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Media contact:
HMRC Press Office (Individuals)
020 7147 2318
Out-of-hours: 07860 359544

Statistical contacts:
David Nolan
Tel: 020 7147 2427
david.nolan@hmrc.gsi.gov.uk
Darren Keelaghan
Tel: 020 7147 2988
darren.keelaghan@hmrc.gsi.gov.uk

KAI Personal Taxes
HM Revenue and Customs
100 Parliament Street
London
SW1A 2HQ

Website:
<http://www.hmrc.gov.uk/statistics/tax-statistics.htm>

Income Tax Liabilities Statistics 2010-11 to 2012-13

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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 UK Statistics Authority website:

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

The United Kingdom Statistics Authority (UKSA) has confirmed that the ITLS statistics and projections can be designated as National Statistics, subject to HMRC implementing the enhancements listed in Assessment Report 157 *Statistics on Income Tax* and Assessment Report 241 *Income Tax Projections*, available at:

<http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html>

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 2010-11 SPI survey (page 50). 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note that the reliability of these projections by country and region is under review, with the possibility that they be withdrawn from future releases (Annex C).

New in this release and next release

ITLS was last published in April 2012. This release provides new analysis of outturn liabilities statistics for tax year 2010-11, based on recently published SPI outturn data.

The release also provides revised projections for tax years 2011-12 and 2012-13, based on the 2010-11 SPI data and projected using economic assumptions consistent with the Office for Budget Responsibility's (OBR) December 2012 *Economic and fiscal outlook*:

<http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/>

ITLS is usually published twice yearly, in December/January and April/May, with revised projections based on the OBR's latest published economic forecast, until final statistics based on outturn SPI survey data can be published. The next scheduled release will be in April/May 2013, containing updated projections to 2012-13 and new projections for 2013-14 following the OBR's Budget 2013

economic forecast. The exact date of publication will be given not less than one calendar month before publication on both the HMRC website and Office for National Statistics (ONS) publication hub.

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

Relevance of ITLS

ITLS Section A provides detailed outturn statistics 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 richest 10%), 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, ITLS 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:
<http://www.hmrc.gov.uk/statistics/income-tax-receipts.htm>

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.

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.

Due to the time needed to receive and process tax returns and information provided by employers, SPI survey results are subject to a lag of several years. Projections up to the current tax year, 2012-13, are provided to bring the statistics up to date, and enhance their timeliness and usability. Projections beyond the current tax year are not provided as tax rates, allowances and thresholds impacting on the statistics are not known until announced by the Government.

The projections methods, described in Annex B, have been chosen to suit ITLS's 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 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 alternative or competitor forecasts of income tax produced by other organisations.

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://budgetresponsibility.independent.gov.uk/>

Use of ITLS

The ITLS 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.¹

The projections from the basis for HMRC's detailed assessments of the Exchequer costs and impacts on individuals of potential changes to the income tax system which inform 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 Budgetary 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.

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 statistics within Government, we would like to improve our knowledge of the use made of the ITLS statistics and projections, 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.

Comments and questions

If you have comments or queries on these statistics, please contact the statistical contacts named on the front page of this release, or use HMRC's user engagement form: <http://www.hmrc.gov.uk/statistics/feedback.htm>

User comments are reviewed regularly, and results of surveys and consultations are published. Information on the most recent survey of users of HMRC income tax statistics is available here: http://webarchive.nationalarchives.gov.uk/20120609144700/http://hmrc.gov.uk/stats/income_tax/user-survey-results.pdf

¹ 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>

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 statistics. Annex D provides a glossary of terms.

SECTION A: Income Tax Liabilities Statistics

Summary of key statistics

Key outturns for taxpayers and income tax liabilities in 2010-11 are:

- 31.3 million individual income taxpayers in 2010-11, an increase of 0.7 million compared with the previous year.
- 28.0 million non-higher rate taxpayers (89.6% of all taxpayers), 3.02 million higher rate taxpayers (9.6%), and 236,000 additional rate taxpayers (0.8%).
- average rates of tax were 12.5% for basic rate taxpayers, 23.1% for higher rate taxpayers, and 39.9% for additional rate taxpayers.
- the richest 50% of taxpayers by total income accounted for a 76.5% share of total income and 88.7% of tax liabilities.
- the richest 1% of taxpayers by total income accounted for a 11.5% share of total income and 25.0% of tax liabilities.
- 61.3% of tax liabilities were due on taxable incomes falling within the basic rate tax band, 23.9% in the higher rate band, and 14.7% in the additional rate band.

Projections for tax years 2011-12 and 2012-13 show:

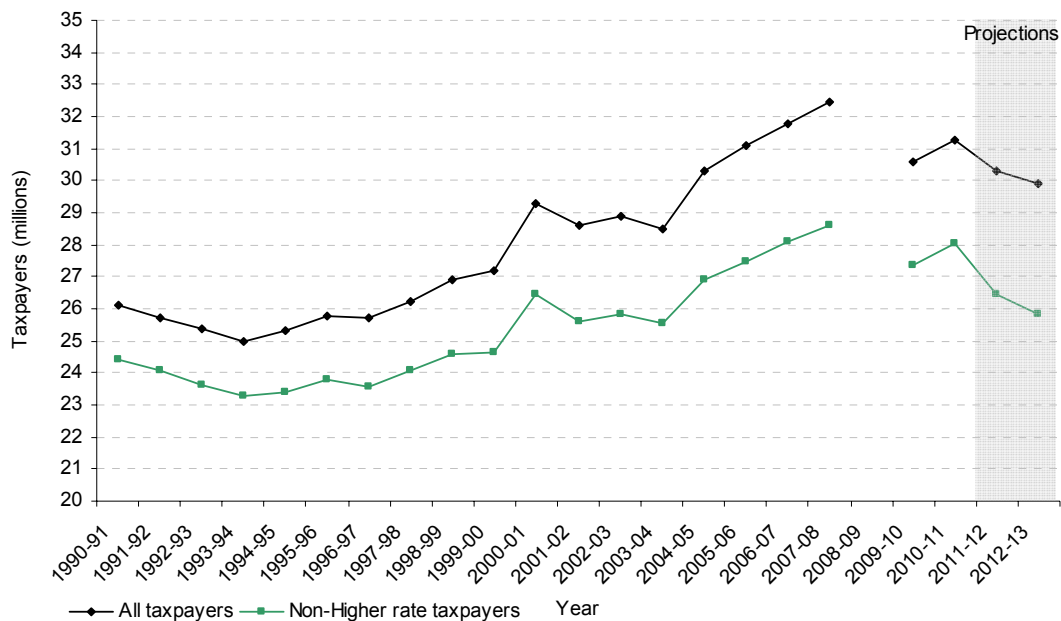
- 29.9 million taxpayers in 2012-13, 1.4 million lower than in 2010-11.
- 3.86 million higher rate taxpayers in 2012-13, 0.9 million higher than in 2010-11, and 267,000 additional rate taxpayers in 2012-13.
- average rates of tax fall to 11.4% for basic rate taxpayers, and to 22.3% for higher rate taxpayers in 2012-13, but increase to 40.8% for additional rate taxpayers.

