

The Scottish Government's Draft Budget 2019-20 Income Tax Policy: Analytical Note on Impacts on Income Levels and Equality

Purpose and Background

This document sets out the impact of the government's income tax policy in the 2019-20 Scottish Draft Budget on individuals' and households' finances. The analysis is then extended to consider the impact on equality by assessing the impact of the income tax policy on age, gender and disability.

Key Findings

The analysis in this document shows that overall, when combined with the planned increase in the Personal Allowance, the income tax policy in the Draft Budget 2019-20 means that for given income levels:

All Taxpayers and Households

- Two million individuals, or 44.6% of adults in Scotland, do not pay income tax as they earn less than the Personal Allowance. They are therefore unaffected by the policy.
- Nearly 99% of the 2.5 million income taxpayers – all those earning less than around £124,000 – will pay less income tax than they did in 2018-19.
- There are around 2.5 million households in Scotland. Of these, 71% will see their post-tax household income increase, 28% will see no change to their household income (primarily because they do not currently pay income tax) and less than 1% will see their household income decrease as a result of changes to income tax in 2019-20.
- All income deciles will see household income increase on average and the increases are greater for higher income households, although the top income decile will see a slightly lower increase than the 8th and 9th deciles. This is due to the top 0.5% of households seeing a decrease in income.

Equality Groups

- Given the limited scope of the income tax changes announced in the Budget, any differences in the proportions of taxpayers who pay less income tax than they did in 2018-19 are fairly marginal across the equality groups.
- Nearly all female income taxpayers (99.6%) will pay less income tax in 2019-20 than they did in 2018-19.
- Since average earnings tend to be lowest amongst young taxpayers under the age of 25 and taxpayers aged 65 and older, virtually all taxpayers in these groups will pay less income tax than they did in 2018-19.
- For households with disabled adults, 55% will see an increase in their household income, 45% will see no change in income and less than 1% will see a decrease in their income as a result of changes to income tax in 2019-20.

1. Introduction

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. This publication focuses exclusively on the impact of the income tax policy in the 2019-20 Draft Budget. However, the Scottish Government continues to explore the feasibility of producing distributional analysis for all tax, benefit and

expenditure to be better able to assess the implications of the overall budget package, in line with the recommendations from the Scottish Parliament's Budget Review Group and other stakeholders.

2. Background: Trends in the distribution of household incomes and the Scottish labour market

This section describes recent trends in inequality and the labour market which provide the context for the Scottish Government's decision on income tax and the analysis presented in this paper. As set out in "The Role of Income Tax for Scotland's Budget"¹, the Scottish tax system is designed to meet four tests. This includes commitments to increase the progressivity of the tax system, reduce income inequality while protecting taxpayers in lower income brackets and support the economy.

Income Inequality in Scotland

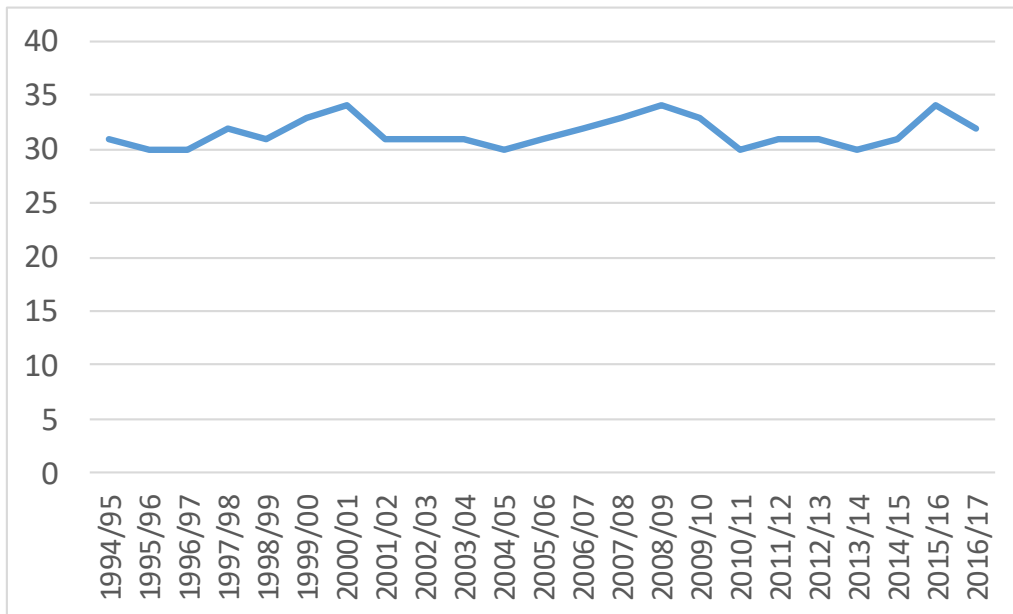
The progressivity of the tax system, and its impact on inequality, can be measured by reporting changes in the Gini coefficient, an internationally recognised measure of how equally income is distributed across the population.² It is important to note, however, that many factors, not just income tax, determine the Gini coefficient, most notably UK Government welfare policies in addition to the distribution of earnings growth.

As illustrated in Chart 1, the Gini coefficient for Scotland was 32 in 2016-17, a decrease from the previous year. While there have been decreases in the Gini coefficient following the recession, it has increased in recent years from 30 in 2013-14.

¹ Available [here](#).

² It takes the value between 0 and 100 where 0 represents perfect equality.

