# The Scottish Government's Income Tax Policy (Stage 1¹): Analytical Note on Impacts on Income Levels and Equality

## Purpose and Background

This analytical note complements the analysis in the *Role of Income Tax in Scotland's Budget*<sup>2</sup> and the update published alongside the Draft Budget in December by setting out the impact of the Scottish Government's amended income tax policy, as set out on 31 January, on income levels and households. 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.

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. This means that from an individual and household perspective, a comparison of particular interest is whether they will pay more or less tax in 2018-19 compared to what they pay in 2017-18. In terms of the policy impact, a direct comparison between what the current income tax regime would be in 2018-19 with and without the policy change is also relevant and Annex A includes details of this comparison. The pattern of findings on impact is, however, broadly similar for the two comparisons.

# Key Findings (Compared to 2017-18)

Overall, when combined with the planned increase in the Personal Allowance, in 2018-19 the income tax policy means that for given income levels:

#### Income Levels

- Two million individuals, or 44% of adults in Scotland, do not pay income tax as they earn less than the Personal Allowance. They are therefore unaffected by the policy.
- Of the 2.5 million income taxpayers, 70% will pay less income tax in 2018-19 and 30% will pay more income tax than they do in 2017-18.
- There are around 2.4 million households in Scotland. Of these, 50% will see their household income increase, 29% will see no change to their household income (primarily because they do not currently pay income tax) and 21% will see their household income decrease as a result of changes to income tax in 2018-19.
- With the exception of the top two income deciles (the highest income 20% of households), all income deciles will see their average household incomes increase on average. Households in the top decile will see their average annual household income decrease by just over £400 a year, as result of changes to income tax.
- There is a small decrease in the Gini coefficient (a decrease of 0.14) representing a small improvement in income inequality.

#### Equality

- 79% of female income taxpayers will pay less income tax in 2018-19 than they
  do in 2017-18 and 64% of male income taxpayers will pay less.
- Around 93% of young adults under 25 will pay less income tax in 2018-19 than they do in 2017-18.
- For households with disabled adults, 45% will see an increase in their household

-

<sup>&</sup>lt;sup>1</sup> This version replaces the distributional analysis that was published alongside the Draft Budget in December.

<sup>&</sup>lt;sup>2</sup> The full report is available <u>here</u>.

income, 45% will see no change in income and 10% will see a decrease in their income as a result of changes to income tax in 2018-19.

## 1. Income tax policy at Stage 1

Earnings of between £11,850 and £13,850 will be taxed at 19%, as opposed to 20% at present. Earnings between £13,851 and £24,000 will be taxed at the 20% rate as they are now. A further band is added at 21% on earnings between £24,000 and £43,430 while the current higher rate of income tax is increased to 41% on income between £43,431 and £150,000. The top rate of income tax, on earnings over £150,000 will be increased to 46%. Table 1 summarises the rates and bands.

TABLE 1: RATES AND BANDS in 2018-19 (as of February 2018)					
Scottish Bands	Band Name	Scottish	Number of people in		
		Rates	band <sup>3</sup>		
Over £11,850* to £13,850	Starter	19%	250,000		
Over £13,850 to £24,000	Basic	20%	1,031,000		
Over £24,000 to £43,430	Intermediate	21%	874,000		
Over £43,430 to £150,000**	Higher	41%	350,000		
Above £150,000	Тор	46%	19,000		

<sup>\*</sup>Assumes individuals are in receipt of the Standard UK Personal Allowance

## 2. Comparisons

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. This means that from an individual and household perspective, a comparison of particular interest is whether they will pay more or less tax in 2018-19 compared to what they pay in 2017-18. Throughout this note, comparisons to 2017-18 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.

In terms of the policy impact, a direct comparison between what the current income tax regime would be in 2018-19 with and without the policy change in 2018-19 is also relevant and this is included in the Annex A. This comparison involves estimating what the current tax regime would be in 2018-19 (by uprating the Personal Allowance and Higher Rate Threshold in line with inflation) and then comparing it with the rates and bands set out in Table 1. This comparison therefore represents the impact of Scottish Government changes to rates and bands.

