

Distributional Analysis to accompany the 2024-25 Scottish Budget

This paper provides an analysis of the impact of tax and social security measures included in the 2024-25 Scottish Budget on households of different income levels and characteristics.

Distributional analysis is critical to understand the impact that Scottish Government policies are having on inequality, and to ensure support is targeted at those who need it most.

Summary

This analysis shows:

- The Scottish tax and social security system is progressive: the higher a household's income, the greater the share of their income they pay in tax, and the less they receive in social security.
- Differences in Scottish and UK Government policies since the devolution of tax and social security powers in 2016 have increased this progressivity.
- As a result, on average, households in the lower half of the income distribution are £400 better off a year than they would be in the rest of the UK.
- Overall, around 58% of households are better off under the Scottish tax and social security system than they would be in the rest of the UK.
- Scottish tax policy decisions taken in this Budget – including both Income Tax policy changes and the freeze in Council Tax – provides a net benefit to around 60% of Scottish households, with around 80% of households paying no more tax as a result of these measures.
- The negative impact of Income Tax policy changes principally falls on the highest earning 20% of households, with the top 10% paying an average of 1% of their income (£1,041) more in Income Tax per year.
- Taking Scottish tax policy changes and the UK Government's reduction in National Insurance Contribution rates together, in 2024-25 over 90% of households will be better off than if rates had been left unchanged and all thresholds uprated with CPI (excluding the Personal Allowance and Top Rate Threshold).

A detailed description of the methodology used to produce this analysis is included in the annex of this note.

Scope of this analysis

The first part of this paper analyses the impact of the Scottish tax and social security system on household incomes. This is shown both in isolation and in comparison to the system in place in the rest of the UK.¹ Understanding the impact of the tax and

¹ For the purposes of this analysis, the 'rest of the UK' comparator uses the Income Tax system in place in England and Northern Ireland, and the Social Security system in place in England and Wales.

social security system as a whole is important context for considering the changes made in an annual Budget.

The second part of this paper analyses the policy changes announced or confirmed in this Budget, namely:

- A new 45p Advanced rate of Income Tax, applied on income between £75,000 and £125,140;
- Increasing the Top rate of Income Tax by 1p to 48p;
- Freezing the Higher rate threshold at £43,662;
- Freezing Council Tax in 2024-25, subject to the agreement of local government.

This modelling of the impact of the freeze in Council Tax assumes rates would otherwise have increased at the rate seen in 2023-24. The implementation of the freeze remains subject to negotiation with the Convention of Scottish Local Authorities (COSLA) and individual agreement with each Local Authority. This analysis is an illustration of the impact on households for 2024-25, based on the rate increases from 2023-24, and assumes that the freeze is agreed by all Local Authorities.

Both parts of this analysis only include policies that directly affect the financial resources available to households – i.e. personal taxes and cash benefits. It does not incorporate in-kind benefits (such as free school meals or free early learning and childcare), or the benefits of public services received by households, such as transport, education or healthcare. We are exploring extending our analysis to cover these benefits, and, if possible, intend to incorporate these in future Budget analyses.

All impacts on household incomes are shown excluding any behavioural responses. This is particularly important when considering impacts of tax policy on higher income deciles, where behavioural responses to policy changes are likely to be greatest.

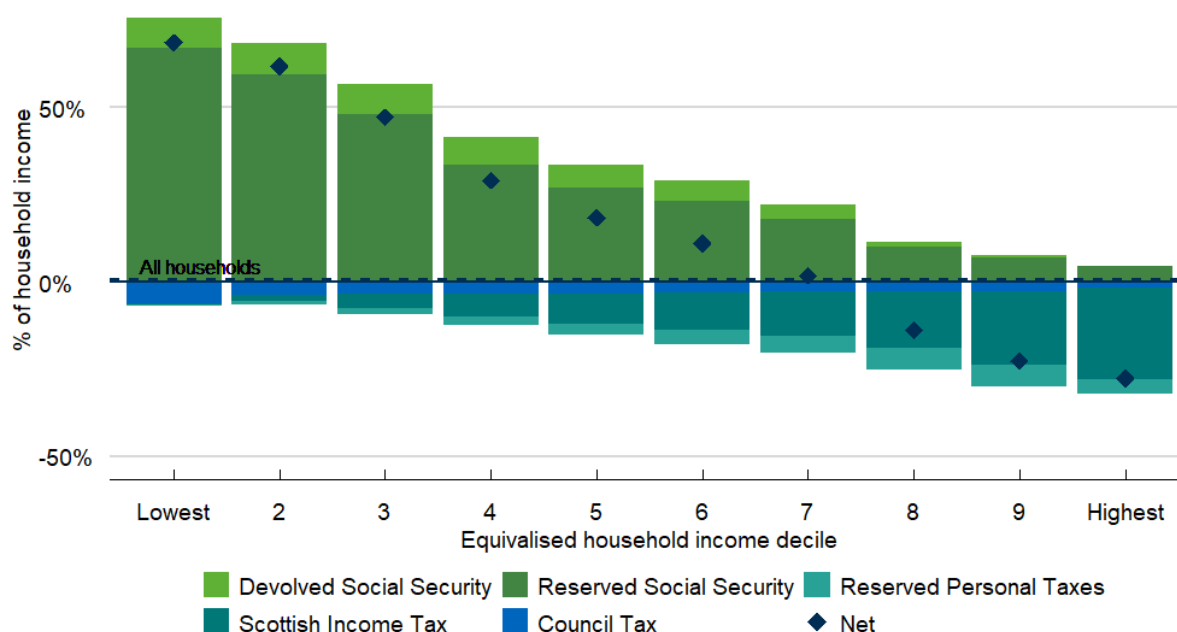
A full list of policies incorporated is included in the methodological annex.

