

Income Tax: Cumulative Impacts on Income Levels and Equality

Office of the Chief Economist

Summary

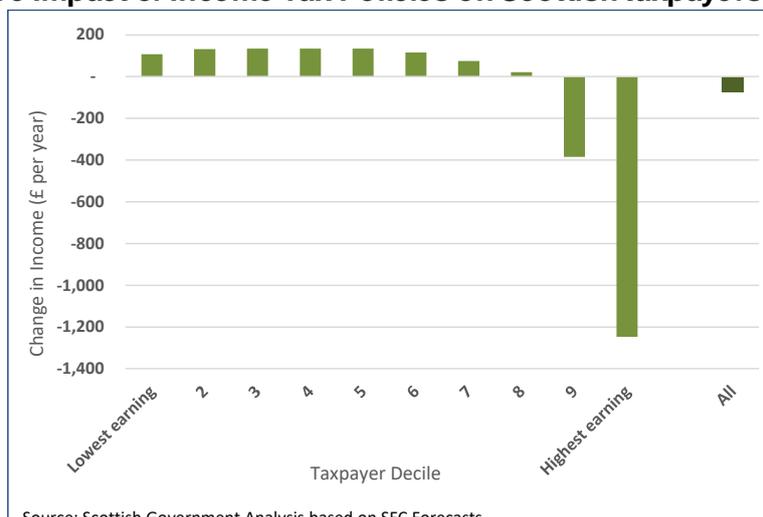
This note sets out the distributional impact of the Scottish Government's Income Tax policy choices over this Parliament (2016-17 to 2021-22) on Scottish taxpayers, considering the effects across income levels, gender and age groups. The analysis shows that the Scottish Government's decisions during this parliamentary term, combined with changes in the UK-wide Personal Allowance, have been highly redistributive and have protected low income taxpayers.

The note considers the effect of Income Tax policy on taxpayers in 2021-22 compared to a counterfactual scenario where Income Tax policies announced at and since April 2016-17 were not introduced, and all thresholds and the Personal Allowance were uprated with CPI inflation instead. Compared to this scenario:

- 77% of Scottish income taxpayers will pay less tax in 2021-22 than they would have done if the Income Tax policy had just followed default inflationary uprating.
- Income taxpayers in the middle of the income distribution (deciles 3 to 5) will pay £135 less in tax in 2021-22. This is largely due to above-inflation increases in the UK-wide Personal Allowance over the period, as well as the introduction of the 19p Starter Rate in Scotland from 2018-19.
- 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 (£1,247) 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 in four out of five years, and to increase the higher rate and top rate by 1p, respectively, from 2018-19.
- 85% of female taxpayers will pay less tax in 2021-22, compared to 72% of male taxpayers. This is due to the fact that women's earnings are lower, on average.
- 97% of taxpayers under 25 years and 90% of taxpayers over 75 years will pay less tax in 2021-22.
- The 2021-22 policy proposal broadly maintains the positive distributional implications of the policy changes across the parliamentary term which improved the progressivity of the tax system.

The analysis does not consider the 2.0 million individuals, or 45% of adults in Scotland, who will not pay Income Tax in 2021-22 because they earn less than the Personal Allowance, for example because they are in full-time education, have full-time caring responsibilities or are retired. These individuals will be unaffected by the Scottish Government's Income Tax policy decisions.

Summary: Cumulative Impact of Income Tax Policies on Scottish taxpayers in 2021-22, cash terms



Policy Changes over this Parliament

During this Parliament (2016-17 to 2021-22), the Scottish Government has implemented a series of policy changes on non savings non dividend (NSND) Income Tax. These have sought to enhance the level of public service provision in Scotland, make the tax system more progressive, protect lower earning taxpayers and support economic growth. These significant policy changes included:

- A cash freeze of the higher rate threshold at £43,000 in **2017-18**;
- The introduction of a new five-band system in **2018-19**, and a below-inflation uplift (of 1%) of the higher rate threshold to £43,430;
- A cash freeze of the higher rate threshold at £43,430 in **2019-20**;
- A cash freeze of the higher rate threshold at £43,430 in **2020-21**;
- Inflationary uprating (0.5%) of all bands and the higher rate threshold in **2021-22**.