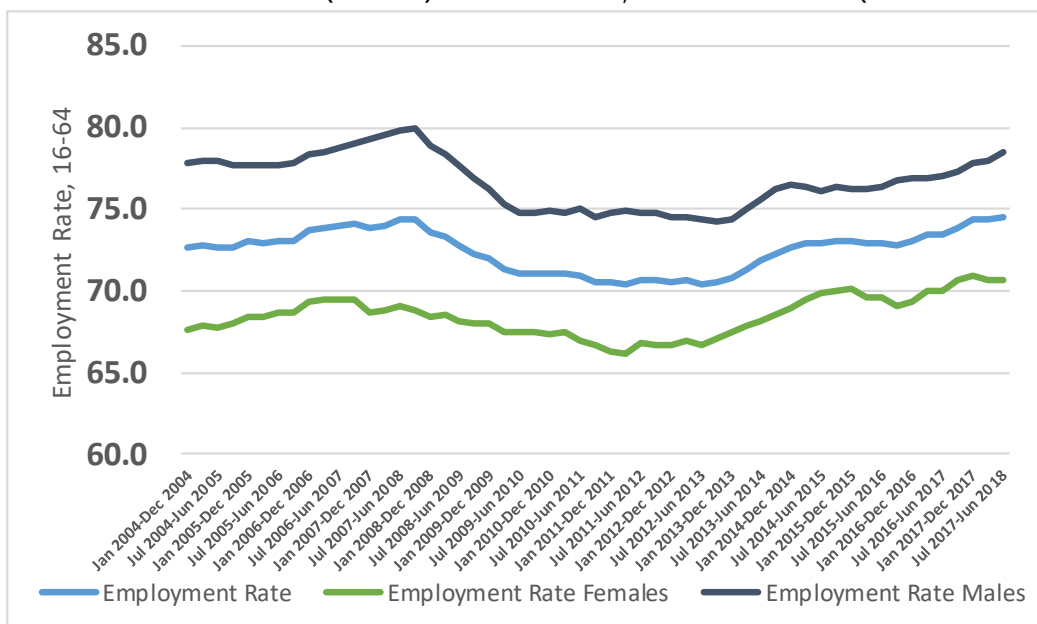
CHART 1: INEQUALITY IN HOUSEHOLD INCOMES AS MEASURED BY THE GINI COEFFICIENT, 1994-95 to 2016-17



The Scottish Labour Market

One of the main drivers of living standards is the performance of the Scottish labour market, including the ability of individuals to find employment and increase their earnings. Since 2008, Scotland has experienced significant employment growth, with employment in Scotland now 69,000 higher than at its pre-recession peak (Mar-May 2008). As illustrated in Chart 2, employment rates for both males and females have recovered strongly since the recession. Scotland’s labour market has continued to perform strongly through the first half of 2018 although recent employment gains appear to be driven by male workers.

CHART 2: EMPLOYMENT RATE (16-64) BY GENDER, 2004 to 2018 (SOURCE: APS)

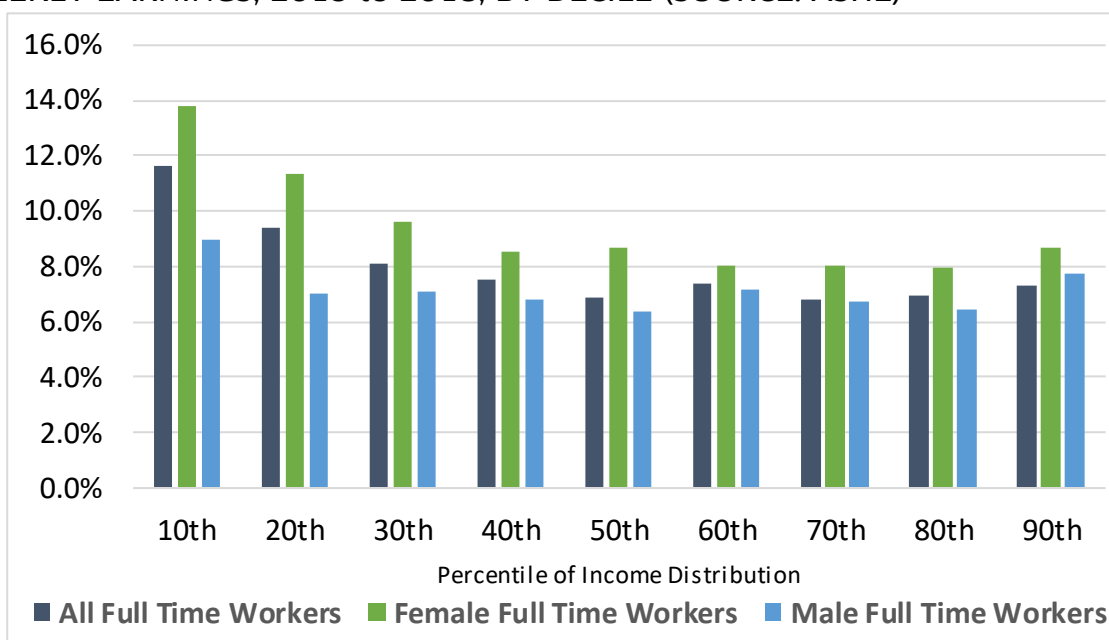


Alongside this, regular earnings growth has strengthened in 2018. In the UK, nominal average weekly regular pay grew by 3.3% over the year to August to October 2018 – its highest rate in nearly a decade.

Following the introduction of the National Living Wage in April 2016, low income earners have seen relatively greater earnings growth than high income earners. As illustrated in Chart 3, earners at the 10th percentile saw their gross weekly wage increase by 11.6% in the last three years. This is higher than at any other point across the income distribution. The trend is even more pronounced for women, as earnings at the 10th percentile grew by 13.8% over this period.

This suggests that income from work has increased for low income earners in Scotland, and in particular for women.