Part One: overall impact of the tax and social security system

The tax and social security system in Scotland is progressive – the higher a household’s income, the greater the share of their income they pay in tax. This enables redistribution of income from higher income to lower income households, both in the form of direct payments – the focus of this analysis – and the funding of public services.

Figure 1 shows this through the total impact of personal taxes and social security payments in 2024-25 on household incomes. It includes both devolved taxes (Scottish Income Tax and Council Tax), reserved taxes (National Insurance Contributions and Income Tax on savings and dividends), and devolved and reserved social security payments.

Figure 1: total tax paid and social security received in Scotland as a proportion of net household income in 2024-25, by equivalised household income decile²



Source: Scottish Government analysis using UKMOD

As Figure 1 shows, the impact of Scottish Income Tax on households increases with household income. The benefits of social security payments are greatest for the lowest income households, although the bulk of these – notably Universal Credit and the State Pension – remain reserved to the UK Government. Council Tax (after accounting for the impact of the Council Tax reduction scheme and Council Tax discounts) has a proportionally greater impact on lower income households, with higher income households paying a lower share of their income. Nevertheless, the

² All charts and figures in this analysis are based on equivalised income before housing costs. Equivalisation is a process to adjust household income to account for the different needs of households of different sizes; further details are provided in the annex.

tax and social security system as a whole remains progressive and (on average) the seven lowest income deciles receive a net benefit.

The average impact of the tax and social security system across all households (shown as a horizontal line on the chart) is close to zero. However, this need not be the case, and it is important to note that the taxes included in this analysis do not directly or exclusively fund the social security payments shown.

This analysis excludes significant sources of spending which benefit all households – such as health, education and transport – and significant sources of tax revenue not levied directly on households, such as VAT and corporation tax. Whether the average household receives a net benefit from social security payments and personal taxes will depend on both UK Government and Scottish Government decisions on the balance between social security and other types of spending; and between direct personal taxes, and other forms of taxation.

Differences between Scotland and the rest of the UK

Since further powers over some taxes and social security payments were devolved to the Scottish Parliament in 2016, there has been increased divergence between the tax and social security systems in Scotland and the rest of the UK.

Figures 2 and 3 below show how Scotland's tax and social security system compares to the system currently in place in the rest of the UK, including the impact of policy changes announced in the 2024-25 Scottish Budget.³ The charts show the impact as a share of net household income and in cash terms, respectively.

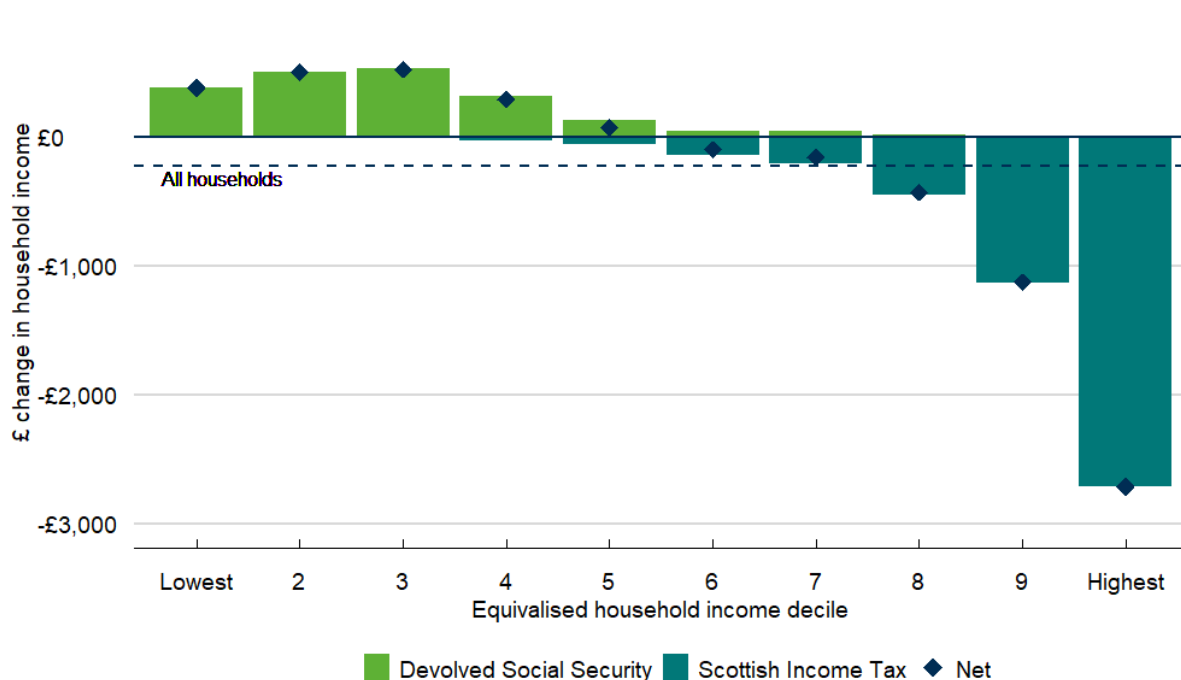
³ This comparison excludes differences in Council Tax between Scotland and the rest of the UK, due to the challenge of making direct comparisons between the Council Tax policies in place in Scotland and England, Wales and Northern Ireland.

