This note sets out the impact of the Scottish Government’s decisions on income tax policy since 2016-17 combined with changes in the UK-wide Personal Allowance.

## Key Findings
The analysis shows that the Scottish Government’s decisions on income tax since 2016-17, combined with changes in the UK-wide Personal Allowance, have been highly redistributive and have protected low income earners.

Compared to a counterfactual scenario in which these income tax policies were not introduced:

### All Taxpayers and Households
- Two million individuals, or 44% of adults in Scotland, will not pay income tax in 2020-21, either because they earn less than the Personal Allowance or because they have no income as they are in full-time education or look after family, for example. These individuals will be unaffected by the Scottish Government’s income tax policy decisions.
- The above-inflation rise in the UK-wide Personal Allowance will lift an extra 79,000 individuals, or 1.7% of Scottish adults, out of paying tax by 2020-21.
- 78% of Scottish income taxpayers will pay less tax in 2020-21.
- Income taxpayers in the middle of the income distribution (deciles 3 to 5) will pay £135 less in tax in 2020-21. This is largely due to above-inflation increases in the UK-wide Personal Allowance, as well as the introduction of the 19p Starter Rate in Scotland from 2018-19 onwards.
- The lowest earning 20% of income taxpayers will see the largest decrease in tax (0.8%), relative to their gross income.
- The highest earning 10% of taxpayers will see the largest increase in tax, both in cash terms (£1,168) and relative to their gross income (1.3%). This is largely due to the Scottish Government’s decisions to uprate the Higher Rate Threshold by less than inflation for four consecutive years and to increase the Higher Rate and Top Rate by 1p, respectively, in 2018-19.
- At a household level, taxpayers in the lowest earning 10% of households will see little change in the amount of tax paid in 2020-21 as there are fewer taxpayers in the lower earning deciles. Households in the top earning 10% of households will see the largest increase in the amount of tax paid (£1,115).
- Overall, 52% of households will pay less tax, 31% will pay the same amount and 17% will pay more in 2020-21.

### Equality Groups
- 86% of female taxpayers will pay less tax, compared to 72% of male taxpayers.
- Since average earnings tend to be lowest amongst young adults and older people, 97% of taxpayers under the age of 25 and 92% of taxpayers over 75 will pay less tax in 2020-21.
- For households with a disabled adult, 47% will pay less tax, 44% will pay the same amount and 9% will pay more tax in 2020-21.
1. Introduction

Income tax on Non-Savings, Non-Dividend (NSND) income has been fully devolved to Scotland since April 2017, although the Scottish Government had some limited power to vary the Scottish Rate of Income Tax (SRIT) as of April 2016. During this time, the Scottish Government has implemented a number of policy changes, which have sought to promote the level of public services, make the tax system more progressive, protect lower earning taxpayers and support economic growth. This included:

- A cash freeze in the Higher Rate Threshold at £43,000 in 2017-18;
- The introduction of the five-band system in 2018-19 and a below-inflation uplift in the Higher Rate Threshold to £43,430;
- A cash freeze in the Higher Rate Threshold at £43,430 in 2019-20;
- A cash freeze in the Higher Rate Threshold at £43,430 in 2020-21.

As a result, there is now a difference between the tax systems applied in Scotland and the rest of the UK. However, Income Tax is not a fully devolved tax, so any impact of the Scottish Government’s decisions on income tax policy needs to be considered alongside changes announced by the UK Government, primarily regarding the Personal Allowance. The proposed rates and bands for Scottish income tax in 2020-21 are summarised below.¹

**Proposed Rates and Bands for 2020-21**

<table>
<thead>
<tr>
<th>Band</th>
<th>Rate</th>
<th>Band</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over £12,500 - £14,549</td>
<td>19%</td>
<td>Over £12,500 - £14,585</td>
<td>19%</td>
</tr>
<tr>
<td>Over £14,549 - £24,944</td>
<td>20%</td>
<td>Over £14,585 - £25,158</td>
<td>20%</td>
</tr>
<tr>
<td>Over £24,944 - £43,430</td>
<td>21%</td>
<td>Over £25,158 - £43,430</td>
<td>21%</td>
</tr>
<tr>
<td>Over £43,430 - £150,000</td>
<td>41%</td>
<td>Over £43,430 - £150,000</td>
<td>41%</td>
</tr>
<tr>
<td>Above £150,000</td>
<td>46%</td>
<td>Above £150,000</td>
<td>46%</td>
</tr>
</tbody>
</table>

¹ Assumes individuals are in receipt of the Standard UK Personal Allowance.  
² Those earning more than £100,000 will see their Personal Allowance reduced by £1 for every £2 earned over £100,000.