Users should note that recent outturns and projections for the highest income taxpayers are strongly affected by expected responses to changes in the top rate of income tax.

The remainder of this section provides more detailed commentary and statistics on income taxpayers and liabilities in 2010-11, and the projections to 2012-13, followed by the detailed tables.

Table 2.1 – Number of individual income taxpayers by marginal rate, gender and age, 1990-91 to 2012-13: 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 taxpayers' marginal tax rate, by gender and by age group.

Figure 1: Income taxpayers



Latest available SPI survey data shows an estimated 31.3 million taxpayers in 2010-11, of which 17.4 million (55.7%) were male, and 6.01 million (19.2%) above the State Pension Age. Comparable figures for the UK population aged 16 and over in 2010 are 48.8% male, and 19.3% above State Pension Age.²

An individual's marginal tax rate – the proportion of an extra pound of income that would be paid in income tax – depends on their total taxable income and its composition. In 2010-11, an estimated 28.0 million individuals, representing the large majority of all income taxpayers (89.6%) were non-higher rate taxpayers³, with no liabilities due at the higher rates of tax. A further 3.02 million individuals (9.6%) were higher rate taxpayers and 236,000 (0.8%) were liable to the additional rate of tax introduced in April 2010. Basic, higher, and additional rates of tax on earnings and savings were 20%, 40%, and 50% respectively in 2010-11; lower rates applied to dividend income.

Among non-higher rate taxpayers, there were 276,000 starting rate taxpayers (0.9% of all taxpayers), classified as those with taxable savings only below the

² Office for National Statistics Mid Year Population Estimates for 2010, <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-231847> State Pension Age for the purposes of this publication in 2010-11 is 65 years for men and 60 years and 6 months for women.

³ Non-higher rate taxpayers comprise starting, savers and basic rate taxpayers who pay no tax at the higher or additional rate.

£2,440 starting rate limit on which a 10% tax rate applied. This is higher than previously projected in ITLS in April 2012 due to an enhancement in 2010-11 to SPI imputation methodology for bank and building society interest to reflect better levels of savings income among the lowest income taxpayers. A further 623,000 (2.0%) without taxable earnings but with taxable savings above the starting rate limit and/or taxable dividends were savers rate taxpayers, where rates of 20% and 10% applied to savings and dividends. The remaining 27.1 million (86.7%) non-higher rate taxpayers had taxable earnings and are classified as basic rate taxpayers.

Taxpayer numbers rose by 0.7 million in 2010-11, more than the 0.4 million increase previously projected in ITLS, but following a 1.9 million fall in the two years to 2009-10 affected by the recession in the UK economy. The economy began to recover during the second half of 2009, and gross domestic product in rose by 1.8% in volume terms in 2010 compared with the previous year. Personal allowances were held constant in cash terms in 2010-11, leading to an increase in taxpayer numbers as average incomes rose.

Projections to 2012-13 show taxpayer numbers declining by 1.4 million to 29.9 million in 2012-13. With limited growth in incomes in the period since 2011, these projected reductions in taxpayer numbers reflect significant increases in the personal allowance for under 65s, particularly in 2011-12 (£690 above indexation) and also 2012-13 (£210 above indexation). In cash terms, the personal allowance for under 65s rose from £6,475 in 2010-11 to £8,105 in 2012-13. Age-related allowances, by contrast, have risen with RPI indexation since 2010-11, and the number of taxpayers aged 65 and over is projected to rise by 0.2 million by 2012-13.

Within the total, numbers liable at the higher and additional rates of tax are projected to rise by 0.9 million, from 3.25 million (10.4% of taxpayers) in 2010-11 to 4.13 million (13.8%) in 2012-13. While the proportion of taxpayers liable at higher rates normally rises over time as income growth typically exceeds price indexation of tax thresholds, UK earnings growth was below RPI inflation for income tax indexation in this particular period. Increases in higher rate taxpayers therefore reflect reductions in the higher rate threshold for income tax which fell in cash terms from £43,875 in 2010-11 to £42,475 in 2011-12 and remained at that level in 2012-13.

Within the 0.9 million rise in the numbers liable at higher rates of tax, the number of additional rate taxpayers is projected to rise from 236,000 in 2010-11 to 267,000 by 2012-13. The 2010-11 SPI outturn is below the 255,000 additional rate taxpayers previously projected in ITLS in April 2012, which was informed by an examination of Self Assessment (SA) returns then available. Based on past SPI surveys, this projection allowed for some high earners being outside SA whereas the 2010-11 outturn shows that nearly all are within SA. Projections of additional rate taxpayers in 2011-12 and 2012-13 are subject to considerable uncertainties, not least concerning likely responses of high income individuals to the new tax rate, but with projected underlying growth in numbers in part explained by the £150,000 additional rate threshold being fixed in cash terms.

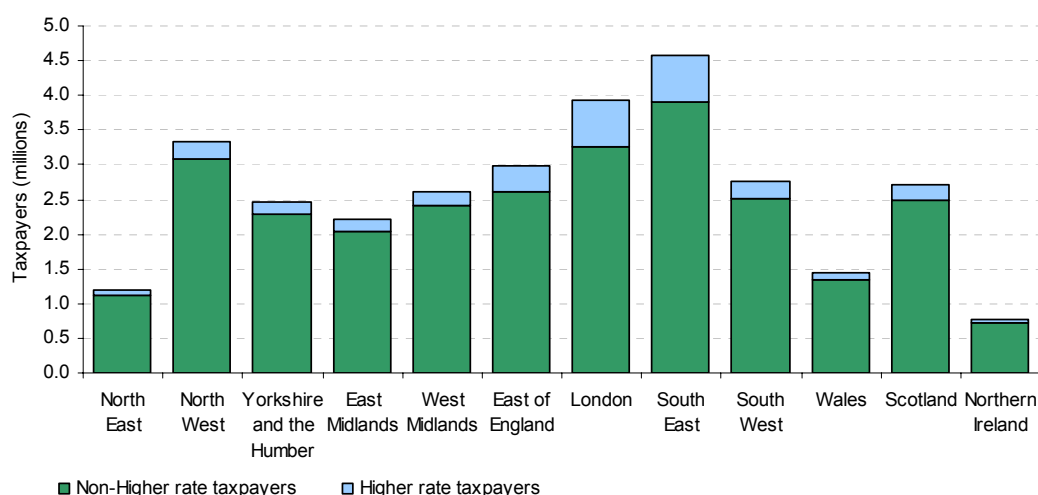
Interpreting Table 2.1: Starting, savers and basic rate taxpayers are non-higher rate taxpayers, and might all be considered "basic" rate taxpayers in the sense that no tax

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.