Figure 2: tax paid and social security received in Scotland relative to the rUK system as a proportion of net household income in 2024-25, by income decile



Source: Scottish Government analysis using UKMOD

Figure 3: tax paid and social security received in Scotland relative to the rUK system in cash terms in 2024-25, by income decile



Source: Scottish Government analysis using UKMOD

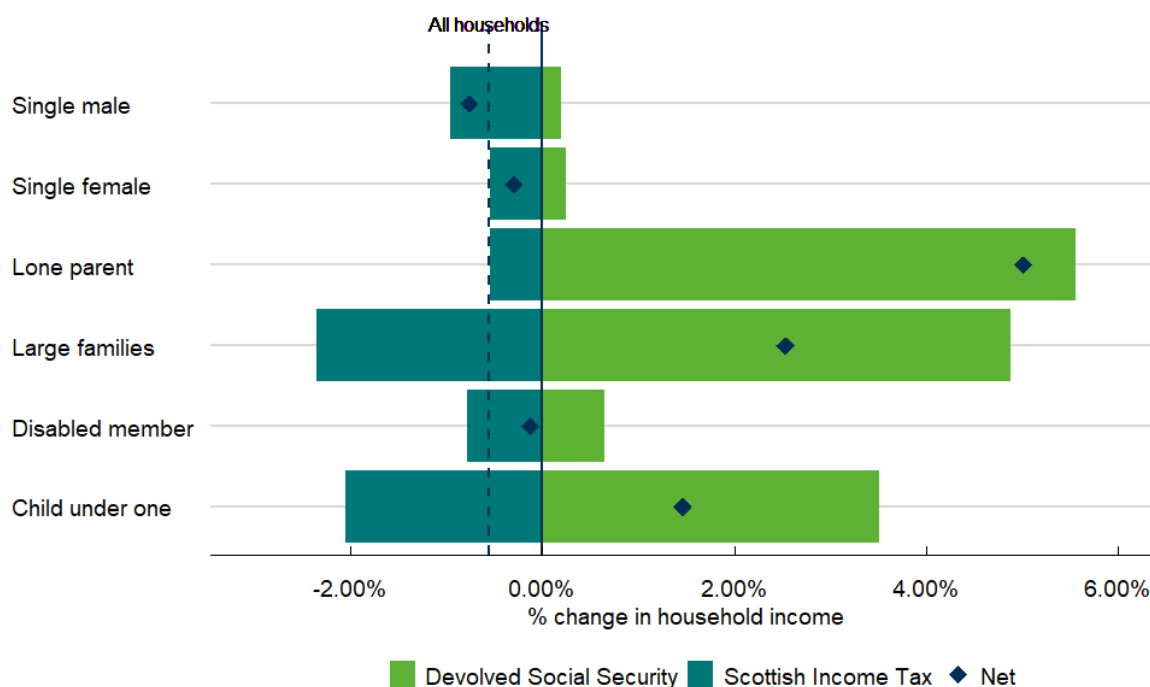
As a result of divergence between Scottish and UK Government policies, on average, the lowest earning five deciles are better off in Scotland than in the rest of the UK. The Scottish Child Payment is the largest single contributor to the improved financial resources of low-income households relative to the rest of the UK, while the

impact on higher income households is driven by the introduction of – as of 2024-25 – a six band Income Tax system in Scotland that levies higher rates of Income Tax on higher incomes, with slightly lower rates on those earning less than £28,850.

Taking changes to the tax and social security system together, 58% of households are better off under the Scottish system than in rUK, with the majority of these in the bottom half of the income distribution.

In addition to considering the impact across the income distribution, we can also consider the impact of policy changes on specific household types. Figure 4 shows the difference between Scotland and the rest of the UK’s policies on tax and social security by six household types. These household types have been selected with reference to protected characteristics as defined in the Equalities Act 2010, and the priority household types used in Scottish child poverty analysis.⁴

Figure 4: tax paid and social security received in Scotland relative to the rUK system in cash terms in 2024-25, by household type⁵



