

Coverage: United Kingdom Theme: The Economy Released: 28 June 2019 Next Release: May/June 2020 Frequency of release: Annually (May/June)

Media contact:

HMRC Press Office (Individuals) Tel: 03000 585024 Out of hours: 07860 359544

Statistical contacts:

Matthew Brunning Tel: 03000 589306 matthew.brunning@hmrc.gov.uk

Naeem Abdulhussein Tel: 03000 515267 naeem.abdulhussein@hmrc.gov.uk

Jonathan Lee-Akinbile Tel: 03000 579268 jonathan.lee-akinbile@hmrc.gov.uk

Penny Nixon Tel: 03000 577166 penny.nixon@hmrc.gov.uk

Adam Gibbs Tel: 03000 590524 adam.gibbs1@hmrc.gov.uk

KAI Personal Taxes HM Revenue and Customs Room 3E/04 100 Parliament Street London SW1A 2BQ

Website: https://www.gov.uk/government/colle ctions/income-tax-statistics-anddistributions

UK Income Tax Liabilities Statistics

2016-17 Survey of Personal Incomes, with projections to 2019-20

Includes Tables 2.1 to 2.7



Key Statistics

In 2016-17, the share of total income of 31.4m the top 50% of taxpayers (£1.045 billion) was 74.8%, a 49.6 percentage point income inequality between the

Top 50% of taxpayers were liable for 90.4% of total tax (£174 billion) in 2016-17, showing the progressive nature of the income tax system.**

High er / Additio nal Rate Taxp avers

othernireand

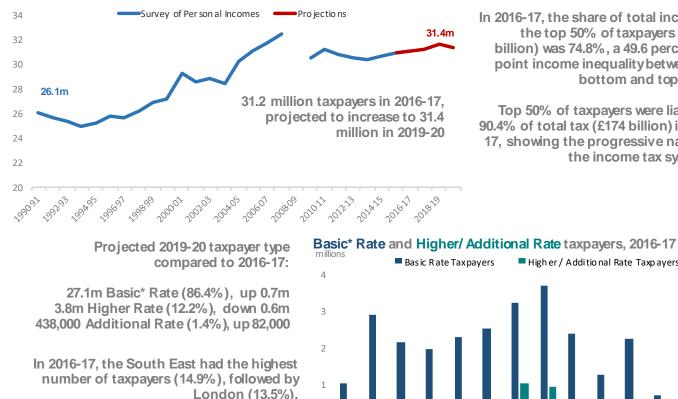
Scotland

Wales

ownand Abroad

bottom and top 50%.**

Number of Individual Income Taxpayers, 1990-91 to 2019-20



0

NorthEast

voitinie and the hundred

Est Midands

West Middards

tato Heland

Northern Ireland had the lowest number of taxpayers (2.3%), followed by the North East (3.7%).

The Top 1% (broadly all Additional Rate taxpayers) had 12.3% of total income in 2016-17 and were liable for 28.1% of total income tax.**

25.2%

Projections for 2019-20 show the top 1% share of total income increased to 12.8% and the top 1% of total income tax increased to 29.6%.***

> Projected 2019-20 average tax rates compared to 2016-17:

9.6% for Basic Rate taxpayers, unchanged 21.7% for Higher Rate taxpayers, down 0.1pp 38.0% for Additional Rate taxpayers, down 0.2pp.

Estimates for 2017-18 to 2019-20 are projections based on the 2016-17 Survey of Personal Incomes and Office for Budgetary Responsibility's March 2019 economic and fiscal outlook *includes Savers Rate taxpayers and both Scottish Starter and Intermediate rate taxpayers from 2018-19 **Taxpayer distribution based on total income before tax ***Projections for the top 1% are indicative

South Fast South WEET

London

2016-17 total income by Bottom and Top 50%**

74.8%

Contents

Key Statistics
SECTION A: Income Tax Liabilities Statistics
Table 2.1 – Number of individual income taxpayers by marginal rate, genderand age, 1990-91 to 2019-204
Table 2.2 – Number of individual income taxpayers by country and region,1999-00 to 2019-207
Table 2.4 – Shares of total income (before and after tax) and income tax forpercentile groups, 1999-00 to 2019-209
Table 2.5 – Income tax liabilities by income range, 2016-17 to 2019-20 14
Table 2.6 – Income tax liabilities by income source, tax band and marginalrate, 2016-17 to 2019-2018
SECTION B: Illustrative Tax Burdens
Table 2.7 – Income tax (net of tax credits) as a per cent of gross earningsfor specimen families, 1990-91 to 2019-2042
SECTION C: Background notes51
Annex A: Context and background information55
Annex B: Data sources and Methodology66
Annex C: Quality indicators79
Annex D: Glossary of Terms85

SECTION A: Income Tax Liabilities Statistics

Section A provides detailed insights into some of the key statistics presented in Table 2.1 to 2.6.

Table 2.1 – Number of individual income taxpayers by marginal rate, gender and age, 1990-91 to 2019-20

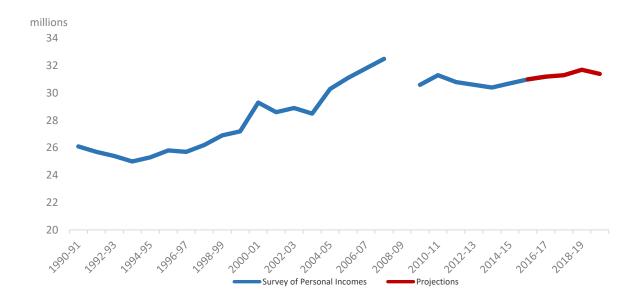
https://www.gov.uk/government/statistics/number-of-individual-income-taxpayers-bymarginal-rate-gender-and-age

Table 2.1 shows how the number of individuals with positive income tax liabilities (taxpayers) has changed over time. The table begins in 1990-91, the year that independent taxation for all individuals was introduced in the UK; previously married couples were taxed jointly. The table provides separate breakdowns of the income taxpaying population by marginal tax rate, gender and by age group.

Taxpayers

Prior to the 2008 recession, income taxpayer numbers generally increased, from 26.1 million in 1990-91 to 32.5 million in 2007-08. Latest SPI data shows an estimated 31.2 million taxpayers in 2016-17, with that figure expected to rise to 31.4 million taxpayers in 2019-20.





Total taxpayers rose by 0.2 million to 31.2 million in 2016-17 compared to 2015-16. Population, income and employment growth would be expected to drive overall growth in taxpayer numbers as the combined growth is higher than the effect of indexation of the tax free Personal Allowance (PA). Above indexation growth in the PA will have somewhat offset this growth in the overall number of taxpayers in total.

In 2016-17, 13.3 million (42.6%) of the 31.2 million income taxpayers were female, 17.9 million (57.4%) were male; and 6.9 million (21.4%) were above the State Pension Age. Comparable figures for the UK population aged 16 and over in 2017 51.1% were female, 48.9% were male; and 23.2% were over the State Pension Age¹. Projections to 2019-20 show 13.1 million (41.7%) of the 31.4 million total income taxpayers will be female, 18.3 million (58.3%) will be male; and 6.4 million (20.4%) above the State Pension Age.

Marginal rate

An individual's marginal tax rate is the proportion of an extra pound of income that would be paid in income tax, which depends on their total taxable income and its composition.

In 1990-91, an estimated 24.4 million individuals, representing the large majority of all income taxpayers (93.5%) were non-Higher Rate taxpayers². The remaining 1.7 million were Higher Rate (HR) taxpayers. In 2016-17, 26.5 million individuals (84.7%) were Basic Rate taxpayers² 4.4 million individuals (14.1%) were HR taxpayers and 356,000 (1.1%) were Additional Rate (AR) taxpayers. In 2019-20, an estimated 27.1 million individuals (86.4%) are non-Higher Rate taxpayers, 3.8 million individuals (12.2%) are HR taxpayers and 438,000 (1.4%) are AR taxpayers.

Among non-Higher Rate taxpayers in 2016-17, there were 588,000 Savers Rate taxpayers without taxable earnings but with taxable savings above the Starting Rate limit and/or taxable dividends, where rates of 20% and 7.5% applied to savings and dividends. The remaining 25.9 million (82.9%) of non-Higher Rate taxpayers had taxable earnings and are classified as Basic Rate taxpayers.

The number of Additional Rate taxpayers decreased in 2016-17, to a total of 356,000 from 362,000 in 2015-16. This was mainly due to the impact of dividend income forestalling, a consequence of the changes to dividend taxation in 2016-17 (further details in Annex B).

The number of Higher and Additional Rate taxpayers are projected to drop from the high of 4.8 million in 2016-17 to around 4.3 million in 2019-20. This is part due to above indexation increases in the PA in 2016-17, 2017-18 and 2019-20 causing the Higher Rate Threshold (HRT) to increase, as well as above indexation increases in the HRT itself in 2016-17, 2017-18 and 2019-20.

¹ Office for National Statistics Mid-Year Population Estimates for 2017, <u>http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationesti</u> <u>mates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland</u> State Pension Age for the purposes of this publication in 2016-17 is 65 years for men and 63.75 years for women, unless otherwise stated.

² Basic Rate taxpayers including Starting, Savers and Basic Rate taxpayers.

Numbers of Higher and Additional Rate taxpayers are then projected to fall by 0.2 million to 4.6 million in 2017-18, increase by 0.1 million to 4.7 million in 2018-19 before falling to 4.3 million in 2019-20. This is, in part, due to an above inflation increase of £1,490 in the HRT in 2017-18 with a £2,460 above inflation increase to £50,000 in 2019-20. There was no policy measure in 2018-19 and therefore the HRT increased by £1,350, in line with CPI growth to £46,350.

The HRT for Scottish taxpayers was frozen at £43,000 in 2017-18 for earned income before rising to £43,430 in 2018-19 and frozen at £43,430 in 2019-20 (details available in Annex A). This will have reduced the year on year decrease in Higher Rate taxpayer numbers from 2017-18 onwards. The assumptions around how a Scottish taxpayer is identified, how their marginal rate is allocated, and how the dual HRT's have been modelled are detailed in Annex B.

In 2018-19 the Scottish Income Tax system³ further diverges from the system used for the rest of the UK. Two new bands called the Starter Rate and Intermediate Rate were introduced for Scottish taxpayers' earned income⁴ within the Basic Rate band for the rest of the UK⁵. While these bands have slightly different marginal rates (19% and 21%), for the purpose of this table taxpayers in these bands have been classed as Basic Rate. The Higher and Additional Rates for Scotland also increased by one percentage point to 41% and 46% respectively, but are grouped with non-Scottish Taxpayers in the same marginal rate bands. Information on how this has been modelled is detailed in Annex B.

Interpreting Table 2.1

Starting, Savers and Basic Rate taxpayers are non-Higher Rate, and might all be considered "Basic" Rate taxpayers in the sense that no tax is due at higher rates. The separate categories are published recognising that the highest marginal rate of tax paid will depend on the make-up of their taxable income, and this affected significant numbers of taxpayers particularly before April 2008 when the Starting Rate of tax on earnings was removed. Classification of taxpayers by marginal rate is described in Annex B, and is subject to discontinuities over time reflecting the changing structure of UK income tax. From 2018-19 Scottish taxpayers in the Starter Rate and Intermediate Rate are considered "Basic" Rate taxpayers (further details in Annex B).

The SPI is an annual, cross section sample survey comprising a different sample of taxpayers each tax year. Changes in taxpayer numbers between years will in part reflect sampling variation (Annex C). Changes to SPI survey methods may also lead to some discontinuities in the accumulated time-series estimates of taxpayer numbers in survey years up to 2016-17.

³ <u>https://www.gov.uk/government/publications/rates-and-allowances-income-tax/income-tax-rates-and-allowances-current-and-past#tax-rates-and-bands</u>

⁴ <u>https://www.gov.uk/scottish-rate-income-tax</u>

⁵ <u>https://www.gov.uk/income-tax-rates</u>

Table 2.2 – Number of individual income taxpayers by country and region, 1999-00 to 2019-20

https://www.gov.uk/government/statistics/number-of-individual-income-taxpayers-bymarginal-rate-gender-and-age-by-country

Table 2.2 provides a breakdown of the number of individuals with positive income tax liabilities (taxpayers) over time, country and across Government Office Regions. The table provides separate breakdowns of the income taxpaying population by taxpayers' marginal tax rate, gender and by age group.

Taxpayers

In 2016-17, estimates suggest that the largest number of taxpayers reside in the South East (14.9% of the total), followed by London (13.5%) and the North West (10.5%) Government Office Regions. Northern Ireland has the lowest number of taxpayers (2.4%) of all the countries and regions, followed by the North East (3.7%) and Wales (4.4%). Around 1% of taxpayers either reside abroad or their address is unknown in the SPI (these are not included in Table 2.2).

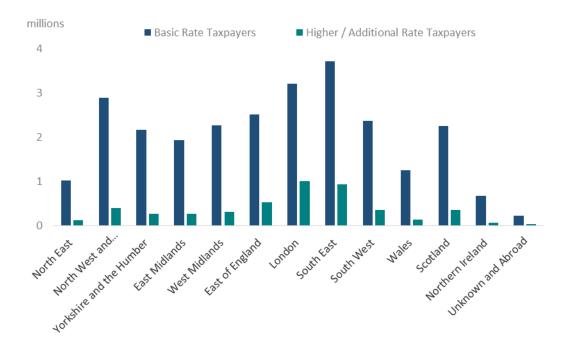


Figure 2: Income taxpayers by country and region, 2016-17

Projections show taxpayer numbers broadly increasing across the countries and regions between 2016-17 and 2019-20.

The projection methods take account of relevant economic trends at UK level; irrespective of the place of residence of each individual in the SPI data (see Annex B). Therefore, these regional projections of taxpayer numbers are indicative, and show close correspondence with the expected overall UK trend, but do not reflect any intra-UK population changes.

Higher and Additional Rate taxpayers

In 2016-17, there are three regions where the proportion of Higher and Additional Rate taxpayers exceed the UK average (15.3%): London (23.8%), the South East (20.0%), and East of England (17.5%). By contrast, under-representation of higher and Additional Rate taxpayers is most marked in Northern Ireland (9.0%), Wales (9.5%) and the North East (10.3%).

Projections of Additional Rate taxpayer numbers by country and regions for 2016-17 to 2019-20 are highly indicative, and are published for continuity with past publications while HMRC assesses their reliability (see Annex C).

The increases in the Higher Rate Threshold between 2016-17 and 2019-20 contributes to the reduction in the number of individuals liable at higher rates of tax in these years across all regions except Scotland. The HRT for non-savings non-dividend (NSND) income (also known as earned income) of Scottish taxpayers' was frozen in 2017-18, capped at 1% increase in 2018-19 and frozen again in 2019-20. These policies result in the projected increases in Higher Rate Scottish taxpayers in each of these years.

Interpreting Table 2.2

Taxpayer country and region for individuals in the SPI data are determined by individuals' residential postcode (not, for example, place of work if any). Projections of taxpayer numbers by country and region beyond the 2016-17 outturn are based on economic outturn/projection assumptions applying generally to the UK as a whole, and should be regarded as indicative in that they make no explicit allowance for geographical variations in economic or population trends. Annex B provides further details. From 2018-19 Scottish taxpayers in the Starter Rate and Intermediate Rate are considered "Basic" Rate taxpayers (further details in Annex B).

Table 2.4 – Shares of total income (before and after tax) and income tax for percentile groups⁶, 1999-00 to 2019-20

https://www.gov.uk/government/statistics/shares-of-total-income-before-and-aftertax-and-income-tax-for-percentile-groups

Table 2.4 shows how the distributions of income and tax liabilities have changed since 1999-00. Income distribution provides one measure of income inequality, while the shares of total tax liabilities reflect the progressivity of the income tax system. The table also shows the income breakpoints for each percentile groups and how this has changed since 1999-00.

Income distribution

Figure 3 shows taxpayers' total income, £533 billion in 1999-00, grew to £1,040 billion in 2016-17 and is expected to reach £1,170 billion by 2019-20.

Figure 3: Distribution of total income for bottom and top 50% of taxpayers, 1999-00 to 2019-20



(a) 2008-09 Survey of Personal Incomes is currently unavailable

(b) Projections

⁶ Percentile groups are ranged on total income before tax

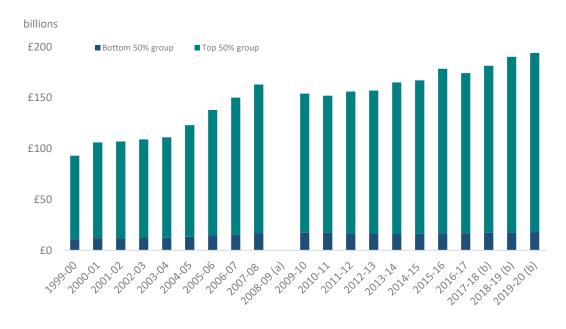
In 1999-00, income inequality between the bottom and top 50% of taxpayers (on total income before tax) was shown by a 52.4 percentage point difference in their share of total income: the bottom 50% had 23.8% of total income before tax whilst the top 50% had 76.2%. Inequality on this measure grew in the years leading up to the 2008 recession, showing a 55.8 percentage point difference in 2007-08 (77.9% compared to 22.1%). By 2016-17 inequality had fallen below its 1999-00 level to 49.6 and is expected to decline further to 49.4 percentage points in 2019-20.

The top 10% of taxpayers accounted for around a third (33.9%) of all income in 2016-17, the top 5% around a quarter (24.5%), and the top 1% around 12.3%. By contrast, the bottom 10% accounted for 3.6% of all income, the bottom 5% had 1.7%, and the bottom 1% had 0.3%.

Share of income tax liabilities

Figure 4 shows taxpayers' total income tax liabilities, £93 billion in 1999-00, grew to \pounds 174 billion by 2016-17 and it is expected to reach £194 billion by 2019-20.

Figure 4: Share of total income tax for bottom and top 50% of taxpayers, 1999-00 to 2019-20

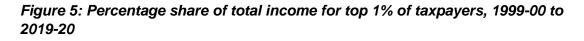


(a) 2008-09 Survey of Personal Incomes is currently unavailable(b) Projections

In 2016-17 the bottom 50% of taxpayers were liable for 9.6% of total tax, whilst the top 50% were liable for 90.4%, showing the progressive nature of the income tax system. Around three fifths (59.7%) of total income tax is paid by the top 10% of taxpayers, while around a quarter (28.1%) is paid by the top 1% in 2016-17. In comparison, the bottom 10% paid 0.4% of total income tax and the bottom 1% paid a negligible share.

In 2019-20 the bottom 50% of taxpayers are projected to be liable for 9.2% of total tax, whilst the top 50% are projected to pay 90.8%. The top 10% of taxpayers are projected to be liable for 60.9% of total tax, with the bottom 25% projected to pay 2.2%. The share projected to be paid by the top 1% of taxpayers' increases by 1.5% to 29.6% between 2016-17 and 2019-20.

Additional Rate impacts





(a) 2008-09 Survey of Personal Incomes is currently unavailable(b) Projections

The top 1% of taxpayers make up the majority of the Additional Rate taxpayer population since its introduction. Figure 5 shows how the introduction of the Additional Rate in April 2010, on taxable income over £150,000, has led to individuals bringing forward or 'forestalling' income in 2009-10 from 2010-11. Income forestalling was estimated by HM Revenue and Customs at around £16-18 billion or 2% of total taxpayer income. Details of these effects were set out in a HM Revenue and Customs report.⁷

In April 2013, the Additional Rate was reduced and this led to the postponement or 'deferral' of income from 2012-13 to 2013-14. This can be seen in the 'below normal' share of income of the top 1% in 2012-13 and the subsequent increase in 2013-14.

⁷ The Exchequer effect of the 50 per cent Additional Rate of tax: http://webarchive.nationalarchives.gov.uk/20140206144454/http://www.hmrc.gov.uk/budget20 12/excheq-income-tax-2042.htm

These behavioural responses are seen in the outturn figures and the share of income of the top 1% should have returned to a 'normal' level in 2014-15.

The impact of these behavioural responses means that the top 1% share of income is:

- artificially high in 2009-10,
- artificially low in 2010-11 and 2011-12 as the forestalling unwinds over these two years

(relating to the introduction of the 50p rate in April 2010).

- artificially low in 2012-13
- artificially high in 2013-14
 - (relating to the reduction in the Additional Rate to 45p in April 2013).
- returned to normal in 2014-15.

Outturn for both 2015-16 and 2016-17, and projections through to 2019-20, are unaffected by the 'income shifting' effects of the Additional Rate, but the outturn for 2015-16, new outturn for 2016-17 and projections for 2017-18 to 2019-20 explicitly take account of estimated income shifting due to the changes to the taxation of dividends.

The impact of these estimated behavioural responses means that the top 1% share of income is:

- artificially high in 2015-16,
- artificially low in 2016-17 through to 2019-20 as the forestalling unwinds over these years (relating to the introduction of the new dividend taxation policies in 2016-17.

(relating to the introduction of the new dividend taxation policies in 2016-17, the majority of the unwind effect is captured in 2016-17 to 2018-19).

The published years unaffected by income forestalling or unwinding are up to 2007-08; and 2014-15. Therefore only 2014-15 can be compared directly with the years preceding the Additional Rate.

The share of total income before tax for the top 1% of taxpayers declined from 13.4% in 2007-08 to 12.3% in 2014-15, reflecting the reduction in income inequality referred to earlier in the two data points unaffected by income shifting.

In contrast, the share of total tax paid by the top 1% of taxpayers increased from 24.4% in 2007-08 to 27.2% in 2014-15 indicating that the progressivity of the tax system increased over this period. Factors contributing to this increase in progressivity will include:

- introduction of the Additional Rate and the PA taper;
- lowering of the limits on tax relief on pension contributions;
- real terms PA increases since 2010-11 with the benefits going mainly to Basic Rate taxpayers.

Annex B (page 74) describes in more detail HMRC's estimates of possible behavioural responses to the Additional Rate of income tax.

Interpreting Table 2.4

The table relates to taxpayers only, as the SPI survey provides complete coverage only for this group. The table does not provide a complete picture of individual income inequality in the UK due to the exclusion of non-taxpayers, and because the SPI records only those incomes that are assessable for tax (e.g. a range of nontaxable social security benefits, tax credits and non-taxable savings from ISAs etc. are not included).

Taxpayers are ranked on the basis of total income assessable for tax (earnings, savings and dividends incomes) before any deductions (e.g. pension contributions) and tax allowances, and then divided into specific groups (e.g. lowest and highest 50% by total income). Income levels at specific percentile points of the taxpayer total income distribution have been added to Table 2.4 to help users.

Projections of shares of income and tax for percentile groups should be considered indicative, as the projection of incomes for all taxpayers generally takes account only of expected growth in incomes in aggregate. The projections do, however, allow for differential earnings growth across the pay distribution consistent with past trends and also continued forestalling effects associated with changes in the Additional Rate of tax (for more details see Annex B).

Table 2.5 – Income tax liabilities by income range, 2016-17 to 2019-20

https://www.gov.uk/government/statistics/income-tax-liabilities-by-income-range

Table 2.5 shows the numbers of individuals with positive income tax liabilities (taxpayers) and their tax liabilities by range of total income and marginal rate of tax. Analysis by income range provides a snapshot of the distribution of taxpayers and their tax liabilities.

Taxpayers by income

In 2016-17, an estimated 12.0 million income taxpayers (38.4%) had total income assessable for tax under £20,000 and 15.6 million taxpayers (49.8%) had income from £20,000 to under £50,000. Combined these groups accounted for 88.2% of all taxpayers in 2016-17.

The number of taxpayers with total incomes of \pounds 50,000 or more in 2016-17 was 3.7 million (11.8%), substantially smaller than the number of taxpayers with incomes under \pounds 50,000. Table 2.5 shows that there are fewer taxpayers with very high incomes. It is estimated that 16,000 taxpayers have incomes above \pounds 1 million, of which 5,000 have incomes above \pounds 2 million.

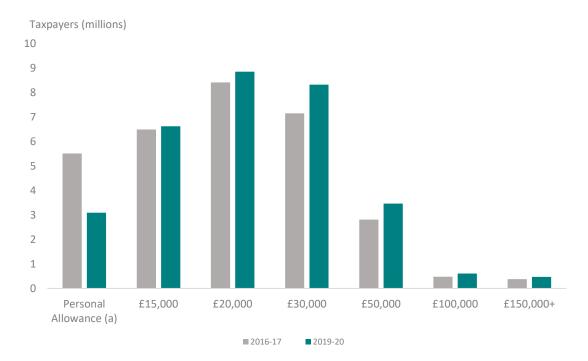


Figure 6: Taxpayers by income range (lower limits), 2016-17 and 2019-20

(a) £11,000 in 2016-17, £12,500 in 2019-20

Figure 6 shows the projected change in the distribution of taxpayers by income bands between 2016-17 and 2019-20 despite overall taxpayer numbers being at very similar levels. This is in part driven by falls in the band under £15,000 due to increases in the PA between the two years. Projections for 2019-20 show increasing or stable taxpayer numbers for all income bands over £15,000 compared with 2016-17, reflecting expected growth in the population, employment and incomes. However, this partially offsets the reduction in taxpayers with total income below £15,000. The main reason why low income taxpayers are reducing in numbers is above indexation increases to the PA.