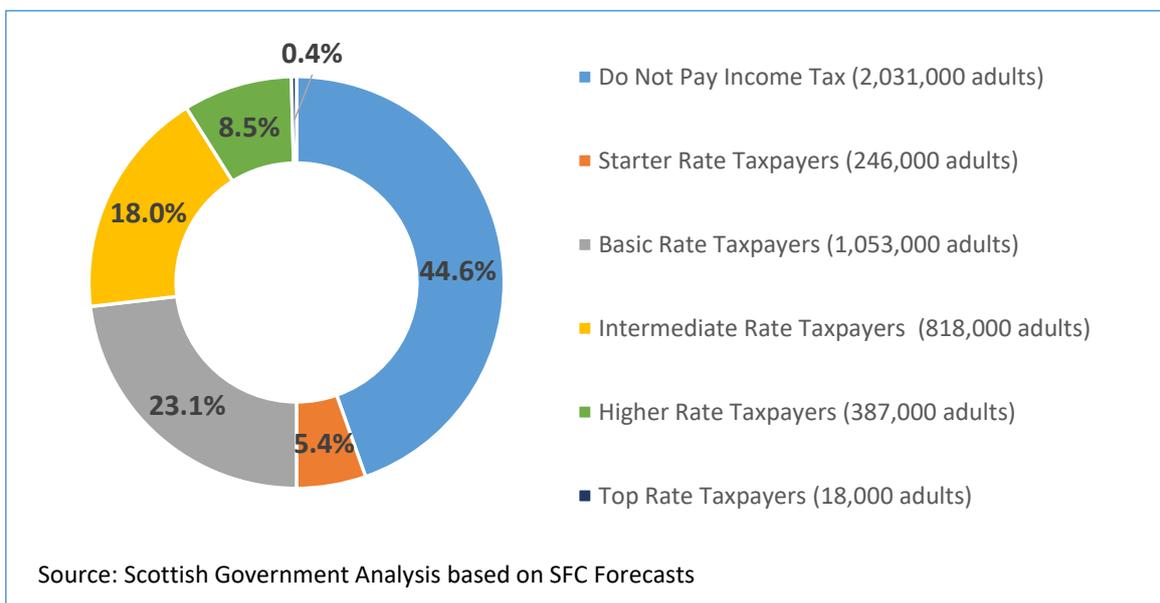
As a result of these changes, there are now differences between the tax systems in Scotland and the rest of the UK. However, as Income Tax is not a fully devolved tax, any distributional impacts of the Scottish Government's policy decisions need to be considered alongside changes to UK Government tax policy, particularly with regard to the UK-wide Personal Allowance. Over this period, the Personal Allowance has increased by more than inflation, from £11,000 in 2016-17 to £12,570 in 2021-22.

Key facts about Scottish Income taxpayers in 2021-22

We estimate that there will be around 4.6 million adults living in Scotland in 2021-22 and around 2.5 million Scottish taxpayers. This means that a significant proportion, around 44.6% or 2.0 million adults, will not pay Income Tax, either because they earn less than the Personal Allowance or because they have no income for example if they are in education, have full-time caring responsibilities or are retired. The UK Government's decision to increase the Personal Allowance by more than inflation over the period 2016-17 to 2021-22 has narrowed Scotland's Income Tax base, removing an extra 84,000 of Scottish adults from paying Income Tax, compared to the default inflationary uprating which is enshrined in UK legislation.

As illustrated in Chart 1, the majority of Scottish taxpayers pay either the Basic Rate (20p) or the Intermediate Rate (21p) of Income Tax. Only 8.5% of Scottish adults pay the Higher Rate (41p), and less than 1% of the Scottish adult population pay the Top Rate (46p).