CHART 3: PERCENTAGE CHANGE IN INDIVIDUAL FULL-TIME EMPLOYEE GROSS WEEKLY EARNINGS, 2015 to 2018, BY DECILE (SOURCE: ASHE)



2 Distributional Analysis of Income Tax in the 2019-20 Draft Budget

Income tax policy proposal

The Scotland Act 2016 confers on the Scottish Parliament the power to set all income tax rates, and the thresholds of bands that apply to the Non-Savings and Non-Dividend (NSND) income of Scottish taxpayers. The Scottish Government will receive all the NSND revenue raised from Scottish taxpayers.

Income tax remains a partially devolved tax. The responsibility for defining the income tax base, including the setting or changing of income tax reliefs and

exemptions (including the Personal Allowance), continues to rest with the UK Government. Income tax on savings and dividends continues to be paid to the UK Government, at the rates and bands it sets. The Table below summarises the proposed rates and bands for 2019-20 NSND income tax in Scotland. Box A below sets out some background and key facts about Scottish income tax payers.

Proposed Rates and Bands for 2019-20

2018-19		2019-20	
Band	Rate	Band	Rate
Over £11,850 [*] - £13,850	19%	Over £12,500 [*] - £14,549	19%
Over £13,850 - £24,000	20%	Over £14,549 - £24,944	20%
Over £24,000 - £43,430	21%	Over £24,944 - £43,430	21%
Over £43,430 - £150,000 ^{**}	41%	Over £43,430 - £150,000 ^{**}	41%
Above £150,000 ^{**} +	46%	Above £150,000 ^{**} +	46%

*Assumes individuals are in receipt of the Standard UK Personal Allowance.

**Those earning more than £100,000 will see their Personal Allowance reduced by £1 for every £2 earned over £100,000.

Lower thresholds are updated in line with inflation while the top rate band is held fixed at £150,000.

Box A: Key Facts about Scottish income taxpayers

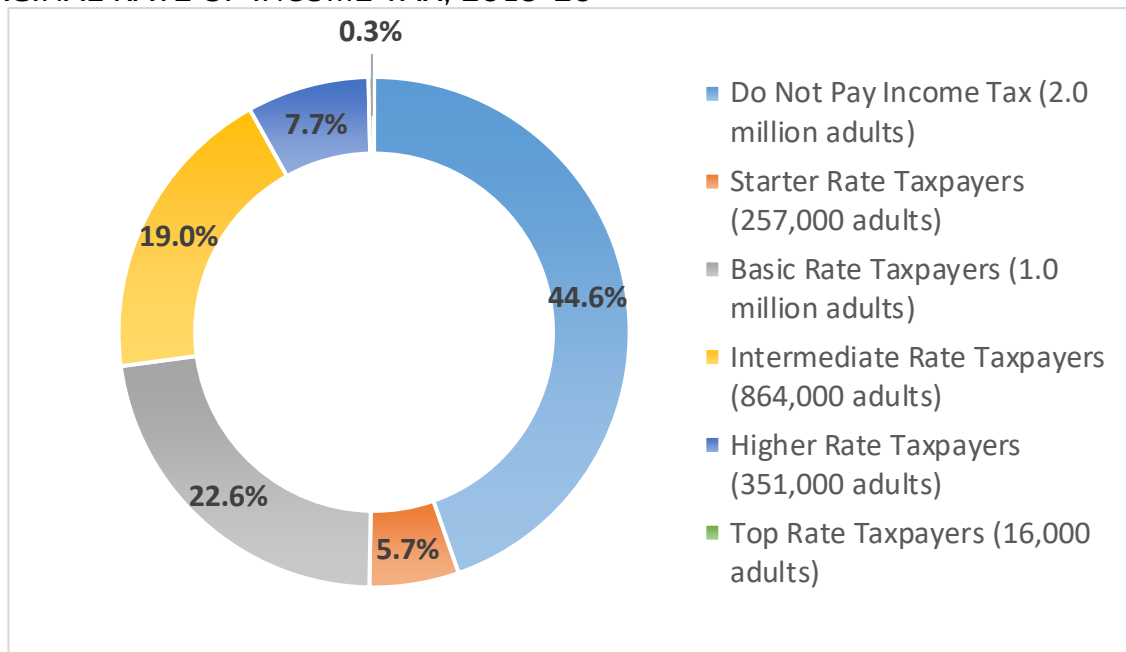
There are estimated to be 4.5 million adults in Scotland in 2019-20 and 2.5 million income tax payers. Around 2 million adults, or 44.6% of all Scottish adults, will not pay income tax as they will earn less than the Personal Allowance. As shown in Table A1, the proportion of Scottish adults not subject to income tax is expected to increase in 2019-20 as the above inflation rise in the UK-wide Personal Allowance will lift more taxpayers out of paying tax altogether.

TABLE A1: EXPECTED NUMBER AND PROPORTION OF SCOTTISH ADULTS WHO DO NOT PAY INCOME TAX, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
Number of Non-Taxpayers (in million)	1.98	1.99	2.02
as % of Scottish Adults	43.9%	43.9%	44.6%

As illustrated in Chart A1, around 6% of Scottish adults will benefit from the Starter 19p Rate of Income Tax in 2019-20. By comparison, 23% of Scottish adults will pay the Basic 20p Rate of Income Tax, with a further 19% of Scottish adults paying the Intermediate 21p Rate. Only 7.7% of Scottish adults will pay the Higher 41p Rate while only a very small proportion of Scottish adults (0.3%) will pay the Top 46p Rate.

CHART A1: NUMBER AND PROPORTION OF ADULTS IN SCOTLAND BY THEIR MARGINAL RATE OF INCOME TAX, 2019-20



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 £25,000 in 2019-20. This means that half of all taxpayers in Scotland earn below this level. The table below shows the estimated income distribution of Scottish taxpayers for 2019-20, split into quarters. This shows, for example, that someone earning between £12,500, the level of the Personal Allowance, and 18,000 would be among the lowest earning 25% of taxpayers in Scotland.