**Box 1: Key Facts about Scottish Income Taxpayers in 2020-21**

There are estimated to be 4.5 million adults in Scotland and 2.6 million income taxpayers. Around 2 million adults, or 44% of Scottish adults, will not pay income tax either because they earn less than the Personal Allowance or because they have no income as they are in education or look after family, for example. By 2020-21, the above-inflation rise in the UK-wide Personal Allowance will lift an extra 79,000 Scottish individuals, or 1.7% of Scottish adults, out of paying tax altogether.

As illustrated in the chart below, around 6% of Scottish adults will pay the Starter Rate (19p). By comparison, 23% of Scottish adults will pay the Basic Rate (20p), with

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¹ The UK Government announced at UK Budget 2018 that the Personal Allowance would be frozen at £12,500 in 2020-21.
a further 19% of Scottish adults paying the Intermediate Rate (21p). Only 9% of Scottish adults will pay the Higher Rate (41p). Only a very small proportion of Scottish adults (0.4%) will pay the Top Rate (46p).

### NUMBER AND PROPORTION OF ADULTS IN SCOTLAND BY THEIR RATE OF INCOME TAX, 2020-21

<table>
<thead>
<tr>
<th>Taxpayer Income Quartiles</th>
<th>Have annual income of less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>75%</td>
<td>£37,000</td>
</tr>
<tr>
<td>50% (Median Income)</td>
<td>£25,200</td>
</tr>
<tr>
<td>25%</td>
<td>£18,000</td>
</tr>
</tbody>
</table>

Looking across all Scottish income taxpayers, i.e. those with taxable earnings above the Personal Allowance of £12,500, and including employees, pensioners and the self-employed, the median income is estimated to reach around £25,200. This means that half of all taxpayers in Scotland earn below this level, and half above. The Table below shows the estimated income distribution of Scottish taxpayers for 2020-21, split into quarters. This shows, for example, that someone earning between the Personal Allowance (£12,500) and £18,000 would be among the lowest earning 25% of taxpayers in Scotland.

### ESTIMATED INCOME DISTRIBUTION OF SCOTTISH TAXPAYERS, 2020-21

- 44% Do Not Pay Income Tax (1,983,000 adults)
- 6% Pay Starter Rate (266,000 adults)
- 23% Pay Intermediate Rate (851,000 adults)
- 19% PayBasic Rate (1,042,000 adults)
- 6% Pay Intermediate Rate (851,000 adults)
- 9% Pay Higher Rate (387,000 adults)
- 0.4% Pay Top Rate (17,000 adults)

Source: OCEA Modelling based on SFC Forecast Determinants

2. Distributional Analysis of Income Tax Decisions since 2016-17

Households’ living standards are affected both by the performance of the Scottish economy and by the direct impact of government decisions, including on tax and public spending.

The analysis in this section sets out the impact of income tax policy decisions announced from 2016-17 onwards, the first year in which income tax was (partially) devolved to Scotland. The analysis is undertaken on a static basis, i.e. it does not include any behavioural responses to these tax changes. It shows the effect of income tax policy on taxpayers and households in 2020-21 compared to a counterfactual scenario in which income tax policies announced at and since April 2016-17 were not...
introduced.² It is important to note that the analysis presents only some of the factors which will drive households’ income and living standards and, importantly, does not take into account the impact of other Scottish Government policies on the wider Scottish economy, including the labour market. Further information on how measures announced in this year’s Budget impact taxpayers’ and households’ income in 2020-21, compared to the previous tax year 2019-20, can be found in Annex A. Further information on the methodology can be found in Annex B.