Source: Scottish Government analysis using UKMOD

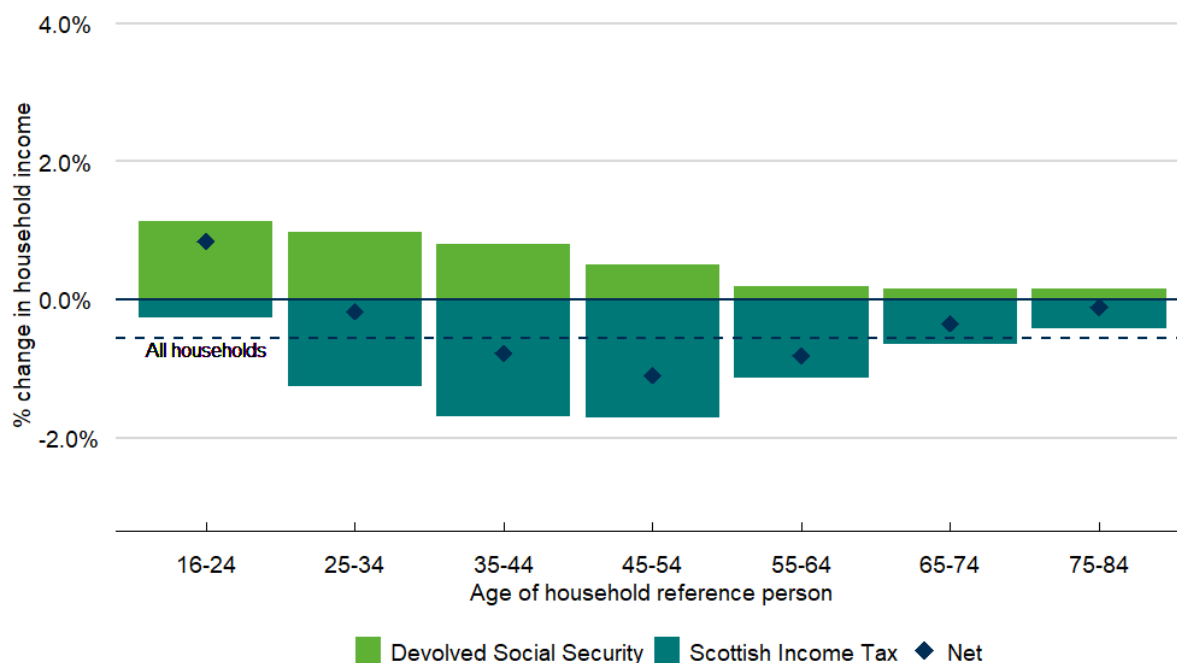
Again, largely driven by the Scottish Child Payment, households with children generally see the greatest benefit relative to their income.

⁴ In addition to the household types shown, we have explored analysis of households with a minority ethnic member, and households with a mother under 25 years old; but found in both instances that the sample size in the data was too small to allow for reliable analysis.

⁵ Large families refers to families with three or more children.

The impacts of differences between the tax and social security systems also vary by age. Figure 5 below shows the impact of differences based on the age of the household reference person.⁶

Figure 5: tax paid and social security received in Scotland relative to the rUK system in cash terms in 2024-25, by age of household reference person



Source: Scottish Government analysis using UKMOD

Figure 5 shows that the impact of differences in income tax policy is greatest in the middle age cohorts (those aged 35 to 54) where average incomes are highest. In older age cohorts, increasing numbers of workers retire or reduce their working hours, causing average incomes to fall. The impact of differences in social security payments is greatest in younger age cohorts, again due to the impact of the Scottish Child Payment.

⁶ The household reference person is the person in the household in whose name the accommodation is owned or rented; if it is jointly owned or rented, it is the highest earner; if there are two joint highest earners, it is the oldest person.

Part Two: Analysis of 2024-25 Budget decisions

This part of the document analyses the impact of the tax and social security policy decisions made or confirmed in the Scottish Budget.

It shows the impact on household incomes of:

- A new 45p Advanced rate of Income Tax, applied on income between £75,000 and £125,140;
- Increasing the Top rate of Income Tax by 1p to 48p;
- Freezing the Higher rate threshold at £43,662
- Freezing Council Tax in 2024-25, subject to the agreement of local government.

These are assessed against an assumed 'no policy change' counterfactual. This consists of:

- Uprating most social security payments and tax thresholds with inflation, excluding the Top Rate threshold and the Personal Allowance⁷.
- A 5% increase to Council Tax rates (based on the average increase in 2023-24). This is not an indication of what level of funding will be provided to Local Authorities to fund the Council Tax freeze; this is purely a modelling assumption used to estimate household level impacts of the policy.

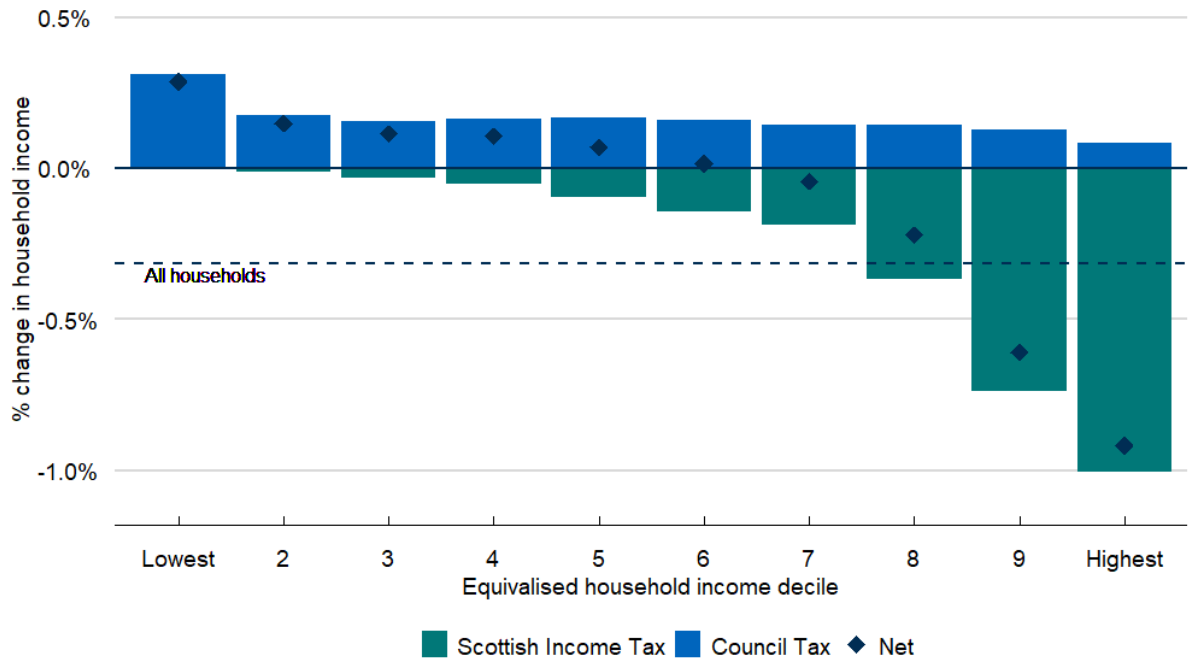
The full details of the counterfactual scenario are included in the Annex.