2019-20	Have income less than
75%	£37,000
50% (Median)	£25,000
25%	£18,000

2.1 Analysis of decisions announced in the Draft Budget 2019-20

Income Tax is not a fully devolved tax, so the impact of the Scottish Government's income tax policy needs to be considered alongside changes already announced by the UK Government, primarily the increase in the Personal Allowance. A comparison of particular interest for individuals and households is whether they will pay more or less income tax in 2019-20 compared to what they pay in 2018-19. Throughout this note, comparisons to 2018-19 refer to the impact of the income tax policy in combination with the planned increase in the Personal Allowance, and for a given income level.

2.1.1 Impact across different Income Levels

a) Impact on Individuals

As set out in Box A, there are currently around 2 million individuals, or 44.6% of adults in Scotland, who do not pay income tax as they earn less than the Personal Allowance of £12,500 in 2019-20. These people would be unaffected by any income tax changes.

For the 2.5 million Scottish income taxpayers, Chart 4 illustrates the impact of Scottish Government changes combined with changes to the Personal Allowance coming into effect next year across different levels of income.

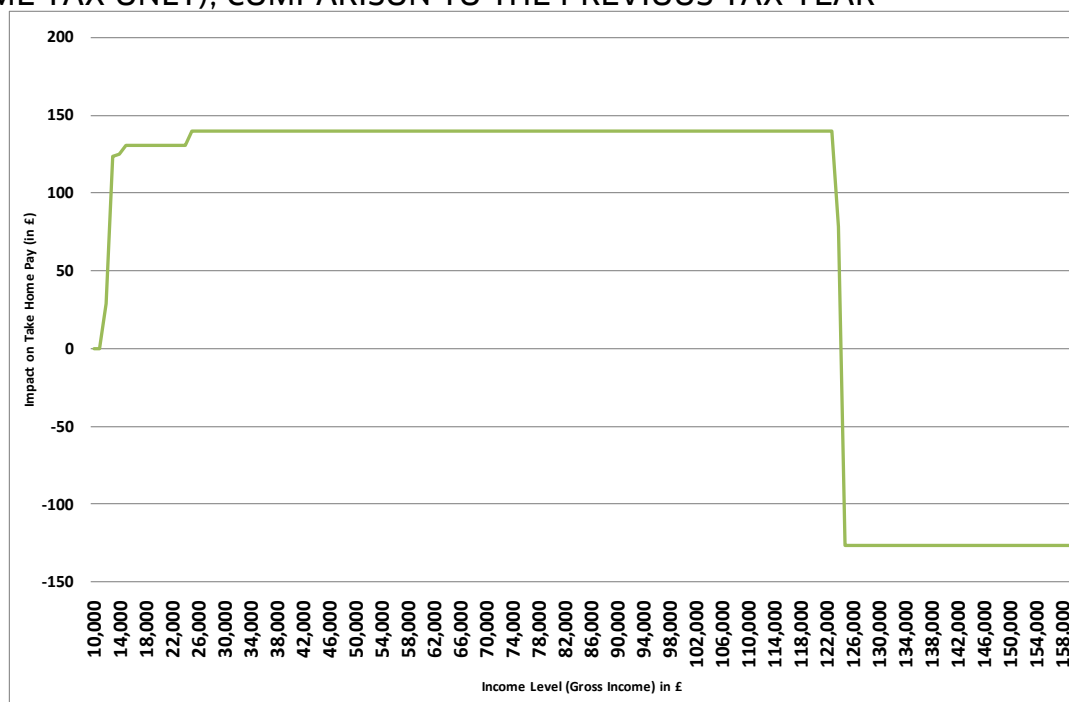
In his Autumn Budget, the Chancellor announced that the UK-wide Personal Allowance will rise from currently £11,850 to £12,500 from April 2019 and will remain at this level in 2020-21. The £650 increase in the Personal Allowance means that a typical basic rate taxpayer will pay £130 less tax than she did in 2019-20 and £300 less tax than she did in 2016-17, the first year income tax was devolved to Scotland.

However, it is important to remember that not all taxpayers benefit from the rise in the tax-free allowance as the Personal Allowance is slowly withdrawn if an individual's income exceeds £100,000, by £1 for every £2 over this threshold. This means that taxpayers earning more than £125,000 do not benefit from the Personal Allowance at all.

In addition, all taxpayers will also see a small uplift in their take home pay from the Scottish Government's decisions to uprate the Basic and Intermediate Rate thresholds in line with inflation. By contrast, the Scottish Government's decision to freeze the Higher Rate Threshold at £43,430 in 2019-20 will improve the progressivity of the tax system by ensuring that high income earners do not benefit from the Personal Allowance rise to a much greater extent than basic rate taxpayers³. As illustrated in Chart 4, the Scottish Government's decisions combined with changes to the Personal Allowance mean that most Scottish taxpayers see their take home pay increase by between £130 and £140, compared to 2018-19.

³ The increase in the Personal Allowance, coupled by the increase in the HRT in rUK to £50,000 means that higher earners in rUK will benefit almost 6 times as much as lower earning taxpayers in rUK.