2.1 Impact across Different Income Levels

Impact on Scottish Taxpayers

The charts below present the impacts on Scottish taxpayers by income decile. This approach divides the taxpayer population into ten equal groups, with decile 1 representing the 10% of taxpayers with the lowest earnings and decile 10, the 10% of taxpayers with the highest earnings. As set out in Box 1, however, it is important to remember that 44% of Scottish adults do not pay income tax.

As shown in Charts 1a and b, the Scottish Government’s decisions on income tax since 2016-17, combined with changes in the UK-wide Personal Allowance, have been highly redistributive and protected low- and middle-income taxpayers, in line with the key tests set out in the discussion paper *The Role of Income Tax in Scotland*.³

CHART 1a: CUMULATIVE IMPACT OF INCOME TAX POLICY DECISIONS SINCE 2016-17 ON SCOTTISH TAXPAYERS IN 2020-21, CASH TERMS

<table>
<thead>
<tr>
<th>Taxpayer Decile</th>
<th>Changes before 2020-21 Budget</th>
<th>2020-21 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest earning</td>
<td>-1,200</td>
<td>-1,000</td>
</tr>
<tr>
<td>Highest earning</td>
<td>-1,000</td>
<td>-800</td>
</tr>
<tr>
<td>Highest earning</td>
<td>-800</td>
<td>-600</td>
</tr>
<tr>
<td>Highest earning</td>
<td>-600</td>
<td>-400</td>
</tr>
<tr>
<td>Highest earning</td>
<td>-400</td>
<td>-200</td>
</tr>
<tr>
<td>Highest earning</td>
<td>-200</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: OCEA Modelling using SFC Forecast Determinants

The chart shows that the lowest earning 70% of Scottish taxpayers will pay less tax as a result of the decisions taken by the Scottish Government and changes in the UK-

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² This counterfactual scenario assumes that the Personal Allowance and all income tax thresholds, except for the Top Rate Threshold, would have increased in line with CPI inflation which is the default assumption for the uprating in income tax thresholds in the rest of the UK. This is consistent with the approach used by HM Treasury and other think tanks, such as the Institute for Fiscal Studies, in their distributional analysis.
³ The income tax discussion paper is available [here](#).
wide Personal Allowance, compared to a scenario where these policies had not been introduced. Income taxpayers in the middle of the income distribution will pay £135 less in tax per person on average by 2020-21. This is largely due to the above-inflation increases in the UK-wide Personal Allowance over this period, which saved a typical Basic Rate taxpayer £114 by 2020-21, with smaller savings in the initial years. In addition, the introduction of the Starter Rate in 2018-19 provided a tax saving of up to £21 to all taxpayers by 2020-21. Relative to their gross income, the lowest earning 20% of income taxpayers will see the largest decrease in tax (0.8%).

The highest earning 10% will see the largest increase in the amount of tax paid, both in cash terms (£1,168) and relative to their gross income (1.3%). This is largely due to the Scottish Government’s decisions to uprate the Higher Rate Threshold by less than inflation for four consecutive years and to increase the Higher Rate and Top Rate by 1p, respectively, in 2018-19.

Policy changes announced in this year’s Budget will only affect the highest earning 16% of Scottish income taxpayers. As illustrated in Chart 1a, the highest earning 10% of taxpayers will see a £149 increase in tax, on average, due to the cash freeze in the Higher Rate Threshold.

Impact on Households

This section extends the analysis by looking at the impact of the policy changes on household incomes after tax and social security payments, accounting for the number of people in the household. This analysis therefore includes individuals who do not currently pay tax and hence are not directly affected by the tax measures implemented since 2016-17.

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*Household income also takes into account the number of people in a household through a process called equivalisation. This uses the idea that for larger households, income has to be spread further than for households with fewer people. The change in equivalised annual income is shown at a household level.*
The results, as shown in the charts below, broadly mirror the findings for the taxpayer population: cumulative tax changes implemented by the Scottish Government, combined with changes in the UK-wide Personal Allowance, have been highly progressive. However, since there are fewer income taxpayers in the lower earnings household deciles, the lowest earning 10% of households will see little change in the amount of tax paid. Households in the 5th decile will see the greatest decrease in the amount of tax paid, both in cash terms and relative to their gross income, while the highest earning 10% of households will see the largest increase in tax, amounting to £1,115 (0.9%).