Liabilities and average tax rates

Figures 7 shows that average rates of tax generally rise with total income. In 2016-17, for example the average rate was 6.7% of total income for those with incomes from £15,000 to under £20,000 and increased to 10.1% for incomes from £20,000 to under £30,000. They then rise to 21.0% for those with incomes between £50,000 and £100,000 (within the Higher Rate tax band), and to 34.0% for those with incomes from £150,000 to under £200,000 (within the Additional Rate band). The average rate of tax for those with incomes of £200,000 or more rose to a peak of 40.4% for individuals earning from £1 million to under £2 million before falling slightly to 39.0% for those with incomes of £2 million and more.

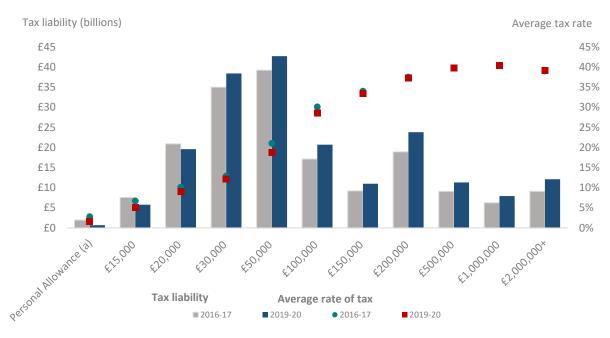
The distribution of total tax liabilities by taxpayers' marginal rate shows marked differences from the distribution of taxpayer numbers by marginal rate. In 2016-17, non-Higher Rate taxpayers (comprising Savers and the Basic Rate, and includes Scottish taxpayers in the Starter Rate and Intermediate Rate) represented the large majority of taxpayers by number (84.9%) but accounted for less than half of total liabilities (33.3%). Higher Rate taxpayers by contrast (14.1% by number) accounted for 37.3% of total tax liabilities and Additional Rate taxpayers (1.1% by number) accounted for 29.6% of total tax liabilities.⁸

Figure 7 shows that the total tax liabilities of those in the bands with income up to $\pounds 30,000$ is projected to decrease between 2016-17 and 2019-20. It shows that taxpayers with income over $\pounds 30,000$ are expected to be liable for a larger proportion of the total tax liabilities: whereas in 2016-17 they were liable for 82.6%, in 2019-20 they are liable for 86.6% of total tax.

The average tax liability is expected to increase by around £600, from £5,580 to \pounds 6,180 from 2016-17 to 2019-20, partly due to above indexation Personal Allowance increases removing some individuals with lower incomes from income tax. However, those with income between £15,000 and £150,000 are expected to see an average decrease in their tax liability of around £160 over this period.

⁸ 2016-17: Non-Higher Rate taxpayer liabilities = £57.9bn, Higher Rate liabilities = £64.9bn, Additional Rate taxpayer liabilities =£51.5bn. Total taxpayer liabilities=£174bn.

Figure 7: Total tax liabilities and average rate of income tax by income range (lower limits), 2016-17 and 2019-20



(a) £11,000 in 2016-17, £12,500 in 2019-20

The average rate of tax for all taxpayers as a whole is projected to fall slightly from its outturn of 16.7% in 2016-17 to 16.6% in 2019-20. This is driven by the fall in average rates of tax for those in income groups below £500,000; in part due to the large increase in the Higher Rate Threshold in 2019-20. Those with incomes between £50,000 and £100,000 have the largest decrease in average rates of tax of 2.3 percentage points from 2016-17 to 2019-20 as they benefit from both the above indexation increases to the Personal Allowance and Higher Rate Threshold.

All else being equal, these cash increases in the Personal Allowance conferred essentially fixed reductions in tax due for Basic Rate taxpayers over the period, and so their impact on average tax rates becomes progressively smaller as income rises. Average tax rates for those with income below £50,000 are projected to decrease in 2019-20 compared to 2016-17, with the average rates of tax for those with incomes between £15,000 and £20,000 decreasing by up to 1.7 percentage points.

Those with incomes between £50,000 and £200,000 are projected to see falls in their average tax rates in 2019-20 compared to 2016-17 in part due to the increases in the Personal Allowance but also due to above indexation increases of the Basic Rate Limit in 2016-17, 2017-18 and 2019-20.

For those with incomes above £200,000, average tax rates are projected to decrease slightly from 2016-17 to 2019-20. Such individuals have the Personal Allowance fully withdrawn and therefore do not benefit from its above indexation increase but have benefitted from the above indexation increases in the Basic Rate Limit.

Interpreting Table 2.5

Income groups are defined in the table in terms of the lower limit for total income before any deductions, allowances and tax credits. Taxable income is net of these deductions, allowances, and credits, and this explains why total income for some taxpayers at each marginal tax rate in Table 2.5 exceeds the corresponding limits for taxable incomes that apply to the tax bands (e.g. total income for some Basic Rate taxpayers significantly exceeds the Basic Rate Limit for taxable income). The lowest income limit shown for each tax year corresponds to the Personal Allowance for all individuals. From 2018-19 Scottish taxpayers in the Starter Rate and Intermediate Rate are considered "Basic" Rate taxpayers (further details in Annex B).

Column totals for tax liabilities of taxpayers by marginal rate show total liabilities of such taxpayers, including liabilities paid at other rates of tax (e.g. total liabilities of Higher Rate taxpayers includes liabilities due at the Basic and other rates of income tax). For each income group, the average rate of income tax is calculated as total tax liabilities expressed as a percentage of total income defined above. Deductions, allowances and tax credits will vary across individuals within each group contributing to differences in individual tax rates within groups over and above differences in individual's marginal rate of tax places an upper limit on their average rate of tax due on their total income; average tax rates therefore rise with income towards 45%.

Table 2.6 – Income tax liabilities by income source, tax band and marginal rate, 2016-17 to 2019-20

https://www.gov.uk/government/statistics/income-tax-liabilities-by-taxpayers-marginalrate

Table 2.6 shows total tax liabilities, broken down by income source (earnings, savings and dividends) and by income tax band showing the composition of the total tax liabilities. It also shows average tax rates by taxpayer marginal rate.

Income Source

The table presents tax liabilities classified into three broad sources of income assessable for income tax: earnings, savings interest and dividends, split by marginal rates. Earnings are defined as including; earnings from employment, profits from self-employment, pensions, taxable state benefits and income from property. In 2016-17, the large majority (93.7%) of total tax liabilities (£174 billion) was due on earnings, with a further 5.4% from dividends and 0.9% from savings interest. In the projections to 2019-20, the proportion of tax from earnings decreases to 91.8%, tax from dividends increases to 7.1% and tax from savings interest increases to 1.2% of the total tax liabilities (£194 billion), mainly due to policy changes in the taxation of dividends and savings. These results largely reflect the composition of taxpayer incomes by source⁹.

The figures for 2016-17, and projections from 2017-18 onwards, reflect the significant changes in dividend income taxation. For 2015-16 and earlier, table 2.6 historically showed dividend tax on a liabilities basis, reflecting the gross taxation before a 10% dividend tax credit was applied. The policy change, effective from 2016-17, abolished the tax credit, and changed the tax rates (the Ordinary Rate reduced from 10% to 7.5%, the Higher Rate was set at 32.5% and the Additional Rate increased from 37.5% to 38.1%). A Dividend tax allowance was also introduced, giving a tax-free allowance on total dividend income up to \pounds 5,000. From 2018-19, the tax-free allowance on total dividend income was reduced to \pounds 2,000. Hence, the latest Table 2.6 reflects these policy changes.

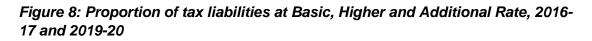
The figures for 2016-17, and projections from 2017-18 onwards, are also affected by a historical forestalling effect, related to the dividend policy changes described above. Some individuals forestalled the policy change by bringing forward dividend income to 2015-16 to benefit from the lower effective rate before the policy change, which leads to a corresponding reduction in dividend income in 2016-17, 2017-18 and 2018-19 as the unwinding mostly affects these years. As the impact of unwinding reduces in the longer term, the amount of tax paid on dividends can be seen to increase.

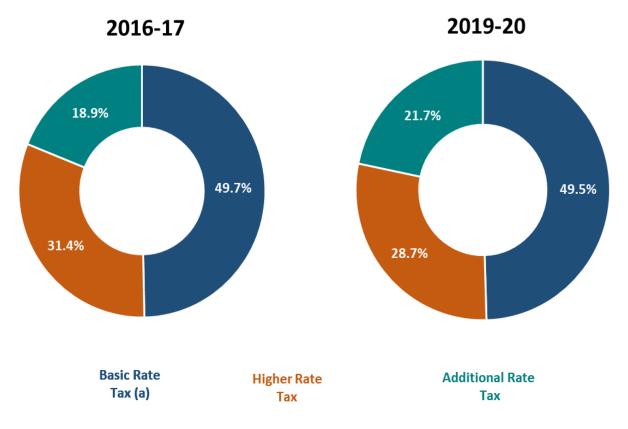
The introduction of the Personal Savings Allowance in 2016-17 has reduced the amount of tax liabilities on savings income. The allowance gives either £1,000 of savings income tax free for Basic Rate taxpayers or £500 for Higher Rate taxpayers.

⁹ HMRC also publishes detailed statistics on taxpayer incomes based on the SPI data: <u>https://www.gov.uk/government/statistics/income-and-deductions</u>

This has led to a fall in overall tax on savings income, arising mainly from basic and Higher Rate taxpayers.

Liabilities by tax band





(a) Includes Savers Rate taxpayer's liabilities, 0.3% in 2016-17 and 0.5% in 2019-20 and Scottish taxpayer's liabilities in the Starter Rate and Intermediate Rate who are considered "Basic" Rate taxpayers (further details in Annex B).

In 2016-17, 49.7% of total tax liabilities were due on taxable incomes falling within the Basic Rate tax band (applying to the first £32,000 of taxable income in 2016-17), compared with 31.4% in the Higher Rate tax band (taxable income above £32,000 and up to £150,000) and 18.9% in the Additional Rate tax band. In 2015-16, the Starting Rate for savings was reduced to 0% and the Starting Rate Limit was increased to £5,000, as such no tax liabilities are due on savings income in the Starting Rate band from 2015-16 onwards (the Starting Rate for earnings was abolished in 2008-09).

Composition of total tax liabilities in 2019-20 is expected to change compared with 2016-17. Tax at the Basic Rate (including tax at Savers Rate) is projected to decrease by 0.2 percentage points to 49.5% in 2019-20. Tax at the Higher Rate is projected to decrease by 2.7 percentage points to 28.7% while Additional Rate tax is projected to increase by 2.8 percentage points to 21.7%.

Increases in the Personal Allowance from 2016-17 to 2019-20 may explain the slight reduction in tax paid at the basic rate. The changes seen at the higher and additional rates suggest a combination of the following:

- The Basic Rate Limit has increased significantly between 2016-17 and 2019-20, hence some taxpayers may no longer have income taxed at the higher rate (it being taxed at the basic rate instead).
- The Additional Rate Limit has not changed, and so a greater number of taxpayers will have income that would have been subject to higher rate tax, now having that income taxed at the additional rate.
- The number of additional rate taxpayers has increased, meaning more tax is paid at that rate.
- There is much less unwind of forestalled dividend income in 2019-20 compared to 2016-17. (This is the dividend income that was forestalled in 2015-16 ahead of changes to dividend taxation.) This would increase the amount of additional rate tax paid in 2019-20 compared with 2016-17.

The average rates of tax

As a complement to Table 2.5, average rates of income tax for taxpayers by taxpayer marginal rate are also shown in Table 2.6. Average rates are estimated to be 9.6% for Basic Rate taxpayers, 21.8% for Higher Rate taxpayers, and 38.2% for Additional Rate taxpayers in 2016-17, compared with headline marginal tax rates of 20%, 40% and 45% on earnings. Average rates of tax in 2016-17 were 3.4% for Savers Rate taxpayers (with taxable savings above the Starting Rate limit and/or Personal Savings Allowance, or taxable dividends but no taxable earnings). Headline marginal rates were 0% for Starting Rate savings, but remained unchanged at 20% for Basic Rate savings and reduced to 7.5% for dividends. Additionally, the Personal Savings Allowance and Personal Dividends Allowance were introduced, reducing tax liabilities.

For Basic Rate taxpayers, the average rate of income tax is projected to remain broadly unchanged at 9.6% in 2017-18, 2018-19, and 2019-20. The average rate for Higher Rate taxpayers is expected to stay broadly the same, and is projected to fall slightly to 21.7% by 2019-20. The average rate for Additional Rate taxpayers is projected to decrease, reaching 38.0% in 2019-20.

Interpreting Table 2.6

The purpose of Table 2.6 is to provide breakdowns of income tax liabilities by income source, by tax band and taxpayer marginal rate. Projections of total liabilities shown here and in other tables are for reference, but please see background notes on relevance and use of ITLS statistics and projections.

Estimates of total liabilities for given tax bands include tax paid on incomes in that band by all taxpayers, e.g. totals for Basic Rate tax include the Basic Rate tax liabilities of Basic, Higher, and Additional Rate taxpayers.

2.1 Number of individual income taxpayers by marginal rate, gender and age, 1990-91 to 2019-20

										Numbers	: thousands
	All	Low er (1) or starting (2)	"Savers" (3)	Basic (4)	Higher (5)	Additional (6)	Males	Females	Under	65's and St	ate Pension
Year	taxpayers	rate	rate	rate	rate	rate	Maloo	1 childioo	65's	over	Age (7)
1990-91	26,100			24,400	1,700		15,400	10,700	23,000	3,120	3,620
1991-92	25,700			24,100	1,620		15,100	10,600	22,800	2,930	3,590
1992-93	25,400	4,240		19,400	1,720		14,900	10,500	22,400	2,960	3,480
1993-94	25,000	5,390		17,900	1,740		14,600	10,300	22,000	3,040	3,570
1994-95	25,300	5,180		18,200	2,000		14,700	10,600	22,100	3,250	3,860
1995-96	25,800	5,770		18,000	2,130		15,000	10,800	22,500	3,320	3,970
1996-97	25,700	7,350		16,200	2,080		14,900	10,800	22,400	3,280	3,860
1997-98	26,200	7,690		16,400	2,120		15,200	11,000	22,800	3,390	4,000
1998-99	26,900	8,090		16,500	2,350		15,600	11,300	23,300	3,670	4,340
1999-00	27,200	2,280	954	21,400	2,510		15,500	11,700	23,600	3,580	4,220
2000-01	29,300	2,820	1,010	22,600	2,880		16,900	12,400	25,300	3,950	4,660
2001-02	28,600	3,030	857	21,700	3,000		16,400	12,200	24,500	4,090	4,780
2002-03	28,900	3,100	730	22,000	3,040		16,500	12,400	24,700	4,190	4,920
2003-04	28,500	3,220	734	21,600	2,960		16,100	12,400	24,500	3,950	4,700
2004-05	30,300	3,570	833	22,500	3,330		17,000	13,300	26,000	4,250	5,110
2005-06	31,100	3,490	866	23,100	3,590		17,600	13,500	26,900	4,160	5,100
2006-07	31,800	3,450	927	23,700	3,770		17,900	13,900	27,300	4,520	5,590
2007-08	32,500	3,440	1,070	24,100	3,870		18,200	14,200	27,700	4,790	5,930
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	*
2009-10	30,600	163	602	26,600	3,190		17,100	13,500	26,000	4,530	5,690
2010-11	31,300	276	623	27,100	3,020	236	17,400	13,800	26,400	4,910	6,010
2011-12	30,800	318	621	26,000	3,570	262	17,300	13,400	25,700	5,090	5,980
2012-13	30,600	270	630	25,700	3,720	273	17,300	13,300	25,200	5,380	6,140
2013-14	30,400	289	686	24,900	4,200	311	17,400	13,000	24,400	5,970	6,560
2014-15	30,700	285	686	25,100	4,300	328	17,600	13,100	24,400	6,330	6,810
2015-16	31,000		806	25,300	4,510	362	17,800	13,200	24,500	6,490	6,870
2016-17	31,200		588	25,900	4,410	356	17,900	13,300	24,700	6,490	6,680
2017-18 (8)(9)	31,300		648	26,100	4,210	380	18,100	13,200	24,700	6,640	6,730
2018-19 (8)(9)(10)	31,700		844	26,200	4,260	410	18,400	13,300	25,100	6,650	6,570
2019-20 (8)(9)(10)	31,400		888	26,200	3,850	438	18,300	13,100	24,900	6,500	6,420

Source: Survey of Personal Incomes.

Key

. not applicable / zero

Footnotes for tables 2.1

(a) Figures for 2008-09 tax year are not currently available.

(1) Taxpayers with total taxable income below the low er rate limit and some taxpayers w hose savings and dividend income took them above the low er rate limit. From 1993-94 until 1998-99 a number of taxpayers with taxable income in excess of the low er rate limit only paid tax at the low er rate. This was because it was only their dividend income and (from 1996-97) their savings income w hich took their taxable income above the low er rate limit, and such income w as chargeable to tax at the low er rate and not the basic rate.

(2) In 1999-2000 the starting rate replaced the low er rate. Betw een 1999-2000 and 2007-08 taxpayers with total taxable income below the starting rate limit. From 2008-09 taxpayers with no taxable earnings and total taxable income from savings below the starting rate limit. From 2015-16 the starting rate of tax for savings income has been reduced from 10% to 0%, and the starting rate limit has been increased to £5,000.

(3) Before 2016-17 taxpayers with no taxable earnings and total taxable income from savings betw een the starting/low er rate limit and the basic rate limit and/or dividends at the 10p ordinary rate. From 2016-17 taxpayers with no taxable earnings and total taxable income from savings charged at 20% and/or dividends at 7.5%. Before 1999-2000 these taxpayers would have been classified as low er rate taxpayers.

(4) Betw een 1999-2000 and 2007-08 taxpayers w hose total taxable income is betw een the starting rate limit and basic rate limit and includes income from earnings or income taxed as earnings. From 2008-09 taxpayers w hose income includes earnings or other income taxed as earnings and with total taxable income below the basic rate limit.

(5) Before 2010-11 taxpayers with total taxable income above the basic rate limit. From 2010-11 taxpayers with total taxable income between the basic rate limit and the higher rate limit. (6) Taxpayers with total taxable income above the higher rate limit.

(7) Taxpayers aged 65 years or older for men and 60 years or older for women in 2009-10. The female State Pension Age was increased gradually from April 2010 to be equalised with the male State Pension Age by November 2018. The female State Pension Age for the purposes of this table is 60.5 years in 2010-11, 61 years in 2011-12, 61.5 years in 2012-13, 62 years in 2013-14, 62.5 years in 2014-15, 63 years in 2015-16, 63.75 years in 2016-17 and 64.5 years in 2017-18. The male and female State Pension Age in 2018-19 is 65.25 and 65.75 in 2019-20.

(8) Projected estimates based upon the 2016-17 Survey of Personal Incomes using economic assumptions consistent with the OBR's March 2019 economic and fiscal outlook.

(9) From 2017-18, individuals who are classified as resident in Scotland and have total taxable income above the Scottish basic rate limit (BRL) but below the UK government's BRL have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within this band is taxed at the higher rate, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within this band (but no total taxable income above the UK BRL) is classified as a higher rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

(10) From 2018-19, individuals who are classified as resident in Scotland and have total taxable income in the Scottish starter rate or Scottish intermediate rate have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within these band is taxed at a 19% or 21% rate respectively, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within these bands (but no total taxable income above the UK BRL) is classified as a basic rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

Table updated June 2019

	All	Starting (2)	"Savers" (3)	Basic (4)	Higher (5)	Additional (6)	Males	Females	Under	65's and	State Pensior
Year	taxpayers	rate	rate	rate	rate	rate	maioo		65's	over	Age (7)
England											
1999-00	22,900	1,910	800	18,000	2,230		13,100	9,860	19,900	3,040	3,570
2000-01	24,700	2,350	853	18,900	2,560		14,200	10,500	21,400	3,310	3,900
2001-02	24,200	2,530	733	18,300	2,660		13,900	10,300	20,700	3,450	4,030
2002-03	24,300	2,570	615	18,400	2,680		14,000	10,300	20,800	3,510	4,090
2003-04	23,800	2,660	618	17,900	2,610		13,500	10,300	20,500	3,300	3,920
2004-05	25,400	2,960	716	18,800	2,920		14,300	11,100	21,800	3,550	4,260
2005-06	26,000	2,890	737	19,200	3,130		14,700	11,300	22,500	3,460	4,230
2006-07	26,600	2,850	795	19,700	3,280		15,000	11,600	22,900	3,770	4,650
2007-08	27,100	2,850	904	20,000	3,360		15,200	11,900	23,100	3,970	4,910
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	
2009-10	25,500	142	525	22,100	2,790		14,300	11,200	21,700	3,770	4,740
2010-11	26,100	235	540	22,400	2,620	214	14,600	11,500	22,000	4,050	4,950
2011-12	25,700	265	538	21,500	3,090	237	14,500	11,200	21,500	4,210	4,950
2012-13	25,500	233	552	21,300	3,220	246	14,500	11,100	21,100	4,450	5,080
2013-14	25,400	240	608	20,700	3,630	280	14,600	10,900	20,500	4,950	5,440
2014-15	25,700	241	604	20,800	3,730	296	14,700	10,900	20,400	5,250	5,650
2015-16	26,100		714	21,100	3,940	333	15,000	11,100	20,700	5,390	5,700
2016-17 (9)	26,300		529	21,500	3,860	330	15,100	11,200	20,900	5,390	5,540
2017-18 (8)(10)	26,400		582	21,800	3,660	350	15,300	11,100	20,900	5,510	5,590
2018-19 (8)(10)(11)	26,700		747	21,900	3,690	378	15,500	11,200	21,200	5,520	5,460
2019-20 (8)(10)(11)	26,400		786	22,000	3,270	403	15,400	11,000	21,000	5,400	5,340
North East											
1999-00	1,090	106	33	890	56		629	457	935	150	177
2000-01	1,160	116	41	939	67		664	499	1,010	157	185
2001-02	1,180	147	36	927	66		682	494	1,010	169	198
2002-03	1,190	145	30	946	71		683	509	1,020	171	198
2003-04	1,170	139	28	933	75		686	489	1,020	159	186
2004-05	1,260	155	31	988	86		701	559	1,100	165	194
2005-06	1,250	149	30	978	89		708	538	1,090	151	181
2006-07	1,330	155	31	1,040	97		748	578	1,150	177	219
2007-08	1,320	151	36	1,030	101		732	587	1,130	186	233
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	
2009-10	1,190	4	17	1,090	80		682	505	1,020	164	202
2010-11	1,190	11	19	1,080	78	3	645	543	1,000	184	229
2011-12	1,170	11	16	1,050	93	3	673	501	985	188	221
2012-13	1,160	9	17	1,030	100	3	664	495	955	204	232
2013-14	1,150	11	18	1,000	118	3	679	474	921	232	256
2014-15	1,120	10	20	974	116	4	648	476	883	240	257
2015-16	1,150		23	1,000	122	4	678	475	896	257	271
2016-17 (9)	1,140		15	1,010	113	4	670	473	888	256	262
2017-18 (8)(10)	1,150		17	1,020	107	4	679	468	885	262	265
2018-19 (8)(10)(11)	1,160		22	1,020	108	5	688	470	897	261	257
2019-20 (8)(10)(11)	1,140		23	1,020	94	5	684	460	893	251	248