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 2010-11.

Table 2.2 – Number of individual income taxpayers by country and region, 1999-00 to 2012-13: provides a breakdown of trends in individual taxpayer numbers over time by country and Government Office Region.

Figure 2: Income taxpayers by country and region, 2010-11



In 2010-11, the largest number of taxpayers are estimated to reside in South East (14.6% of the total), followed by London (12.6%) and the North West (10.7%) Government Office Regions. The countries and regions with the lowest number of taxpayers are Northern Ireland (2.4%), followed by the North East (3.8%) and Wales (4.6%). These rankings closely mirror in country and regional shares in the UK population aged 16 and over.

Within the taxpayer totals for 2010-11, there are three regions where the proportion of higher and additional rate taxpayers exceeds the UK average (10.4%): London (16.9%), the South East (14.3%), and East of England (12.3%). By contrast, under-representation of higher and additional rate taxpayers is most marked in Wales (6.2%), Northern Ireland (6.3%) and the North East (6.8%).

Taxpayer numbers rose across nearly all countries and regions in 2010-11 compared with 2009-10, with the exception of the North East which showed no change. Growth in taxpayer numbers exceeded 3% in Scotland, Wales and the South East, compared with 2.2% for the UK as a whole.

ITLS projections show taxpayer numbers declining by between around 3½ and 5½% across the countries and regions between 2010-11 and 2012-13, in line with the UK projection of a 4.3% decline. These regional projections of taxpayer numbers are indicative, and show close correspondence with the expected UK trend. The projection methods take account only of relevant economic and other trends only at UK level, irrespective of the place of residence of each individual in the SPI data (see Annex B).

Projections of additional rate taxpayer numbers by regions and country for 2011-12 and 2012-13 are highly indicative, and are published for continuity with past publications while HMRC assesses their reliability (see Annex C).

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 2010-11 outturns are based on economic outturns/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 trends. Annex B provides further details.

Table 2.4 – Shares of total income (before and after tax) and income tax for percentile groups, 1999-00 to 2012-13: *shows how the distributions of individual incomes and tax liabilities have changed since 1999-00. Shares in total income assessable for income tax of different income groups provide one measure of how equally income is distributed across the taxpaying population. Shares of total tax liabilities for different income groups reflect both the underlying distribution of incomes assessable for tax and also the progressivity of the income tax system.*

Taxpayers in the top half of the before tax total income distribution (the richest 50%) accounted for a 76.5% share of total income before tax in 2010-11, compared with a 23.5% share for those in the bottom half of the income distribution. Shares in total tax liabilities of high income groups exceed their income shares, reflecting the progressive structure of the income tax system. The richest 50% of taxpayers accounted for 88.7% of tax liabilities in 2010-11, compared with 11.3% for the bottom half.

Relative to taxpayer populations, distributions of income and tax liabilities become progressively more unequal moving towards the very top end of the income distribution. Shares of total income before tax and tax liabilities for the richest 10% of the taxpayers by total income were 33.7% and 53.5% respectively in 2010-11, and 11.5% and 25.0% for the richest 1%.

Table 2.4 shows that the distribution of total income among taxpayers has tended to become less equal over time. The income share for the richest 50% of taxpayers rose by 0.9 percentage points between 1999-00 and 2009-10. This is more than explained by developments at the very top of the taxpayer income distribution. The income share for the top 1% rose by 2.9 percentage points over the same period, but declined for taxpayer groups below the 95th percentile.

The total income share of the richest 1% of taxpayers, however, fell sharply in 2010-11 to 11.5%, down 2.4 percentage points on 2009-10. Their share of tax fell by 1.5 percentage points to 25.0%. This probably represents a temporary reduction in incomes below 'normal' levels, the counterpart of bringing forward or forestalling of income in 2009-10 by individuals affected by the introduction of the additional rate of tax. Income forestalling was estimated by HMRC at around £16-18 billion or 2% of total taxpayer income among broadly the richest 1% in 2009-10, though this assessment was subject to considerable uncertainties.⁴ There has been less reduction in income and tax shares for the richest 1% in 2010-11 than previously projected in ITLS in April 2012.

⁴ *The Exchequer effect of the 50 per cent additional rate of tax:*
<http://www.hmrc.gov.uk/budget2012/excheq-income-tax-2042.pdf>