In summary, 52% of households will pay less tax, 31% of households will pay the same amount of tax and 17% of households will pay more tax as result of the tax changes implemented since 2016-17.

**CHART 2a: CUMULATIVE IMPACT OF INCOME TAX POLICY DECISIONS SINCE 2016-17 ON SCOTTISH HOUSEHOLDS IN 2020-21**

[Diagram showing cumulative impact of income tax policy decisions since 2016-17 on Scottish households in 2020-21.]

Source: Strategy Unit Analysis based on FRS

**CHART 2b: CUMULATIVE IMPACT OF INCOME TAX POLICY DECISIONS SINCE 2016-17 ON SCOTTISH HOUSEHOLDS IN 2020-21**

[Diagram showing cumulative impact of income tax policy decisions since 2016-17 on Scottish households in 2020-21.]

Source: Strategy Unit Analysis based on FRS
2.2 Impact of Policy by Gender, Age and Disability

This section explains the impact of income tax changes on equality groups. The Equality Act (2010) protects people against discrimination and the Act identifies nine protected characteristics.\(^5\)

The overall evidence base on equality is improving and the Scottish Government’s Equality Evidence Finder, which brings together evidence on the protected characteristics in one portal, continues to be updated on a regular basis.\(^6\) The evidence finder highlights, however, that for some protected characteristics, information on income and poverty is limited.\(^7\) Therefore the analysis in this note can only explore impacts on gender, age, and disability.\(^8\)

For each group, information on the profile of the group, in relation to income tax, is first presented before considering the impact of the cumulative changes in income tax policy since 2016-17 on the group.

a) Gender

As noted above, there are estimated to be around 4.5 million adults in Scotland in 2020-21 and 2.6 million income taxpayers. While women account for around 52% of all Scottish adults, they make up only 43% of Scottish income taxpayers.

There are a number of factors explaining this trend. First, while the proportion of women in work has increased over the past decades, there are still relatively more men than women who actively participate in the labour market and are either in work or are actively looking for work.

Second, women tend to have lower earnings, on average, than their male counterparts. This reflects the fact that women are more likely to take time out of the labour market to look after family and children, and are more likely to be second earners or work part time within a household. Finally, while the gender pay gap has narrowed in the past decades, women continue to be paid less, on average, than their male counterparts for the same jobs.

This trend is also evident in the income tax data. Based on the latest forecasts, the median income of all Scottish income taxpayers is forecast to reach around £25,200 in 2020-21. This means that half of all Scottish income taxpayers earn below this level, and half above. Breaking this down by gender, the median income of male income taxpayers is expected to reach £28,000, compared to £22,200 for women. In addition, men are also more likely to pay the Higher Rate and Top Rate of income tax.

\(^5\) These are Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, and Sexual orientation.

\(^6\) All these resources can be found here: [http://www.gov.scot/Topics/People/Equality/Equalities](http://www.gov.scot/Topics/People/Equality/Equalities).

\(^7\) [http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid](http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid)

\(^8\) Further information on the Survey of Personal Incomes and household income tax models used to assess the impact on these groups is set out in Annex B.
As a result, male income taxpayers are expected to contribute around 71% (£8.8 billion) to overall income tax liabilities in Scotland in 2020-21. Almost 50% of income tax is paid by male Higher Rate and Top Rate income taxpayers, compared to 12.4% of women, as shown in Chart 3.

**CHART 3: CONTRIBUTION TO INCOME TAX TAKE BY GENDER AND INDIVIDUAL’S INCOME TAX RATE\(^9\) IN 2020-21**

![Chart 3: Contribution to Income Tax Take by Gender and Individual’s Income Tax Rate](image)

As illustrated in Table 1, the proportion of male and female taxpayers who pay the Higher Rate of Income Tax has increased over the past four years, as a result of earnings growth and the Scottish Government’s decisions to uprate this threshold by less than inflation over this period. Nevertheless, at 9.1% the proportion of female taxpayers paying the Higher Rate in 2020-21 remains well below that of their male counterparts (20.9%).