continued Government Office Region (GOR) Numbers: thousands Additional (6) Males ΔII Starting (2) "Savers" (3) Basic (4) Higher (5) Females Under 65's and State Pension 65's Year taxpayers rate rate rate rate rate over Age (7) North West 3,080 335 2,420 216 1,740 1,340 2,700 380 458 1999-00 111 3,220 327 106 232 1,380 2,800 417 497 2000-01 2.550 1.840 2.750 2001-02 3.190 368 93 2.480 250 1,830 1,360 431 507 2002-03 3,210 371 78 2,510 253 1,820 1,390 2,740 468 549 2,720 2003-04 3,160 393 84 2,430 253 1,390 438 519 1,770 2004-05 3.310 412 89 2.530 282 1,830 1,480 2.860 456 553 2005-06 3,360 405 2,570 298 1,880 1,480 2,920 438 88 539 96 315 2,970 2006-07 3.450 405 2.640 1.920 1.530 484 601 2007-08 3,490 398 111 2,660 317 1,920 1,570 2,980 507 633 2008-09 (a) * 2009-10 3,300 16 64 2,960 258 1,810 1,490 2,820 476 603 12 2.840 2010-11 3,340 30 63 2,990 248 1,840 1,500 504 622 2011-12 3,260 33 66 2,850 301 13 1,820 1,440 2,720 538 635 2012-13 3,260 28 65 2,840 315 14 1,840 2,680 579 661 1,420 31 73 2 740 16 2 570 645 2013-14 3 220 353 1.820 1.390 710 2014-15 3,230 32 73 2,740 370 17 1,850 1,380 2,560 671 724 3,260 86 2,770 386 19 1,870 1,390 2,570 687 727 2015-16 2,590 2016-17 (9) 3,280 62 2,820 377 18 1,880 1,400 687 709 2017-18 (8)(10) 3,290 69 2,840 356 20 1,900 1,380 2,590 696 707 2018-19 (8)(10)(11) 3,320 89 2,850 359 21 1,930 1,390 2,630 696 687 3.290 2,860 23 2.610 680 2019-20 (8)(10)(11) 94 316 1,920 1,370 671 Yorkshire and the Humber 2.210 165 80 1.820 952 1.950 259 307 1999-00 140 1.260 2000-01 2,390 254 90 1,890 157 1,380 1,010 2,090 296 351 269 70 176 2,040 364 2001-02 2,340 1,830 1,360 983 307 2002-03 2.360 285 1,840 1,380 2.050 314 59 179 986 370 2003-04 2,340 280 58 1,830 174 1,350 996 2,050 299 354 1,860 2004-05 2.430 306 65 200 1,380 1,050 2,100 325 389 2005-06 2,500 1.920 2,190 308 297 69 216 1.430 1.070 377 2006-07 2.590 306 75 1,980 231 1,470 1,120 2.250 341 418 296 79 2007-08 2,580 1,980 228 1,470 1,120 2,220 364 446 2008-09 (a) 2009-10 2,410 13 45 2,170 181 1,350 1,050 2,060 350 436 2010-11 2.470 20 45 2,220 180 8 1,400 1,070 2,100 373 460 2011-12 2,390 25 2.110 2.010 44 207 9 1.360 1.030 380 454 2012-13 2.380 24 43 2,090 217 10 1,360 1,020 1,970 410 470 2013-14 2,360 23 52 2,040 241 11 1,370 1,900 462 506 989 23 2,050 1,900 2014-15 2,390 49 257 12 1,390 1,000 495 532 2015-16 2.410 58 2.080 265 14 1,420 999 1,900 513 543 2016-17 (9) 2,430 42 2,120 257 12 1,420 1,000 1,930 497 511 46 2017-18 (8)(10) 2.440 2.140 240 13 1.440 1.930 510 517 996 2018-19 (8)(10)(11) 2,470 61 2,150 243 14 1,460 1,000 1,960 509 504 2019-20 (8)(10)(11) 2,440 63 212 15 1,460 1,940 493 488 2,140 979

continued Government Office Region (GOR) Numbers: thousands Additional (6) Males Under ΔII Starting (2) "Savers" (3) Basic (4) Higher (5) Females 65's and State Pension 65's Year taxpayers rate rate rate rate rate over Age (7) East Midlands 1,940 150 1,570 149 812 1,710 234 276 1999-00 66 1,130 2000-01 217 71 1,620 169 1,810 268 318 2.080 1.200 876 1.770 293 2001-02 2.070 242 61 1,590 174 1,210 855 336 2002-03 2,090 223 51 1,640 182 1,230 867 1,810 285 332 53 1,820 328 2003-04 2,090 240 1,620 179 1,190 901 274 297 2004-05 2.190 263 62 1.660 204 1,260 932 1.890 357 2005-06 2,240 265 1,690 218 1,300 941 1,940 295 63 362 260 68 1,980 2006-07 2.300 1.750 224 1.320 986 318 395 2007-08 2,340 253 78 1,780 231 1,350 992 2,000 340 421 2008-09 (a) * 2009-10 2,200 12 42 1,960 183 1,250 945 1,880 317 404 1.880 2010-11 2.220 19 42 1,970 177 8 1,260 962 335 414 2011-12 2,170 22 45 1,880 208 10 1,240 924 1,800 366 429 2012-13 2,170 18 42 1,880 220 10 1,250 915 1,770 392 444 1,250 20 1.800 255 1.710 427 2013-14 2 140 50 11 886 469 2014-15 2,160 21 47 1,830 250 13 1,280 880 1,690 469 502 2,210 58 1,860 270 15 1,310 896 1,730 472 496 2015-16 2016-17 (9) 2.210 40 1,900 260 13 1,300 912 1,730 475 485 2017-18 (8)(10) 2,210 44 1,910 244 14 1,310 906 1,730 484 489 2018-19 (8)(10)(11) 2,240 58 1,920 247 15 1,330 912 1,760 486 480 2,220 60 1,930 17 1,740 2019-20 (8)(10)(11) 217 1,320 896 476 471 West Midlands 2.080 2.380 200 75 1.930 174 1.370 1.010 301 354 1999-00 2000-01 2,530 263 75 1,990 198 1,490 1,040 2,210 321 386 275 205 329 391 2001-02 2,500 66 1,960 1,460 1,050 2,180 2002-03 2,500 277 1,960 203 1,050 2,150 348 63 1.450 408 2003-04 2,490 305 58 1,930 204 1,430 1,070 2,170 327 392 2004-05 2,640 323 68 2,020 226 1,510 1,130 2,290 351 421 2,310 2005-06 2.640 312 71 2.020 236 338 415 1.510 1.140 2006-07 2.710 308 75 2.080 254 1,570 1,150 2.340 378 463 299 87 474 2007-08 2,750 2,110 256 1,570 1,180 2,360 390 2008-09 (a) 2009-10 2,530 14 46 2,270 197 1,440 1,090 2,150 377 478 2010-11 2.610 27 50 2,330 192 10 1,490 1,110 2,190 418 505 2011-12 27 2.140 2.560 48 2.240 235 11 1.460 1.100 418 493 2012-13 2.530 24 49 2,210 243 11 1,470 1,070 2,100 435 499 2013-14 2,500 29 54 2,130 279 13 1,450 1,050 2,000 500 549 27 2,170 2,010 2014-15 2,550 54 288 14 1,490 1,060 540 582 2015-16 2.570 65 2.190 305 16 1,500 1,070 2.010 560 594 2016-17 (9) 2,580 45 2,220 302 15 1,500 1,090 2,030 555 569 49 1,520 2,020 2017-18 (8)(10) 2.600 2.250 282 16 1.080 570 577 2018-19 (8)(10)(11) 2,630 65 2,260 284 18 1,530 1,090 2.050 572 566 2019-20 (8)(10)(11) 2,600 69 2,260 250 19 1,530 1,070 2,040 559 553

continued Government Office Region (GOR) Numbers: thousands Additional (6) Males ΔII Starting (2) "Savers" (3) Basic (4) Higher (5) Females Under 65's and State Pension 65's Year taxpayers rate rate rate rate rate over Age (7) East of England 2,530 173 100 1,970 292 1,020 2,190 339 393 1999-00 1,510 242 93 2,080 338 1,120 2,380 375 437 2000-01 2.750 1.630 2.310 2001-02 2.720 257 80 2.030 354 1,610 1,120 409 468 2002-03 2,780 269 70 2,080 360 1,640 1,140 2,370 408 482 2,020 2003-04 2,740 295 71 351 1,570 1,170 2,350 386 459 2004-05 2.840 312 84 2.070 382 1,630 1,210 2.420 428 513 2005-06 2,980 316 2,160 408 1,260 2,550 93 1,720 429 524 96 423 2,550 2006-07 3.010 309 2.180 1.730 1.280 462 566 2007-08 3,070 314 109 2,220 435 1,770 1,310 2,590 486 608 2008-09 (a) * 2009-10 2,940 17 66 2,490 361 1,670 1,260 2,470 464 583 2,980 27 2,480 2010-11 28 66 2.520 338 1,700 1,280 500 614 2011-12 2,970 32 62 2,450 394 31 1,710 1,260 2,450 521 608 2012-13 2,950 30 69 2,410 409 31 2,410 546 621 1,690 1,260 2 970 32 73 2 350 35 2 350 617 2013-14 474 1.730 1.240 676 2014-15 2,980 28 74 2,370 472 37 1,730 1,250 2,330 650 698 3,040 86 2,410 504 41 1,770 1,270 2,380 659 697 2015-16 3,030 2,440 41 2.380 2016-17 (9) 65 489 1,760 1,270 650 668 2017-18 (8)(10) 3,050 72 2,460 464 44 1,780 1,260 2,380 664 671 2018-19 (8)(10)(11) 3,080 91 2,480 469 47 1.810 1.270 2,420 667 659 3,060 95 2,500 50 2.410 654 2019-20 (8)(10)(11) 419 1,810 1,250 646 London 2.910 3.290 273 91 2.460 470 1.510 384 452 1999-00 1.780 2000-01 3,610 304 111 2,630 566 1,980 1,630 3,190 426 501 303 2001-02 3,390 89 2,420 574 1,860 1,530 2,980 410 486 71 2.470 1,880 1,540 3.010 2002-03 3,420 311 572 409 481 2003-04 3,330 316 75 2,400 542 1,830 1,500 2,960 376 454 2004-05 3,740 396 88 2,620 631 2,030 1,710 3,340 401 493 3,410 2005-06 3,790 368 2.670 385 483 85 673 2.090 1.710 2006-07 3.890 363 94 2.720 711 2,150 1,740 3.470 417 523 391 2007-08 4,030 109 2,790 743 2,230 1,800 3,590 436 549 2008-09 (a) 2009-10 3,840 14 74 3,090 654 2,080 1,760 3,430 406 509 2010-11 3,930 27 79 3,160 583 81 2,150 1,780 3.500 427 520 36 2.170 3.500 2011-12 3.950 79 3.060 685 88 1.790 446 526 2012-13 3,930 26 82 3.020 710 91 2,160 1,780 3,460 470 538 2013-14 3,950 25 93 2,940 792 104 2,190 1,760 3,440 517 575 30 2,960 3,500 2014-15 4,010 94 823 110 2,230 1,790 512 556 2015-16 4.130 110 3.020 880 123 2.300 1,830 3.600 536 573 2016-17 (9) 4,210 91 3,120 879 126 2,330 1,880 3,660 548 570 102 562 2017-18 (8)(10) 4.230 3.160 838 133 2.350 1.880 3.670 572 2018-19 (8)(10)(11) 4,290 125 3,180 842 143 2,390 1,900 3,720 564 556 2019-20 (8)(10)(11) 4,260 132 3,220 758 150 2,380 1,880 3,700 555 546

continued Government Office Region (GOR) Numbers: thousands Additional (6) Males ΔII Starting (2) "Savers" (3) Basic (4) Higher (5) Females Under 65's and State Pension 65's Year taxpayers rate rate rate rate rate over Age (7) South East 3,990 287 134 3,030 543 2,280 1,720 3,420 572 657 1999-00 4,340 355 3,220 618 3,700 635 742 2000-01 151 2.530 1.810 3.580 2001-02 4.240 382 140 3.090 634 2.430 1,810 664 775 2002-03 4,140 389 113 3,010 633 2,390 1,760 3,480 666 769 2003-04 3,990 403 113 2,870 609 2,270 3,360 632 741 1,720 2004-05 4.330 464 133 3.070 669 2.430 1,910 3.650 684 815 2005-06 4,500 458 3,170 2,540 3,820 680 143 722 1,950 825 3,850 2006-07 4.580 440 154 3.240 745 2.570 2.010 727 894 2007-08 4,660 434 177 3,290 758 2,590 2,070 3,900 763 938 2008-09 (a) * 2009-10 4,430 29 105 3,660 641 2,480 1,950 3,700 731 915 43 53 2.540 2010-11 4.570 108 3.760 598 2,030 3.770 792 963 2011-12 4,490 45 111 3,580 696 59 2,540 1,950 3,670 820 958 2012-13 42 115 3,560 724 62 3,640 975 4,500 2,550 1,950 857 42 71 2 540 3 530 2013-14 4 480 124 3 4 5 0 795 1.940 949 1.030 2014-15 4,520 39 122 3,470 819 73 2,560 1,960 3,510 1,010 1,080 4,610 143 3,530 860 82 2,620 1,990 3,580 1,040 1,100 2015-16 3,600 81 3,600 2016-17 (9) 4,640 111 848 2,650 1,990 1,040 1,070 2017-18 (8)(10) 4,680 122 3,660 807 87 2,690 1,990 3,610 1,070 1,080 2018-19 (8)(10)(11) 4,730 154 3,670 814 94 2,720 2,010 3,660 1,070 1,060 163 100 3.650 1.050 1.040 2019-20 (8)(10)(11) 4,700 3,710 729 2,720 1,980 South West 2.410 223 1.880 192 1.030 1.990 417 1999-00 111 1.370 491 2000-01 2,590 270 115 1,990 216 1,500 1,100 2,180 415 484 2001-02 2,550 288 98 1,940 221 1,450 1,090 2,110 442 506 2002-03 2.570 1,980 1,500 2.140 295 79 223 1,080 438 505 2003-04 2,500 291 77 1,910 222 1,440 1,060 2,090 410 488 2004-05 2.620 326 96 1,950 245 1,480 1,140 2,180 441 520 2,280 2005-06 2,710 2.020 271 1.540 438 326 95 1.170 529 2006-07 2.760 308 105 2.060 285 1,560 1,200 2.290 467 572 2007-08 2,860 316 118 2,130 294 1,600 1,260 2,360 498 611 2008-09 (a) 2009-10 2,690 23 67 2,360 235 1,520 1,170 2,200 484 608 2010-11 2,760 30 69 2,420 230 12 1,550 1,220 2.250 516 627 34 2.320 2.180 2011-12 2.700 66 271 13 1.510 1.190 528 625 2012-13 2,670 31 69 2,270 282 13 1,510 1,160 2,110 561 641 2013-14 2,670 28 73 2,230 327 16 1,530 1,140 2,070 604 660 32 2,050 2014-15 2,720 70 2,270 330 17 1,570 1,140 667 715 2015-16 2.720 85 2.270 351 20 1,580 1,140 2.060 667 700 2016-17 (9) 2,720 57 2,310 336 19 1,580 1,140 2,040 678 697 2,340 2,040 2017-18 (8)(10) 2.730 61 20 1.600 1.130 695 704 316 2018-19 (8)(10)(11) 2,770 81 2,340 320 22 1,620 1,140 2.070 696 688 2019-20 (8)(10)(11) 2,740 86 2,350 280 24 1,620 1,120 2,060 682 674

Government Office R											ers: thousands
Year	All taxpayers	Starting (2) rate	"Savers" (3) rate	Basic (4) rate	Higher (5) rate	Additional (6) rate	Males	Females	Under 65's	65's and over	State Pension Age (7
Wales											
1999-00	1,200	104	58	971	69		711	492	1,030	170	20
2000-01	1,330	143	51	1,060	75		765	566	1,110	217	255
2001-02	1,330	145	40	1,060	79		768	557	1,130	198	232
2002-03	1,360	162	36	1,070	83		780	575	1,140	218	262
2003-04	1,340	169	37	1,050	85		762	578	1,140	200	239
2004-05	1,410	186	37	1,090	98		802	606	1,180	223	268
2005-06	1,450	178	37	1,130	107		825	627	1,230	222	269
2006-07	1,480	178	40	1,150	112		837	643	1,240	240	295
2007-08	1,510	176	51	1,170	115		852	655	1,250	257	316
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	,
2009-10	1,400	7	23	1,280	90		776	620	1,170	230	286
2010-11	1,440	13	23	1,320	87	3	789	655	1,200	249	305
2011-12	1,410	18	24	1,260	105	3	787	626	1,150	264	307
2012-13	1,390	10	23	1,250	106	3	776	616	1,100	288	326
2013-14	1,350	12	23	1,180	126	4	777	571	1,050	295	319
2014-15	1,340	12	25	1,180	127	4	778	567	1,040	306	330
2015-16	1,350		28	1,180	135	5	782	568	1,030	323	339
2016-17 (9)	1,380		17	1,230	126	5	800	576	1,060	320	330
2017-18 (8)(10)	1,380	•	18	1,240	118	5	809	574	1,050	329	335
2018-19 (8)(10)(11)	1,300		25	1,240	118	5	821	576	1,070	330	324
2019-20 (8)(10)(11)	1,380	•	23	1,250	102	6	817	565	1,060	323	318
Scotland											
1999-00	2,270	190	71	1,850	167		1,290	984	1,990	288	344
2000-01	2,490	246	84	1,970	193		1,420	1,070	2,160	326	389
2001-02	2,450	266	67	1,910	213		1,350	1,110	2,120	330	393
2002-03	2,490	274	59	1,940	216		1,360	1,130	2,150	340	411
2003-04	2,470	281	59	1,930	207		1,350	1,130	2,150	326	394
2004-05	2,570	308	61	1,970	237		1,400	1,180	2,230	344	425
2005-06	2,650	294	63	2,030	261		1,440	1,200	2,310	341	423
2006-07	2,700	289	66	2,070	276		1,470	1,230	2,330	372	465
2007-08	2,780	283	73	2,140	288		1,500	1,280	2,380	398	499
2008-09 (a)	2,700	*	*	*	*	*	*	*	*	*	-100
2009-10	2,630	9	39	2,350	235		1,430	1,200	2,260	370	466
2009-10	2,030	19	41	2,330	233	11	1,460	1,260	2,200	425	532
2010-11		23	41		232	13			2,300	425	508
	2,640			2,290			1,450	1,190			
2012-13	2,590	17	38	2,230	296	14	1,420	1,170	2,150	442	508
2013-14	2,590	22	39	2,170	335	17	1,430	1,160	2,090	490	547
2014-15	2,600	21	41	2,180	339	18	1,440	1,160	2,080	524	569
2015-16	2,600	•	50	2,190	342	18	1,440	1,160	2,060	542	582
2016-17 (9)	2,600	•	36	2,210	331	17	1,450	1,150	2,060	541	560
2017-18 (8)(10)	2,600		40	2,190	351	18	1,460	1,140	2,050	550	559
2018-19 (8)(10)(11)	2,630		61	2,180	371	20	1,480	1,150	2,080	549	539
2019-20 (8)(10)(11)	2,600		64	2,120	396	22	1,470	1,130	2,070	532	523

continued Government Office Region (GOR) Numbers: thousands Starting (2) "Savers" (3) Basic (4) Higher (5) Additional (6) Males Females Under 65's and State Pension All 65's Year taxpayers rate rate rate rate over Age (7) rate Northern Ireland 1999-00 2000-01 2001-02 2002-03 qq 2003-04 2004-05 2005-06 2006-07 2007-08 2008-09 (a) 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16 2016-17 (9) 2017-18 (8)(10) 1.32 2018-19 (8)(10)(11) 2019-20 (8)(10)(11)

Source: Survey of Personal Incomes

Key

. not applicable / zero

Footnotes for tables 2.2

(a) Figures for 2008-09 tax year are not currently available.

(1) Taxpayers with total taxable income below the lower rate limit and some taxpayers whose savings and dividend income took them above the lower rate limit. From 1993-94 until 1998-99 a number of taxpayers with taxable income in excess of the lower rate limit only paid tax at the lower rate. This was because it was only their dividend income and (from 1996-97) their savings income which took their taxable income above the lower rate limit, and such income was chargeable to tax at the lower rate and not the basic rate.

(2) In 1999-2000 the starting rate replaced the lower rate. Between 1999-2000 and 2007-08 taxpayers with total taxable income below the starting rate limit. From 2008-09 taxpayers with no taxable earnings and total taxable income from savings below the starting rate limit. From 2015-16 the starting rate of tax for savings income has been reduced from 10% to 0%, and the starting rate limit has been increased to £5,000.

(3) Before 2016-17 taxpayers with no taxable earnings and total taxable income from savings between the starting/lower rate limit and the basic rate limit and/or dividends at the 10p ordinary rate. From 2016-17 taxpayers with no taxable earnings and total taxable income from savings charged at 20% and/or dividends at 7.5%. Before 1999-2000 these taxpayers would have been classified as lower rate taxpayers.

(4) Between 1999-2000 and 2007-08 taxpayers whose total taxable income is between the starting rate limit and basic rate limit and includes income from earnings or income taxed as earnings. From 2008-09 taxpayers whose income includes earnings or other income taxed as earnings and with total taxable income below the basic rate limit.

(5) Before 2010-11 taxpayers with total taxable income above the basic rate limit. From 2010-11 taxpayers with total taxable income between the basic rate limit and the higher rate limit.

(6) Taxpayers with total taxable income above the higher rate limit.

(7) Taxpayers aged 65 years or older for men and 60 years or older for women in 2009-10. The female State Pension Age was increased gradually from April 2010 to be equalised with the male State Pension Age by November 2018. The female State Pension Age for the purposes of this table is 60.5 years in 2010-11, 61 years in 2011-12, 61.5 years in 2012-13, 62 years in 2013-14, 62.5 years in 2014-15, 63 years in 2015-16, 63.75 years in 2016-17 and 64.5 years in 2017-18. The male and female State Pension Age in 2018-19 is 65.25 and 65.75 in 2019-20.

(8) Projected estimates based upon the 2016-17 Survey of Personal Incomes using economic assumptions consistent with the OBR's March 2019 economic and fiscal outlook.

(9) Some UK taxpayers reside abroad, or region is not known (245,000 in 2016-17). The sum of taxpayer numbers across countries and regions in Table 2.2 therefore will not match UK total shown in Table 2.1.

(10) From 2017-18, individuals who are classified as resident in Scotland and have total taxable income above the Scottish basic rate limit (BRL) but below the UK government's BRL have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within this band is taxed at the higher rate, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within this band (but no total taxable income above the UK BRL) is classified as a higher rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate tax payer.