Because social security payments have been uprated in line with inflation, and no significant social security policy changes have been introduced in this Budget, the following charts only show the impact of changes to tax policy.

Figures 6 and 7 below summarise the impact of the decisions made in the Budget on household incomes. Impacts are shown as a proportion of net household income and in cash terms.

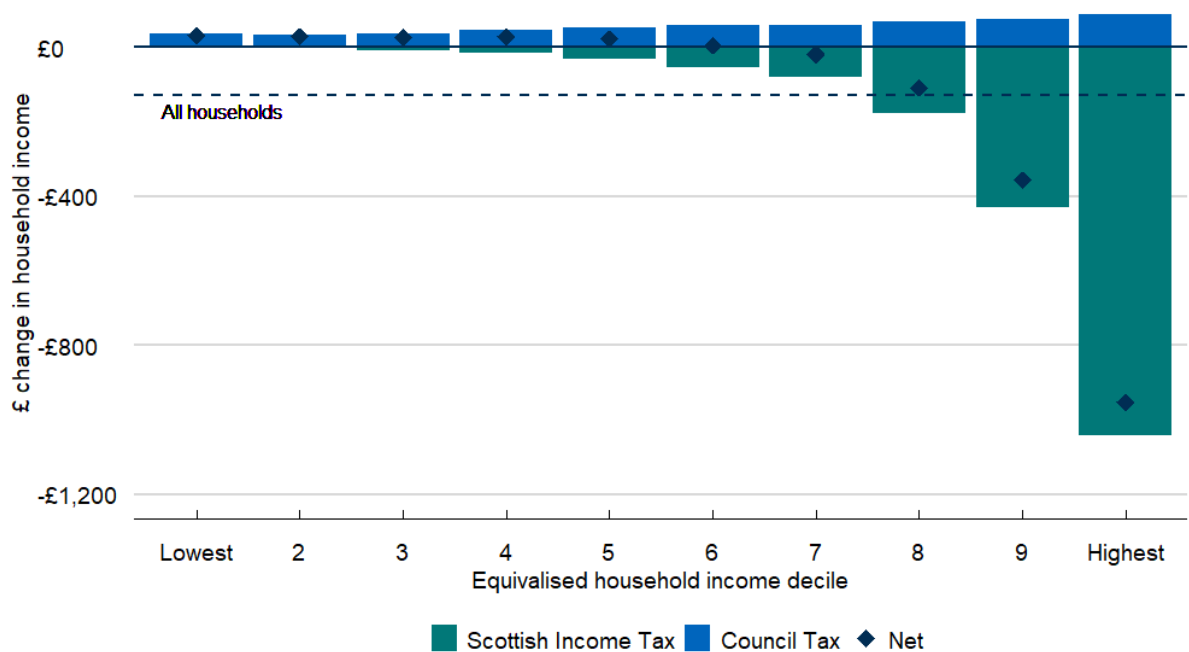
⁷ In all instances, uprating with inflation refers to increasing by the September 2023 Consumer Price Index inflation rate for the preceding 12 months (6.7%).

Figure 6: impact of Budget decisions on household incomes in 2024-25 by household income decile, as a proportion of net income



Source: Scottish Government analysis using UKMOD

Figure 7: impact of Budget decisions on household incomes in 2024-25 by household income decile, in cash terms



Source: Scottish Government analysis using UKMOD

The freeze in Council Tax generates a small benefit – averaging £57 a year, or about 0.2% of household income - for households in every decile.⁸ In cash terms, the benefit is greater for higher income households, who tend on average to live in larger houses and therefore pay a higher rate of Council Tax. However, relative to household income, the benefits of the Council Tax freeze are greatest for the lowest income decile, smallest for the top income decile, and similar for most other household income deciles.