**TABLE 1: NUMBER OF HIGHER RATE (HR) TAXPAYERS BY YEAR AND GENDER**

<table>
<thead>
<tr>
<th></th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>All HR Taxpayers*</td>
<td>307,300</td>
<td>321,800</td>
<td>338,300</td>
<td>370,200</td>
<td>403,900</td>
</tr>
<tr>
<td>as % of all Taxpayers</td>
<td>12.2%</td>
<td>12.8%</td>
<td>13.4%</td>
<td>14.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Male HR Taxpayers</td>
<td>236,900</td>
<td>247,900</td>
<td>258,800</td>
<td>280,600</td>
<td>302,700</td>
</tr>
<tr>
<td>as % of Male Taxpayers</td>
<td>16.7%</td>
<td>17.4%</td>
<td>18.1%</td>
<td>19.7%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Female HR Taxpayers</td>
<td>70,400</td>
<td>73,900</td>
<td>79,500</td>
<td>89,600</td>
<td>101,200</td>
</tr>
<tr>
<td>as % of Female Taxpayers</td>
<td>6.4%</td>
<td>6.8%</td>
<td>7.3%</td>
<td>8.3%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

*This includes all individuals subject to the HR, including Additional/Top Rate taxpayers. Figures relating to 2018-19 onwards are forecasts.

This implies that any changes to the Higher Rate Threshold are more likely to affect men than women. Overall, the cumulative changes in income tax from 2016-17 onwards mean that 72% of male taxpayers will pay less income tax in 2020-21, compared to 86% for female taxpayers.

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\(^9\) For example, the income tax rate of an Intermediate Rate taxpayer is 21p.
b) Age

The majority of Scottish income taxpayers are aged between 25-64 years. In total, this age group accounts for 73% of all income taxpayers. This is explained by a number of factors. For example, many young adults are still in full-time education or training and are therefore unlikely to earn enough to pay income tax. Likewise, income taxpayers of pension age (65+) may have incomes that fall below the Personal Allowance.

For many income taxpayers, average earnings tend to peak in middle age. Income taxpayers aged between 45-54 are expected to have the highest average earnings in 2020-21, at just under £40,000 a year, as shown in Chart 4. As a result, income taxpayers in this age bracket are expected to make the largest contribution to income tax liabilities in 2020-21, at 29% of total income tax revenues.

![Chart 4: Average Income of Scottish Taxpayers by Age Group in 2020-21](image)

As illustrated in Chart 5, 78% of Scottish income taxpayers will pay less tax in 2020-21 due to the cumulative changes in Scottish income tax and the UK-wide Personal Allowance. However, the impact varies across taxpayer groups. Since average earnings tend to be lowest amongst young adults and older people, 97% of taxpayers under the age of 25 and 92% of over 75s will pay less tax, again as they tend to be lower-earning taxpayers.
c) Disability

The evidence base on the income and income tax of disabled people is limited. However, there is some evidence that poverty rates remain higher for households with a disabled adult\textsuperscript{10,11} with some research showing that for both full-time and part-time work, the proportion of disabled employees who were low paid (earning less than £7 per hour) was higher than that for non-disabled employees.\textsuperscript{12}

It is possible to report the impact of the income tax policy according to households with and without disabled adults (see Chart 6). For households with disabled adults, 47% will pay less tax, 44% will pay the same amount and 9% will pay more tax as a result of changes in income tax since 2016-17.

The higher proportion of households with a disabled adult that will see no change in income tax reflects the fact that a higher proportion of such households do not contain anyone who earns above the Personal Allowance and are therefore not subject to income tax.

\textsuperscript{10} https://www2.gov.scot/Topics/People/Equality/Equalities/DataGrid/Disability
\textsuperscript{11} http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis/povertyanalysis
\textsuperscript{12} https://www2.gov.scot/Topics/People/Equality/Equalities/DataGrid/Disability/DisabPov
Discussion

This note has set out the impacts of changes to income tax since 2016-17 on taxpayers’ and households’ finances, as well as protected equality groups (age, gender and disability).