(11) From 2018-19, individuals who are classified as resident in Scotland and have total taxable income in the Scotlish starter rate or Scotlish intermediate rate have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within these band is taxed at a 19% or 21% rate respectively, whereas savings and dividends income is taxed at the basic rate. A Scotlish taxpayer with any taxable NSND income within these bands (but no total taxable income above the UK BRL) is classified as a basic rate taxpayer, as this is the top rate they are paying. A Scotlish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

Table updated June 2019

2.4

Shares of total income (before and after tax) and income tax for percentile groups, 1999-00 to 2019-20 Taxpayers only

Percentile Groups (ranged on total income	Bottom				Bottom	Тор				Тор	Total (All Taxpayers
before tax)	1%	5%	10%	25%	50%	50%	25%	10%	5%	1%	£bn
Share of Total Income											Total Incon
Before Tax											Before Ta
1999-00	0.2	1.3	2.8	8.9	23.8	76.2	53.4	32.9	23.3	11.0	533
2000-01	0.2	1.2	2.7	8.5	23.2	76.8	54.1	33.7	24.0	11.5	595
2001-02	0.2	1.2	2.7	8.6	23.4	76.6	53.9	33.4	23.7	11.1	612
2002-03	0.2	1.2	2.7	8.6	23.5	76.5	53.7	33.1	23.3	10.8	624
2003-04	0.2	1.2	2.7	8.5	23.3	76.7	53.9	33.3	23.6	11.0	625
2004-05	0.2	1.2	2.7	8.4	22.9	77.1	54.4	33.6	23.8	11.3	691
2005-06	0.2	1.2	2.6	8.3	22.4	77.6	55.3	34.8	25.1	12.2	756
2006-07	0.2	1.2	2.6	8.2	22.2	77.8	55.8	35.5	25.8	12.9	810
2007-08	0.2	1.1	2.5	8.1	22.1	77.9	56.1	36.0	26.4	13.4	870
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	*
2009-10	0.2	1.3	2.8	8.7	22.9	77.1	55.5	35.8	26.4	13.9	869
2010-11	0.2	1.3	2.9	8.9	23.5	76.5	54.2	33.7	24.0	11.5	857
2011-12	0.3	1.4	3.1	9.2	23.8	76.2	54.1	33.8	24.2	11.5	886
2012-13	0.3	1.5	3.2	9.6	24.3	75.7	53.5	33.4	23.8	11.2	904
2013-14	0.3	1.6	3.4	9.8	24.4	75.6	54.0	34.5	25.1	12.6	951
2014-15	0.3	1.7	3.5	10.0	24.7	75.3	53.6	34.1	24.8	12.3	977
2015-16	0.3	1.7	3.5	10.0	24.5	75.5	54.1	34.9	25.6	13.2	1,040
2016-17 (2)	0.3	1.7	3.6	10.0	25.2	74.8	53.2	33.9	24.5	12.3	1,040
2017-18 (1,2)	0.3	1.7	3.6	10.3	25.2	74.8	53.2	34.1	24.9	12.6	1,040
2018-19 (1,2)	0.3	1.7	3.7	10.4	25.2	74.8	53.3	34.2	25.0	12.7	1,130
2019-20 (1,2)	0.3	1.8	3.7	10.4	25.3	74.7	53.2	34.3	25.0	12.8	1,170
(,,_)								••			.,
After Tax											After Tax
1999-00	0.3	1.5	3.4	10.2	26.4	73.6	50.0	29.3	19.9	8.8	440
2000-01	0.3	1.5	3.2	9.9	25.8	74.2	50.6	29.8	20.4	9.2	489
2001-02	0.3	1.5	3.2	9.9	26.0	74.0	50.3	29.5	20.0	8.9	505
2002-03	0.3	1.5	3.2	10.0	26.1	73.9	50.1	29.2	19.7	8.6	515
2003-04	0.3	1.4	3.2	9.8	25.9	74.1	50.4	29.5	20.1	8.9	514
2004-05	0.3	1.4	3.2	9.8	25.5	74.5	50.8	29.7	20.3	9.1	568
2005-06	0.3	1.4	3.1	9.6	25.1	74.9	51.7	30.8	21.3	9.9	618
2006-07	0.3	1.4	3.1	9.6	24.9	75.1	52.1	31.4	22.0	10.5	661
2007-08	0.2	1.4	3.1	9.5	24.8	75.2	52.4	31.8	22.5	10.9	708
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	*
2009-10	0.3	1.5	3.3	10.0	25.4	74.6	52.0	31.6	22.4	11.2	716
2010-11	0.3	1.6	3.4	10.3	26.1	73.9	50.5	29.4	19.9	8.6	706
2011-12	0.3	1.7	3.6	10.7	26.6	73.4	50.1	29.2	19.8	8.6	731
2012-13	0.3	1.8	3.8	11.1	20.0	72.8	49.4	28.7	19.4	8.3	731
2012-13	0.3	1.0 1.9	3.8 4.0	11.4	27.2	72.6	49.4 49.6	20.7 29.4	19.4 20.4	o.s 9.5	747 787
2013-14	0.4	2.0	4.0	11.4	27.4	72.0	49.0	29.4 29.1	20.4	9.3 9.3	811
2014-15	0.4		4.1	11.6		72.2	49.2 49.5	29.1 29.7	20.1		858
		2.0			27.6					10.0	
2016-17 (2)	0.4	2.0	4.3	11.9 <i>12.0</i>	28.3	71.7 71.6	48.7 48.7	28.7 28.0	19.7 20.0	9.1 9.1	870
2017-18 (1,2)	0.4 0.4	2.1	4.3		28.4 28.4	71.6 71.6	48.7 48.7	28.9 28.0	20.0	9.4 0.4	908 945
2018-19 (1,2) 2019-20 (1,2)	0.4 0.4	2.1 2.1	4.3 4.4	12.0 12.1	28.4 28.5	71.6 71.5	48.7 48.7	28.9 28.9	20.0 20.0	9.4 9.4	945 976

2.4 Shares of total income (before and after tax) and income tax for percentile groups, 1999-00 to 2019-20

	· · · · · · · · · · · · · · · · · · ·	-
Continued	Taxpayers only	

Percentile Groups Bottom Bottom Тор Тор Total (All (ranged on total income Taxpayers) before tax) 1% 5% 10% 25% 50% 50% 25% 10% 5% £bn 1% Share of Total Tax Total Tax 1999-00 0.0 0.1 0.3 2.4 11.6 88.4 69.5 50.3 39.6 21.3 93 2000-01 0.0 0.1 0.3 2.2 11.3 88.7 70.3 51.5 40.7 22.2 106 2001-02 0.0 0.1 0.3 2.2 11.1 88.9 70.8 51.9 40.8 21.8 107 2002-03 0.0 0.1 0.3 2.2 11.1 88.9 70.5 51.5 40.2 21.0 109 2003-04 0.0 0.1 0.3 2.2 11.2 88.8 70.1 50.9 39.8 20.8 111 2004-05 0.0 0.1 0.3 2.1 10.8 89.2 70.7 51.4 40.3 21.4 123 2005-06 0.0 0.3 2.1 10.6 89.4 71.5 0.1 52.9 41.9 22.7 138 10.5 2006-07 0.0 0.1 0.3 2.1 89.5 71.8 53.5 42.6 23.5 150 2007-08 0.0 0.1 0.3 2.1 10.4 89.6 72.2 54.3 43.4 24.4 163 * * * * * * * * * * * 2008-09 (a) 2009-10 0.0 0.1 0.6 2.7 11.2 88.8 72.0 54.9 44.8 26.5 154 11.3 2010-11 0.0 0.1 0.5 2.7 88.7 71.3 53.5 43.3 25.0 152 2011-12 72.7 0.0 0.1 0.5 2.5 10.7 89.3 55.4 44.7 25.4 156 2012-13 0.0 0.1 0.5 2.5 10.6 89.4 73.0 55.8 44.8 25.1 157 2013-14 0.0 0.3 2.2 9.7 90.3 75.0 27.6 0.1 58.6 47.5 165 2014-15 0.0 0.1 0.3 2.2 9.7 90.3 75.0 58.5 47.4 27.2 167 0.3 90.6 60.0 2015-16 0.0 2.1 9.4 75.9 48.9 28.8 178 0.1 2016-17 (2) 0.0 0.1 0.4 2.3 9.6 90.4 75.6 59.7 48.5 28.1 174 2017-18 (1,2) 0.0 0.1 0.4 2.3 9.5 90.5 75.9 60.3 49.3 29.0 181 2018-19 (1,2) 0.0 0.1 0.4 2.2 9.3 90.7 76.2 60.6 49.6 29.1 190 2019-20 (1,2) 0.0 2.2 9.2 90.8 76.3 60.9 194 0.1 0.4 50.1 29.6

Percentage

Shares of total income (before and after tax) and income tax 2.4 for percentile groups, 1999-00 to 2019-20

Continued	Taxpayers onl	у У	,							Percentage
Percentile point	s for total income	before ta	ax							Amounts: £
	1	5	10	25	50	75	90	95	99	Mean
1999-00	4,600	5,630	6,570	9,260	14,400	22,300	33,000	44,600	96,400	19,600
2000-01	4,620	5,520	6,480	9,280	14,800	23,000	34,200	46,700	102,000	20,300
2001-02	4,780	5,850	6,860	9,910	15,500	24,300	36,200	49,200	107,000	21,400
2002-03	4,860	5,960	6,970	10,000	15,800	24,700	36,700	49,800	108,000	21,600
2003-04	4,820	5,850	7,000	10,100	16,000	25,100	37,100	50,600	111,000	21,900
2004-05	4,980	6,070	7,260	10,300	16,400	26,100	39,000	52,400	117,000	22,800
2005-06	5,200	6,350	7,610	10,800	17,100	27,400	41,300	56,200	132,000	24,300
2006-07	5,410	6,600	7,880	11,200	17,700	28,400	42,900	58,500	141,000	25,500
2007-08	5,600	6,870	8,240	11,800	18,500	29,500	44,900	61,500	149,000	26,800
2008-09 (a) *	*	*	*	*	*	*	*	*	*
2009-10	6,800	7,970	9,510	12,900	19,600	30,900	46,600	63,200	149,000	28,400
2010-11	6,730	7,830	9,350	12,700	19,500	30,900	46,300	62,600	140,000	27,400
2011-12	7,740	8,840	10,200	13,500	20,300	32,100	48,300	66,200	147,000	28,800
2012-13	8,370	9,570	10,900	14,200	21,000	32,900	49,200	67,900	150,000	29,600
2013-14	9,710	10,760	11,800	15,000	21,900	33,900	50,600	70,400	159,000	31,300
2014-15	10,300	11,200	12,200	15,500	22,400	34,500	51,400	71,700	162,000	31,800
2015-16	10,820	11,720	12,800	16,100	23,200	35,600	53,100	75,000	170,000	33,400
2016-17 (2) 11,200	12,170	13,300	16,700	23,600	36,000	53,600	75,300	166,000	33,500
2017-18 (1,	2) 11,770	12,750	13,900	17,300	24,500	37,000	55,300	77,500	174,000	34,700
2018-19 (1,	2) 12,140	13,180	14,300	17,700	25,100	38,100	57,000	80,000	180,000	35,800
2019-20 (1,	2) 12,780	13,880	15,000	18,500	26,200	39,500	59,200	83,000	188,000	37,300

Source: Survey of Personal Incomes

Key

* not available

- negligible

Footnotes for table 2.4

(a) Figures for 2008-09 tax year are not currently available.

(1) Projected estimates based upon the 2016-17 Survey of Personal Incomes using economic assumptions consistent with the OBRs March 2019 economic and fiscal outlook.

(2) Prior to 2016-17, total income includes the amount of dividends plus dividend tax credit (one ninth of the dividend), the grossed dividend, and income tax is charged on the grossed dividend. The tax due can be satisfied (in part) by the notional tax credit (10% of the grossed dividend). The table reflects the grossed dividend in total income and shows the income tax liability before the tax credit is offset. From 2016-17 the dividend tax credit is abolished, effective dividend tax rates are increased by 7.5% and a £5,000 Personal Dividend Allow ance is introduced. This affects the measure of total income and leads to a discontinuity in the basis on which tax liabilities are presented betw een 2015-16 (and earlier) and 2016-17, so the share of incomes and tax liabilities are not directly comparable.

Table updated June 2019

2.5 Income tax liabilities, by Income Range, 2016-17 to 2019-20

							2016-17	(7)					Numbers: tho	usands; Amou	unts: £ million
Range of total income (lower limit)	Starting rat taxpaye	. ,	"Savers" ra taxpaye	. ,	Basic rate taxpaye	. ,	Higher rat taxpaye	. ,	Additional ra taxpaye	. ,	All taxpayers	Total income of taxpayers	Tax liability	Average rate of tax	Average amount o tax
£	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Amount	%	£
11,000 <i>(a)</i>				1	5,510	1,970					5,510	71,500	1,970	2.8	358
15,000			94	13	6,390	7,540					6,490	113,000	7,550	6.7	1,160
20,000			208	134	8,200	20,800					8,400	206,000	20,900	10.1	2,490
30,000			281	453	5,740	26,900	1,130	7,670		•	7,150	272,000	35,000	12.9	4,900
50,000	•		4	5	26	118	2,780	39,000			2,810	186,000	39,200	21.0	13,900
100,000					1	4	474	17,000	2	119	477	56,800	17,100	30.1	35,900
150,000							25	1,130	133	8,060	158	27,000	9,200	34.0	58,200
200,000							1	41	172	18,900	173	50,400	18,900	37.5	109,000
500,000									33	9,090	34	22,900	9,090	39.8	271,000
1,000,000									11	6,230	11	15,400	6,230	40.4	550,000
2,000,000+	-								5	9,090	5	23,300	9,090	39.0	1,840,000
All Ranges			588	607	25,900	57,300	4,410	64,900	356	51,500	31,200	1,040,000	174,000	16.7	5,580

In 2016-17 earnings over the Personal Allowance (PA) of £11,000 are taxable at 20 percent up to the Higher Rate Threshold (HRT) of £43,000, 40 percent up to the Additional Rate Threshold (ART) of £150,000 and 45 percent over the ART. The Personal Savings Allowance is £1,000 for BR taxpayers, £500 for HR taxpayers and £0 for AR taxpayers, savings income above this is taxable at 0 percent up to the Starting Rate Limit (SRL) of £5,000 above the PA, 20 percent up to the HRT, 40 percent up to the ART and 45 percent over the ART.

The Dividend Allowance is £5,000 for all taxpayers, dividend income above this is taxable at 7.5 percent up to the HRT, 32.5 percent up to the ART and 38.1 percent above ART.

See Bulletin for more details on income tax calculations - Annex A: Context and Background information.

2.5

Income tax liabilities, by Income Range, 2016-17 to 2019-20

continued

2017-18 (6,7,8)

Numbers: thousands; Amounts: £ million

Range of total income (lower limit)	Starting rat taxpaye	. ,	"Savers" ra taxpaye	. ,	Basic rate taxpaye	. ,	Higher rat taxpaye	()	Additional ra taxpaye	. ,	All taxpayers	Total income of taxpayers	Tax liability	Average rate of tax	Average amount of tax
£	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Amount	%	£
11,500 (a)				1	4,690	1,480			÷		4,690	62,300	1,490	2	316
15,000			86	11	6,430	6,970					6,510	113,000	6,980	6.2	1,070
20,000			218	134	8,420	20,500					8,640	212,000	20,700	9.7	2,390
30,000			337	554	6,510	30,500	737	5,120			7,580	289,000	36,200	12.5	4,780
50,000			6	9	57	313	2,920	39,700			2,980	197,000	40,000	20.3	13,400
100,000							522	18,300			522	62,300	18,300	29.4	35,000
150,000							30	1,380	133	8,080	163	27,900	9,460	33.9	58,000
200,000							-	14	192	21,000	192	56,100	21,000	37.4	109,000
500,000									37	9,980	37	25,100	9,980	39.7	271,000
1,000,000									13	6,900	13	17,100	6,900	40.3	548,000
2,000,000+									6	10,400	6	26,800	10,400	39.0	1,880,000
All Ranges			648	709	26,100	59,800	4,210	64,500	380	56,400	31,300	1,090,000	181,000	16.7	5,790

In 2017-18 earnings above the Personal Allowance (PA) of £11,500 are taxable at 20 percent up to the Higher Rate Threshold (HRT) of £45,000, 40 percent up to the Additional Rate Threshold (ART) of £150,000 and 45 percent over the ART (8). The Personal Savings Allowance is £1,000 for BR taxpayers, £500 for HR taxpayers and £0 for AR taxpayers, savings income above this is taxable at 0 percent up to the Starting Rate Limit (SRL) of £5,000 above the PA, 20 percent up to the HRT, 40 percent up to the ART and 45 percent over the ART.

The Dividend Allowance is £5,000 for all taxpayers, dividend income above this is taxable at 7.5 percent up to the HRT, 32.5 percent up to the ART and 38.1 percent above ART. See Bulletin for more details on income tax calculations - Annex A: Context and Background information.

2.5

Income tax liabilities, by Income Range, 2016-17 to 2019-20

continued

							2018-19 (6	6,7,8,9)					Numbers: the	usands; Amou	sands; Amounts: £ millioi		
Range of total income (lower limit)	Starting rat taxpaye	. ,	"Savers" ra taxpaye	. ,	Basic rate taxpaye	. ,	Higher rat taxpaye	. ,	Additional r taxpaye	. ,	All taxpayers	Total income of taxpayers	Tax liability	Average rate of tax	Average amount c ta		
£	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Amount	%	£		
11,850 (a)			39	2	4,080	1,160					4,120	55,500	1,160	2.1	281		
15,000			209	47	6,410	6,530					6,620	115,000	6,570	5.7	99:		
20,000			227	180	8,540	20,300					8,760	215,000	20,500	9.5	2,340		
30,000			362	683	7,060	33,300	539	3,740			7,960	304,000	37,800	12.4	4,740		
50,000			7	13	94	553	3,120	41,600			3,220	212,000	42,200	19.9	13,100		
100,000							569	19,700			569	67,700	19,700	29.2	34,700		
150,000							33	1,510	145	8,790	178	30,500	10,300	33.8	57,800		
200,000							-	12	206	22,600	207	60,400	22,600	37.5	109,000		
500,000									39	10,700	39	26,800	10,700	39.9	272,000		
1,000,000									14	7,390	14	18,300	7,390	40.3	546,000		
2,000,000+	-					•			6	11,300	6	29,000	11,300	39.0	1,880,000		
All Ranges			844	926	26,200	61,900	4,260	66,600	410	60,800	31,700	1,130,000	190,000	16.8	6,000		

In 2018-19 earnings above the Personal Allowance (PA) of £11.850 are taxable at 20 percent up to the Higher Rate Threshold (HRT) of £46,350, 40 percent up to the Additional Rate Threshold (ART) of £150,000 and 45 percent over the ART (8). The Personal Savings Allowance is £1,000 for BR taxpayers, £500 for HR taxpayers and £0 for AR taxpayers, savings income above this is taxable at 0 percent up to the Starting Rate Limit (SRL) of £5,000 above the PA, 20 percent up to the HRT, 40 percent up to the ART and 45 percent over the ART.

The Dividend Allowance is £2,000 for all taxpayers, dividend income above this is taxable at 7.5 percent up to the HRT, 32.5 percent up to the ART and 38.1 percent above ART.

See Bulletin for more details on income tax calculations - Annex A: Context and Background information.

Income tax liabilities, by Income Range, 2016-17 to 2019-20

continued

							2019-20 (6,7,8,9)							
													Numbers: the	ousands; Amou	unts: £ millio
Range of												Total		Average	Average
total income	Starting ra	te (1)	"Savers" ra	ate (2)	Basic rate	ə (3)	Higher rat	e (4)	Additional r	ate (5)	All	income of		rate of	amount of
(lower limit)	taxpaye	ers	taxpaye	ers	taxpaye	ers	taxpaye	ers	taxpaye	ers	taxpayers	taxpayers	Tax liability	tax	tax
£	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Amount	%	£
12,500 (a)			17	1	3,070	684					3,090	42,500	685	1.6	222
15,000			216	41	6,400	5,720					6,620	115,000	5,760	5.0	871
20,000			233	172	8,610	19,400					8,840	217,000	19,600	9.0	2,210
30,000			408	784	7,820	37,000	92	678			8,320	318,000	38,400	12.1	4,620
50,000			13	27	343	2,310	3,110	40,300			3,470	228,000	42,700	18.7	12,300
100,000							609	20,700			610	72,600	20,700	28.6	34,000
150,000							36	1,620	157	9,380	193	33,000	11,000	33.4	57,100
200,000							1	18	218	23,800	219	63,900	23,800	37.3	109,000
500,000									42	11,300	42	28,400	11,300	39.8	271,000
1,000,000									15	7,920	15	19,700	7,920	40.3	546,000
2,000,000+									6	12,100	6	31,000	12,100	39.1	1,880,000
All Ranges			888	1,020	26,200	65,100	3,850	63,400	438	64,600	31,400	1,170,000	194,000	16.6	6,180

In 2019-20 earnings above the Personal Allowance of £12,500 are taxable at 20 percent up to the Higher Rate Threshold (HRT) of £50,000, 40 percent up to the Additional Rate Threshold (ART) of £150,000 and 45 percent over the ART (8). The Personal Savings Allowance is £1,000 for BR taxpayers, £500 for HR taxpayers and £0 for AR taxpayers, savings income above this is taxable at 0 percent up to the Starting Rate Limit (SRL) of £5,000 above the PA, 20 percent up to the HRT, 40 percent up to the ART and 45 percent over the ART.

The Dividend Allowance is £2,000 for all taxpayers, dividend income above this is taxable at 7.5 percent up to the HRT, 32.5 percent up to the ART and 38.1 percent above ART.

See Bulletin for more details on income tax calculations - Annex A: Context and Background information.

Key

. not applicable / zero

.. not available or sample size too small to produce a reliable estimate

- negligible

Footnotes for table 2.5

(1) Taxpayers with no taxable earnings and total taxable income from savings below the starting rate limit. From 2015-16 the starting rate of tax for savings income has been reduced from 10% to 0%, and the starting rate limit has been increased to £5,000.

(2) Before 2016-17 taxpayers with no taxable earnings and total taxable income from savings betw een the starting rate limit and the basic rate limit and/or dividends at the 10p ordinary rate. From 2016-17 taxpayers with no taxable earnings and total taxable income from savings charged at the 20p rate and/or dividends at the 7.5p rate.

(3) Taxpayers whose income includes earnings or other income taxed as earnings and with total taxable income below the basic rate limit.

(4) Taxpayers with total taxable income between the basic rate limit and the higher rate limit.

(5) Taxpayers with total taxable income above the higher rate limit.

(6) Projected estimates based upon the 2016-17 Survey of Personal Incomes using economic assumptions consistent with the OBR's Spring 2019 economic and fiscal outlook.

(7) Prior to 2016-17, total income includes the amount of dividends plus dividend tax credit (one ninth of the dividend), the grossed dividend, and income tax is charged on the grossed dividend. The tax due can be satisfied (in part) by the notional tax credit (10% of the grossed dividend). From 2016-17 the dividend tax credit is abolished, effective dividend tax rates are increased by 7.5% and a £5,000 Personal Dividend Allow ance is introduced.

(8) From 2017-18, individuals who are classified as resident in Scotland and have total taxable income above the Scottish basic rate limit (BRL) but below the UK government's BRL have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within this band is taxed at the higher rate, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within this band (but no total taxable income above the UK BRL) is classified as a higher rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

(9) From 2018-19, individuals who are classified as resident in Scotland and have total taxable income in the Scottish starter rate or Scottish intermediate rate have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within these band is taxed at a 19% or 21% rate respectively, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within these bands (but no total taxable income above the UK BRL) is classified as a basic rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

(a) Can include some taxpayers who are not entitled to a Personal Allow ance whose total income can be less than the Personal Allow ance (see Annex B: Data sources and methodology). From 2015-16, this will also include individuals whose Personal Allow ance is reduced and therefore become taxpayers as an impact of the Marriage Allow ance (see Annex B: Data sources and methodology).

2016-17 Amounts: £ million											
	Starting rate (1) taxpayers	"Savers" rate (2) taxpayers	Basic rate (3) taxpayers	Higher rate (4) taxpayers	Additional rate (5) taxpayers	All taxpayers					
Tax liability after allowances given as income tax reductions (6)											
Tax on Eamings:											
Basic rate			56,800	25,700	2,180	84,700					
Higher rate				34,100	15,200	49,400					
Additional rate					29,100	29,100					
Tax on Savings:											
Starting rate											
Basic rate		33	159	129	14	335					
Higher rate				471	179	650					
Additional rate					659	659					
Tax on dividends (after personal dividend allowance) (7):											
Ordinary rate		574	280	676	13	1,540					
Higher rate				3,770	873	4,640					
Additional rate					3,200	3,200					
Allowances given as tax reductions		3	213	316	1,800	2,330					
Tax liability after allowances given as income tax reduction		607	57,300	64,900	51,500	174,000					
Average Rate of Tax %		3.4	9.6	21.8	38.2	16.7					
Average amount of tax £		1,030	2,210	14,700	144,000	5,580					

2.6 Income tax liabilities, by income source, tax band and marginal rate, 2016-17 to 2019-20

2.6 Income tax liabilities, by income source, tax band and marginal rate, 2016-17 to 2019-20 <u>continued</u>

		2017-18	(8,9)			
					A	mounts: £ million
	Starting rate (1) taxpayers	"Savers" rate (2) taxpayers	Basic rate (3) taxpayers	Higher rate (4) taxpayers	Additional rate (5) taxpayers	All taxpayers
Tax liability after allowances given as income tax reductions (6)						
Tax on Earnings:						
Basic rate			59,400	25,700	2,440	87,500
Higher rate				33,500	16,200	49,700
Additional rate					31,300	31,300
Tax on Savings:						
Starting rate						
Basic rate		30	143	111	12	297
Higher rate				393	151	544
Additional rate					559	559
Tax on dividends (after personal dividend allowance) (7):						
Ordinary rate		679	326	631	12	1,650
Higher rate				4,100	801	4,900
Additional rate					4,850	4,850
Allowances given as tax reductions		3	186	306	1,910	2,400
Tax liability after allowances given as income tax reduction		709	59,800	64,500	56,400	181,000
Average Rate of Tax %		3.5	9.6	21.8	38.1	16.7
Average amount of tax £		1,090	2,290	15,300	148,000	5,790

2.6 Income tax liabilities, by income source, tax band and marginal rate, 2016-17 to 2019-20 continued

		2018-19	(8,9,10)			
					A	mounts: £ million
	Starting rate (1) taxpayers	"Savers" rate (2) taxpayers	Basic rate (3) taxpayers	Higher rate (4) taxpayers	Additional rate (5) taxpayers	All taxpayers
Tax liability after allowances given as income tax reductions (6)						
Tax on Earnings:						
Basic rate		2	61,200	26,700	2,710	90,600
Higher rate				33,800	17,300	51,000
Additional rate					33,500	33,500
Tax on Savings:						
Starting rate						
Basic rate		39	183	150	17	388
Higher rate				507	206	713
Additional rate					787	787
Tax on dividends (after personal dividend allowance) (7):						
Ordinary rate		885	489	788	15	2,180
Higher rate				4,770	937	5,710
Additional rate					5,360	5,360
Allowances given as tax reductions		4	167	324	2,010	2,500
Tax liability after allowances given as income tax reduction		926	61,900	66,600	60,800	190,000
Average Rate of Tax %		3.8	9.6	21.8	38.1	16.8
Average amount of tax £		1,100	2,360	15,600	148,000	6,000

2.6 Income tax liabilities, by income source, tax band and marginal rate, 2016-17 to 2019-20 continued

		2019-20	(8,9,10)			
					A	mounts: £ million
	Starting rate (1) taxpayers	"Savers" rate (2) taxpayers	Basic rate (3) taxpayers	Higher rate (4) taxpayers	Additional rate (5) taxpayers	All taxpayers
Tax liability after allowances given as income tax reductions (6)						
Tax on Earnings:						
Basic rate		2	64,300	25,900	3,130	93,300
Higher rate				31,400	17,900	49,300
Additional rate					35,500	35,500
Tax on Savings:						
Starting rate						
Basic rate		50	235	176	22	484
Higher rate				559	255	814
Additional rate					998	998
Tax on dividends (after personal dividend allowance) (7):						
Ordinary rate		973	559	770	19	2,320
Higher rate				4,620	1,030	5,650
Additional rate					5,710	5,710
Allowances given as tax reductions		5	148	310	2,110	2,570
Tax liability after allowances given as income tax reduction		1,020	65,100	63,400	64,600	194,000
Average Rate of Tax %		3.8	9.6	21.7	38.0	16.6
Average amount of tax £		1,150	2,480	16,500	147,000	6,180

Source: Survey of Personal Incomes.