Figure 3: Shares of total income by taxpayer total income decile, 2010-11

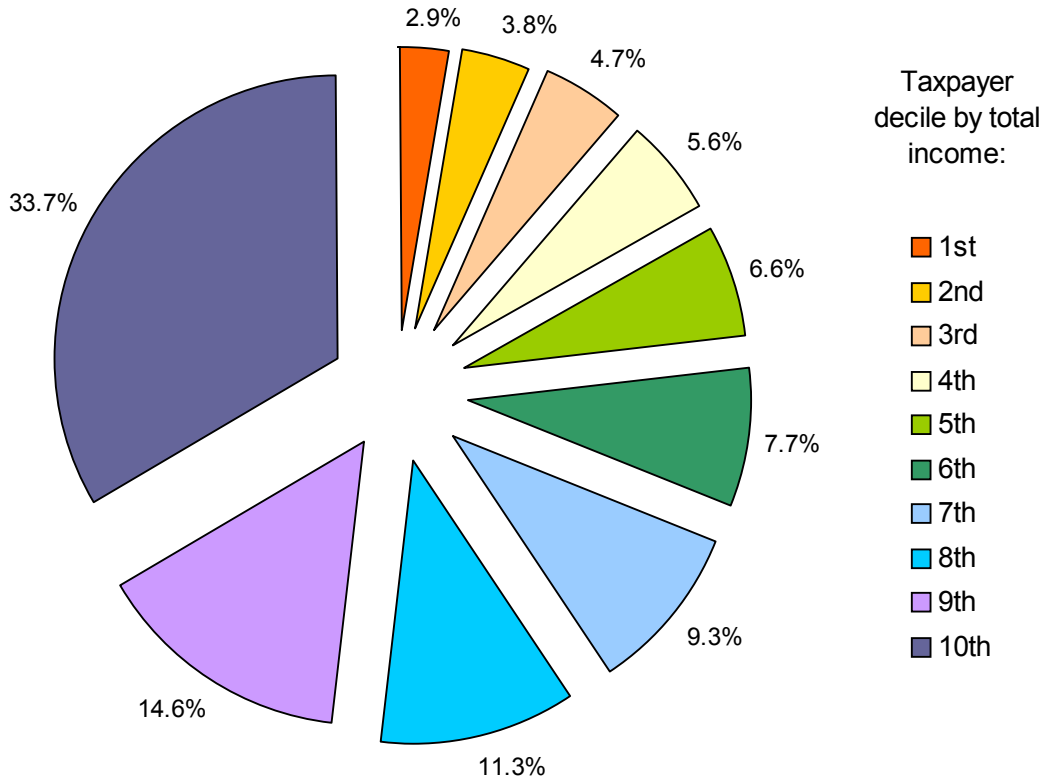
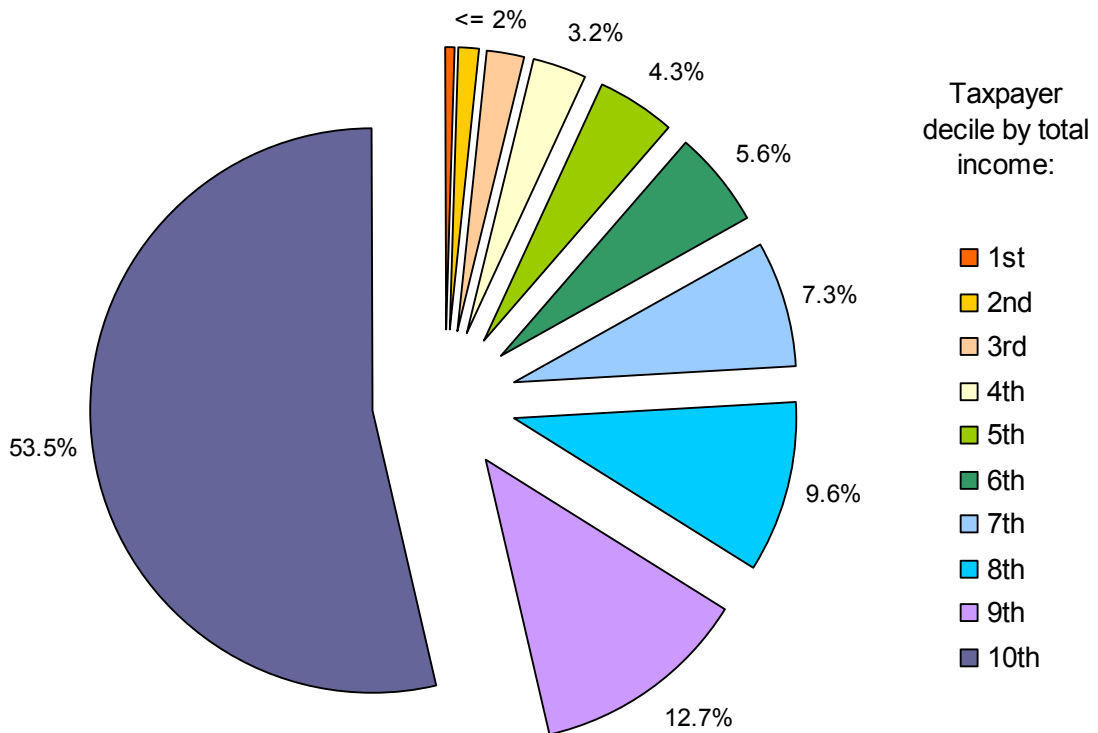


Figure 4: Shares of tax liabilities by taxpayer total income decile, 2010-11



Projections of shares of income and tax for percentile groups in 2011-12 and 2012-13 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 the additional rate of tax.

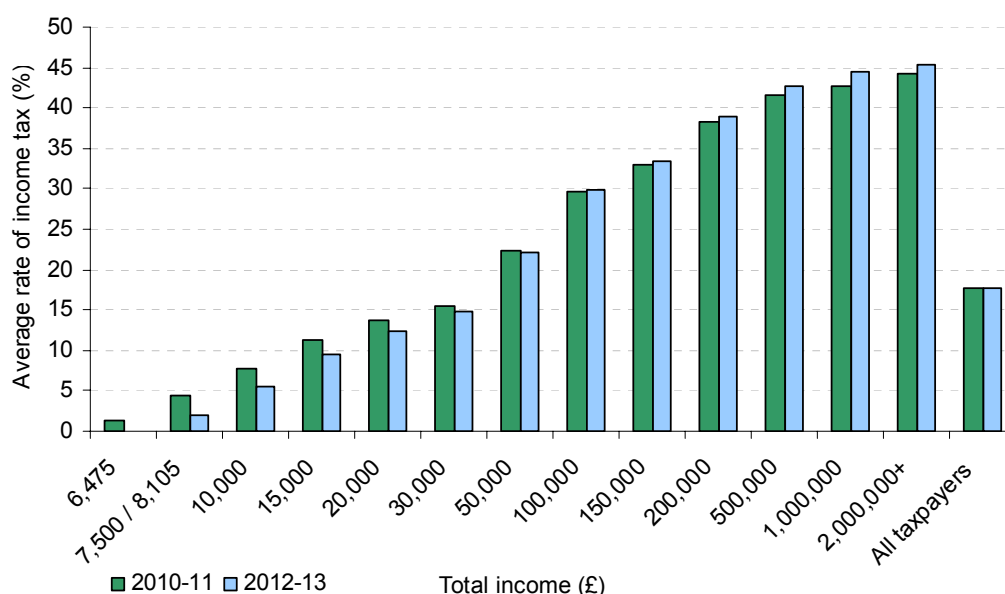
The top 1% share of income is projected to rise as incomes return closer to normal levels in 2011-12, but dips again in 2012-13 reflecting likely deferral of incomes ahead of the reduction in the additional rate to 45% in 2013-14. Their share of tax is projected to rise from 25.0% in 2010-11 to 26.5% in 2012-13. Shares of tax for other taxpayers among the richest 10% are also projected to rise between 2010-11 and 2012-13, notwithstanding a slight fall in their income share. The higher rate threshold for income tax declined in cash terms over the same period.

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 non-taxable social security benefits and tax credits 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.

Table 2.5 – Income tax liabilities, by income range, 2010-11 to 2012-13: shows numbers of 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 taxpayer incomes in a given tax year. Analysis by marginal rate provides a snapshot of the tax liabilities of e.g. basic and higher rate taxpayers in a given tax year.

Figure 5: Average rate of income tax by income range, 2010-11 and 2012-13



In 2010-11, an estimated 4.0 million taxpayers (12.8% of the total) had total income assessable for tax between the personal allowance for under 65s of £6,475 but below £10,000, while 12.2 million (38.9%) had total income between £10,000 and £20,000, and 12.5 million (40.0%) had total income between £20,000 and £50,000. Combined these groups accounted for 91.6% of all taxpayers in 2010-11.

Numbers of taxpayers with total incomes above £50,000 in 2010-11 were much smaller by comparison at 2.6 million (8.4%). Table 2.5 also shows that there are small numbers of taxpayers with very high incomes, including an estimated 10,000 with incomes above £1,000,000, among which 3,000 have income above £2,000,000. The distribution of taxpayers by total income therefore exhibits significant right skew.