Compared to a counterfactual scenario in which these tax policies were not introduced, the analysis shows that the Scottish Government’s decisions on income tax since 2016-17, combined with changes in the UK-wide Personal Allowance, have been highly redistributive and protected low-income earners.

The distributional analysis does not take into account the extent to which different households and individuals benefit from the provision of public services. In weighing up the broad impact of changes to income tax, the benefits of public services are also an important consideration.

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ANNEX A: Comparison against the previous tax year (2019-20)

Another comparison of particular interest for individuals and households is whether they will pay more or less income tax in 2020-21, compared to what they paid in 2019-20. To maintain consistency with our previous publications, this Annex therefore examines the impact of the income tax policy announced at this Budget, compared to the previous tax year, for a given level of income.

Impact on Individuals

As illustrated in Chart A.1, the proposed cash freeze of the Higher Rate Threshold, when combined with the freeze in the UK-wide Personal Allowance, means that no Scottish income taxpayer will pay more tax in 2020-21 than they paid in 2019-20.

Around 90% of Scottish taxpayers will pay less income tax in 2020-21 than they did in the previous tax year, for a given level of income. However, due to the planned cash freeze of the UK-wide Personal Allowance, the lowest earning 10% of Scottish taxpayers, i.e. those earning between £12,500 and £14,549 in 2020-21, will pay the same amount of tax as they did in 2019-20, for a given income.

Nevertheless, it is important to note that the impact varies across taxpayer groups. The proportion of female taxpayers as well as taxpayers under the age of 25 and over the age of 75 who pay the same amount of income tax, compared to the previous year, is relatively greater than for the taxpayer population as a whole. This is explained by the fact that earnings amongst these taxpayers are relatively lower, as discussed above.
Impact on Households

Considering all households in Scotland, 63% will pay less income tax in 2020-21, compared to what they paid in 2019-20, for a given income, and 37% will pay the same amount of tax (Chart A.2). No household will pay more income tax, for a given income.

CHART A.2: PROPORTION OF HOUSEHOLDS AFFECTED BY THE POLICY IN 2020-21, FOR A GIVEN LEVEL OF INCOME, COMPARED TO 2019-20

Source: Strategy Unit Analysis based on FRS
ANNEX B: Methodology

B.1. Estimating the impact on income taxpayers

The starting point for the distributional analysis is HMRC’s Survey of Personal Incomes (SPI). The SPI comprises a detailed sample of over 40,000 anonymised Scottish tax records, which are weighted to be representative of all Scottish taxpayers. For each record, there is detailed information on sources and level of income, age group, gender and a range of other relevant variables. The latest available data is for the financial year 2016-17.

The SPI data is then rolled forward, using assumptions about future growth in earnings and the number of taxpayers, to provide forecasts of the Scottish income tax base in future years. These assumptions are consistent with the economic forecasts published by the Scottish Fiscal Commission (SFC) alongside the Budget.13

B.2 Estimating impact on household income

Household income differs from individual earnings, since households may have more than one earner and more than one source of income. The analysis therefore calculates the impact on household incomes after tax and social security payments, accounting for the number of people in the household.

Household income distributional analysis is based on a static tax and benefit micro-simulation model developed by the Scottish Government. For this analysis, the model uses six years of Family Resources Survey (FRS) data (2012-13 to 2017-18), uprates all incomes to 2020-21 prices and corrects for under-reporting of benefit information. This combined dataset contains around 17,100 households. It does not incorporate the impact of any behavioural response or secondary impacts, for example, employment impacts from the interaction between employment and social security income.

The distributional impact is demonstrated using equivalised gross household income deciles. This splits all people in Scotland into 10 equally sized groups by level of gross household income. Each decile has an equal number of people within it. The 1st decile contains households with the 10% of people with the lowest household incomes, whilst the 10th decile contains households with the 10% of people with the highest household incomes. Equivalised gross household income is used, as it adjusts for the composition of different households.

13 The SFC report is available here