Table updated June 2019

Key

- negligible

. not applicable / zero

Footnotes for table 2.6

(1) Taxpayers with no taxable earnings and total taxable income from savings below the starting rate limit. From 2015-16 the starting rate of tax for savings income has been reduced from 10% to 0%, and the starting rate limit has been increased to £5,000.

(2) Before 2016-17 taxpayers with no taxable earnings and total taxable income from savings between the starting rate limit and the basic rate limit and/or dividends at the 10p ordinary rate. From 2016-17 taxpayers with no taxable earnings and total taxable income from savings charged at the 20p rate and/or dividends at the 7.5p rate.

(3) Taxpayers whose income includes earnings or other income taxed as earnings and with total taxable income below the basic rate limit.

(4) Taxpayers with total taxable income between the basic rate limit and the higher rate limit.

(5) Taxpayers with total taxable income above the higher rate limit.

(6) In this context tax reductions refer to allow ances given at a fixed rate, for example the Married Couples Allow ance.

(7) Prior to 2016-17, total income included the amount of dividends plus dividend tax credit (one ninth of the dividend), the grossed dividend, and income tax is charged on the grossed dividend. The tax due could be satisfied (in part) by the notional tax credit (10% of the grossed dividend). Hence, tables for 2015-16 and earlier reflected the grossed dividend in total income and show ed the income tax liability before the tax credit w as offset. From 2016-17 the dividend tax credit is abolished, effective dividend tax rates are increased by 7.5% and a £5,000 Personal Dividend Allow ance is introduced (reduced to £2,000 from 2018-19). This affects the measure of total income, income range and marginal rate band, and leads to a discontinuity in the basis on w hich tax liabilities are presented betw een 2015-16 (and earlier) and 2016-17, so the share of incomes and tax liabilities are not directly comparable. For this reason comparing dividend tax liabilities betw een 2016-17 and 2015-16 is not a reliable indication of the impact of the 2016-17 dividend tax reform.

(8) Projected estimates based upon the 2016-17 Survey of Personal Incomes using economic assumptions consistent with the OBR's March 2019 economic and fiscal outlook.

(9) From 2017-18, individuals who are classified as resident in Scotland and have total taxable income above the Scottish basic rate limit (BRL) but below the UK government's BRL have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within this band is taxed at the higher rate, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within this band (but no total taxable income above the UK BRL) is classified as a higher rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

(10) From 2018-19, individuals who are classified as resident in Scotland and have total taxable income in the Scottish starter rate or Scottish intermediate rate have their marginal rate classified based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within these bands is taxed at a 19% or 21% rate respectively, whereas savings and dividends income is taxed at the basic rate. A Scottish taxpayer with any taxable NSND income within these bands (but no total taxable income above the UK BRL) is classified as a basic rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a basic rate taxpayer.

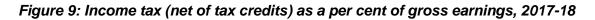
SECTION B: Illustrative Tax Burdens

Section B provides details of some of the key illustrative statistics presented in the Table 2.7.

Table 2.7 – Income tax (net of tax credits) as a per cent of grossearnings for specimen families, 1990-91 to 2019-20

https://www.gov.uk/government/statistics/percentage-of-earnings-paid-in-income-tax

Table 2.7 shows how income tax burdens (tax due as per cent of gross earnings) have evolved over time for a range of illustrative families with a single wage earner at specific earnings levels across the earnings distribution. From 1999-00, income tax burdens take account of the financial support families receive in the form of tax credits, and are shown for single persons, and couples, with and without children.





Tax Burden (% of gross income)

Tax burden

In 2017-18, the latest tax year for which provisional earnings outturns are available¹⁰, childless single persons with gross earnings at the 10th percentile of the earnings distribution had an estimated income tax burden of 6.4% of gross earnings. This increases to 12.1% at the median (50th percentile) and 20.4% at the 90th percentile. For childless couples, the tax burden is the same except for those at the 10th percentile who would still be entitled to Working Tax Credit (WTC) in 2017-18, which reduces their net income tax burden to 3.4%. Childless single people also qualify for WTC but only receive support at earnings levels below those shown in the table.

A **couple with two children** are eligible for WTC and Child Tax Credit (CTC). CTC extends much further up the income scale than WTC, reducing tax burdens for a couple with two children at incomes up to and including median (50th percentile) earnings. At the 10th percentile the amount of CTC and WTC received in 2017-18 significantly exceeds income tax liabilities due, giving a net tax burden of -32.8% of gross earnings. As the child element of tax credits is withdrawn at higher earnings levels, the difference in tax burdens for couples with and without children steadily falls. Since 2015-16 those at mean earnings and above no longer receive any WTC or CTC.

Income tax burdens for **childless single persons** generally declined in 2017-18 compared with the previous year, for all groups presented. This was due to the £500 cash increase in the Personal Allowance (PA) to £11,500 in 2017-18, representing a 5% increase on 2016-17. This meant the PA grew faster than gross earnings for each of the illustrative percentiles. Additionally, the tax burden for the illustrative high earner at the 90th earnings percentile was further reduced, as the increase in the Higher Rate Threshold from £43,000 to £45,000 (5%) was greater than the change in gross earnings at this level.

Changes in tax burdens in 2017-18 for **childless couples with only one earner** were the same as those for single persons, except at the 10th earnings percentile. At the 10th earnings percentile, reductions in WTC relative to earnings give an overall increase in the net tax burden for childless couples, compared to 2016-17.

Couples with two children, with earnings up to the median (50th percentile) saw their net tax burden increase due to reductions in their WTC and CTC award compared with 2016-17. Those in the mean, 75th and 90th percentile do not receive WTC and CTC thus saw the same net changes in their tax burden as those without children.

¹⁰ The ONS have published provisional estimates of earnings for 2018; this may be subject to revision at a later date.



Figure 10: Income tax (net of tax credits) as a per cent of gross earnings, 2019-20

Projections for 2019-20 show income tax burdens slightly decreasing for most families due to the £650 cash increase in the Personal Allowance. For lower earning families with children, net tax burdens are projected to increase for those below mean earnings in 2019-20. This is due to the freeze in most tax credit rates relative to earnings, which also impact childless couples below the 10th percentile.

Tax burdens for all illustrative families in the 90th percentile are projected to decrease substantially, this is due to the cash increase of £3,650 in the Higher Rate Threshold.

For individuals in Scotland the Higher Rate Threshold for non-savings non-dividend (NSND) income has remained at £43,430 in 2019-20. Thus Scottish families may have a different tax burden to that of families with equivalent earnings in other parts of the UK.

Interpreting Table 2.7

Table 2.7 is different from the other tables in this release. The tax burdens are shown for hypothetical or illustrative families with given circumstances and earnings, and since 1999-00 take account of financial support received through the tax credit system. Tax credit entitlements exceed income tax liabilities in some cases leading to negative estimated tax burdens. SPI survey data is not used in constructing the table.

These illustrative families are not designed to represent the overall UK taxpaying population, whose family circumstances and incomes vary widely. The tax burdens do not account for differences from devolved elements of income tax. Earnings levels assumed in the table are derived from the Office for National Statistics' Annual Survey of Hours and Earnings, with latest available outturn data for April 2018. Outturns for tax burdens therefore are published to 2017-18, with projections for 2018-19 and 2019-20. The Office for National Statistics have revised their 2017 earnings estimates and this has been incorporated into the earnings levels used for 2016-17, which therefore may have changed the tax burdens for that year, from that published in the previous publication of Table 2.7.

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2019-20

			tion in eamings	(1) distributi	on	
Per cent of gross earnings	10 th	25 th	50 th		75 th	90 th
	percentile	Percentile	Percentile	mean	percentile	Percentile
1990-91						
Gross earnings (£ weekly)	133.6	172.9	238.2	273.9	328.2	439.2
Tax burden (per cent of gross earnings)						
Single	14.2	16.6	18.9	19.7	20.6	21.7
Married (2)	8.0	11.9	15.5	16.7	18.1	19.8
1991-92						
Gross earnings (£ weekly)	143.7	185.7	255.8	294.7	354.1	473.1
Tax burden (per cent of gross earnings)						
Single	14.0	16.5	18.8	19.6	20.5	21.7
Married (2)	8.2	12.0	15.6	16.8	18.2	19.9
1992-93						
Gross earnings (£ weekly)	150.6	195.2	269.0	310.8	373.6	499.5
Tax burden (per cent of gross earnings)						
Single	12.7	15.5	18.1	19.1	20.1	21.3
Married (2)	7.2	11.3	15.1	16.4	17.8	19.6
1993-94						
Gross earnings (£ weekly)	155.6	201.5	277.6	321.3	385.3	517.0
Tax burden (per cent of gross earnings)						
Single	12.8	15.6	18.2	19.1	20.1	21.3
Married (2)	7.5	11.5	15.2	16.5	17.9	19.7
1994-95						
Gross earnings (£ weekly)	159.2	207.0	286.1	331.0	396.5	533.5
Tax burden (per cent of gross earnings)						
Single	12.8	15.6	18.2	19.1	20.1	21.7
Married (2)	8.6	12.4	15.9	17.1	18.4	20.4
1995-96						
Gross earnings (£ weekly)	163.5	213.8	295.7	343.9	411.9	556.3
Tax burden (per cent of gross earnings)						
Single	12.8	15.6	18.2	19.2	20.1	22.0
Married (2)	9.7	13.3	16.6	17.7	18.9	21.1
1996-97		000 0	000 0	050.0	400.0	F00 /
Gross earnings (£ weekly)	171.1	223.0	308.0	359.6	428.9	580.1
Tax burden (per cent of gross earnings)	40.4	14.0	47 4	10.0	10.0	04.0
Single	12.1	14.9	17.4	18.3	19.2	21.0
Married (2)	9.1	12.5	15.7	16.9	18.0	20.1

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2019-20

continued

	10 th	Posit 25 th	tion in earnings 50 th	(1) distributi	on 75 th	90 th
	percentile	Percentile	Percentile	mean	percentile	Percentile
1997-98						
Gross earnings (£ weekly)	178.8	232.1	320.8	376.1	446.6	604.3
Tax burden (per cent of gross earnings)						
Single	11.7	14.3	16.7	17.6	18.5	20.3
Married (2)	8.7	12.0	15.0	16.2	17.3	19.5
1998-99						
Gross earnings (£ weekly)	186.2	241.2	332.7	392.3	465.0	631.8
Tax burden (per cent of gross earnings)						
Single	11.7	14.3	16.7	17.6	18.5	20.5
Married (2)	8.8	12.0	15.0	16.2	17.3	19.6
1999-2000						
Gross earnings (£ weekly)	194.1	251.0	346.0	409.9	483.9	659.2
Tax burden (per cent of gross earnings)						
Single	11.2	13.9	16.4	17.4	18.3	20.5
Married (2)	9.2	12.4	15.3	16.5	17.5	19.9
With two children	-23.1	-4.3	13.3	16.5	17.5	19.9
2000-01						
Gross earnings (£ weekly)	202.6	261.7	361.7	432.0	506.8	697.7
Tax burden (per cent of gross earnings)						
Childless	11.1	13.6	15.9	16.9	17.6	20.6
With two children	-25.3	-6.2	11.9	16.9	17.6	20.6
2001-02						
Gross earnings (£ weekly)	211.3	272.5	376.8	454.5	529.6	737.3
Tax burden (per cent of gross earnings)						
Childless	10.9	13.4	15.8	16.8	17.6	20.9
With two children	-27.6	-8.1	10.6	14.6	15.7	20.3
2002-03						
Gross earnings (£ weekly)	218.6	283.6	397.5	479.6	562.2	781.0
Tax burden (per cent of gross earnings)						
Childless	11.0	13.6	16.0	17.0	17.7	21.6
With two children	-27.3	-7.4	11.7	14.9	15.9	21.3
2003-04						
Gross earnings (£ weekly)	226.5	293.1	411.8	492.9	581.8	804.8
Tax burden (per cent of gross earnings)						
Childless single	11.4	13.8	16.2	17.1	17.9	21.9
Childless couple	1.6	13.8	16.2	17.1	17.9	21.9
With two children	-27.5	-7.9	11.4	15.0	16.1	20.6

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2019-20

continued

	10 th	Posit 25 th	tion in earnings 50 th	(1) distributi	on 75 th	90 th
	percentile	Percentile	Percentile	mean	percentile	Percentile
	222.0	201.8	405.4	E07 9	601.6	822.0
Gross earnings (£ weekly)	232.8	301.8	425.4	507.8	601.6	833.0
Tax burden (per cent of gross earnings)		40.0	46.0	474	47.0	22.0
Childless single	11.4 1.9	13.8 13.8	16.2 16.2	17.1 17.1	17.9	22.0 22.0
Childless couple With two children	-29.5	-9.3	10.5	17.1	17.9 16.1	22.0
2005-06						
Gross earnings (£ weekly)	240.5	312.3	440.9	528.6	626.1	869.7
Tax burden (per cent of gross earnings)						
Childless single	11.4	13.8	16.2	17.2	17.9	22.2
Childless couple	2.0	13.8	16.2	17.2	17.9	22.2
With two children	-29.4	-9.1	10.7	15.2	16.2	21.0
2006-07						
Gross earnings (£ weekly)	248.2	321.0	451.6	543.7	641.0	896.1
Tax burden (per cent of gross earnings)						
Childless single	11.4	13.8	16.2	17.2	17.9	22.3
Childless couple	2.5	13.8	16.2	17.2	17.9	22.3
With two children	-29.0	-9.1	10.6	15.2	16.3	21.1
2007-08						
Gross earnings (£ weekly)	257.4	332.1	468.1	562.3	663.3	927.0
Tax burden (per cent of gross earnings)						
Childless single	11.4	13.8	16.2	17.2	17.9	22.2
Childless couple	3.1	13.8	16.2	17.2	17.9	22.2
Couple with two children	-28.5	-8.9	10.8	15.3	16.3	21.1
2008-09						
Gross earnings (£ weekly)	266.2	343.0	483.7	580.8	684.5	958.9
Tax burden (per cent of gross earnings)						
Childless single	11.3	13.2	15.2	16.0	16.6	21.2
Childless couple	1.1	13.2	15.2	16.0	16.6	21.2
Couple with two children	-32.9	-12.3	8.4	14.2	15.1	20.1
2009-10						
Gross earnings (£ weekly)	273.2	351.1	493.8	592.8	699.1	977.6
Tax burden (per cent of gross earnings)						
Childless single	10.9	12.9	15.0	15.8	16.4	20.2
Childless couple	0.4	12.9	15.0	15.8	16.4	20.2
Couple with two children	-34.9	-14.1	7.0	14.0	14.9	19.2
2010-11						
Gross earnings (£ weekly)	276.0	354.3	498.6	600.6	706.9	991.4
Tax burden (per cent of gross earnings)						
Childless single	11.0	13.0	15.0	15.9	16.5	20.5
Childless couple	0.4	13.0	15.0	15.9	16.5	20.5
Couple with two children	-35.5	-14.6	6.7	14.1	15.0	19.6

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2019-20

continued

	10 th	Posit 25 th	tion in earnings 50 th	(1) distributi	ion 75 th	90 th
	percentile	Percentile	Percentile	mean	percentile	Percentile
2011-12						
Gross earnings (£ weekly)	279.2	357.0	502.2	605.4	711.6	1,000.2
Tax burden (per cent of gross earnings)						
Childless single	9.7	11.9	14.3	15.3	16.0	20.8
Childless couple	0.5	11.9	14.3	15.3	16.0	20.8
Couple with two children	-38.5	-16.8	5.7	13.5	14.5	20.8
2012-13						
Gross earnings (£ weekly)	284.8	364.1	511.8	614.0	722.0	1,011.0
Tax burden (per cent of gross earnings)						
Childless single	9.1	11.4	13.9	14.9	15.7	20.8
Childless couple	0.8	11.4	13.9	14.9	15.7	20.8
Couple with two children	-39.3	-17.4	5.2	14.5	15.7	20.8
2013-14						
Gross earnings (£ weekly)	287.7	369.0	517.9	620.5	731.5	1,022.7
Tax burden (per cent of gross earnings)						
Childless single	7.4	10.2	13.0	14.1	15.0	20.9
Childless couple	-0.5	10.2	13.0	14.1	15.0	20.9
Couple with two children	-40.6	-18.2	4.5	13.9	15.0	20.9
2014-15						
Gross earnings (£ weekly)	292.0	374.2	522.7	624.1	737.7	1,030.1
Tax burden (per cent of gross earnings)						
Childless single	6.8	9.7	12.6	13.8	14.8	20.6
Childless couple	-0.7	9.7	12.6	13.8	14.8	20.6
Couple with two children	-40.6	-18.3	4.3	13.5	14.8	20.6
2015-16						
Gross earnings (£ weekly)	302.5	383.8	532.9	636.2	752.1	1,046.9
Tax burden (per cent of gross earnings)						
Childless single	6.5	9.4	12.3	13.6	14.6	20.5
Childless couple	0.3	9.4	12.3	13.6	14.6	20.5
Couple with two children	-38.5	-17.4	4.5	13.6	14.6	20.5
2016-17						
Gross earnings (£ weekly)	313.9	394.5	544.3	653.0	768.4	1,075.4
Tax burden (per cent of gross earnings)	0.5		40.0	40.5	445	00.7
Childless single	6.5	9.3	12.2	13.5	14.5	20.7
Childless couple	2.1	9.3	12.2	13.5	14.5	20.7
Couple with two children	-35.3	-15.6	5.4	13.5	14.5	20.7
2017-18						
Gross earnings (£ weekly)	324.5	406.0	559.5	673.2	787.4	1,110.1
Tax burden (per cent of gross earnings)						
Childless single	6.4	9.1	12.1	13.4	14.4	20.4
Childless couple	3.4	9.1	12.1	13.4	14.4	20.4
Couple with two children	-32.8	-14.0	6.6	13.4	14.4	20.4

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2019-20

continued

		Posit	ion in earnings	(1) distribut	ion	
	10 th	25 th	50 th		75 th	90 th
	percentile	Percentile	Percentile	mean	percentile	Percentile
2018-19 (3)						
Gross earnings (£ weekly)	337.1	418.5	574.1	692.5	807.2	1,141.7
Tax burden (per cent of gross earnings)						
Childless single	6.5	9.1	12.1	13.4	14.4	20.4
Childless couple	5.2	9.1	12.1	13.4	14.4	20.4
Couple with two children	-29.7	-12.0	7.8	13.4	14.4	20.4
2019-20 (3)						
Gross earnings (£ weekly)	350.4	431.5	589.3	712.7	827.9	1,174.7
Tax burden (per cent of gross earnings)						
Childless single	6.3	8.9	11.8	13.3	14.2	19.5
Childless couple	6.3	8.9	11.8	13.3	14.2	19.5
Couple with two children	-27.0	-10.4	8.7	13.3	14.2	19.5

Source: Annual Survey of Hours and Earnings

Table updated June 2019

Footnotes for table 2.7

(1) Gross weekly earnings (Annual Survey of Hours and Earnings). Earnings are for full-time employee jobs (male and female) on adult rates with pay unaffected by absence.

(2) Married partner calculation assumes that the person is claiming the full Married Couple's Allow ance.

(3) Earnings projections based on Annual Survey of Hours and Earning (ASHE) data to April 2018, and earnings grow th assumptions consistent with the OBR's March 2019 economic and fiscal outlook.

(4) The family types depicted in Table 2.7 have changed over time, reflecting changes to the systems. More details are available in Annex B of the bulletin linked to below .

SECTION C: Background notes

Income Tax Liabilities Statistics (ITLS) is a National Statistics publication by HM Revenue and Customs (HMRC). For more information about National Statistics, please see the United Kingdom Statistics Authority (UKSA) website:

http://www.statisticsauthority.gov.uk/

UKSA has confirmed that the ITLS and projections are designated as National Statistics, following HMRC implementing the enhancements listed in Assessment Report 157 *Statistics on Income Tax* and Assessment and Report 241 *Income Tax Projections*, available at:

https://www.statisticsauthority.gov.uk/publications-list/?keyword=&type=assessmentreport&theme=&producer=hm-revenue-customs&date=

Data sources, methods and quality

These statistics are based on HMRC's annual Survey of Personal Incomes (SPI), a representative sample survey of the tax records of individuals in HMRC's Pay As You Earn (PAYE), Self-Assessment (SA) and repayment claims administrative systems. Individuals' tax liabilities are estimated using the information SPI provides on taxpayer incomes and circumstances (e.g. their age).

Data sources and methods are described in Annex B, including information on changes to imputation methods introduced for the 2016-17 SPI (page 66). Information about the quality of the statistics is set out in Annex C.

As in previous releases, ITLS Table 2.2 provides projections of taxpayer numbers by taxpayer marginal rate for countries and regions. These projections are indicative only and users should note that the reliability of these projections by country and region is under review, with the possibility that they be partially withdrawn from future releases (Annex C).

New in this release

ITLS was last published in May 2018. This publication (June 2019) includes the finalised figures for the 2016-17 SPI.

This (June 2019) release provides revised projections for tax years 2017-18 to 2018-19 as well as the first estimates for the 2019-20 tax year, all based on the new 2016-17 SPI data. The data is projected using economic assumptions consistent with the Office for Budget Responsibility's (OBR) March 2019 Economic and fiscal outlook:

http://obr.uk/efo/economic-fiscal-outlook-march-2019/

This (June 2019) release reflects all income tax policy changes up to and including the 2019-20 tax year. This includes changes made by both the UK and Scottish Governments following the devolution of income tax rates and bands (except the personal allowance, which remains reserved) that apply to Scottish taxpayers' non-savings, non-dividend (NSND) income for tax year 2019-20.

Next release

As announced in the May 2018 publication, following a user engagement exercise in November 2017 – January 2018 the ITLS will now be published once a year only in May/June. This will still include revised projections based on the OBR's latest published economic forecast, until final statistics based on outturn SPI data can be published.

The next scheduled release will be in May/June 2020, containing 2017-18 SPI outturn data with revised projections for 2018-19 and 2019-20 as well as the first estimates for the 2020-21 tax year. This will follow the OBR's Spring Statement 2020 economic forecast.

The exact date of publication will be announced no less than four weeks before publication on both the HMRC Gov.uk statistics page and Office for National Statistics (ONS) publication hub.

2008-09 Survey of Personal Income

The 2008-09 SPI is still unavailable but HMRC remains committed to producing National Statistics for 2008-09 and will announce their publication dates as soon as they have been confirmed.

Income Tax Liability Statistics

Section A provides detailed statistics on outturn and projections of individual income taxpayer numbers, income tax liabilities and average rates of tax broken down by taxpayer characteristics such as age and gender, income levels and groupings (e.g. the top 1%), and by marginal rate of tax (e.g. Basic Rate taxpayers). Section A also shows tax liabilities arising on different forms of income subject to income tax and in each tax band.