Average rates of tax rise with total income, for example from 11.4% of total income in 2010-11 for those with incomes between £15,000 and £20,000 (median taxpayer income was £19,500 in 2010-11) to 22.3% for those with incomes between £50,000 and £100,000 (within the higher rate tax band), and to 33.1% for those with incomes between £150,000 and £200,000 (within the additional rate band). The average rate of tax for those in the £2,000,000 and over income band reaches 44.2%.

The distribution of total tax liabilities by taxpayers' marginal rate therefore shows marked differences with the distribution of taxpayer numbers. In 2010-11,

non-higher rate taxpayers (comprising starting, savers and the basic rate) taxpayers represented the large majority of taxpayers by number (89.6%) but accounted for less than half of total liabilities (45.8%). Higher rate taxpayers by contrast (9.6% by number) accounted for 31.4% of total tax liabilities and additional rate taxpayers (0.8% by number) accounted for 22.7% of total tax liabilities.

Projections for 2011-12 and 2012-13 show increasing taxpayer numbers for all income bands over £15,000 compared with 2010-11, reflecting expected growth in the population, employment and incomes. However, this is more than offset by a sharp reduction in taxpayers with total income below £10,000 which more than halves over the same period. This reflects significant above indexation increases in the personal allowance, which rose from £6,475 in 2010-11, to £7,475 then £8,105 in 2012-13, contributing to a projected 1.4 million reduction overall in taxpayer numbers by 2012-13.

The average rate of tax across all taxpayers is projected to remain at 17.7% in 2012-13, unchanged from its 2010-11 outturn. Average rates of tax, however, are projected to fall markedly for those in income groups below £50,000, these reductions around 2 percentage points for income bands below £20,000. These projected falls again reflect increases in personal allowances for under 65s. All else 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.

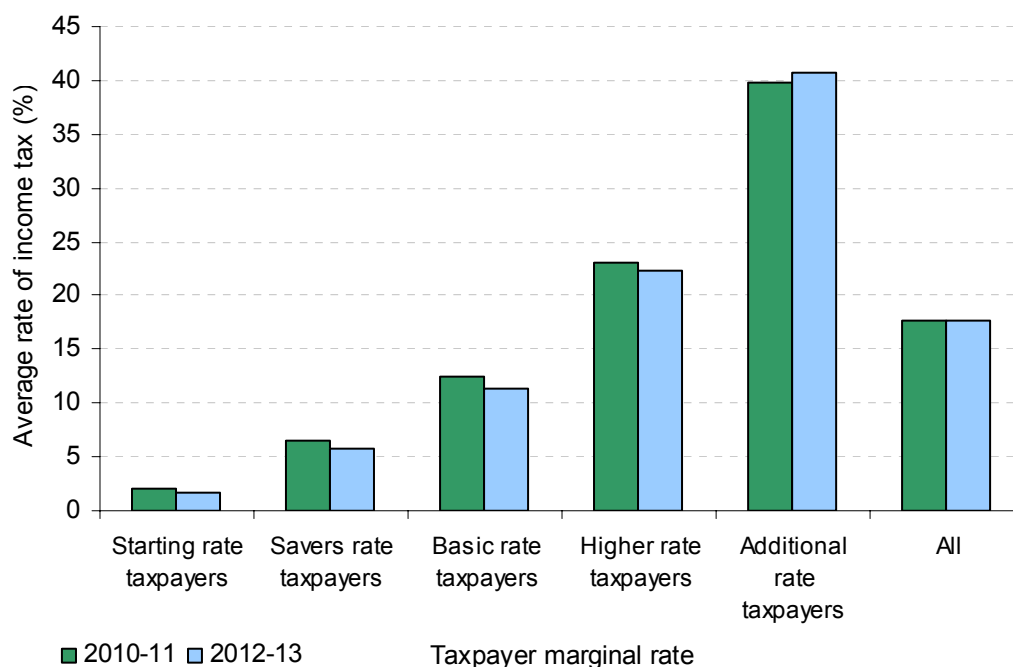
Average tax rates in the £50,000 to under £150,000 income groups are projected to remain broadly stable. The basic rate limit declined in this same period, offsetting reductions in tax through higher personal allowances for those with income above the £43,875 higher rate threshold in 2010-11 and up to £100,000. For income groups above £150,000 average tax rates are projected to rise, as total incomes recover to more normal levels within the additional rate tax band. The share of total liabilities accounted for by higher and additional rate taxpayers combined is projected to rise from 54.2% in 2010-11 to 61.3% in 2012-13.

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 individuals aged under 65.

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 incomes. An 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 50% from 2010-11.

Table 2.6 – Income tax liabilities, by income source and tax band, 2010-11 to 2012-13: shows total tax liabilities due broken down by income source (earnings, savings and dividends) and by income tax band. It also shows average tax rates by taxpayer marginal rate.

Figure 5: Average rate of income tax by income range, 2010-11 and 2012-13



In 2010-11, the large majority of total income tax liabilities of £152 billion were due on earned income (93.8% of the total). Earnings in this context includes earnings from employment, but also profits from self-employment, pensions, taxable state benefits and income from property. Remaining shares in total liabilities were 4.4% for dividends income and 1.8% for savings income. These results largely reflect the composition of taxpayer incomes by source.⁵

In 2010-11, £93.0 billion of tax liabilities (61.3% of the total) were due on taxable incomes falling within the basic rate tax band (applying to the first £37,400 of taxable income in 2010-11), compared with £36.3 billion (23.9%) in the higher rate band (taxable income above £37,400 and up to £150,000) and £22.3 billion (14.7%) in the additional rate tax band. Just £92 million of tax liabilities (0.1%) were due on taxable incomes in the starting rate band, which applied to the first £2,440 of taxable savings only in 2010-11 (the starting rate for earnings was abolished in 2008-09).

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 12.5% for basic rate taxpayers, 23.1% for higher rate taxpayers, and 39.9% for additional rate taxpayers in 2010-11, compared with headline marginal tax rates of 20%, 40%, and 50% on earnings. Average rates of tax in 2010-11 were 2.1% for starting rate taxpayers (individuals with savings income below the

⁵ HMRC also publishes detailed statistics on taxpayer incomes based on the SPI data: <http://www.hmrc.gov.uk/statistics/personal-incomes.htm>

starting rate limit and no taxable earnings) and 6.5% for savers rate taxpayers (with taxable savings above the starting rate limit or taxable dividends but no taxable earnings). Headline marginal rates were 10% for starting rate savings, 20% for basic rate savings and 10% for dividends.

Tax liabilities on earnings rose by £3.1 billion (2.2%) in 2010-11 compared with 2009-10, but fell by £0.9 billion for savings income (-25.4%) reflecting lower interest rates, and fell by £4.3 billion (-39.0%) for dividends. This significant reduction in dividends tax reflected reduced liabilities due at higher rates of tax, affected by forestalling of income in 2009-10, notwithstanding the introduction of the additional rate. It more than accounts for the £3.7 billion reduction in combined liabilities due at higher rates of tax in 2010-11.