Chart 1: Number and Proportion of Scottish Taxpayers, 2021-22



The threshold at which taxpayers start paying the Intermediate Rate is broadly aligned with the median income of Scottish taxpayers. This is expected to reach around £25,300 in 2021-22, which means that half of all taxpayers in Scotland earn below this level, and half above. Table 1 shows the estimated income distribution of Scottish taxpayers for 2021-22, split into quarters. For example, someone earning between the Personal Allowance (£12,570) and £18,000 would be among the lowest earning 25% of taxpayers in Scotland.

Table 1: Estimated Income Distribution of Scottish Taxpayers, 2021-22

Taxpayer Income Quartiles	Have annual income of less than
75%	£37,700
50% (Median Income)	£25,300
25%	£18,000

Distributional Analysis

People’s 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. Our analysis shows the effect of Income Tax policy on taxpayers in 2021-22 compared to a counterfactual scenario where Income Tax policies announced at and since April 2016-17 were not introduced, and all thresholds and the Personal Allowance were updated in line with CPI inflation instead. The full methodology is set out in the annex.

It is important to note that the analysis presents only some of the factors which will drive taxpayers’ income and living standards and, importantly, does not take into account the impact of other Government policies on the wider Scottish economy, including the labour market, such as changes to the minimum wage.

Moreover, recent evidence shows that the economic effects of the COVID-19 pandemic are not felt evenly across different income groups and groups with protected characteristics. The nature of the economic crisis means that customer facing sectors, such as Retail, Hospitality and Leisure, have been hit particularly hard. Since low income earners, the young and women account for the majority of workers in those sectors, they are more likely to have seen their incomes fall, to be furloughed or made redundant, although income losses can be observed across the income distribution.¹

The analysis presented in this paper does not fully reflect these emerging trends as it is based on the latest available, pre-COVID, income tax data from the 2017-18 Survey of Personal Incomes (SPI). In order to ensure consistency with the Scottish Fiscal Commission (SFC)’s forecasts, we apply the same economic determinants and assumptions as the Commission to project the data forward to 2021-22. Our results therefore need to be interpreted in the light of these data limitations.

Impact across different levels of taxpayer income

Charts 2 and 3 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.

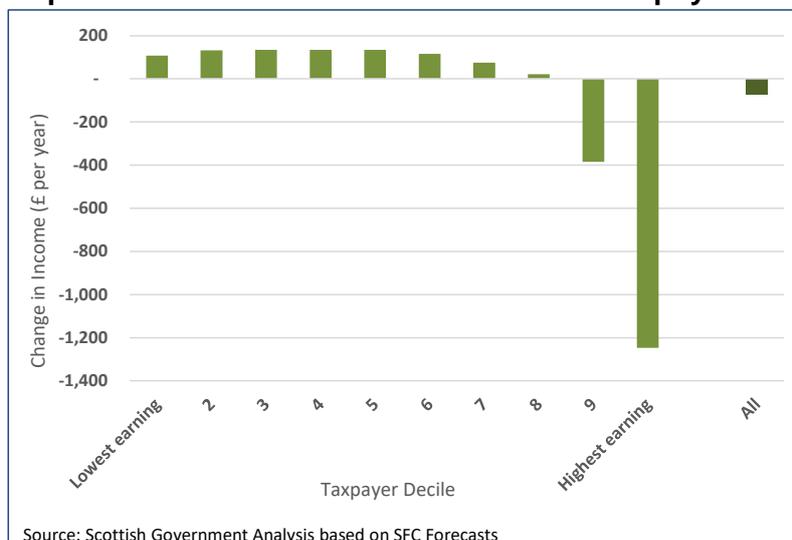
However, it is important to remember that 45% of Scottish adults do not pay income tax and are therefore not covered by this analysis. Moreover, while higher and top rate taxpayers are expected to make up the

¹ See for example [Resolution Foundation](#) (October 2020), [Institute for Fiscal Studies](#) (June 2020) and [Scottish Government](#) (April 2020).

highest earning 16% of Scottish taxpayers, some of these individuals may be the main family breadwinner, supporting a partner and/or children.