As a complement to the survey-based statistics, Section B sets out trends in income tax burdens over time for a selection of illustrative family types and earnings levels. HMRC also publishes statistics on income tax receipts:

https://www.gov.uk/government/collections/income-tax-receipts-statistics

Liability versus receipts

Liabilities are amounts of income tax due on incomes arising in a given tax year whereas receipts are amounts of income tax paid and collected in a given year. Statistics on income tax liabilities and receipts in any year can differ appreciably, due to lags in the payment and collection of tax particularly under SA, or when over or underpayments occur which are repaid or recovered in a later year.

Data sources and methods underpinning the statistics also differ. Receipts statistics are based on aggregate administrative data sources whereas liabilities statistics are compiled using a sample of individuals' tax records (SPI).

The detailed breakdowns of income tax liabilities provided in ITLS, e.g. by taxpayer income or marginal rate, are not available on a receipts basis, and are not generally available in other statistical publications. Liabilities statistics also reflect more closely and immediately than tax receipts the impact of changes in the income tax policy regime and developments in the wider economy.

Time frames

SPI survey results are usually available around 21 months after the end of the tax year. The information is drawn from the transactional systems approximately a year after the reference period and it takes about 8-9 months to turn the raw dataset into information and commentary ready for publication.

Projections up to the current tax year, 2019-20, are provided to bring the statistics up to date, and enhance their timeliness and usability.

Projections beyond the current tax year are not provided because tax rates, allowances and thresholds impacting on the statistics are not known until announced by the Government. Any projections beyond 2019-20 would also be subject to the likelihood of larger projection errors.

Projection methods

The projection methods, described in Annex B, have been chosen to suit ITLS's key purpose of providing informative breakdowns of income taxpayers and liabilities. This uses the OBR's UK-level economic determinants. Provision of projections of total tax is not a key purpose of the ITLS release, and the use of other data sources and alternative projection methods would be required to make them suitable for that particular purpose. They should not be seen or used as alternatives to other forecasts of income tax.

Office for Budget Responsibility

The Office for Budget Responsibility was created in 2010 to provide independent and authoritative analysis of the UK's public finances, and twice yearly publishes five-year forecasts for the economy and public finances, including income tax receipts:

http://obr.uk

Use of Income Tax Liabilities Statistics

Income Tax Liabilities Statistics are used by a variety of organisations mainly concerned with Government decision making about tax policy, both in a policy making and policy monitoring context.¹¹

The projections form the basis for HMRC's detailed assessments of the Exchequer costs and impacts on individuals of potential changes to the income tax system. This informs the Government's tax policy decisions, and they are used by other Government departments for similar purposes.

They are also used by Parliament, Government departments such as HM Treasury, some private organisations including policy 'think tanks', as well as the media and other commentators to monitor income tax trends and distributions. They inform, for example, users' assessments of the impacts of past tax policy changes or the sustainability of the UK public finances. For some users, such as the Office for Budget Responsibility, the statistics are used explicitly in an economic and tax forecasting context, informing assessments of recent trends or used as specific inputs to the forecasting process.

¹¹ UKSA Monitoring Brief 6/2010 *The Use Made of Official Statistics* provides a generic framework for classes of use of Official Statistics:

http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-reviews/monitoring-brief-6-2010---the-use-made-of-official-statistics.pdf

The statistics are also used by HMRC and other organisations including the Office for Tax Simplification in assessments of the operation of the UK income tax system and its impact on individuals.

While HMRC has regular contact with some key users of the ITLS bulletin within Government, we would like to improve our knowledge of the use made of the ITLS bulletin, particularly by private sector organisations and individuals. We encourage users to provide feedback on their use of the statistics including any decisions they may inform, together with their requirements and any improvements they would like to see by using the contact points set out below.

Further information

Further information setting out the context for these statistics and projections is provided in Annex A. This includes an introduction to the UK income tax system and a summary of recent income tax policy changes which impact on the ITLS. Annex D provides a glossary of terms.

User Engagement Exercise

A user engagement exercise for this publication was run from November 2017 to January 2018, and then extended to the end of July 2018. It sought to gain feedback on reducing the frequency of the publication from twice a year to once a year and also on the specific content and presentation of the data including any suggestions for changes and improvements.

Only a limited number of responses were received and no new responses following the extension until the end of July 2018 following the May 2018 publication. There were no objections received with regards to the proposed move to an annual publication through the user engagement exercise, the change notice published on the HMRC announcement page¹² to cancel the February 2018 edition, or any correspondence from users looking for the January/February edition once it was not released. We therefore have moved to permanently publishing once a year in May/June.

User comments are reviewed regularly, and results of surveys and consultations are published. Information on the previous survey of users of HMRC income tax statistics is available here:

http://webarchive.nationalarchives.gov.uk/*/http://www.hmrc.gov.uk/statistics/income/usersurvey-results.pdf

Feedback and questions

We strive to improve the quality and accessibility of our National Statistics. Your feedback is crucial in this process. Outside of the user engagement exercise, we also welcome your suggestions on any of the Statistics and commentary in this publication. If you have any feedback or queries, please contact the Statisticians named on the front page of this release, participate in HMRC's user engagement exercise or use HMRC's user engagement from:

https://www.gov.uk/government/organisations/hm-revenue-customs/about/statistics#contactus

¹² <u>https://www.gov.uk/government/statistics/schedule-of-updates-for-hmrcs-statistics</u>

Annex A: Context and background information

Income tax

An overview of income tax is available on the gov.uk website:

https://www.gov.uk/income-tax https://www.gov.uk/scottish-rate-income-tax

Income tax is an annual tax on individuals' income arising in a given tax year (6th April to the 5th April the following year). It is the UK Government's largest single source of tax revenue, with income tax receipts gross of tax credits contributing £180.6 billion to total current receipts of £753.1 billion in 2017-18¹³.

Since April 1990, the UK has had a system of independent taxation. This means that the tax liability for each taxpayer is based solely on their own income and circumstances, and the income of spouses or partners or other family members in general has no effect on the total tax paid. The exception to this is for married couples or civil partnerships that are living together where at least one spouse or partner was born before 6th April 1935, who can still claim Married Couples Allowance (MCA).

The Marriage Allowance became available from 2015-16. This allows the transfer of 10% (£1,250 in 2019-20) of the tax free Personal Allowance between couples who are married or in civil partnerships, were born after 6th April 1935 and one partner has an annual income of £12,500 or less, plus up to £5,000 of tax-free savings interest and the other partner's annual income is between £12,501 and £50,000 (or £43,430 if you are in Scotland).

https://www.gov.uk/marriage-allowance

Most sources of income are liable for income tax including earnings from employment and from self-employment, most pensions income (state, occupational and personal), interest on most savings, income from shares (dividends), rental income and income paid from trusts, and some social security benefits. Employees who receive non-cash benefits from their employers such as company cars, fuel, medical insurance, living accommodation or loans also pay tax on these benefits. Adding all these sources together will give an individual's total income assessable for tax, an aggregate that appears in several ITLS tables.

Some sources of income are not liable for tax including certain social security benefits, Child and Working Tax Credits, and income from tax exempt savings accounts (e.g. Individual Savings Accounts and some National Savings & Investment products):

https://www.gov.uk/income-tax

¹³ OBR Economic and Fiscal Outlook, Table 4.3: Current receipts, March 2019.

Most individuals resident in the UK for tax purposes receive a tax free or 'Personal Allowance' (PA), which is an amount of income they can receive each year tax-free. In 2019-20, the basic PA is £12,500. All individuals with an income above £100,000 have their allowance reduced by £1 for every £2 of the excess until it is withdrawn completely. People who are registered as blind in England and Wales, or who in Scotland and Northern Ireland cannot do any work for which eyesight is essential, can claim Blind Person's Allowance.

From 2016-17 the Dividend Allowance was available which means that the first £5,000 of an individual's dividend income is tax free. This is irrespective of their total dividend and nondividend income. In 2018-19 the Dividend Allowance has reduced to £2,000. Furthermore, from 2016-17 the Personal Savings Allowance applies. As a result a Basic Rate taxpayer is able to receive up to £1,000 in savings income tax-free. The corresponding allowance is £500 for Higher Rate and £0 for Additional Rate taxpayers.

Income tax is due only on taxable income above an individual's Personal Allowance. Even then, there are other reliefs and allowances that can reduce an individual's tax bill. Tax reliefs are available on contributions to pension schemes and donations to charities. Employees and Directors may also receive tax relief on business expenses they have paid for. There are other allowances and reliefs that can reduce tax bills such as MCA described above. Unlike Personal Allowances, these are not amounts of income that can be received tax-free; rather they are amounts that may be deducted from any tax bill due.

Once tax-free allowances have been taken into account, income tax due is calculated using different tax rates for specific types of income across a series of tax bands. There are three different sources of income for tax purposes:

- income other than savings and dividends, often referred to informally as "earnings", which includes earnings from employment, but also profits from self-employment, pension income, taxable benefits and rental income
- savings income (e.g. bank and building society interest)
- dividends (e.g. income from shares in UK companies)

These sources are taxed at one of the main rates of income tax shown in the table below (the Basic Rate, the Higher Rate and, from 2010-11, the Additional Rate). Income tax works on a 'stack' basis. This means that earnings are taxed first, then savings and finally dividend income is taxed last. This means, for example, that if an individual has earnings after allowances sufficient to completely fill the Basic Rate tax band, all savings or dividends income would be charged at the Higher (or Additional) Rates of tax.

Table 1: Income tax rates 2019-20 by type of income and tax band

Source	Starting Rate for savings ¹	Basic Rate	Higher Rate	Additional Rate
Taxable	5		£34,500 -	More than
income after	£0 - £5,000	£0 - £34,500	£150,000	£150,000
allowances				
Earnings ²	-	20%	40%	45%
Savings	0%	20%	40%	45%
Dividends	-	7.5%	32.5%	38.1%

1 The Starting Rate for savings is a special rate of tax for savings income only. It is only available to the extent that the individual's taxable income from earnings does not exceed the Starting Rate limit. 2 Includes all taxable income not defined as savings or dividend income.

A series of example tax calculations using 2019-20 rates and allowances are provided in table 2 below:

Table 2: Examples of tax liability calculations for 2019-20¹

Liabilities rounded to nearest whole £

Example 1a: Individual with earnings of £50,000 and no savings or dividend income

Personal Allowance

12,500

	income:		income	come after Personal Allowance at:		income after savings &		income tax liabilities at:				
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	Total liabilities
										@20% =		
Earnings	50,000	37,500	-	37,500	0	-	37,500	0	-	7500	0	7,500
Savings	0	0	0	0	0	0	0	0	0	0	0	0
Dividends	0	0	-	0	0	-	0	0	-	0	0	0
Total	50,000	37,500	0	37,500	0	0	37,500	0	0	7,500	0	7,500

Example 1b: Individual in Scotland with earnings of £50,000 and no savings or dividend income

Personal

allowance 12,500

	income:		income a	income after personal allowance at:				income after savings & dividends allowance at:			
	before allowance	after allowance	starting rate	basic rate	intermediate rate	higher rate	starting rate	basic rate	intermediate rate	higher rate	
Earnings	50,000	37,500	2,049	10,395	18,486	6,570	2,049	10,395	18,486	6,570	
Savings	0	0	0	0	0	0	0	0	0	0	
Dividends	0	0	-	0	0	0	0	0	0	0	
Total	50,000	37,500	2,049	10,395	18,486	6,570	2,049	10,395	18,486	6,570	

Example 1b continued:

	income tax liabilities at:								
	starting	basic	intermediate	higher	Total				
	rate rate		rate	rate	liabilities				
Earnings	@19% = 389.31	@20% = 2079	@21% = 3882.06	@41% = 2693.7	9,044				
Savings	0	0	0	0	0				
Dividends	0	0	0	0	0				
Total	389	2,079	3,882	2,694	9,044				

Example 2: Personal Individual with £40,000 of earnings, £3,000 of savings and £5,000 of dividends

Allowance

12,500

	income:		income after Personal Allowance at:			income after savings & dividends allowance at:			income tax liabilities at:			
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	Total liabilities
Earnings	40,000	27,500	0	27,500	0	-	27,500	0	-	@20% = 5500 @20% =	0	5,500
Savings	3,000	3,000	0	3,000	0	0	2,000	0	0	400 @7.5% =	0	400
Dividends Total	5,000 48,000	5,000 35,500	0 0	5,000 35,500	0 0	- 0	3,000 32,500	0 0	- 0	225 6,125	0 0	225 6,125

Example 3: Individual with £10,000 of earnings income and £10,000 of savings income

Tax allowance

12,500

	income:	income after Personal Allowance at:			income after savings & dividends allowance at:			income tax liabilities at:				
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	Total liabilities
Earnings	10,000	0	0	0	0	-	0	0	- @0% =	0 @20% =	0	0
Savings	10,000	7,500	5,000	2,500	0	5,000	1,500	0	0	300	0	300
Dividends	0	0	0	0	0	-	0	0	-	0	0	0
Total	20,000	7,500	5,000	2,500	0	5,000	1,500	0	0	300	0	300

Example 4: Individual with £16,500 of pensions income and £3,000 of savings income

Tax allowance

12,500

	income:		income after Personal Allowance at:		income after savings & dividends allowance at:			income tax liabilities at:				
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	Total liabilities
Earnings	16,500	4,000	0	4,000	0	-	4,000	0	- @0% =	@20% = 800 @20% =	0	800
Savings	3,000	3,000	1,000	2,000	0	1,000	1,000	0	0	200	0	200
Dividends	0	0	0	0	0	-	0	0	-	0	0	0
Total	19,500	7,000	1,000	6,000	0	1,000	5,000	0	0	1,000	0	1,000

The way income tax is collected depends both on the type of the income and circumstances of the taxpayer. For most taxpayers, income tax on employment income or occupational pensions is collected through PAYE where income tax is calculated and deducted from the taxpayer's pay or pension before being paid over directly to HMRC by the employer or pension provider. Before 2016-17, tax on savings income was deducted at source by banks or building societies at the Basic Rate, with additional income tax due for Higher and Additional Rate taxpayers being collected either through PAYE via a change in their tax code or through Self-Assessment (SA). Since 2016-17, tax on savings income is no longer deducted at source by banks or building societies, and therefore any tax on savings income above the Personal Savings Allowance is collected either through PAYE via a change in their tax code or through Self-Assessment (SA).

Various categories of taxpayers including those with total income above £100,000, or income from savings, investments and property above a certain level, the self-employed, company directors and others with more complex tax affairs pay income tax due through SA:

https://www.gov.uk/self-assessment-tax-returns/who-must-send-a-tax-return

There are lags between when taxes collected through SA are received and when the corresponding tax liabilities arise. This is because the majority of tax collected through SA is not usually paid until the year after the liability arises.

Recent changes to income tax

The Personal Allowance and most income tax limits are statutorily increased each tax year with the annual increase in the Consumer Price Index (CPI) for September in the previous year ('indexation'). This has changed from using the Retail Price Index (RPI) for most thresholds since 2015-16. The Government may also legislate to introduce other changes to allowances and limits to over-ride indexation, or to introduce changes to income tax rates and structures.

Details of current and historic income tax allowances and rates are published on the HMRC website:

https://www.gov.uk/government/collections/tax-structure-and-parameters-statistics

The main income tax changes over recent years can be summarised as follows.

2008-09

- The Basic Rate of income tax was reduced from 22% to 20% and the 20% Savings Rate was abolished. The 10% Starting Rate was removed except for savings income.
- The Personal Allowance was increased by £600 above indexation, and the Personal Allowances for those aged 65-74 and 75 and over were increased by £1,180 above indexation. The Basic Rate Limit was reduced by £1,200 after indexation.

2009-10

• The Personal Allowance was increased by £130 above indexation and the Basic Rate Limit was increased by £800 above indexation.

2010-11

- All existing allowances and limits remained at their 2009-10 levels, reflecting the annual change in the RPI being negative in the previous September.
- Additionally, two changes to the structure of income tax came into effect: the first was the introduction of a new tax rate, the Additional Rate, set at 50% for taxable income over £150,000 (42.5% for dividends); the second reduces the Personal Allowance by £1 for every £2 of taxable income above £100,000 until fully withdrawn, regardless of the individual's age. This creates a notional marginal tax rate of 60% as every extra £2 earned within this band can be taxed at 40% as well as the 20% impact of having £1 of the Personal Allowance removed.

2011-12

• The Personal Allowance for those aged under 65 was increased by £1,000 in cash terms (£690 above indexation) and the Basic Rate Limit was reduced by £2,400 in cash terms, leading to a £1,400 decrease in the Higher Rate Threshold.

• The pension tax relief annual allowance was reduced from £255,000 to £50,000 in April 2011 (and the lifetime allowance falls from £1.8m to £1.5m from April 2012). These measures replaced a previously announced policy of restricting pension relief for those with incomes of £150,000 and over.

2012-13

• In 2012-13, the Personal Allowance for those aged under 65 was increased by £630 in cash terms (£210 above indexation) and the Basic Rate Limit was reduced by the same amount, implying no change in the Higher Rate Threshold.

2013-14

- In 2013-14, the Personal Allowance for those born after 6 April 1948 (previously those aged under 65) was increased by £1,335 in cash terms (£1,115 above indexation). The Basic Rate Limit was reduced by £2,360 to £32,010.
- The age-related Personal Allowances were frozen at 2012-13 levels so that the aged Personal Allowance for those born between 6 April 1948 and 5 April 1938 (previously those aged 65-74) remained at £10,500 while the aged Personal Allowance for those born before 6 April 1938 (previously those aged 75 and over) remained at £10,660.
- The Additional Rate of income tax for earnings and savings was reduced from 50% to 45% while the Additional Rate for dividend income was reduced from 42.5% to 37.5%.

2014-15

- In 2014-15, the Personal Allowance for those born after 6 April 1948 (previously those aged under 65) was increased by £560 in cash terms (£260 above indexation). The Basic Rate Limit was reduced by £145 to £31,865 since the Higher Rate threshold is subject to a 1% growth cap in 2014-15.
- The age-related Personal Allowances were frozen at 2013-14 levels so that the aged Personal Allowance for those born between 6 April 1948 and 5 April 1938 (previously those aged 65-74) remained at £10,500 while the aged Personal Allowance for those born before 6 April 1938 (previously those aged 75 and over) remained at £10,660.

2015-16

In 2015-16, the Personal Allowance for those born after 6 April 1948 (previously those aged under 65) was increased by £500 in cash terms (£370 above indexation), and then by a further £100 in cash terms. The Basic Rate Limit was reduced by £80 to £31,785 since the Higher Rate threshold is subject to a 1% growth cap in 2015-16 plus a £100 increase in line with the further £100 Personal Allowance increase passing full gains to Higher Rate taxpayers.

- The age-related Personal Allowances were frozen at 2013-14 levels so that the aged Personal Allowance for those born before 6 April 1938 (previously those aged 75 and over) remained at £10,660. The allowance for those born between 6 April 1948 and 5 April 1938 (previously those aged 65-74) remained at £10,500 until this year when the Personal Allowance went beyond this amount to £10,600 and therefore this aged Personal Allowance was surpassed.
- A new Marriage Allowance was introduced from 2015-16, allowing the transfer of £1,060 (10%) of the tax free Personal Allowance between couples who are married or in civil partnerships. It is for those born after 6th April 1935 and one partner must have an annual income of £10,600 or less, plus up to £5,000 of tax-free savings interest and the other partner's annual income must be between £10,601 and £42,385.
- The Starting Rate for savings was reduced to 0% from 10% and the threshold for which the rate applies above the Personal Allowance for savings interest was increased from £2,880 to £5,000.

A number of the reductions in the Basic Rate Limit had the effect of restricting the gains made by Higher Rate taxpayers from Personal Allowance increases.

2016-17

- In 2016-17, the Personal Allowance for those born after 6 April 1938 (previously those aged under 65 and those aged 65-74) was increased by £400 in cash terms. Due to negative CPI in 2016-17, the effective indexation was zero. Therefore the increase above indexation was also £400. The Basic Rate Limit was increased by £215 to £32,000.
- The age-related Personal Allowances were frozen at 2013-14 levels so that the aged Personal Allowance for those born before 6 April 1938 (previously those aged 75 and over) remained at £10,660 until this year when the Personal Allowance went beyond this amount to £11,000 and therefore this aged Personal Allowance was surpassed.
- From 2016-17 the 10% dividend tax credit was abolished while the rates charged on dividend income were increased such that the Basic Rate is now 7.5%, the Higher Rate 32.5% and the Additional Rate 38.1%. The Dividend Allowance was introduced in April 2016, which gives a tax-free allowance on total dividend income below £5,000.
- The Personal Savings allowance was introduced in 2016-17, giving a tax-free allowance on total savings income below the threshold of £1,000. The tax-free allowance is dependent on the top marginal tax rate on an individual's total income, with the threshold being halved for Higher Rate taxpayers and set to £0 for Additional Rate taxpayers.
- All savings and dividends income is taken into account when calculating a taxpayer's marginal rate. No tax is liable on dividend or savings income within an individual's Dividend or Personal Savings allowances, as this is charged at a nil rate.

• The effect of the Personal Allowance, Starting Rate and Personal Savings Allowance for 2016-17 is that an individual with total taxable income of £17,000 will pay no tax on their savings income.

2017-18

- In 2017-18, the Personal Allowance for all (following the abolishment of aged Personal Allowances) was increased by £500 in cash terms to 11,500. The effective indexation due to CPI was £110. Therefore the increase above indexation was £390.
- The Basic Rate Limit was increased by £1,500 to £33,500 for individuals in all areas of the United Kingdom excluding Scotland. This combined with the Personal Allowance increase sets the Higher Rate Threshold at £45,000, up £2000 on 2016-17.
- The Scottish Government has set the 2017-18 Higher Rate Threshold for nonsavings non-dividend (NSND) income of Scottish taxpayers unchanged from 2016-17 in cash terms at £43,000 – below the level set by the UK Government of £45,000.
- The Starting Rate band for savings was frozen at the 2016-17 level of £5,000.

2018-19

- In 2018-19 the Personal Allowance was increased by £350 to £11,850 due to CPI indexation.
- The Basic Rate Limit increased by £1,000 to £34,500, for individuals in all areas of the United Kingdom excluding Scotland, also due to CPI indexation. This combined with the Personal Allowance increase has set the Higher Rate Threshold at £46,350, up £1,350 on 2017-18.
- The Scottish Government introduced two new tax bands for Earnings; the Starter Rate band for non-savings non-dividend (NSND) income of Scottish taxpayers was introduced and is set at a rate of 19% with the Starter Rate Limit set to £13,850. The Basic Rate remains for Scottish taxpayers, starting at the Starter Rate Limit. It is still set at 20% with the Basic Rate Limit reduced down to £24,000. The Intermediate Rate band (for NSND only) was also introduced, starting at the new Basic Rate Limit and is set at 21% with the Intermediate Rate Limit set to £31,850.
- The Scottish Government has capped growth in the Higher Rate Threshold (for NSND only) to 1%, which has set it at £43,430 for Scottish taxpayers – below the level set by the UK Government of £46,350. This growth cap from 2017-18 has set the 2018-19 Intermediate Rate Limit (formally the Basic Rate Limit) at £31,850 (for NSND only).
- The Scottish Government also increased the Higher and Additional Rates of income tax on NSND income to 41% and 46% respectively for Scottish taxpayers.
- The Dividend Allowance was reduced by £3,000 and is now set at £2,000.

• The Starting Rate band for savings was frozen at the 2017-18 level of £5,000.

Note that the High Income Child Benefit charge applicable from 7 January 2013 is not included in the ITLS projections.

2019-20

- In 2019-20, the Personal Allowance was increased by £650 in cash terms to £12,500. The effective indexation due to CPI was £290. Therefore the increase above indexation was £360.
- The Basic Rate Limit was increased by £3,000 to £37,500 for individuals in all areas of the United Kingdom excluding Scotland. This combined with the Personal Allowance increase sets the Higher Rate Threshold at £50,000, up £3,650 on 2018-19.
- The Starter Rate band for non-savings non-dividend (NSND) income of Scottish taxpayers is set at a rate of 19% with the Starter Rate Limit set to £14,549. The Basic Rate is set at 20% with the Basic Rate Limit for NSND income of Scottish taxpayers set to £24,944. The Intermediate Rate band is set at 21% with the Intermediate Rate Limit set to £30,930.
- The Scottish Government has frozen the 2019-20 Higher Rate Threshold for nonsavings non-dividend (NSND) income of Scottish taxpayers unchanged from 2018-19 in cash terms at £43,430 – below the level set by the UK Government of £50,000.
- The Starting Rate band for savings was frozen at the 2018-19 level of £5,000.