CHART 4: IMPACT OF POLICY PROPOSAL ON AN INDIVIDUAL'S TAKE HOME PAY (INCOME TAX ONLY), COMPARISON TO THE PREVIOUS TAX YEAR



Due to a combination of changes in the Personal Allowance and the Scottish thresholds, Scottish taxpayers earning less than around £124,300 in 2019-20 (2.5 million tax payers) will pay less income tax than they did in 2018-19, for a given level of income. Overall, nearly 99% of Scottish income taxpayers will pay less tax next year compared to what they are paying this year for a given level of income.

b) Impact on households

The analysis below calculates the impact of the policy on household incomes after tax and social security payments, accounting for the number of people in the household.⁴

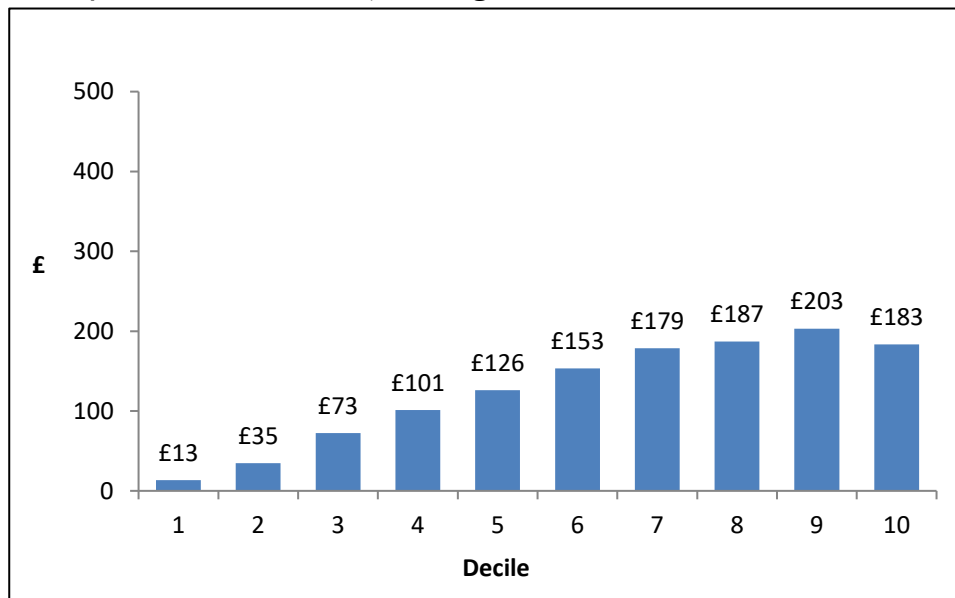
Chart 5 presents the impacts on household income by income decile. This approach divides the population into ten equal groups, with decile 1 representing the 10% of households with the lowest incomes and decile 10, the 10% of households with the highest incomes.

All income deciles will see household income increase on average and the increases are greater for higher income households, although the top income decile will see a slightly lower increase than the 8th and 9th deciles. This is due to the top 0.5% of households seeing a decrease in income.

⁴ Household income also takes into account the number of people in a household through a process called equivalisation. This uses the common sense notion 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 increasing impact across the deciles is due to the fact there are fewer income tax payers in the lower deciles. This results in the average increase being lower in the bottom half of the income distribution.

CHART 5: AVERAGE CHANGE IN HOUSEHOLD INCOME BY INCOME DECILE
(Compared to 2018-19, for a given income level)

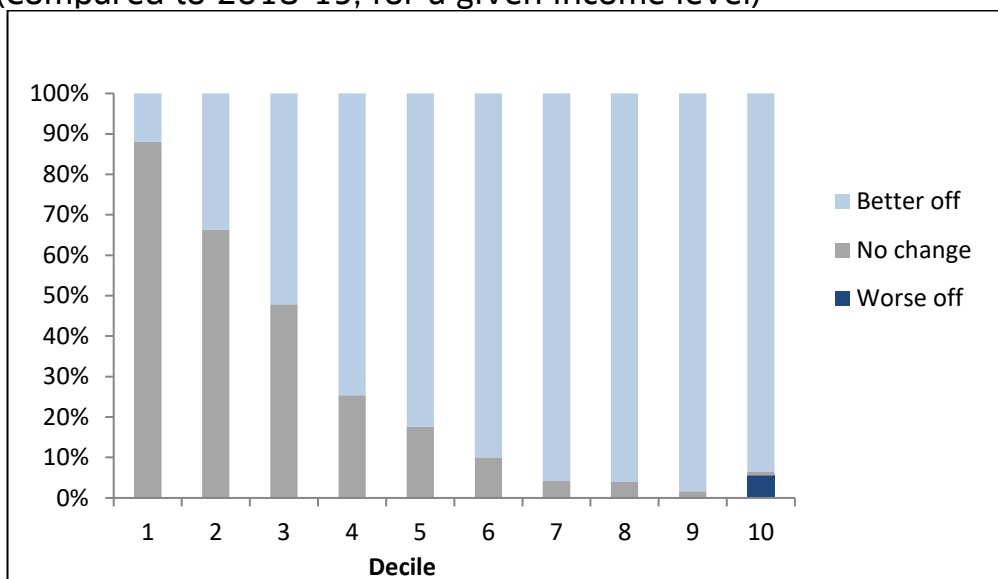


Of the 2.5 million households in Scotland, 71% will see their household income increase as a result of income tax changes between 2018-19 and 2019-20, 28% will see no change to their household income (primarily because they do not currently pay income tax) and less than 1% will see their household income decrease as a result of changes in income tax.

Chart 6 presents a breakdown of this information by income decile. The majority of households in the bottom two deciles see no change in household income, due to the low proportion of households in this group that pay income tax. In deciles 3 to 10, the majority see their household income increase as a result of changes to income tax in 2019-20. The only households that see a decrease in income are at the high end of the top decile and they represent less than 1% of all households in Scotland. The decrease in income for these households is due to the fact they earn in excess of £125,000 per annum and so do not benefit from the personal allowance.⁵

⁵ There is a very small number of households in the sample that see no change in the top decile. This could be because their income is from "other income sources" and "private benefits". These include insurance policies, trust funds and support from family members (e.g. students receiving support from their parents).