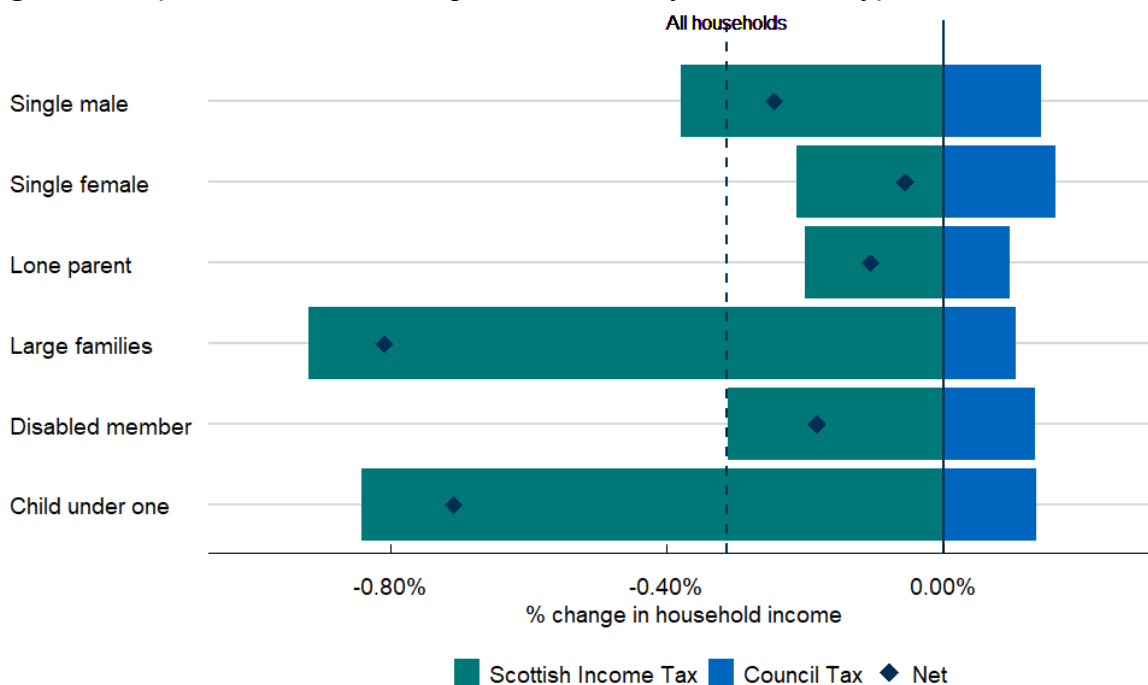
The Income Tax policy is strongly progressive, with the greatest impacts – equivalent to 0.9% of annual household income – on the top two deciles, with lesser impacts on lower income deciles. Principally due to the freeze in the Higher rate threshold, which impacts individuals earning more than £43,662, a small number of households in the lower half of the income distribution are also affected by the Income Tax policy.

However, looking at the Council Tax freeze and Income Tax policy together, the freeze in Council Tax – on average – offsets any negative impact of the Income Tax policy for households in the lower 60% of the income distribution. The negative impact of the Income Tax policy is also reduced for higher income households.

Taking the two policies together, 79% of Scottish households will be paying no more tax as a result of Scottish Government policy changes in this Budget. Of the 21% of households paying more tax, two-thirds of these are in the top two income deciles.

Figure 8 also analyses the impact of the policy changes announced in this Budget by the same household types as used above.

Figure 8: impact of 2024-25 Budget decisions, by household type



Source: Scottish Government analysis using UKMOD

⁸ All charts and figures for Council Tax are shown after the impact of Council Tax Reductions.

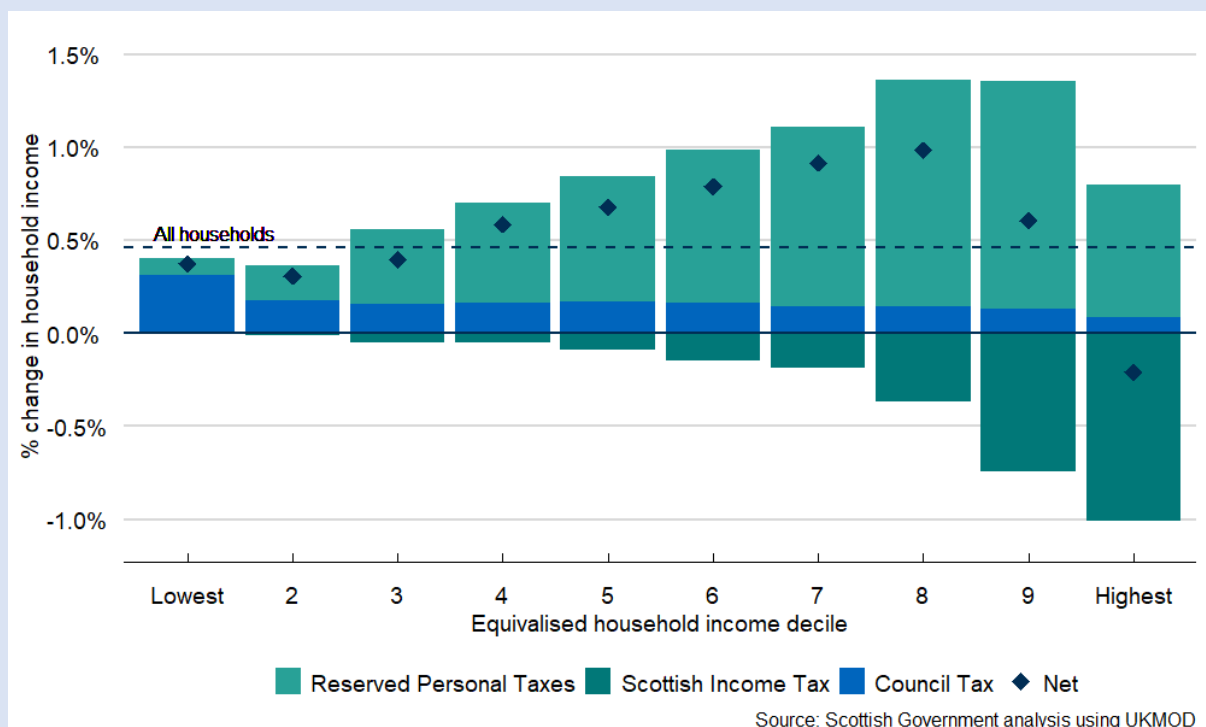
BOX: Impact of changes to National Insurance Contribution Rates