Annex B: Data sources and Methodology

Annex B first describes the data sources and methods used to compile statistics on the number of taxpayers and income tax liabilities shown in Tables 2.1 to 2.6 of this release.

The methods used to compile estimates of the percentage of earnings paid in income tax by individuals at specific income levels (Table 2.7) are quite distinct, and described in a later section.

Tables 2.1 to 2.6

Data sources and sampling

The published estimates of the number of persons subject to UK tax with positive income tax liabilities ("income taxpayers") and the magnitude of those tax liabilities are based on HMRC's Survey of Personal Incomes (SPI).

The SPI is a sample survey of the tax records held by HMRC for individuals in the PAYE, SA and repayment claims administrative systems. The survey is conducted annually, and consists of a different sample of individuals each tax year. For each individual in the sample, SPI includes information on incomes assessable to income tax together with some basic information on individual characteristics, for example age and gender. As described below, the survey data is used to estimate income tax liabilities arising on incomes in a given tax year for each individual in the SPI sample, these amounts summarised in Tables 2.1 to 2.6 of this release.

The SPI sample totalled around 736,000 individual records in 2016-17, the latest available, representing an approximate 1.5% sample overall of individuals in contact with HMRC, and is made up of three separate samples drawn from the following HMRC administrative systems:

- National Insurance and PAYE Service (NPS): covering all employees and recipients
 of occupational or personal pensions with a PAYE record.
- Computerised Environment for Self-Assessment (CESA): covering the SA population which includes individuals with self-employment, rental, or untaxed investment income, as well as company directors and individuals with high incomes or complex tax affairs.
- Claims: covering persons without NPS or CESA records who have had too much tax deducted on incomes at source and claim a repayment.

Some individuals with a PAYE record are also in the SA system. These individuals are excluded from the PAYE population prior to sampling, as their SA record provides a more complete picture of their taxable income. Separate samples were drawn from each of these systems and different sampling strategies were used for each. The samples were structured as follows:

- The PAYE population from NPS was stratified by gender and by the sum of pay plus occupational pension income for the previous tax year. Where no previous year's income was available cases were stratified by gender and by whether they were a Higher Rate or Additional Rate taxpayer for the current tax year based on information available at the time the sample was drawn. The sampling fractions varied from 1 in 8 for individuals with high incomes and rare allowances to about 1 in 272 for people with low combined pay and pensions. In all, about 404,000 individuals were selected from NPS for inclusion in the 2016-17 SPI.
- For the SA population from CESA, the main source of income (self-employment or employment/ occupational pension) and ranges of income and tax were used to stratify the sample, with the sampling fraction varying from 1 in 1 for cases with very high income or tax up to about 1 in 249 for employees and occupational pensioners with smaller income or tax for 2016-17. In all, about 328,000 individuals were selected from SA for inclusion in the 2016-17 SPI.
- Around 3,700 claims cases were selected for inclusion in the 2016-17 SPI.

Once data was collected for the three constituent parts of the sample, the data sets were joined together. After allowing for incomplete records and records that failed data validation tests, there were about 736,000 valid cases on the 2016-17 final SPI file.

The stratified SPI sample design purposely yields very large sub-samples of SPI cases with very high incomes who account for a large proportion of total liabilities, increasing the precision of estimates of tax liabilities and taxable incomes.

Coverage of SPI and imputation of missing data items

Not all of the individuals in the SPI sample are taxpayers. About 23 per cent of sample cases (37 per cent grossed) have no income tax liability because allowances, deductions and reliefs exceed their total income assessable for tax. Where income exceeds the threshold for the operation of PAYE (£11,000 for 2016-17), the SPI provides the most comprehensive and accurate official source of data on personal incomes assessable for income tax.

However, as HMRC does not hold information for all people with personal incomes below this level, the SPI is not a representative data source for this part of the population and no attempt has been made to estimate the number of cases below the tax threshold or the amount of their incomes. Therefore the statistics in this publication only cover individuals liable to UK income tax (taxpayers) and their incomes.

The coverage of investment income for the sample drawn from NPS is incomplete. This is because most taxpayers with savings income do not report this income to HMRC as it is covered by a combination of the Personal Savings Allowance, the Personal Allowance, and the Starting Rate for Savings. Those that do need to pay tax on their savings income do so by contacting HMRC to report their savings income, where this information has not already been provided through Self-Assessment. HMRC also collects information on savings income directly from Banks and Building Societies. In order to create a full picture of total income for this survey, it is necessary to impute values of bank and building society interest and dividends to some sample cases.

For interest and dividends imputation, the amount for each SPI case:

 is known for cases in Self-Assessment from the amount declared on the Self-Assessment Return

- can be inferred or estimated reasonably for NPS cases where there is an adjustment to the tax code for Higher Rate taxpayers
- is supplemented with information from interest paying institutions
- is unknown for NPS cases where there is no coding adjustment typically those with no liabilities at the Higher Rate of tax

Where no information at case level is available from HMRC administrative systems, estimated values are imputed to cases so that the population as a whole has amounts consistent with evidence from other sources (for example, amounts of tax accounted for by deposit takers or indicated by household surveys).

For interest income, starting from control totals at UK level, for the number of cases with interest and the total amount of that interest, the numbers of cases and amounts of interest in Self-Assessment cases and those NPS cases with coding adjustments are deducted to leave targets for the remainder of the taxpayer population. These targets are at UK level – no attempt is made to control the targets to sub-UK geographical units. The cases to which amounts are attached by the imputation process and the amounts attached are determined by probabilistic methods with just the UK targets and distributions in mind.

For dividends income, the number of non SA cases with dividends income and distribution of imputed amounts were inferred from Family Resources Survey data for 2016-17.

As with investment income, HMRC does not have complete information about superannuation or personal pension contributions. Under PAYE, tax is paid on pay after the deduction of superannuation contributions and therefore HMRC does not need to record the contributions deducted from gross pay. For a small proportion of individuals, the superannuation contribution has been taken directly from an end of year return submitted by employers. For others, their total amount of superannuation contributions has been estimated and has been distributed among earners in the SPI sample, based on information from the Annual Survey of Hours and Earnings produced by the Office for National Statistics.

Relief at Basic Rate is given at source for employee contributions to personal pensions. As this is the correct amount of relief for Basic Rate taxpayer employees, HMRC does not need to collect personal pension data for this group of taxpayers. To compile complete estimates for personal pensions and total income for the SPI, a significant proportion of the amount of personal pension contributions has been imputed using data from external data sources. The estimated value for this and for superannuation contributions has been combined with other pension reliefs and included in these statistics.

Methods for modelling income tax liabilities

Numbers of taxpayers, total income tax liabilities, and the distributions of income tax liabilities shown in Tables 2.1 to 2.6 are estimated using HMRC's Personal Tax Model (PTM).

PTM is a micro simulation model of the UK income tax system. 'Micro simulation' denotes modelling of tax with reference to individual case level data, in this context the large sample of individuals within the SPI. For each sample case, PTM models income tax liabilities due in a given tax year based on the main features and parameters of the income tax system applying in that year, and incomes assessable for tax recorded in SPI.

Annex A provides a brief summary of how tax liabilities are calculated. An overview of the PTM modelling process applied to each SPI sample case is given below.

- Step 1: "Total income" is summed across the various components of income assessable for tax recorded or imputed in SPI, with separate sub totals for "earnings" (comprising all incomes taxed like earnings), savings and dividends.
- Step 2: "Income after deductions" is calculated by PTM as total income less contributions to occupational and private pensions and charities. This approach implies 100% tax relief on such contributions, consistent with the overall exchequer effects. PTM deducts pension contributions and contributions to charities from earnings income first, then savings then dividends income.
- Step 3: PTM calculates Personal Allowances, initially on the basis of an individual's age, and with blind person's allowance allocated where applicable. PTM's final assessment of Personal Allowances takes account of the excess of income after deductions over the aged income limit for SPI cases aged 65 and over (replaced by those born before 6 April 1948 from 2013-14) and, from 2010-11, the excess of income after deductions over £100,000 for all SPI cases.
- Step 4: The resulting allowance is allocated first to earnings, then savings and then dividends incomes (after deductions) in order to derive sub totals for "taxable income".
- Step 5: Taxable incomes are allocated to the Starting, Basic, Higher and, from 2010-11, Additional Rate tax bands beginning with taxable earnings, then savings, and then dividends, with corresponding gross tax liabilities in each category found by applying the corresponding rate of income tax.
- Step 6: The resulting total for income tax liabilities is adjusted to take account of other allowances. These include the Personal Savings and Dividends Allowances, and also allowances given as income tax reductions (sometimes called "tax credits"). PTM takes the following such allowances into account: Married Couples Allowance, Maintenance Payments Relief, Community Investment Tax relief, Venture Capital Trust Relief, Enterprise Investment Scheme Relief, Seed Enterprise Investment Scheme Relief and Social Investment relief.

As with similar models of personal taxes and benefits, it is neither possible nor practical to incorporate all of the detailed features of the UK income tax system into the PTM modelling process. For example, the list of deductions and allowances built into the PTM modelling process at steps 2-6 is not exhaustive, but does cover the most significant income tax reliefs by value.

The tax calculation process has been revised to better reflect the treatment of a small number of cases subject to the pension charge or who, under the residence and /or domicile rules, do not qualify for or choose to give up their Personal Allowance.

A Pension Tax Charge occurs when a taxpayer makes contributions to their pension above the annual (or lifetime) threshold for tax relief. The charge is the equivalent of taxing these contributions at the taxpayers' marginal tax rate. While this charge uses the income tax rates, and it is part of a taxpayer's tax liability, it is strictly the recovery of an excess of tax relief given. The methodology used in the personal tax model keeps this charge separate from a taxpayer's income tax liability, which maintains the link between their taxable income and the income tax paid.

An individual with income below the Personal Allowance can still be a taxpayer in some circumstances. This can arise where individuals who have income liable to UK tax do not

qualify for a Personal Allowance under the residence and /or domicile rules. Some people who do qualify for the Personal Allowance choose to give up their Personal Allowance as part of the qualifying conditions for having their income taxed under the "remittance basis". These taxpayers may only have a small amount of income liable to UK tax (i.e. below where the Personal Allowance is set), but this income is still liable to tax and is charged at the Starting and/or Basic Rates.

Taxpayers and taxpayer marginal rates

SPI sample cases with PTM modelled tax liabilities greater than zero are classified as income taxpayers and underpin the analyses of numbers of taxpayers shown in Tables 2.1 and 2.2. PTM further classifies taxpayers by their highest marginal rate of tax, as seen in Tables 2.1, 2.2, 2.5 and 2.6.

In practice, the marginal rate of tax an individual will pay on an additional pound of income will depend on what type of income it is, as well as the total and composition of their other taxable incomes. For example, an individual with earnings only within the Basic Rate tax band would face a marginal rate of 20% on an additional pound of earnings in 2016-17; the same rate would apply to an extra pound of savings (if it was outside the Starting Rate for savings which has a 0% rate), whereas a 7.5% rate would apply for dividends in 2016-17.

PTM adopts a simplified and strictly ordered method in allocating marginal rates to SPI sample cases:

- From 2010-11, cases with total taxable income above the additional rate threshold (£150,000) are classified as Additional Rate taxpayers.
- Cases with total taxable income above the Basic Rate Limit but below the Additional Rate threshold are classified as Higher Rate taxpayers.
- From 2017-18, individuals who are classified as resident in Scotland and have total taxable income above the Scottish Basic Rate Limit (BRL) but below the UK government's BRL have their marginal rate classification based on their income within this notional band. For these taxpayers, non-savings non-dividend (NSND) income within this band is taxed at the Higher Rate, whereas savings and dividends income is taxed at the Basic Rate. A Scottish taxpayer with any taxable NSND income within this band (but no total taxable income above the UK BRL) is classified as a Higher Rate taxpayer, as this is the top rate they are paying. A Scottish taxpayer with only savings and/or dividend income within this band (and no total taxable income above the UK BRL) is classified as a Basic Rate taxpayer.
- From 2018-19, individuals who are classified as resident in Scotland and have total taxable NSND income in the new Starter or Intermediate Rates for Scottish taxpayers (as well as the Basic Rate band between them) are classified as a Basic Rate Taxpayer within this publication (or "non-higher rate" taxpayers). Individuals who are classified as resident in Scotland and have total taxable NSND income in the Higher or Additional Rates (which have a different rates to the rest of the UK) are grouped with the equivalent Higher and Additional Rate taxpayers in all other regions.
- Remaining cases with non-zero total taxable income lying at or below the UK government's BRL (or Scottish BRL for individual classified as resident in Scotland) are classified as either Lower/Starting Rate (before 2015-16), Savers Rate or Basic Rate taxpayers according to the make-up of their total taxable income:

- Those with any taxable earnings (NSND income) are classified as Basic Rate taxpayers.
- Those without taxable earnings (NSND income), and with taxable savings only below the Starting Rate Limit for savings income are classified as Starting Rate taxpayers. From 2015-16 the Savings Rate below the Starting Rate Limit for savings income was changed to zero and therefore individuals in this group are no longer taxpayers. Those without taxable earnings (NSND income), and with taxable savings exceeding the Starting Rate limit or taxable dividends, are classified as "Savers" Rate taxpayers.

This ITLS classification has changed over time reflecting the changing structure of the income tax system. The allocation described above applies from 2008-09, when the Starting Rate of tax was removed for earnings income.

For 2007-08 and earlier, all SPI cases with taxable earnings/savings income below the Starting Rate Limit were classified as Starting Rate taxpayers. Those with taxable earnings/savings between the starting and Basic Rate Limits were classified either at Savers Rate (i.e. those without earnings charged at the then basic rate of 22%) or Basic Rate otherwise. Individuals with taxable dividends only below the Basic Rate Limit were classified at Savers Rate.

Informally, all individuals classified by PTM as either Starting, Savers and Basic Rate taxpayers may all be viewed as "non-Higher Rate" taxpayers in the sense that their total taxable income is less than the Basic Rate Limit, and so no tax liabilities are due at the Higher or Additional Rates of tax.

Tables 2.1, 2.2, 2.5 and 2.6 are presented in their current format to provide additional information showing these different types of non-Higher Rate taxpayer, but some users may prefer to group together these categories depending on context and purpose; in a time-series context for example, this grouping is helpful in abstracting from those step changes in numbers assigned to each sub category that have arisen directly as a result of changes to the structure of the income tax system.

Projections

Due to the time needed to receive and process tax returns and information provided by employers, SPI survey results are not available until several years after the tax year to which the survey data relates. The latest available SPI survey data is for 2016-17, and was first published in March 2019.

Projections up to the current tax year, 2019-20, therefore are also given in tables 2.1 to 2.6 in order to provide a more up-to-date assessment of the distributions for taxpayers and liabilities. While the projections methods aim to capture where possible the most important likely influences on taxpayer numbers and liabilities, projection of the base SPI survey data to later years inevitably means that these projections are subject to greater uncertainties and potential error margins than outturns for 2016-17 and earlier years (see Annex C).

The projection methods described below have been chosen to suit the ITLS statistics key purpose of providing informative breakdowns of income taxpayers and liabilities. Provision of projections of total tax is not a key purpose of the ITLS release, and use of other data sources and alternative projection methods would be required to make them suitable for that particular purpose. They should not be seen or used as alternative or competitor forecasts of income tax produced by other organisations.

Potential taxpayer numbers in the projections years are projected via a re-scaling of the SPI base year grossing factors for individual SPI sample cases, according to a high level partition of the SPI sample by each case's main income source:

- main source employment and self-employment income cases are first projected/rescaled according to published Office for National Statistics (ONS) population projections by single year of age (implying initially constant employment and selfemployment rates by age band). Grossing factors are then further re-scaled uniformly across all age bands so that grossed SPI main source employment and selfemployment case totals change in percentage terms from 2016-17 in line with the OBR's most recently published forecast for total employment and self-employment (Labour Force Survey definitions).
- remaining SPI cases are projected/re-scaled uniformly according to the implied percentage change in the residual main source "other" category, calculated as difference between the published ONS population total and projected SPI main source employed and self-employed totals derived as described immediately above.
- this process is applied separately for males and females.

Nominal income amounts recorded in the base SPI survey data for each case are projected at the UK level using OBR's most recently published forecasts for a range of macroeconomic series relevant to the specific income sources recorded in SPI. For each income source, this uprating is generally uniform across all sample cases. However, in the case of pay/earnings, the projection factors are allowed to vary across the pay distribution according to the recent trends revealed in the ONS Annual Survey of Hours and Earnings (ASHE):

- SPI cases are assigned to one of seven quantile groups, partitioned according to percentiles P10, P25, P75, P90, P95 and P99 of the ASHE weekly pay distribution.
- For each quantile group, earnings growth is adjusted according to the percentage point difference between historic earnings growth for the corresponding percentile point in the ASHE data and the growth in the mean. For example, earnings growth for those in the bottom group (below P10) is adjusted according to average growth at ASHE P10 relative to the ASHE mean.
- For projecting 2017-18, the percentage point differences referred to above are based on the April 2017 and April 2018 ASHE data already available. This has been adjusted to remove the impact of the national living wage, which was introduced in April 2016 (as this is already included in the overall average growth determinants from the OBR).
- For projecting 2018-19 and 2019-20, the percentage point differences are based on a seven year long term average of ASHE back from 2017-18.

Again, this process is applied separately for males and females. Since these ASHE and SPI samples are different, it should be clear that resulting mean earnings growth across all SPI cases would differ from the OBR forecast; a further re-scaling is applied to all cases to ensure that mean earnings growth does align with the OBR forecast.

Table 3 below summarises which assumptions/series are used in the ITLS projections processes for re-scaling of grossing factors and nominal incomes.

SPI population totals:	SPI taxpayer total 2016-17 £ billion	Series used in projections
Main source employed	-	Population by single year age; and total employees (LFS)
Main source self employed	-	Population by single year age; and total self- employment (LFS)
Main source other	-	Population by single year age
Main income components:		
Pay	713	Implied whole economy average earnings (Wages and salaries divided by LFS employees), with allowance for differential growth across distribution (see main text)
Profits	91	Total self-employed (mixed) income
Personal pension income	95	Weighted average Retail Prices Index and whole economy average earnings
Dividends	58	Non-oil, non-financial profits
State pension income	54	Announced rates
Bank & building society interest	6	Household bank & building society deposits multiplied by weighted average of building society deposit and 5-year rates
Property income	19	The growth in the private rented dwelling stock (assumed to be 3% per year) and the growth in private rents
Taxable employer benefits	9	Implied whole economy average earnings (Wages and salaries divided by LFS employees)

Table 3: Summary of economic assumptions used in ITLS projections

The economic series used in the projection processes are consistent with the most recently published OBR forecast for the UK economy. Note that because ITLS projections are provided only to the current tax year, these economic series mainly consist of economic outturns published by other organisations, usually ONS. The OBR forecasts for these series are typically relevant only for the ITLS projections for tax year 2019-20, where economic outturns for most series are not yet available.

The projections in the May 2019 release of ITLS use economic series consistent with the OBR's March 2019 Economic and fiscal outlook. Outturns and OBR forecasts for key series including employment, earnings, prices and interest rates are published by the OBR (Table 3.10 'Determinants of the fiscal forecast'):

https://obr.uk/download/march-2019-economic-and-fiscal-outlook-charts-and-tableseconomy/ The OBR's release policy for supplementary forecast information is available here:

https://obr.uk/docs/dlm_uploads/release_policy.pdf

Population projections used in this ITLS release are published by ONS (Table Z1 - Zipped Population Projections Data Files, UK, 'UK_PPP_opendata2016'):

http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/z1zippedpopulationprojections/datafilesuk

Income tax structures, rates, allowances and thresholds have been announced up to and including the current tax year 2019-20. No projection methods or assumptions are therefore required for this aspect of the modelling process for projections years.

For all projection years, income tax liabilities are modelled as described with respect to regrossed and uprated SPI dataset, and announced tax rates, allowances and thresholds.

Additional Rate adjustments

The adjustments for the impacts of Additional Rate have now all been realised in the SPI survey data. Outturn of incomes for high earners from 2009-10 displays a large amount of forestalling prior to introduction of the 50% rate, 2010-11 and 2011-12 contain behaviour from the rate increase and unwinding of forestalling while in 2012-13 taxpayers will have been anticipating the pre-announced reduction to 45% in 2013-14. Data for 2013-14 includes the impact of the behavioural responses following the reduction in the Additional Rate from 50% to 45% in April 2013. The outturn for 2013-14 includes some amount of temporarily elevated incomes. The size of this forestalling effect is estimated to be around £5.25 billion in 2013-14. This represents the counterpart of the 2012-13 deferrals following the reduction in the Additional Rate.

Specifically, these responses are: (a) continued temporary reductions in incomes below 'normal' levels for those affected during 2012-13, the counterpart of significant forestalling of incomes in 2009-10 ahead of the introduction of the Additional Rate; and (b) possible anticipatory effects in 2012-13 and their subsequent counterpart in 2013-14 that arose in advance of the reduction in the Additional Rate of tax to 45%.

In March 2012 HMRC published a comprehensive ex-post assessment of the 50% Additional Rate of income tax using a range of evidence including 2010-11 SA returns¹⁴. The degree of forestalling/unwinding is assumed to have increased by broad income band, consistent also with the evidence from SA returns.

The 2014-15 SPI includes estimates of income for higher earners and is expected to be the first year relatively unaffected by timing effects due to the changes in the Additional Rate of income tax in the recent series.

HMRC's assessment of the yield arising from the introduction of the Additional Rate in 2010-11 is set out in the published report on the exchequer effects of the 50p rate. It is not possible to infer the additional yield arising from the 50p rate using ITLS Table 2.6, as this gives no indication of reductions in income and yield arising due to behavioural responses.

14

http://webarchive.nationalarchives.gov.uk/20140206144454/http://www.hmrc.gov.uk/budget2012/exch eq-income-tax-2042.htm

Dividend tax adjustments

The 2015-16 SPI reflects estimates of income for individuals that includes some forestalling of dividend income in 2015-16. As was set out in the OBR's November 2017 EFO¹⁵, this was updated to reflect outturn data from SA returns.

The new 2016-17 SPI reflects estimates of income for individuals that includes some unwinding of that forestalled dividend income in 2016-17, hence the estimates are reduced to reflect this.

Projections of dividend income allow for the behavioural response following the reforms to dividend taxation. These responses include a reduction in dividend income in 2017-18, 2018-19, and 2019-20. The pace at which the forestalled income is assumed to unwind is as set out in the OBR's March 2018 EFO¹⁶. This has been reflected in the latest projections.

Consistent with the costing methodology including the estimated behavioural impact for the policy, the projections for 2017-18, 2018-19, and 2019-20 allow for:

- The temporary reduction in dividend income in 2017-18 to represent those who brought forward more than double the normal dividend income to 2015-16.
- The temporary reduction in dividend income in 2018-19 to further represent those who brought forward greater proportions of their normal dividend income to 2015-16.
- A behavioural response in 2016-17 onwards to the change in the effective dividend tax rates and the introduction of the dividend allowance.

The projection adjustment is applied to most SPI cases with dividend income and have a significant impact on the ITLS projections for 2017-18 and 2018-19, which are particularly visible in table 2.6 where the underlying amounts of dividend income impact the projected tax liabilities shown.

Modelling Scottish Income Tax

The PTM and projections for 2017-18 onwards have been adjusted to account for the devolution of Income tax rates and thresholds for non-savings, non-dividend (NSND) income liabilities (i.e. earnings from employment, self-employment, pension income, foreign income, taxable benefits and income from property), also called earned income in this publication.

From 2017-18, the Scottish income tax is payable by Scottish taxpayers. An individual's taxpayer status is determined by the location of their main place of residence for the majority of the tax year. This is based on HMRC address data. The SPI holds the postcode for the address as at the end of the tax year. Within this analysis Scottish individuals have therefore been identified on the basis of this postcode rather than the taxpayer status which is determined by place of residence, not at a point in time but over the course of the year and thus only finalised after each tax year, from 2016-17 onwards, has ended. The income of individuals identified as Scottish in the 2016-17 SPI is projected forward without any adjustments for changes in address in later years, and then the appropriate tax system, Scottish or non-Scottish tax, is applied for each year.