<sup>\*\*</sup> Those earning more than £100,000 will see their Personal Allowance reduced by £1 for every £2 over £100,000

<sup>&</sup>lt;sup>3</sup> The figures are not directly comparable to the analysis published in the discussion paper as the revenue estimates are now based on the updated determinants, including changes to public sector pay awards, produced by the Scottish Fiscal Commission (SFC).

## 3. Impact on Income Levels

It is important to remember that there are currently 2 million individuals, or 44% of adults in Scotland, who do not pay income tax as they earn less than the Personal Allowance. These people would be unaffected by income tax changes in 2018-19.

For the 2.5 million income tax payers in Scotland, Table 2 illustrates the proportion who will pay more or less income tax in 2018-19 compared to 2017-18.

It shows that at least 70% of Scottish income taxpayers (1.8 million individuals), i.e. all individuals earning less than £33,000, would pay less tax in 2018-19 than they do in 2017-18. The remaining 30% of income taxpayers would pay more.

TABLE 2: IMPACT ON INCOME TAXPAYERS IN SCOTLAND (Compared to 2017-18, for a given income level)

·		•		
	Taxpayers (m)	Percentage of Income taxpayers who pay		
		same tax	more tax	less tax
olicy (February 2018)	2.53	-	30%	70%
ricy (residury 2010)	2.55		30%	, ,

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.<sup>4</sup>

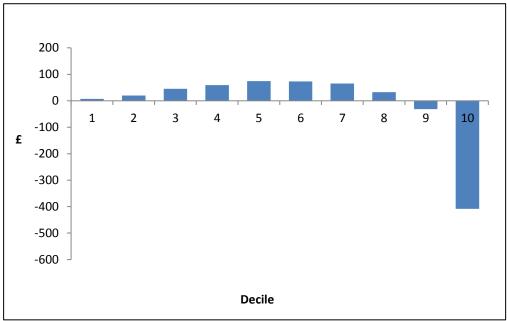
Chart 1 presents the impacts on household income by income decile. This approach divides the population into ten equal groups, with decile 1 representing the 10% of households with the lowest incomes and decile 10, the 10% of households with the highest incomes.

With the exception of the top two income deciles, all income deciles will see their average household incomes increase as a result of income tax changes in 2018-19. The top decile (the highest earning households) see their average annual household income decrease by just over £400, as result of income tax changes.

<sup>-</sup>

<sup>&</sup>lt;sup>4</sup> 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 analysis does not include the impact from Universal Credit since the rollout is still in its early stages.

CHART 1: AVERAGE CHANGE IN HOUSEHOLD INCOME BY INCOME DECILE (Compared to 2017-18, for a given income level)



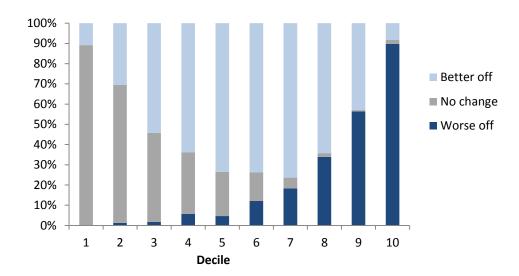
Of the 2.4 million households in Scotland, 50% will see their household income increase as a result of income tax changes between 2017-18 and 2018-19, 29% will see no change to their household income and 21% will see their household income decrease as a result of changes in income tax.

Chart 2 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 8, the majority see their household income increase as a result of changes to income tax in 2018-19. For the top two deciles, the majority see their household incomes decrease as a result of changes in income tax. <sup>5</sup>

\_

<sup>&</sup>lt;sup>5</sup> 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 2: HOUSEHOLD INCOME - PERCENTAGE OF HOUSEHOLDS AFFECTED (Compared to 2017-18, for a given income level)



Overall, when combined with the planned increase in the Personal Allowance, income tax changes in 2018-19 result in a small decrease in the Gini coefficient, a measure of income inequality, of approximately 0.14.

## 4. 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.<sup>6</sup>

The overall evidence based 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.<sup>7</sup> The evidence finder highlights, however, that for some protected characteristics, information on income and poverty is limited.<sup>8</sup> 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 the Annex B.

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.