This analysis focuses on devolved taxes, where the Scottish Government has power to set policy. However, household incomes will also be affected by recent changes in UK Government policy over reserved taxes and social security payments.

One significant change announced by the UK Government at the Autumn Statement 2023 was a reduction in National Insurance Contribution (NIC) rates paid by both employees and the self-employed.

Figure B1 below shows the impact of these measures on Scottish households alongside the Scottish Government’s tax policy changes.

Figure B1: impact of Budget decisions and NIC reductions on household incomes in 2024-25 by household income decile, as a proportion of household income



For employees, the NIC rates are reduced by 2% on all earnings between £12,570 and £50,270. This results in a maximum benefit of £754 per year received by all employees earning at least £50,270.

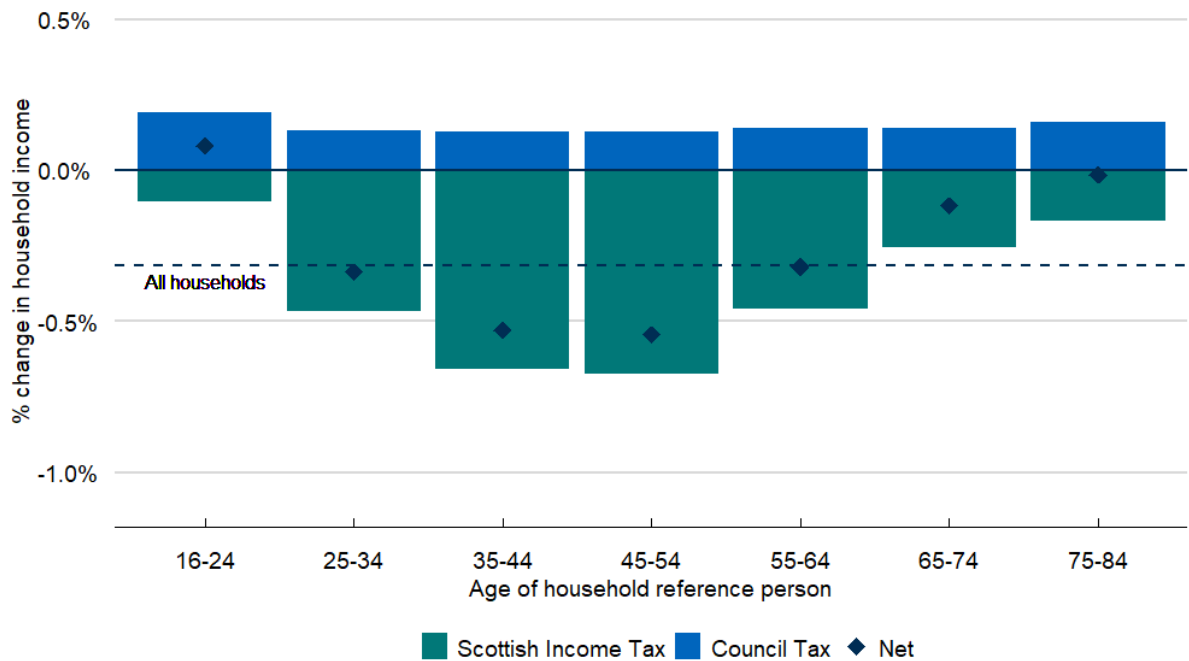
Relative to household income, this results in households in the eighth and ninth income deciles receiving the greatest benefit. The benefit is lower for the top decile, and progressively lower for each lower income decile.

If Scottish and UK Government tax policy changes are considered together, almost all households will be better off due to policy changes announced in the Autumn Statement and Scottish Budget. Only 6% of households – almost all in the top decile – will be worse-off as a result of these changes, on average seeing their income reduce by 0.2%.

The pattern shown in figure 8 largely reflects differences in earnings between household types. For example, the higher impact for single males than single females is driven by the well-documented gender pay gap between men and women.

Figure 9 below shows the impact of the Budget policy package by the age of the household reference person. As discussed in part 1, the differences in impact arise from differences in earnings across age groups. The impact of the Council Tax freeze does not vary significantly across age groups.

Figure 9: impact of 2023-24 Budget decisions, by age of household reference person



Source: Scottish Government analysis using UKMOD

Annex: Methodology

Modelling Approach

This analysis uses UKMOD, an open-access microsimulation model developed by the Institute for Social and Economic Research (ISER) at the University of Essex. The model applies tax and benefit rules to a set of individual and household-level data, allowing the user to simulate and compare alternative scenarios.