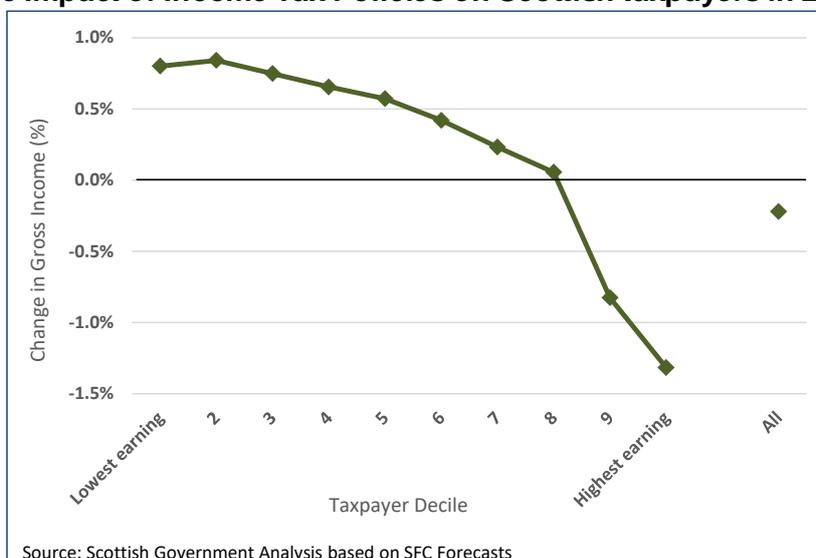
As shown in Charts 2 and 3, the Scottish Government’s decisions on Income Tax over the course of this Parliament, combined with changes in the UK-wide Personal Allowance, have been highly redistributive and protected low- and middle-income taxpayers, in line with the key tests set out in *The Role of Income Tax in Scotland*².

Chart 2: Cumulative Impact of Income Tax Policies on Scottish taxpayers in 2021-22, cash terms



As illustrated in Chart 2, taxpayers in the middle of the income distribution will pay £135 less in tax per person on average by 2021-22. This is largely due to the above-inflation increases in the UK-wide Personal Allowance over this period, which saved a basic rate taxpayer £114 by 2021-22, 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 2021-22, although for people earning above £27,393 this is more than offset by increases in the intermediate, higher and top rates. Relative to their gross income, the lowest earning 20% of income taxpayers will see the largest decrease in tax (0.8%), as shown in Chart 3.

Chart 3: Cumulative Impact of Income Tax Policies on Scottish taxpayers in 2021-22, % terms



² The income tax discussion paper is available [here](#).

The highest earning 10% will see the largest increase in the amount of tax paid, both in cash terms (£1,247) 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 in four out of five years and to increase the higher rate and top rate by 1p, respectively, from 2018-19 onwards.

The 2021-22 policy proposal broadly maintains the positive distributional implications of the policy changes across the parliamentary term which improved the progressivity of the tax system.

Impact by Equality Group

This section explains the impact of the policy changes over this parliamentary session on some equality groups, including gender and age.³

a) Gender

While women are expected to account for around 52% of all Scottish adults, they are forecast to make up only 44% of Scottish income taxpayers in 2021-22. 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 similar jobs.

It is too early to tell how the COVID-19 pandemic will impact gender equality in the longer term although, as discussed above, initial evidence suggests that the pandemic has had a disproportionate economic and social impact on women. Women's disproportionate shouldering of caring responsibilities may also make it harder to maintain or take on employment when childcare settings or schools are shut to prevent the spread of the virus. This is particularly acute for lone parents the vast majority of which are women.⁴ In the longer term, this might adversely affect work and career progression for mothers.⁵