5

<sup>&</sup>lt;sup>6</sup> These are Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, Sexual orientation

<sup>&</sup>lt;sup>7</sup> All these resources can be found here: <a href="http://www.gov.scot/Topics/People/Equality/Equalities">http://www.gov.scot/Topics/People/Equality/Equalities</a>.

<sup>&</sup>lt;sup>8</sup> http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid

#### 4.1 Gender

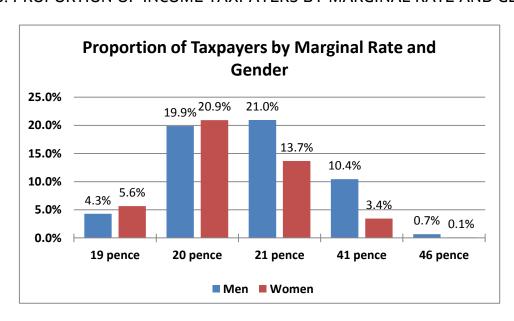
As noted above, there are estimated to be around 4.5 million adults in Scotland in 2018-19 and 2.5 million income taxpayers. While women account for 52% of all Scottish adults, they make up only 44% of Scottish income tax payers.

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.

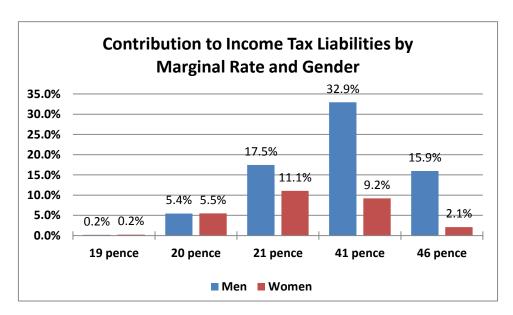
This trend is also evident in the income tax data. Based on the latest forecasts, the median income of all Scottish income taxpayers is estimated to reach £24,000 in 2018-19. This means that half of all Scottish income tax payers earn below this level. Breaking this down by gender, the median income of male income tax payers is expected to reach £27,000, compared to £22,000 for women. In addition, men are also more likely to pay the higher and top rates of income tax. As illustrated in Chart 3, around 10.4% of all Scottish income taxpayers are male and pay the Higher Rate of income tax, while only 3.4% of Scottish income taxpayers are female and Higher Rate income taxpayers.

CHART 3: PROPORTION OF INCOME TAXPAYERS BY MARGINAL RATE AND GENDER



As a result, male income taxpayers are expected to contribute around 72% (£8.9 billion) to overall income tax liabilities in Scotland in 2018-19. Almost 50% of income tax is paid by male HR and top rate income taxpayers, as illustrated in Chart 4.

CHART 4: CONTRIBUTION TO INCOME TAX LIABILITIES BY MARGINAL RATE AND GENDER



Since the Scottish Government's proposed policy increases the progressivity of the tax system by raising taxes for those on higher incomes, and men tend to have higher earnings than women, men will be disproportionately affected by changes to income tax in 2018-19.

Table 4 shows that, around 1.8 million basic rate income taxpayers, i.e. those earning up to £33,000, would pay less tax in 2018-19 than they do this year. Considering the gender breakdown, around 79% of female income taxpayers will pay less tax in 2018-19, compared to 64% of male income taxpayers.

TABLE 4: IMPACT ON SCOTTISH INCOME TAXPAYERS BY GENDER (Compared to 2017-18, for a given income level)

	Income	Percentage of group who pay		
Income Taxpayers who	Taxpayers			
are	(millions)	same tax	more tax	less tax
Women	1.11	-	21%	79%
Men	1.42	-	36%	64%
All Income Taxpayers	2.53	-	30%	70%

# 4.2 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, as illustrated in Chart 5.

Estimated Proportion of Taxpayers by Age Band, 2018-19 25% 20% 18% 18% 20% 17% 15% 12% 9% 10% 6% 5% 0% Under 25 25-34 35-44 45-54 55-64 65-74 75 and above Taxpayers who are aged

CHART 5: PROPORTION OF INCOME TAXPAYER BY AGE GROUP, 2018-19

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 2018-19, at just under £39,000 a year, as shown in Chart 6. As a result, income taxpayers in this age bracket are expected to make the largest contribution to income tax liabilities, at 30% of total income tax revenues, as shown in Chart 7.