The input data in UKMOD is derived from DWP's Family Resources Survey (FRS). The analysis in this paper uses two years of FRS data, namely 2019-20 and 2021-22. Data from 2020-21 is excluded due to the impacts of the pandemic on survey collection. To pool the data, the grossing weights used to scale the FRS sample to the whole population are divided by the number of data years, in this case two.

The income components and other monetary variables are then scaled to the year being analysed (2024-25) based on the Office for Budget Responsibility (OBR) latest forecasts. No adjustments are made for demographic change.

All modelling includes adjustments to take-up rates of social security payments to reflect take-up as observed in the outturn data.

Analysing the distribution of income

All analysis in this paper shows the impact of policies on net equivalised household income, before housing costs.

In this context, *net* means after the impact of taxes and social security payments.

Equivalised means income is adjusted based on household size and composition, to allow for the fact that larger households will require a higher income to maintain a similar standard of living as a smaller household. This analysis uses the modified OECD equivalence scale, following the same approach as used in UK and Scottish Government poverty analysis. Further detail on the equivalisation calculation is available [here](#).

Household income means that all income is assumed to be shared across all members of the household. This analysis uses the Family Resources Survey definition of a household (i.e. one person living alone or a group of people (not necessarily related) living at the same address, who share cooking facilities and share a living room or sitting room or dining area.)

Before housing costs means that no deductions are made for rent or mortgage payments from household incomes.

To summarise impacts across the income distribution, households are ranked from the lowest net equivalised household income to the highest, then divided into ten equal groups called deciles.

Results are reported based on the average gain or loss of income within these household income deciles. There may still be wide variation around this average within a decile.

As an indication of the income levels in each decile, table A1 below shows the median gross (i.e. pre-tax and pre-social security) unequivalised household income in each decile.

Table A1: median unequivalised gross annual household income, by equivalised net income decile

Equivalised net household income decile, before housing costs	Median unequivalised gross annual household income (£)
Lowest	£100
2	£2,800
3	£9,300
4	£21,400
5	£27,300
6	£32,000
7	£43,000
8	£58,800
9	£73,700
Highest	£118,900

Scope

The following policies are devolved taxes or social security payments which are explicitly modelled in this analysis:

- Scottish Income Tax
- Council Tax, excluding water and sewerage charges
- Council Tax Reduction⁹
- Scottish Child Payment
- Discretionary Housing Payments (DHPs) used to mitigate the bedroom tax and benefit cap.¹⁰
- Carers Allowance Supplement
- Best Start Grant and Best Start Foods
- Child Winter Heating Payment

In addition to the payments listed above, the Scottish Government also has responsibility for a range of disability benefits, which have recently been replaced by the Adult Disability Payment, Child Disability Payment and Pension Age Disability Payment.

The predecessors for these payments are covered in the underlying survey data, but the impact of the changes introduced by the Scottish Government are not modelled. Consequently, differences in policy on these aspects of the social security system do not account for any of the differences shown in figures 2 or 3 above. As more data

⁹ In all charts, Council Tax Reduction is deducted directly from Council Tax, rather than being included as a separate social security payment.

¹⁰ This covers the majority of spend on DHPs in Scotland; other Discretionary Housing Payments are excluded due to not being awarded by fixed criteria.

becomes available on the effect Scottish Government policy changes have on take-up, we may revisit modelling of these aspects of the social security system.

Figure 1 presents analysis of a wider segment of the tax and social security system, including several reserved policy measures, and so additionally includes:

- National Insurance Contributions
- Income tax on savings and dividends income
- Universal Credit, and the legacy benefits it replaces
- Pension Credit
- Child Benefit
- State Pensions
- Statutory sick pay
- Statutory maternity pay

Counterfactuals

Table A2 below summarises the parameters used for each of the two counterfactuals reported on in this analysis.

Table A2: counterfactual parameters

Policy	rUK policy counterfactual for 2024/25	No policy change counterfactual for 2024/25
Income Tax	Income Tax rates and bands as in place in England & Northern Ireland for 2024/25, based on Autumn Statement announcements.	Top rate threshold frozen. Personal allowance frozen, as per UKG policy. All other bands uprated by CPI (6.7%). All rates unchanged.
Council Tax	Excluded from comparisons made against this counterfactual.	Average Band D Council Tax increased at the same rate as 2023/24 (5%).
Scottish Child Payment	Policy not in place.	Awards uprated with CPI. Eligibility criteria remain unchanged.
Discretionary Housing Payments to mitigate bedroom tax benefit cap	Policy not in place.	Awards uprated with CPI. Eligibility criteria remain unchanged.
Carers Allowance Supplement	Policy not in place.	Awards uprated with CPI. Eligibility criteria remain unchanged.
Child Winter Heating Payment	Policy not in place.	Awards fixed in cash terms. Eligibility criteria remain unchanged.
Best Start grant & Best Start Foods	Replaced with Sure Start and Healthy Start grants	Awards fixed in cash terms. Eligibility criteria remain unchanged.
Council Tax Reduction	Excluded from comparisons made against this counterfactual, as grouped as part of Council Tax.	Eligibility criteria and calculation approach remain unchanged.



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