The pre-COVID trends are also evident in the Income Tax data. Median income of male income taxpayers is forecast at £28,700 in 2021-22, compared to £22,300 for women. In addition, men are also more likely to pay the higher and top rate. As a result, male income taxpayers are expected to contribute around 69% to total Income Tax liabilities in Scotland in 2021-22. Almost 50% of income tax is paid by male higher rate and top rate income taxpayers, compared to 12.7% by women, as shown in Chart 4.⁶

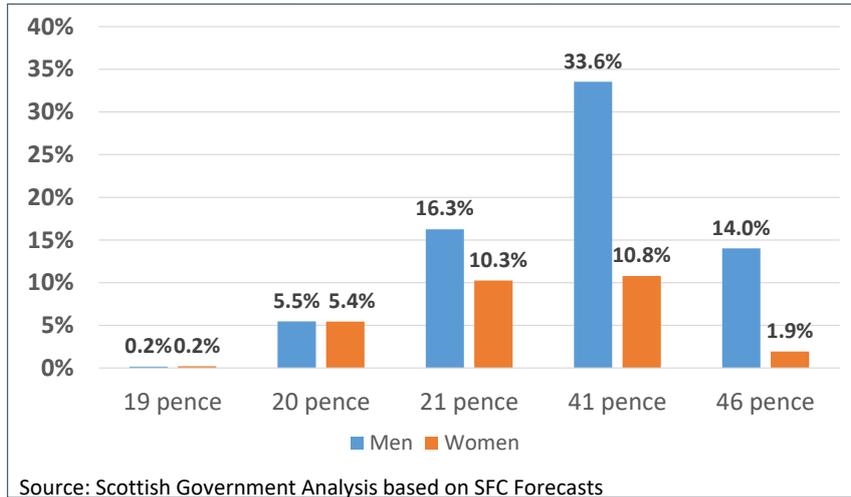
³ The Equality Act (2010) protects people against discrimination and the Act identifies nine protected characteristics, including Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, and Sexual orientation. For some protected characteristics, information on income and poverty is limited. Therefore the analysis in this note, which is based on taxpayer information from the Survey of Personal Incomes (SPI) can only explore impacts on gender and age.

⁴ [Scottish Government](#) (April 2020).

⁵ [Institute for Fiscal Studies](#) (June 2020).

⁶ Some income tax records, accounting for 2% of total liabilities, do not have a gender indicator.

Chart 4: Contribution to Income Tax by Gender and Marginal Rate, 2021-22



Overall, the cumulative changes over this Parliament mean that 72% of male taxpayers will pay less Income Tax in 2021-22 than they would have done under the default inflationary uprating, compared to 85% for female taxpayers.

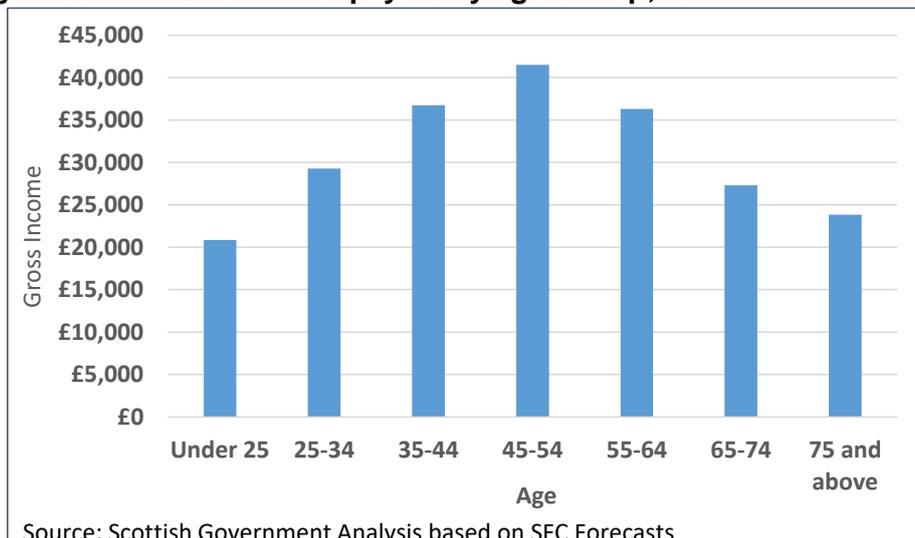
b) Impact by Age

The majority of Scottish income taxpayers (73%) are aged between 25 and 64 years. 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 2021-22, at around £42,000 a year, as shown in Chart 5. As a result, income taxpayers in this age bracket are expected to make the largest contribution to Income Tax liabilities in 2021-22, at around 30% of total Income Tax liabilities.