Projections for 2011-12 and 2012-13 show that tax liabilities on savings income are projected to fall a little further by 2012-13, whereas tax on earnings and dividends rise, the latter by a cumulative 20.2% by 2012-13 from its temporarily depressed 2010-11 outturn. The share of dividends liabilities in total liabilities is projected to increase to 5.0% by 2012-13.

Liabilities due at the additional rate of tax are projected to recover as the incomes of the highest earners return to normal levels after 2010-11, with the additional rate share in total liabilities rising from 14.7% in 2010-11 to 16.8% in 2012-13. The share of higher rate liabilities in total tax is also projected to increase from 23.9% in 2010-11 to 27.3% in 2012-13. Correspondingly, the basic rate liabilities share falls from 61.3% in 2010-11 to 55.8% in 2012-13, reflecting a significant compression of the width of the basic rate band over the same period.

For basic rate taxpayers, the average rate of income tax is projected to fall from 12.5% in 2010-11 to 11.8% in 2011-12 and 11.4% in 2012-13, following increases in personal allowances for under 65s in these years. The average rate for higher rate taxpayers is also expected to decline, from 23.1% in 2010-11 to 22.3% by 2012-13. The average rate for additional rate taxpayers by contrast is projected to rise from 39.9% in 2010-11 to 40.8% in 2012-13, again affected by shifts in incomes in response to changes in the top rate of tax.

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.

Dividends liabilities are shown gross of the 10% dividends tax credit that covers the first 10% of tax due on dividends income for all taxpayers. Estimates of total liabilities for given tax bands include tax paid on incomes in that band by all taxpayers, e.g. totals for starting rate tax in 2007-08 include the starting rate tax liabilities of basic and higher rate taxpayers.

While Table 2.6 shows liabilities arising at the additional rate of tax from 2010-11, it is not possible to infer the additional yield arising from its introduction from this table. Additional rate liabilities are shown only for given projected taxpayer incomes, and so the table gives no indication of reductions in income and yield arising due to behavioural responses. HMRC's assessment of the additional yield arising from the introduction of the additional rate is set out in its published report on the 50% additional tax rate.

2.1 Number of individual income taxpayers by marginal rate, gender and age, 1990-91 to 2012-13

Numbers: thousands

Year	All taxpayers	Lower (1) or 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)
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 (8)	30,300	242	618	25,600	3,600	253	17,100	13,300	25,200	5,080	6,000
2012-13 (8)	29,900	229	606	25,000	3,860	267	17,000	13,000	24,800	5,120	5,860

Source: Survey of Personal Incomes.

Table updated January 2013

Key

. not applicable

Footnotes for tables 2.1

(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.

(3) 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. 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 is being 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 years and 6 months in 2010-11, 61 years in 2011-12 and 61 years and 6 months in 2012-13.

(8) Projected estimates based upon the 2010-11 Survey of Personal Incomes using economic assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

2.2 Number of individual income taxpayers by marginal rate, gender and age, by country and region (9), 1999-2000 to 2012-13

Government Office Region (GOR)							Numbers: 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)
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 (8)	25,300	204	541	21,200	3,120	229	14,300	11,000	21,100	4,190	4,950
2012-13 (8)	25,000	191	531	20,600	3,340	241	14,200	10,800	20,700	4,220	4,840
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 (8)	1,150	9	17	1,020	96	3	630	517	957	190	228
2012-13 (8)	1,130	8	18	997	104	3	623	505	937	191	222
North West											
1999-00	3,080	335	111	2,420	216	.	1,740	1,340	2,700	380	458
2000-01	3,220	327	106	2,550	232	.	1,840	1,380	2,800	417	497
2001-02	3,190	368	93	2,480	250	.	1,830	1,360	2,750	431	507
2002-03	3,210	371	78	2,510	253	.	1,820	1,390	2,740	468	549
2003-04	3,160	393	84	2,430	253	.	1,770	1,390	2,720	438	519
2004-05	3,310	412	89	2,530	282	.	1,830	1,480	2,860	456	553
2005-06	3,360	405	88	2,570	298	.	1,880	1,480	2,920	438	539
2006-07	3,450	405	96	2,640	315	.	1,920	1,530	2,970	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
2010-11	3,340	30	63	2,990	248	12	1,840	1,500	2,840	504	622
2011-12 (8)	3,230	26	65	2,820	304	13	1,800	1,430	2,710	520	620
2012-13 (8)	3,190	24	64	2,750	331	14	1,790	1,400	2,660	523	603
Yorkshire and the Humber											
1999-00	2,210	165	80	1,820	140	.	1,260	952	1,950	259	307
2000-01	2,390	254	90	1,890	157	.	1,380	1,010	2,090	296	351
2001-02	2,340	269	70	1,830	176	.	1,360	983	2,040	307	364
2002-03	2,360	285	59	1,840	179	.	1,380	986	2,050	314	370
2003-04	2,340	280	58	1,830	174	.	1,350	996	2,050	299	354
2004-05	2,430	306	65	1,860	200	.	1,380	1,050	2,100	325	389
2005-06	2,500	297	69	1,920	216	.	1,430	1,070	2,190	308	377
2006-07	2,590	306	75	1,980	231	.	1,470	1,120	2,250	341	418
2007-08	2,580	296	79	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 (8)	2,380	18	46	2,090	222	9	1,370	1,010	2,000	388	460
2012-13 (8)	2,350	19	44	2,040	239	10	1,370	984	1,960	392	451

2.2 Number of individual income taxpayers by marginal rate, gender and age, by country and region (9), 1999-2000 to 2012-13