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 6: AVERAGE INCOME BY AGE GROUP, 2018-19

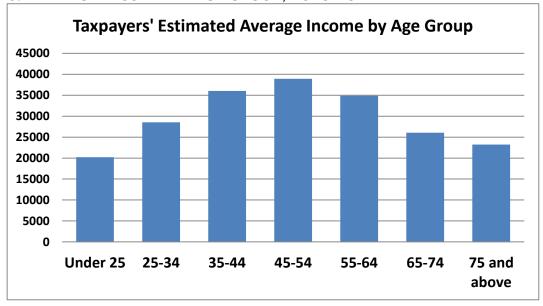
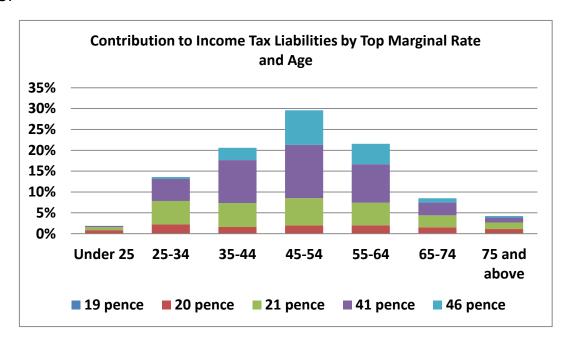


CHART 7: CONTRIBUTION TO INCOME TAX LIABILITIES BY MARGINAL RATE AND AGE GROUP



Since average earnings tend to be lowest amongst young adults and the elderly, these groups are therefore more likely to pay less tax as a result of changes to income tax in 2018-19. This is illustrated in Table 5 below which shows that around 93% of young adults (aged under 25) are expected to pay less tax in 2018-19 since there are only a small number of individuals earning over £33,000.

Similarly, less than half of those in the highest age band (75+), pay income tax. The majority of those earn between £11,850 and £33,000, meaning that around 87% of

over 75 year old income tax payers would pay less tax in 2018-19 than they do this year.

TABLE 5: IMPACT ON SCOTTISH INCOME TAXPAYERS BY AGE GROUP (Compared to 2017-18, for a given income level)

	Income	Percentage of group who pay		
	Taxpayers			
Income taxpayers who are aged	(millions)	same tax	more tax	less tax
Under 25	0.1	-	7%	93%
25-34	0.5	-	27%	73%
35-44	0.4	-	40%	60%
45-54	0.5	-	40%	60%
55-64	0.5	-	33%	67%
65-74	0.3	-	20%	80%
75 and above	0.2	-	13%	87%
All Taxpayers	2.5	-	30%	70%

## 4.3 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 <sup>9, 10</sup> 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. <sup>11</sup>

It is possible to report the impact of the income tax policy according to households with and without disabled adults (see chart 8). For households with disabled adults, 45% will see an increase in their household income, 45% will see no change in income and 10% will see a decrease in the their income as a result of changes in income tax.

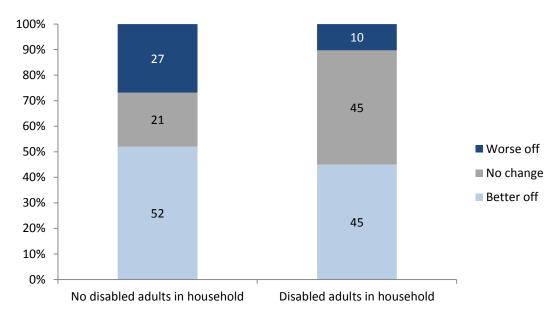
The higher proportion of households with a disabled adult who will see no change in income, reflects the fact that a higher proportion of such households do not contain anyone who earns above the Personal Allowance and therefore pays no income tax.

<sup>&</sup>lt;sup>9</sup> http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid/disability/

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

<sup>11</sup> http://www.gov.scot/Topics/People/Equality/Equalities/DataGrid/disability/disabPov

CHART 8: PERCENTAGE OF HOUSEHOLDS AFFECTED BY DISABILITY STATUS (Compared to 2017-18, for a given income level)



## 4.4 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

February 2018

ANNEX A: Impact of Income Tax Policy on Income Levels and Equality Using Different Comparisons

## A.1 Summary of Impact Using Different Comparisons

As noted in Section 2, a comparison with 2017-18 refers to the impact of the income tax policy in combination with the planned increase in the Personal Allowance (for a given income level).