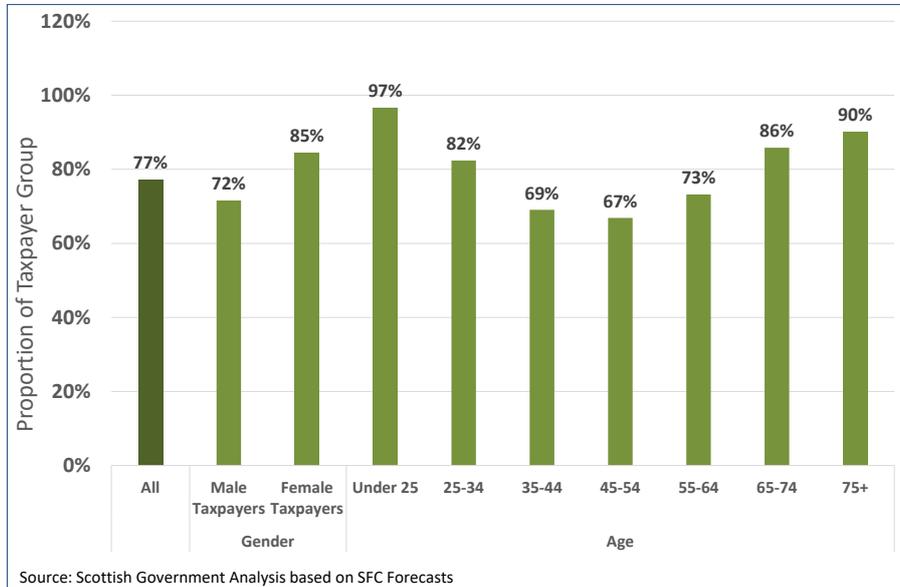
As noted above, these projections are based on pre-COVID trends and young people have borne the brunt of the economic impacts of COVID-19. Our analysis is consistent with the SFC’s forecasts which assume that labour force participation rates amongst the 16-24 year olds will decrease as a result of COVID-19.

Chart 5: Average Income of Scottish taxpayers by Age Group, 2021-22



As illustrated in Chart 6, 77% of Scottish income taxpayers will pay less tax in 2021-22 than they would have done under default inflationary uprating, 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 90% of over 75s will pay less tax than they would have done otherwise.

Chart 6: Proportion of taxpayers paying less tax due to Income Tax policy decisions over this Parliament, 2021-22



ANNEX A: Methodology

1. Underlying dataset and projections

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 2017-18.

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.

2. Tax parameters

The analysis compares tax liabilities across the different income deciles under the 2021-22 policy proposal, as set out in the Scottish Budget, and a hypothetical scenario where the Personal Allowance and the 2016-17 band would have increased with CPI inflation, as per default uprating which is enshrined in UK legislation. These tax parameters are summarised in Table A.1. It is important to note that this is not the same as comparing Scottish Government policy against UK Government policy in 2021-22 as both the Personal Allowance and the UK higher rate threshold have increased by more than inflation over this period.

Table A.1: Tax Parameters

2021-22 Policy		Counterfactual Scenario 2021-22	
Band	Rate	Band	Rate
Over £12,570 - £14,667	19%	Over £12,000 - £47,100	20%
Over £14,667 - £25,296	20%	Over £47,100 - £150,000	40%
Over £25,296 - £43,662	21%	Above £150,000	45%
Over £43,662 - £150,000	41%		
Above £150,000	46%		