continued

Government Office Region (GOR)							Numbers: 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)
East Midlands											
1999-00	1,940	150	66	1,570	149	.	1,130	812	1,710	234	276
2000-01	2,080	217	71	1,620	169	.	1,200	876	1,810	268	318
2001-02	2,070	242	61	1,590	174	.	1,210	855	1,770	293	336
2002-03	2,090	223	51	1,640	182	.	1,230	867	1,810	285	332
2003-04	2,090	240	53	1,620	179	.	1,190	901	1,820	274	328
2004-05	2,190	263	62	1,660	204	.	1,260	932	1,890	297	357
2005-06	2,240	265	63	1,690	218	.	1,300	941	1,940	295	362
2006-07	2,300	260	68	1,750	224	.	1,320	986	1,980	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
2010-11	2,220	19	42	1,970	177	8	1,260	962	1,880	335	414
2011-12 (8)	2,150	17	42	1,870	213	9	1,230	919	1,810	346	412
2012-13 (8)	2,120	16	42	1,830	229	10	1,230	898	1,770	351	402
West Midlands											
1999-00	2,380	200	75	1,930	174	.	1,370	1,010	2,080	301	354
2000-01	2,530	263	75	1,990	198	.	1,490	1,040	2,210	321	386
2001-02	2,500	275	66	1,960	205	.	1,460	1,050	2,180	329	391
2002-03	2,500	277	63	1,960	203	.	1,450	1,050	2,150	348	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
2005-06	2,640	312	71	2,020	236	.	1,510	1,140	2,310	338	415
2006-07	2,710	308	75	2,080	254	.	1,570	1,150	2,340	378	463
2007-08	2,750	299	87	2,110	256	.	1,570	1,180	2,360	390	474
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 (8)	2,520	24	51	2,200	235	11	1,460	1,070	2,090	436	508
2012-13 (8)	2,490	20	51	2,150	254	11	1,450	1,040	2,050	438	497
East of England											
1999-00	2,530	173	100	1,970	292	.	1,510	1,020	2,190	339	393
2000-01	2,750	242	93	2,080	338	.	1,630	1,120	2,380	375	437
2001-02	2,720	257	80	2,030	354	.	1,610	1,120	2,310	409	468
2002-03	2,780	269	70	2,080	360	.	1,640	1,140	2,370	408	482
2003-04	2,740	295	71	2,020	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	93	2,160	408	.	1,720	1,260	2,550	429	524
2006-07	3,010	309	96	2,180	423	.	1,730	1,280	2,550	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
2010-11	2,980	28	66	2,520	338	27	1,700	1,280	2,480	500	614
2011-12 (8)	2,890	23	65	2,380	398	30	1,670	1,220	2,380	518	615
2012-13 (8)	2,860	20	65	2,320	426	31	1,670	1,190	2,340	522	601
London											
1999-00	3,290	273	91	2,460	470	.	1,780	1,510	2,910	384	452
2000-01	3,610	304	111	2,630	566	.	1,980	1,630	3,190	426	501
2001-02	3,390	303	89	2,420	574	.	1,860	1,530	2,980	410	486
2002-03	3,420	311	71	2,470	572	.	1,880	1,540	3,010	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
2005-06	3,790	368	85	2,670	673	.	2,090	1,710	3,410	385	483
2006-07	3,890	363	94	2,720	711	.	2,150	1,740	3,470	417	523
2007-08	4,030	391	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
2011-12 (8)	3,810	23	77	2,940	676	85	2,080	1,720	3,360	442	521
2012-13 (8)	3,770	22	74	2,860	721	88	2,060	1,700	3,330	444	509

2.2 Number of individual income taxpayers by marginal rate, gender and age, by country and region (9), 1999-2000 to 2012-13

continued

Government Office Region (GOR)											Numbers: 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)
South East											
1999-00	3,990	287	134	3,030	543	.	2,280	1,720	3,420	572	657
2000-01	4,340	355	151	3,220	618	.	2,530	1,810	3,700	635	742
2001-02	4,240	382	140	3,090	634	.	2,430	1,810	3,580	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	1,720	3,360	632	741
2004-05	4,330	464	133	3,070	669	.	2,430	1,910	3,650	684	815
2005-06	4,500	458	143	3,170	722	.	2,540	1,950	3,820	680	825
2006-07	4,580	440	154	3,240	745	.	2,570	2,010	3,850	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
2010-11	4,570	43	108	3,760	598	53	2,540	2,030	3,770	792	963
2011-12 (8)	4,450	37	108	3,550	698	57	2,500	1,950	3,630	819	961
2012-13 (8)	4,400	36	106	3,460	740	61	2,490	1,910	3,570	826	942
South West											
1999-00	2,410	223	111	1,880	192	.	1,370	1,030	1,990	417	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	295	79	1,980	223	.	1,500	1,080	2,140	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
2005-06	2,710	326	95	2,020	271	.	1,540	1,170	2,280	438	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
2011-12 (8)	2,680	27	68	2,300	279	13	1,520	1,160	2,150	533	625
2012-13 (8)	2,640	25	66	2,240	299	14	1,510	1,130	2,110	537	610
Wales											
1999-00	1,200	104	58	971	69	.	711	492	1,030	170	205
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 (8)	1,390	11	21	1,250	108	3	771	622	1,130	258	305
2012-13 (8)	1,370	13	20	1,220	119	4	765	607	1,110	262	299
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)	*	*	*	*	*	*	*	*	*	*	*
2009-10	2,630	9	39	2,350	235	.	1,430	1,200	2,260	370	466
2010-11	2,720	19	41	2,420	232	11	1,460	1,260	2,300	425	532
2011-12 (8)	2,650	16	40	2,300	280	12	1,440	1,210	2,210	439	531
2012-13 (8)	2,610	17	38	2,240	301	13	1,430	1,180	2,170	440	515

2.2 Number of individual income taxpayers by marginal rate, gender and age, by country and region (9), 1999-2000 to 2012-13

continued

Government Office Region (GOR)

Numbers: 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)
Northern Ireland											
1999-00	638	58	18	526	36	.	347	291	579	59	73
2000-01	666	64	17	545	40	.	375	291	595	71	83
2001-02	552	66	11	434	41	.	318	235	486	66	79
2002-03	629	72	13	500	44	.	347	282	546	83	99
2003-04	701	79	12	562	48	.	385	316	624	77	98
2004-05	746	88	10	597	52	.	411	335	661	85	107
2005-06	773	87	16	612	59	.	436	338	688	86	105
2006-07	785	85	15	623	63	.	439	346	703	82	101
2007-08	801	82	22	632	65	.	450	351	706	95	118
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	*
2009-10	747	3	8	689	48	.	402	346	656	91	112
2010-11	762	5	10	698	46	2	418	344	664	98	117
2011-12 (8)	732	5	9	657	57	2	403	328	631	101	117
2012-13 (8)	721	4	10	642	62	3	399	321	619	102	115

Source: Survey of Personal Incomes

Table updated January 2013

Key

. not applicable

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.

(3) 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.

(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 is being 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 years and 6 months in 2010-11, 61 years in 2011-12 and 61 years and 6 months in 2012-13.

(8) Projected estimates based upon the 2010-11 Survey of Personal Incomes using economic assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

(9) Some UK taxpayers reside abroad, or region is not known (298,000 in 2010-11). The sum of taxpayer numbers across countries and regions in Table 2.2 therefore will not match UK total shown in Table 2.1.