CHART 6: HOUSEHOLD INCOME - PERCENTAGE OF HOUSEHOLDS AFFECTED
(Compared to 2018-19, for a given income level)



Overall, when combined with the planned increase in the Personal Allowance, income tax changes in 2019-20 result in a negligible decrease in the Gini coefficient, a measure of income inequality. The Gini coefficient stands at 32 in 2016/17, the latest year available. While there had been decreases in the Gini coefficient following the recession, recently it has increased from 30 in 2013-14.

2.1.2 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.⁶

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.⁷ The evidence finder highlights, however, that for some protected characteristics, information on income and poverty is limited.⁸ Therefore the analysis in this note can only explore impacts on gender, age, and disability.

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 A.

For each group, information on the profile of the group, in relation to income tax, is first presented before considering the impact of the income tax policy on the group.

⁶ These are Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, Sexual orientation

⁷ All these resources can be found here: <http://www.gov.scot/Topics/People/Equality/Equalities>.

⁸ <http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid>

a) Gender

As noted above, there are estimated to be around 4.5 million adults in Scotland in 2019-20 and 2.5 million income taxpayers. While women account for around 52% of all Scottish adults, they make up only 44% of Scottish income tax payers.

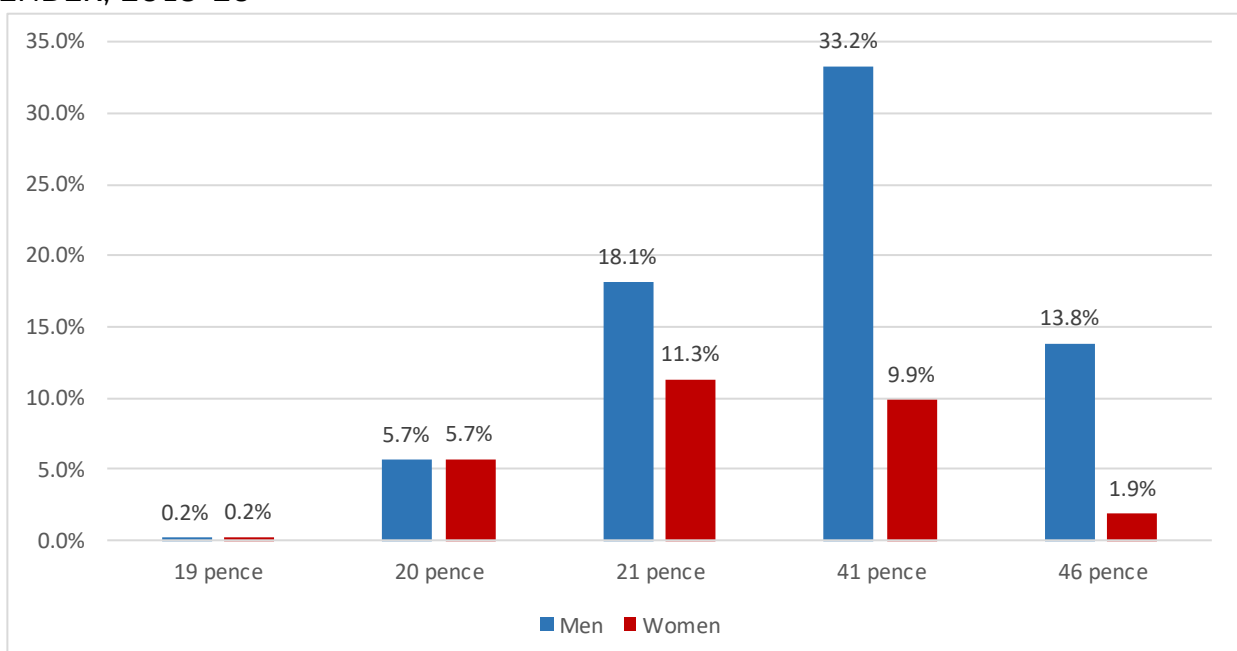
There are a number of factors explaining this trend. Firstly, while the proportion of women in work has increased over the past decades, there are still relatively more men than women who actively participate in the labour market and are either in work or are actively looking for work.

Secondly, women tend to have lower earnings, on average, than their male counterparts. This reflects the fact that women often take time out of the labour market to look after family and children, and are often second earners or work part time. 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 estimated to reach around £25,000 in 2019-20. This means that half of all Scottish income tax payers earn below this level. Breaking this down by gender, the median income of male income tax payers is expected to reach £28,000, compared to £22,000 for women. In addition, men are also more likely to pay the higher and top rates of income tax.

As a result, male income taxpayers are expected to contribute around 71% (£8.5 billion) to overall income tax liabilities in Scotland in 2019-20. Almost 50% of income tax is paid by male Higher Rate and Top Rate income taxpayers, as illustrated in Chart 7.

CHART 7: CONTRIBUTION TO INCOME TAX LIABILITIES BY MARGINAL RATE AND GENDER, 2019-20



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 two 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 8.3% the proportion of female taxpayers subject to the Higher Rate remains well below that of their male counterparts (19.5%).

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

	2017-18	2018-19	2019-20
All HR Taxpayers*	324,400	338,700	367,000
as % of all Taxpayers	12.8%	13.4%	14.6%
Male HR Taxpayers	247,400	257,000	275,100
as % of Male Taxpayers	17.5%	18.2%	19.5%
Female HR Taxpayers	77,000	81,700	91,900
as % of Female Taxpayers	6.9%	7.3%	8.3%

*This includes all individuals subject to the HR, including Top Rate taxpayers.

This implies that any changes to the Higher Rate Threshold are more likely to affect men than women. When taken together with the changes in the Personal Allowance, 98.2% of male taxpayers will pay less tax than they did in 2018-19, compared to 99.6% for female taxpayers.

b) Age

The majority of Scottish income taxpayers are aged between 25 and 64 years. In total, this age group accounts for 74% 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 which fall below the Personal Allowance.