¹⁵ <u>https://cdn.obr.uk/Nov2017EFOwebversion-2.pdf</u> (page 122 para 4.47)

¹⁶ <u>http://cdn.obr.uk/EFO-MaRch_2018.pdf</u> (page 106 para 4.35)

Rates and thresholds for Scottish taxpayers from 2017-18 onwards were set by the Scottish Parliament (each year) and applied for each respective tax year. Details of the Scottish Tax system are outlined in Annex A – Recent changes to income tax. In brief, in 2017-18, the Scottish Government changed the effective higher rate threshold (HRT) for non-savings non-dividend (NSND) income to a lower threshold than that of the UK Government. (The UK HRT also applies to non-Scottish NSND income and all dividend and savings income.) In 2018-19, the Scottish Government introduced a more substantial change, with new tax bands, rates and thresholds, diverging from the structure of the UK Government income tax system. In 2019-20, the Scottish Government made no further changes to the underlying structure of their system, making only changes to threshold values.

The two different systems are modelled together in PTM and applied to an individual's NSND income based on their address.

Details of Income Tax in Scotland are explained at the following website: <u>https://www.gov.uk/scottish-income-tax</u>

The OBR set out some further details in their devolved taxes forecast, the most recent from March 2019 is available here (Chapter 2): https://obr.uk/download/march-2019-devolved-tax-and-spending-forecasts/

Table 2.7

Table 2.7 "Percentage of earnings paid in income tax" depicts income tax burdens over time for a selection of specific family types and illustrative earnings levels.

The purpose and therefore methods underpinning Table 2.7 are quite distinct from Tables 2.1 to 2.6. The statistics in Table 2.7 do not relate to actual UK taxpayers, nor any particular subset of UK taxpayers, but rather hypothetical families assuming specific family circumstances (e.g. concerning numbers of children) and gross wages. Family circumstances and earnings in all cases are by assumption, and SPI data is not used in the calculations. The family types depicted are illustrative but far from exhaustive; circumstances and incomes in practice vary widely across families in the UK.

Table 2.7 also differs from the other tables in this release by taking account of the amounts of personal tax credits (Working Tax Credit and Child Tax Credit) the depicted families would be entitled to. These tax credits provide financial support to working families and families with children, based on family circumstances including hours worked, family income, claimant's age, the number and age of children and childcare costs.

An introduction to the tax credit system is published alongside HMRC's regularly published tax credit statistics:

https://www.gov.uk/government/collections/personal-tax-credits-statistics

Methods

Gross income tax liabilities and tax credit entitlements are calculated for each family in each tax year assuming specific family circumstances and the presence of a single wage earner with gross earnings at specified points in the earnings distribution.

The family types depicted in Table 2.7 have changed over time, reflecting changes to the systems, including the introduction of tax credits in 1999-00, abolition of Married Couples Allowance for all born after 6th April 1935, and reforms to the tax credits system in April 2003. Since 2003-04, income tax burdens are presented for single adult families without children, couple families without children, and couples with two children.

The income tax calculations assume that:

- the taxable income of the wage earner consists only of the specified gross earnings; and that the partner in couples is a non-taxpayer.
- the wage earner is entitled only to the Personal Allowance for under 65s, and has no deductions (e.g. pension contributions) or other allowances (e.g. blind persons allowance) reducing gross tax liabilities.

The tax credit calculations assume that:

- wage earners work full-time (>30 hours per week) and so are entitled to Working Tax Credit (WTC), including the couple element where applicable, and the WTC 30 hour element whatever their family circumstances or earnings.
- the family with two children is entitled to the Child Tax Credit (CTC) family premium and per child element; and does not receive any support through WTC for childcare costs.
- the final (tapered) tax credit award is based on a family income that consists solely of the gross earnings of the wage earner.

Calculations for each tax year are based on the prevailing structure and parameters of the income tax and tax credit systems. Table 2.7 shows income tax net of tax credits entitlements, and expressed as a percentage of gross earnings. In some cases, calculated tax credit entitlements exceed income tax liabilities, leading to a negative estimate of tax overall as a per cent of income.

Data

Earnings at the specified points in the earnings distributions are based on the Office for National Statistics Annual Survey of Hours and Earnings (ASHE):

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/workplacepensions/bulle tins/annualsurveyofhoursandearningspensiontables/2018provisionaland2017revisedresults

The specific ASHE-based earnings percentiles used in Table 2.7 relate to gross weekly pay for full-time employee jobs (ASHE Table 1.1a), on an annualised basis. ASHE is published annually with an April reference period. At the time of publication of the provisional estimates for their latest year, the ONS also revise their data for the previous year (e.g. in releasing 2018 they also revise 2017), the revision for that previous year is incorporated into our figures. Figures for tax years are derived by HMRC as an average of the ASHE results for the adjacent Aprils.

http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/allemployeesashetable1

Projections

The most recently published ASHE results are for April 2018, published on 25 October 2018, permitting derivation of estimates of earnings across the distribution up to tax year 2017-18.

Projections of income tax burdens are also provided for 2018-19 and 2019-20. Earnings are projected to grow uniformly across the earnings distribution according to the OBR's March 2019 forecast for whole economy earnings growth.

Annex C: Quality indicators

A quality report covering the ITLS statistics and projections is available from the National and Official Statistics section of the HMRC website:

https://www.gov.uk/government/statistics/quality-report-income-tax-liabilities-statistics

This report, last updated in January 2014, assesses the statistics against standard dimensions of quality such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, and coherence and comparability.

This Annex provides an annual update on quality, and provides more detailed summary quality indicators, in particular summarising the accuracy and reliability of ITLS statistics and projections. It also contains further information on the relevance and appropriate use of the statistics.

Sampling Error

The SPI sample is compiled in order to infer results for the UK taxpaying population as a whole, e.g. the number of such taxpayers and their total tax liabilities. As with all sample surveys, estimates from the SPI are subject to sampling variation meaning estimated totals and other sample statistics would vary from one sample to the next if repeated random samples were drawn, and in all cases would differ to some degree from the corresponding population totals purely by chance. Intuitively, the extent of such variation increases with the degree of variation across the population in the variable of interest (e.g. income tax liabilities), and falls as the size of the sample increases.

Variation in a given sample-based statistic is usually measured by its standard error, which represents the standard deviation of the statistic of interest computed across all possible samples that could have been drawn from the population. Based on the standard errors, the precision of sample estimates is typically illustrated through confidence intervals, which provide an estimated range of values which is likely to include the unknown population parameter with a given level of confidence.

95% confidence intervals for SPI-based estimates of the number of UK income taxpayers and total tax liabilities by region and county in 2016-17, together with a range of other variables, are published in HMRC Table 3.13a:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da ta/file/791690/190402_National_Statistics_T3_12_to_T3_15a_publication_2016-17_FINAL.pdf

Key results are repeated in table 4 below. For the United Kingdom, the width of the 95% confidence intervals for numbers of taxpayers and total income tax liabilities are 100,000 and $\pounds 2$ billion (0.3% and 1.1% of the central estimates respectively). As shown in the table, precision declines for smaller estimated totals, e.g. for numbers of taxpayers and tax liabilities in specific countries and regions. Broadly speaking, as sample size changes by a factor x, the confidence interval will change by a factor ($1/\sqrt{x}$), so a fourfold increase in sample size will halve the confidence interval. Confidence intervals for year on year changes in these quantities meanwhile may very broadly be expected to be larger than those for the annual levels shown below by a factor of around $\sqrt{2}$.

Table 4: Confidence intervals for estimates of taxpayer numbers and total tax liabilities, 2016-17 Survey of Personal Incomes

SPI 2016-17

	Taxpayers, thousands			Income ta	Income tax liabilities, £million			
	95% CI		95% CI	CI width	95% CI		95% CI	CI width
	Lower	Central	Upper	as %	Lower	Central	Upper	as %
	Limit	estimate	Limit	estimate	Limit	estimate	Limit	estimate
United Kingdom	31,200	31,200	31,300	0.3	173,000	174,000	175,000	1.1
North East	1,120	1,140	1,160	3.5	4,020	4,120	4,220	4.9
North West	3,250	3,280	3,310	1.8	13,400	13,700	13,900	3.6
Yorkshire and the Humber	2,400	2,430	2,460	2.5	9,250	9,420	9,590	3.6
East Midlands	2,180	2,210	2,240	2.7	9,030	9,190	9,360	3.6
West Midlands	2,550	2,580	2,610	2.3	10,500	11,000	11,400	8.2
East of England	3,000	3,030	3,060	2.0	17,800	18,100	18,400	3.3
London	4,180	4,210	4,250	1.7	43,200	43,800	44,300	2.5
South East	4,610	4,640	4,680	1.5	32,400	32,800	33,100	2.1
South West	2,690	2,720	2,750	2.2	11,800	12,000	12,200	3.3
Wales	1,350	1,380	1,400	3.6	4,630	4,740	4,850	4.6
Scotland	2,570	2,600	2,630	2.3	11,600	11,800	12,000	3.4
Northern Ireland	725	741	757	4.3	2,510	2,590	2,660	5.8

The 95% confidence intervals may be interpreted in one of two ways: (i) if repeated samples were drawn and intervals computed as in the table, those intervals would contain the unknown population parameter around 95 times in 100; or (ii) the lower and upper confidence limits provide a plausible range for the true population value in the sense that if that value were in reality greater [smaller] than the upper [lower] confidence limit, then the probability of obtaining a sample estimate any lower [greater] than that observed would be just 2.5%.

Coverage error

The SPI survey is fully representative only of UK taxpayers, as opposed to the entire UK population, and so ITLS tables are published for UK taxpayers only.

Annex B also notes that for the SPI sub-sample of individuals drawn from PAYE only, a number of data items are not recorded in administrative tax records because these are not needed for the operation of the income tax system. These items include, for example, savings interest income which is not recorded in PAYE because tax was deducted at source via a separate scheme operated by deposit takers until 2016-17 and since then taxpayers inform HMRC of savings interest where tax needs to be paid or it's reported through self-assessment. These missing data items are imputed for most SPI sample cases in PAYE only as described in the annex.

Table 5 below shows the total contribution to key SPI income aggregates from imputed values in 2016-17. Users interested in ITLS estimates and projections of tax liabilities on these particular items should note the degree of imputation. A large contribution to the estimates from imputed values is likely to lead to a loss of accuracy. Overall, imputation contributes around £28.8 billion to grossed total income across all taxpayers of £1,040 billion in 2016-17.

	Number of Individuals (thousands)		Total aı (£ milli	
	Imputed	Total	Imputed	Total
Individuals Gender Individuals Age Bank and building society interest	2 24	49,700 49,700	-	-
income	27,000	32,700	3,670	8,880
Dividend income	2,180	6,120	2,020	60,700
Occupational pension contributions Personal pension contributions	13,500 7,270	13,500 7,270	15,900 7,190	15,900 7,190

Table 5: Extent of imputation, 2016-17 Survey of Personal Incomes

Model errors

Income tax liabilities in ITLS are estimated at case level on the basis of the SPI survey data using HMRC's Personal Tax Model (PTM). The tax modelling process of the PTM attempts to capture all of the significant features of the UK income tax system, but inevitably this involves certain simplifications and omissions.

PTM model outputs are regularly benchmarked at case level against income liabilities recorded as due in HMRC's SA system for the SPI sub-sample in SA. Differences arise for known and specific reasons and only in a small minority of sample cases. The impact of these simplifications is judged to be small for key aggregates at UK level, and for most UK taxpayer sub populations.

Projection errors

Simplifications and potential errors: (a) in projection processes; and also (b) the economic assumptions employed in those processes are likely to induce larger errors in ITLS projections compared with outturn statistics for 2016-17 and earlier tax years.

Projection methods are described in Annex B. Users of the projections should note that the projection methods are suited to analysis of tax liabilities at UK level. Projection of potential taxpayer numbers and incomes by income source are based on UK economic assumptions, which are applied generally uniformly to all individuals in the SPI sample. They take no account of local divergences in economic trends since 2016-17 within the UK, or indeed across other dimensions such as industrial sector.

Published breakdowns of projected taxpayer numbers by country and region (Table 2.2) therefore are indicative, and there is some evidence that they may be subject to potentially large error margins. HMRC is reviewing the evidence, and will consider whether regional projections are suitable for continued publication.

In addition, the projections will not capture potentially important shifts in the distribution of incomes occurring after 2016-17. ITLS projected shares of total income and tax across taxpayer income groupings are therefore likewise indicative (Table 2.4), but do allow for differential growth in earnings across the pay distribution consistent with past trends, and possible responses of high income taxpayers to changes in the tax policy regime. Summary statistics describing ex post ITLS absolute projection errors across key aggregates for projections released following spring Budgets since 2001 are shown in the table below. The forecast horizon is defined with respect to the latest SPI outturn data available, e.g. this

ITLS release uses 2016-17 SPI survey data, which gives a 'one-year ahead' projection for 2017-18.

Table 6: Summary statistics for absolute errors in ITLS projections of key aggregates^{1,2}

	Taxpayers thousands	Higher rate taxpayers thousands	Total income £ billion	Total liabilities £ billion
One-year ahead projections (N = 15) Mean Max Standard deviation	510 1,400 450	150 370 130	16 40 12	4 9 2
Mean Max Standard deviation	2% 5% 2%	4% 10% 3%	2% 7% 2%	3% 8% 2%
Two-year ahead projections (N = 14) Mean Max Standard deviation	810 1,900 420	180 420 140	25 63 19	6 14 4
Mean Max Standard deviation	3% 6% 1%	5% 11% 4%	3% 8% 3%	4% 10% 3%
Three-year ahead projections (N = 13) Mean Max Standard deviation	1,090 2,300 580	190 480 130	34 84 25	8 19 6
Mean Max Standard deviation	4% 8% 2%	5% 13% 4%	4% 11% 3%	6% 13% 4%
Memo: Evolution of projections for 2016-17 Three-year ahead projection (April 2016) Two-year ahead projection (April 2017) One-year ahead projection (April 2018) SPI 2016-17 outturn	30,100 30,400 30,800 31,200	4,410 4,340 4,420 4,760	1,010 1,010 1,030 1,040	169 167 172 174

¹ ITLS projections released after spring Budgets since 2001.

² Projection horizon is defined by latest SPI outturn data available for analysis, e.g. one-year ahead projections are projections for tax year T+1 based on SPI data for year T. Budget projections for year T+1 are generally published at the beginning of year T+3, and so economic assumptions used in the projection process are typically outturns to around year T+2.

The table indicates mean absolute projection errors of 2-4% for key UK aggregates in respect of the one-year ahead projections, and increase to roughly 4-6% for three-year

ahead projections. Plus or minus one standard deviation in past errors provides one guide to the possible limits of approximate 70% confidence intervals around central projections for key ITLS aggregates. However, past errors may not accurately reflect the degree of ex ante uncertainty in projections made at any specific point in time. The table also shows the evolution of projections made for 2016-17, the latest SPI outturn.

Ex ante uncertainty in the projections may be illustrated via 'ready reckoners'. The table below shows estimated changes from the May 2019 ITLS central projections used in this publication, arising for illustrative increases in key economic assumptions used in the projection process. Comparable reductions in the same series would have broadly similar impacts of opposite sign.

Table 7: Sensitivity of central projections to changes in key economic assumptions

	2016-17	2017-18	2018-19	201 9- 20
	outturn	projection	projection	projection
Central projection		p: 0j000.011	projection	<u>p: 0j0011011</u>
Taxpayers	31,200	31,300	31,700	31,400
o/w non Higher Rate taxpayers	26,500	26,800	27,000	27,100
o/w Higher/Additional Rate taxpayers	4,760	4,590	4,670	4,290
Total liabilities	174,000	181,000	190,000	194,000
o/w liabilities of non-Higher Rate taxpayers	57,900	60,500	62,800	66,100
o/w liabilities of Higher/Additional Rate taxpayers	116,000	121,000	127,000	128,000
Working-age employees+1% ¹	·			
Taxpayers		130	133	132
o/w non Higher Rate taxpayers		104	106	108
o/w Higher/Additional Rate taxpayers		26	27	24
Total liabilities		759	800	797
o/w liabilities of non-Higher Rate taxpayers		296	311	329
o/w liabilities of Higher/Additional Rate taxpayers		462	489	468
Pay+1% ²				
Taxpayers		93	79	92
o/w non Higher Rate taxpayers		10	-6	20
o/w Higher/Additional Rate taxpayers		83	86	72
Total liabilities		2,180	2,280	2,320
o/w liabilities of non-Higher Rate taxpayers		872	909	962
o/w liabilities of Higher/Additional Rate taxpayers		1,310	1,370	1,360
Profits+1% ²				
Taxpayers		39	23	25
o/w non Higher Rate taxpayers		32	18	19
o/w Higher/Additional Rate taxpayers		7	6	6
Total liabilities		301	304	315
o/w liabilities of non-Higher Rate taxpayers		88	89	94
o/w liabilities of Higher/Additional Rate taxpayers		213	215	220
Interest rates+1ppt ³				
Taxpayers		94	96	101
o/w non Higher Rate taxpayers		-18	-17	10
o/w Higher/Additional Rate taxpayers		113	112	92
Total liabilities		3,780	4,080	4,300
o/w liabilities of non-Higher Rate taxpayers		891	903	970
o/w liabilities of Higher/Additional Rate taxpayers		2,890	3,180	3,330

¹1% point increase in numbers employed (SPI cases with pay > 0 aged 16-65) relative to central projection, holding SPI population aged 16-65 constant.

²1% point increase in pay/profits for all SPI cases with pay/profits relative to central projection.
³1% point increase interest rates on savings income relative to central projection. The resulting percentage change in savings interest income depends on the central projection for interest rates, but will generally be much larger than the +1% ready reckoners shown earlier in the table for pay/profits.

The table shows that:

- An illustrative 1 percentage point increase in working-age employment increases projected taxpayer numbers by 0.42% and tax liabilities by 0.42% in 2017-18, with increases in taxpayer numbers and liabilities for both non-Higher and Higher/Additional Rate groups reflecting their centrally projected distributions.
- An illustrative 1 percentage point increase in pay has a larger 1.2% impact on liabilities in 2017-18, as marginal rates of tax exceed average rates (the latter relevant to the employment change). Taxpayer numbers rise by 0.3% overall, but increase for higher/Additional Rate taxpayers (1.81%) compared with an increase for non-Higher Rate taxpayers (0.04%) as numbers moving into Higher Rate tax (from Basic Rate) exceed those moving into Basic Rate tax as pay increases.
- An illustrative 1 percentage point increase in average profits raises liabilities by 0.2% in 2017-18, reflecting the much lower level of profits in total taxpayer income relative to earnings. Taxpayer numbers rise by 0.1%.
- An illustrative 1 percentage point increase in interest rates increases liabilities by 2.1% in 2016-17. Note that the percentage change in savings income resulting from a 1 percentage point increase in savings interest rates varies with the central projection for interest rates, but will generally be much larger than 1 percentage point ready reckoners shown for pay and profits. Taxpayer numbers rise by 0.3%

Annex D: Glossary of Terms

Annex D aims to explain acronyms, abbreviations and terms associated with personal incomes and income tax liabilities.

Allowances

The amount of income which an individual can receive before being liable for income tax. The Personal Allowance is an example of an allowance.

Average rate of Tax

The ratio of income tax liability to total income, where income is measured before deductions, reliefs and allowances.

Basic Rate Limit

This is the highest income point for taxable income (after allowances) at which Basic Rate income tax is charged.

CESA (Computerised Environment for Self-Assessment)

This is the computer system used to administer Self-Assessment from which SA data for the SPI has been extracted since 1996-97. See Self-Assessment (SA).

COP (Computerisation of PAYE)

The computer system which used to administer PAYE until being replaced by NPS and from which PAYE data for the SPI was extracted for tax years 1997-98 to 2007-08 inclusive.

Deductions and Reliefs

Amounts deducted from total income, along with Personal Allowances to arrive at the amount of taxable income subject to an income tax charge. This includes amounts for contributions to occupational and personal pensions, and a variety of other Deductions and Reliefs including charitable giving and loss relief etc.

Dividend Allowance

This is the amount of dividends income you can receive for the tax year without having to pay tax on it, this is currently set to £5000 irrespective of the total amount of dividend and non-dividend income received.

Dividend Income

Income derived from shares.

Earned Income

Earned income consists of income such as pay, private and occupational pensions, retirement annuities, state retirement pensions and taxable social security income.

Geographical Areas

Some tables present information for sub-UK areas described as Government Office Region, County, District and Parliamentary Constituency. Administrative and Political geographical areas are not held on taxpayers' records. For the SPI, the areas are attached by matching the individual's postcode to the Office for National Statistics Postcode Directory.

Industry

Industry categories are based on UK Standard Industrial Classification of Economic Activities 2007 (SIC2007). Income from self-employment (sole trade and partner) is assigned an industry using the nature of business text descriptions supplied on Self-Assessment Returns.

Intermediate Rate Limit (for Scottish taxpayers NSND income)

This is the highest income point for taxable income (after allowances) at which Intermediate Rate income tax is charged for Scottish taxpayers with NSND income.

National Insurance and PAYE System (NPS)

NPS is the computer system HMRC uses to administer PAYE. It replaced COP and is the source of PAYE data for SPI for tax year 2008-09 onwards.

National Insurance Recording System 2 (NIRS2)

This computer system is used to monitor payment of National Insurance (NI) contributions and to calculate and prove entitlement to contributory benefits. These include Job Seekers Allowance (JSA) and the National Insurance Pension. It provides contribution information to a number of government departments.

Non-Savings Non-Dividend Income (NSND)

See earned income.

P14s

Form P14 is an End of Year summary for an employment that is submitted by the employer to HMRC, showing pay, tax and NI contributions for the year. The employer provides similar information to the employee on an end of year certificate, form P60.

Pay As You Earn (PAYE)

PAYE is the system used by HMRC to collect and account for income tax on earnings from employment and pensions. Income Tax and National Insurance Contributions are deducted by the employer and paid over to HMRC on behalf of the individual for each pay period.

Personal Allowance

This is the amount of income you can receive for the tax year without having to pay tax on it.

Personal Savings Allowance

This is the amount of savings income you can receive for the tax year without having to pay tax on it. The upper bound for the tax-free allowance depends on the top marginal tax rate on an individual's total income; the threshold for Higher Rate taxpayers is half that for Basic Rate taxpayers and is set to £0 for Additional Rate taxpayers.

Savings Income

A particular class of income that includes interest on bank and building society accounts.

Self-Assessment (SA)

SA is a system where an individual declares their income and can calculate their own income tax due after the end of the tax year. Taxpayers included in SA can be higher earners, self-employed and taxpayers with complex tax affairs.

Starter Rate Limit (for Scottish taxpayers NSND income)

This is the highest income point for taxable income (after allowances) at which Starter Rate income tax is charged for Scottish taxpayers with NSND income.

Starting Rate Limit/Starting Rate for savings limit

This is the highest income point for taxable income (after allowances) at which Starting Rate income tax is charged. From 2008-09 the Starting Rate was abolished for non-savings income and applied only to non-dividend savings income.

Superannuation contributions

These are the regular amounts paid by an employee into an employer occupational pension fund which are deducted from the employee's salary. Superannuation contributions to an authorised fund or scheme are not liable to income tax and the employer would deduct the amount of superannuation contributions from the gross pay before assessing the income tax liability through PAYE.

Survey of Personal Incomes (SPI)

An annual survey of individuals who could be liable for income tax derived from HMRC administrative systems holding data on persons within PAYE, SA and income tax claims.

Tax liabilities

The amount of income tax due on taxable income after applying tax rates to the tax base. The income tax liability for each sample case in SPI is calculated by reference to the amounts of income by type, deductions and reliefs and the tax regime parameters that apply for the year. The calculated liability for a tax year will differ from the amount of tax receipts collected in a financial year.

Tax receipts

The amount of income tax collected by HMRC. The SPI measures the amount of income tax liability for a tax year, but not the amount of receipts in the financial year.

Taxable income

Income assessable to income tax after allowances.

Taxpayer

An individual calculated to have a positive income tax liability for the tax year, based on the income, allowances, reliefs and deductions for the year.

Total income

The sum of an individual's components of income taken into account in calculating income tax. This includes earnings from employment, profits from self-employment, pension income, some social security benefits, savings income, income from shares (dividends), rental income, and income paid from trusts. It excludes:

- gains from the disposal of assets that are classified as capital gains
- interest, dividends or bonuses from tax exempt investments (for example, ISAs and National Savings & Investments Savings Certificates)
- interest and terminal bonuses from Save As You Earn Schemes
- Premium Bond, National Lottery and gambling prize winnings

It is before relief for contributions to occupational and personal pensions, other deductions and reliefs or Personal Allowances.

In the tax system, income is streamed into three main categories: Dividends; Savings Income (not dividends); Non-savings income as different rules apply.