earning quartile in Northern Ireland are women.

Average age of HRP



Share of households where HRP is a woman



Source: Cebr analysis, UK Data Service

Conclusions

The main conclusions of this research are:

- The lowest earning quartile of households in Northern Ireland is very sensitive to price shocks which affect how much they have to spend on necessary items.
- Because the bottom quartile of earners already have negative discretionary incomes, on average, any upward price shocks make the size of their weekly deficit larger.
- In comparison, the average household in the lowest income quartile for the whole of the UK does have a few pounds left over at the end of each week, after taxes and essential spending. Although this can also be eroded by higher prices of essential items.
- Expenditure on food, in particular can have a significant impact on the discretionary incomes of households, because it makes up a very large component of essential spending.
- Meanwhile, the higher three income quartiles in Northern Ireland are much more resilient to shocks. On average, households in the second lowest earning quartile can withstand even a 20% increase in spending on all essential items without dipping into savings or using credit products.

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