For many income taxpayers, average earnings tend to peak in middle age. Income taxpayers aged between 45 and 54 are expected to have the highest average earnings in 2019-20, at just under £39,000 a year, as shown in Chart 8. As a result, income taxpayers in this age bracket are expected to make the largest contribution to income tax liabilities, at 28% of total income tax revenues, as shown in Chart 9.

It should be noted that this analysis only looks at the average incomes among those who pay income tax (i.e. earn more than the Personal Allowance). Looking at the average incomes of all adults by age band would show lower average incomes.

CHART 8: AVERAGE INCOME BY AGE GROUP, 2019-20

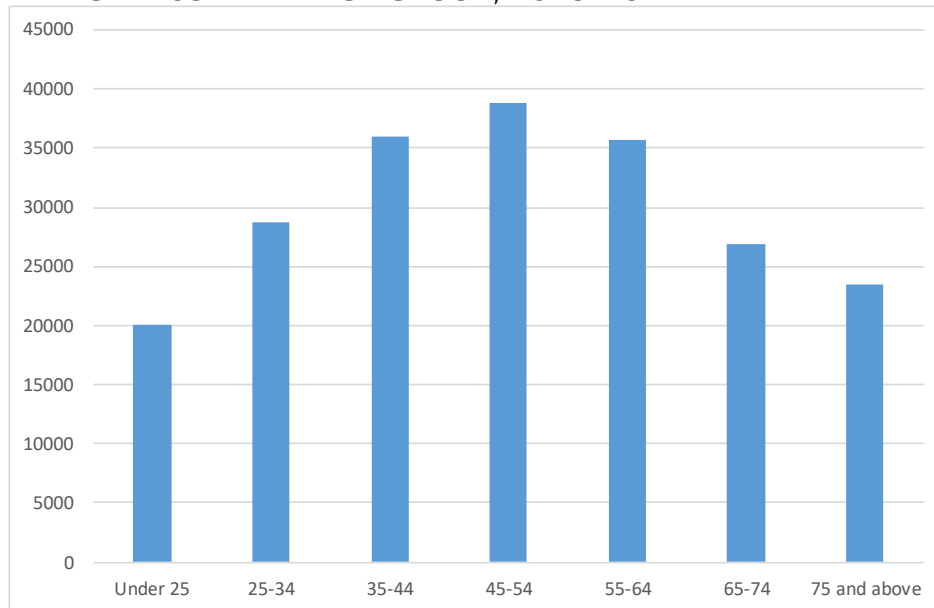
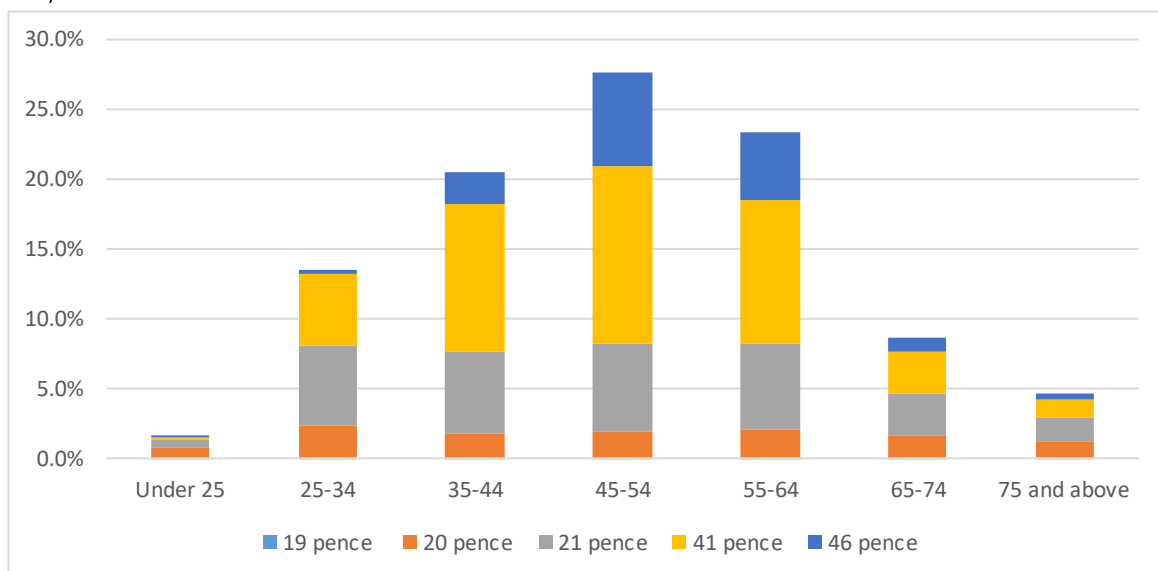
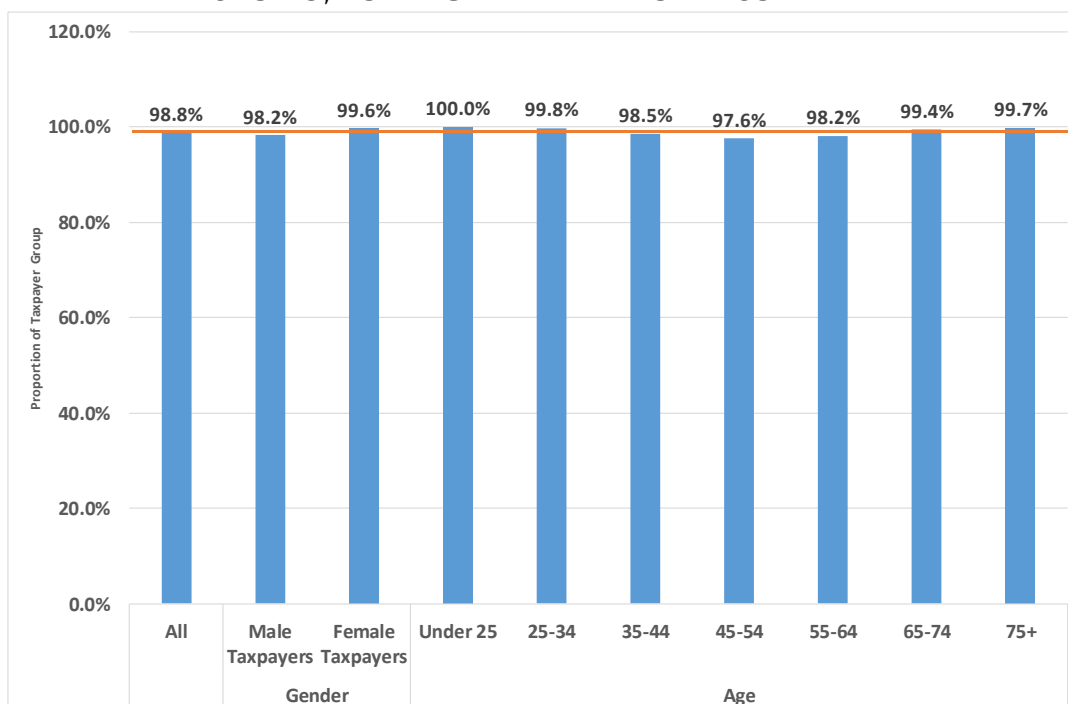