A comparison with the current regime in 2018-19, refers to what the current income regime would be in 2018-19 with and without the policy change in 2018-19. This comparison therefore represents the impact of Scottish Government changes to rates and bands.

TABLE A.1 SUMMARY OF IMPACT USING DIFFERENT COMPARISONS

Impact	Comparison with 2017-18 (for a given income level)	Comparison with current regime as it would be in 2018-19
Income levels		
% income taxpayers who will pay more tax	30%	45%
% income taxpayers who will pay less tax	70%	55%
Households		
% households who will pay more tax and income decreased	21%	37%
% households who will see no change in tax or income	29%	31%
% households who will pay less tax and income	50%	33%
increased		
Gender	<del>,</del>	
% female taxpayers who will pay more tax	21%	36%
% female taxpayers who will pay less tax	79%	64%
% male taxpayers who will pay more tax	36%	53%
% male taxpayers who will pay less tax	64%	47%
Age	<del>,</del>	
% young adults who will pay more tax	7%	16%
% young adults who will pay less tax	93%	84%
Disability	T	
% of households with disabled adults who will pay	10%	20%
more tax and income decreased		
% of households with disabled adults who will see no change in tax or income	45%	46%
% of households with disabled adults who will pay less tax and income increased	45%	34%

A.2 Further detail on the impacts of the income levels and equality from the income tax policy compared to the current regime in 2018-19

This annex assesses the impact of the Scottish Government's income tax policy in 2018-19, to the system which would be in place in the absence of these reforms. In other words, under the 2017-18 tax rates, and with the Personal Allowance and Higher Rate Threshold increasing in line with inflation. This comparison therefore represents the impact of Scottish Government changes to rates and bands.

It is important to remember that there are currently 2 million individuals, or 44% of adults in Scotland, who do not pay income tax as they earn less than the Personal Allowance. These people would be unaffected by the Scottish Government's income tax policy.

For the 2.5 million income tax payers in Scotland, Table A.2 illustrates the proportion who will pay more or less income tax in 2018-19 compared to the current regime in 2018-19.

It shows that around 55% of Scottish income taxpayers (1.4 million individuals), i.e. all individuals earning less than £26,000, would pay less tax in 2018-19 compared to the current regime in 2018-19. The remaining 45% of income taxpayers would pay more.

TABLE A.2: IMPACT ON INCOME TAXPAYERS IN SCOTLAND
(Compared to current regime in 2018-19)

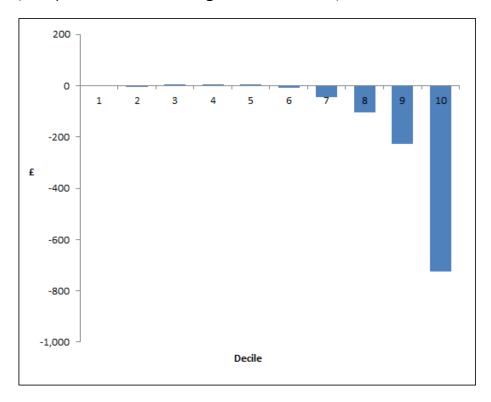
	Taxpayers (m)	Percentage of Income taxpayers who pay		
		same tax	more tax	less tax
Policy (February 2018)	2.53	-	45%	55%

Chart A.1 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.

On average, households in the bottom six deciles see a comparatively small change in annual income. The largest decreases in average annual household income are seen in the top income deciles (deciles 8 to 10), as a result of them paying more tax.

The top decile (the highest earning households) see their average annual household income decrease by around £725, as result of income tax changes.

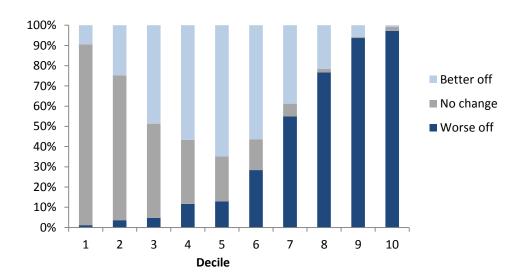
CHART A.1: AVERAGE CHANGE IN HOUSEHOLD INCOME BY INCOME DECILE (Compared to current regime in 2018-19)



Of the 2.4 million households in Scotland, 37% will see their household income decrease, 31% will see no change to their household income and 33% will see their household income increase as a result of changes in income tax.

Chart A.2 presents a breakdown of this information by income decile. The majority of households in the bottom 2 deciles (lower earning households) see no change in household income, due to the low proportion of households in these deciles that pay income tax. From the 7<sup>th</sup> decile upwards (higher earning households), the majority of households see a decrease in their household income.

CHART A.2: PERCENTAGE OF HOUSEHOLDS AFFECTED BY INCOME DECILE (Compared to current regime in 2018-19)



Overall, compared to the current income tax regimes in 2018-19, the policy results in a small decrease in income inequality, with the Gini coefficient decreasing by 0.18.

#### Gender

Table A.3 shows that, around 1.4 million basic rate taxpayers, i.e. those earning up to £26,000, would be better off in 2018-19 than they are under the current income tax regime in 2018-19. Considering the gender breakdown, around 64% of female taxpayers will pay less tax, compared to 47% of male taxpayers.

TABLE A.3: IMPACT ON SCOTTISH TAXPAYERS BY GENDER (Compared to current regime in 2018-19)

	Taxpayers	Percentage of group who pay		
Taxpayers who are	(millions)	same tax	more tax	less tax
Women	1.11	-	36%	64%
Men	1.42	-	53%	47%
All Taxpayers	2.53	-	45%	55%

### Age

This is illustrated in Table A.4 below which shows that around 84% of young adults under 25 are expected to pay less tax since there are only a small number of individuals earning over £26,000.

Similarly, for those in the highest age band (+75), less than half of individuals currently pay income tax, as most have an income below the Personal Allowance. The majority of those that do pay income tax earn under £26,000, meaning that

around 75% of over 75 year olds would pay less tax as a result of changes in income tax.

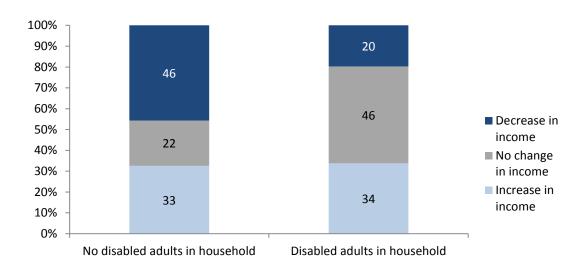
TABLE A.4: IMPACT ON SCOTTISH TAXPAYERS BY AGE GROUP (Compared to current regime in 2018-19)

	Taxpayers	Percentage of group who pay		
Taxpayers who are aged	(millions)	same tax	more tax	less tax
Under 25	0.1	-	16%	84%
25-34	0.5	-	45%	55%
35-44	0.4	-	56%	44%
45-54	0.5	-	56%	44%
55-64	0.5	-	50%	50%
65-74	0.3	-	33%	67%
75 and above	0.2	-	25%	75%
All Taxpayers	2.5	-	45%	55%

## Disability

Households containing at least one disabled adult are less than half as likely to see a decrease in household income as a result of the income tax policy than households with no disabled adults (see Chart A.3). The percentage of households that could expect an increase in household income are similar for households with or without a disabled adult. Households with a disabled adult are twice as likely to see no change in income as a result of the income tax policy than those with no disabled adults. This reflects the higher proportion of households with a disabled adult where no one earns above the Personal Allowance.

CHART A.3: HOUSEHOLD INCOME - PERCENTAGE OF HOUSEHOLDS AFFECTED BY DISABILITY STATUS (Compared to current regime in 2018-19)



## **ANNEX B**

## 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 2014-15.

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).<sup>12</sup>

# 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 microsimulation model developed by the Scottish Government. The model is based on 2015-16 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.

\_

<sup>&</sup>lt;sup>12</sup> The SFC report from December is available <u>here</u> and their updated forecasts can be accessed <u>here.</u>