CHART 9: CONTRIBUTION TO INCOME TAX LIABILITIES BY MARGINAL RATE AND AGE GROUP, 2019-20



Since average earnings tend to be lowest amongst young adults and the elderly, virtually all taxpayers in these groups pay less tax next year than they did in 2018-19. However, as illustrated in the Chart below, any differences are very marginal across all taxpayer groups given the limited scope of the income tax changes announced in the Budget.

CHART 10: PROPORTION OF TAXPAYERS WHO PAY LESS INCOME TAX in 2019-20 THAN THEY DID IN 2018-19, FOR A GIVEN LEVEL OF INCOME



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^{9,10} with some research showing that for both full-time and part-time work, the proportion of employees with a work-limiting disability who were low paid (earning less than £7 per hour) was higher than that for employees without a work-limiting disability.¹¹

It is possible to report the impact of the income tax policy according to households with and without disabled adults (see Chart 11). For households with disabled adults, 55% will see an increase in their household income, 45% will see no change in income and less than 1% will see a decrease in their income as a result of changes in income tax.

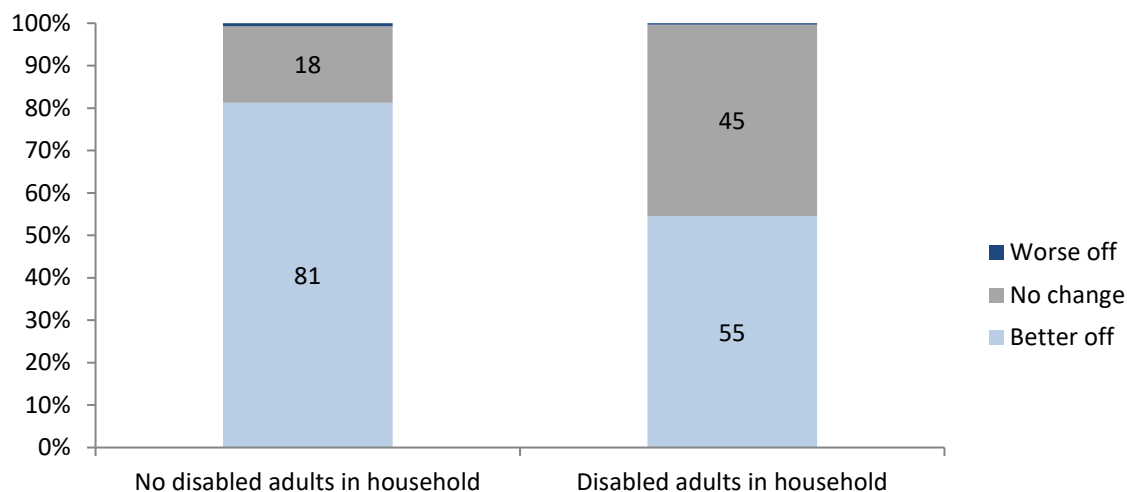
The higher proportion of households with a disabled adult who will see no change in income, reflects the fact that a higher proportion of such households do not contain anyone who earns above the Personal Allowance and therefore pays no income tax.

⁹ <https://www2.gov.scot/Topics/People/Equality/Equalities/DataGrid/Disability>

¹⁰ <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis/povertyanalysis>

¹¹ <https://www2.gov.scot/Topics/People/Equality/Equalities/DataGrid/Disability/DisabPov>

**CHART 11 PERCENTAGE OF HOUSEHOLDS AFFECTED BY DISABILITY STATUS
(Compared to 2018-19, for a given income level)**



Discussion

This note has set out the impacts on income levels and impacts on age, gender and disability of changes to income tax.

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

Office of the Chief Economic Adviser / Strategy Unit

December 2018

ANNEX A: Methodology

A.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 2015-16.

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).¹²

A.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. The model is based on 2016-17 Family Resources Survey (FRS) data. 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 household income deciles. This splits all households in Scotland into 10 equally sized groups by level of income. The 1st decile is the 10% of households with the lowest incomes, whilst the 10th decile is the 10% of households with the highest incomes. Equivalised income is used as it adjusts for the composition of different households.

¹² The SFC report from December is available [here](#)