2.4 Shares of total income (before and after tax) and income tax for percentile groups, 1999-00 to 2012-13

Taxpayers only

Percentage

Percentile Groups (ranged on total income before tax)	Bottom				Bottom		Top				Total (All Taxpayers) £bn
	1%	5%	10%	25%	50%	50%	25%	10%	5%	1%	
Share of Total Income											Total Income
Before Tax											Before Tax
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 (1)	0.3	1.4	3.1	9.3	23.8	76.2	54.1	34.0	24.5	12.2	882
2012-13 (1)	0.3	1.5	3.2	9.5	24.2	75.8	53.6	33.5	24.0	11.7	901
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	0.2	1.3	2.8	8.4	21.5	60.9	41.6	24.2	16.4	7.1	706
2011-12 (1)	0.3	1.4	3.0	8.8	21.9	60.2	41.1	24.0	16.4	7.3	724
2012-13 (1)	0.3	1.5	3.1	9.1	22.4	60.0	40.7	23.6	16.0	7.0	742
Share of Total Tax											Total Tax
1999-00	-	0.1	0.3	2.4	11.6	88.4	69.5	50.3	39.6	21.3	93
2000-01	-	0.1	0.3	2.2	11.3	88.7	70.3	51.5	40.7	22.2	106
2001-02	-	0.1	0.3	2.2	11.1	88.9	70.8	51.9	40.8	21.8	107
2002-03	-	0.1	0.3	2.2	11.1	88.9	70.5	51.5	40.2	21.0	109
2003-04	-	0.1	0.3	2.2	11.2	88.8	70.1	50.9	39.8	20.8	111
2004-05	-	0.1	0.3	2.1	10.8	89.2	70.7	51.4	40.3	21.4	123
2005-06	-	0.1	0.3	2.1	10.6	89.4	71.5	52.9	41.9	22.7	138
2006-07	-	0.1	0.3	2.1	10.5	89.5	71.8	53.5	42.6	23.5	150
2007-08	-	0.1	0.3	2.1	10.4	89.6	72.2	54.3	43.4	24.4	163
2008-09 (a)	*	*	*	*	*	*	*	*	*	*	*
2009-10	-	0.1	0.6	2.7	11.2	88.8	72.0	54.9	44.8	26.5	154
2010-11	-	0.1	0.5	2.7	11.3	88.7	71.3	53.5	43.3	25.0	152
2011-12 (1)	-	0.1	0.5	2.5	10.6	89.4	73.0	56.0	45.7	27.4	158
2012-13 (1)	-	0.1	0.5	2.5	10.6	89.4	73.1	55.9	45.2	26.5	159

2.4

Shares of total income (before and after tax) and income tax for percentile groups, 1999-00 to 2012-13

continued

Taxpayers only

Percentage

Percentile points for total income before tax										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 (1)	7,780	8,970	10,360	13,700	20,500	32,200	48,200	65,300	145,000	29,100
2012-13 (1)	8,430	9,640	11,070	14,400	21,400	33,400	49,900	67,700	150,000	30,100

Source: Survey of Personal Incomes

Table updated January 2013

Key

- negligible

Footnotes for table 2.4

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

(1) Projected estimates based upon the 2010-11 Survey of Personal Incomes using economic assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

2.5 Income tax liabilities, by Income Range, 2010-11 to 2012-13

2010-11

Numbers: thousands; Amounts: £ million

Range of total income (lower limit)	Starting rate (1) taxpayers		"Savers" rate (2) taxpayers		Basic rate (3) taxpayers		Higher rate (4) taxpayers		Additional rate (5) taxpayers		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	%
6,475	97	4	34	1	1,060	102	.	.	.	.	1,190	8,340	107	1.3	90
7,500	82	7	85	18	2,630	1,070	.	.	.	.	2,800	24,600	1,100	4.5	392
10,000	79	13	180	81	6,470	6,380	.	.	.	.	6,730	83,600	6,480	7.7	963
15,000	5	4	87	92	5,350	10,700	.	.	.	.	5,440	94,600	10,700	11.4	1,980
20,000	6	8	100	189	6,770	22,900	.	.	.	.	6,880	168,000	23,100	13.8	3,370
30,000	7	22	132	430	4,830	27,300	669	5,310	.	.	5,640	214,000	33,100	15.5	5,860
50,000	..	..	3	9	23	131	2,000	29,500	.	.	2,020	133,000	29,600	22.3	14,600
100,000	..	..	..	..	2	8	317	11,400	.	.	319	38,400	11,400	29.7	35,800
150,000	..	..	..	..	..	..	30	1,380	86	5,170	116	19,800	6,550	33.1	56,400
200,000	..	..	..	..	..	..	2	73	117	13,200	120	34,700	13,200	38.2	110,000
500,000	..	..	..	..	..	..	..	..	22	6,410	23	15,500	6,420	41.5	285,000
1,000,000	..	..	..	..	..	..	..	..	7	4,070	7	9,500	4,070	42.8	578,000
2,000,000+	..	..	..	..	..	..	..	..	3	5,660	3	12,800	5,660	44.2	1,880,000
All Ranges	276	59	623	821	27,100	68,600	3,020	47,700	236	34,500	31,300	857,000	152,000	17.7	4,850

In 2010-11 all taxpayers are liable on taxable income other than savings and dividend income at the basic rate of 20 per cent on the first £37,400, 40 per cent over the basic rate limit of £37,400 and 50 per cent over the higher rate limit of £150,000. Dividend income is charged at 10 per cent up to the basic rate limit of £37,400, 32.5 per cent above £37,400 and 42.5 per cent above £150,000. Savings income is charged at 10 per cent up to the starting rate limit on the first £2,440, at 20 per cent up to £37,400, 40 per cent above £37,400 and 50 per cent above £150,000.

2.5 Income tax liabilities, by Income Range, 2010-11 to 2012-13

continued

2011-12 (6)

Numbers: thousands; Amounts: £ million

Range of total income (lower limit)	Starting rate (1) taxpayers		"Savers" rate (2) taxpayers		Basic rate (3) taxpayers		Higher rate (4) taxpayers		Additional rate (5) taxpayers		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	%
7,475	110	9	77	7	2,340	561	.	.	.	.	2,530	22,100	577	2.6	228
10,000	117	15	203	76	6,370	5,230	.	.	.	.	6,690	83,300	5,320	6.4	795
15,000	5	3	103	99	5,350	9,680	.	.	.	.	5,460	95,000	9,780	10.3	1,790
20,000	6	8	119	213	6,870	22,000	.	.	.	.	7,000	171,000	22,200	13.0	3,170
30,000	4	10	114	342	4,660	25,100	1,090	8,250	.	.	5,870	223,000	33,700	15.1	5,740
50,000	..	..	2	5	17	87	2,140	31,600	.	.	2,150	141,000	31,700	22.4	14,700
100,000	..	..	..	..	1	4	339	12,200	.	.	340	40,700	12,200	29.9	35,800
150,000	..	..	..	..	..	..	29	1,340	90	5,440	119	20,300	6,780	33.4	57,100
200,000	..	..	..	..	..	..	2	50	126	14,600	128	37,500	14,600	39.0	114,000
500,000	..	..	..	..	..	..	..	..	24	7,150	24	16,700	7,150	42.8	296,000
1,000,000	..	..	..	..	..	..	..	..	9	5,360	9	12,100	5,360	44.4	593,000
2,000,000+	..	..	..	..	..	..	..	..	4	8,520	4	18,700	8,520	45.7	2,030,000
All Ranges	242	44	618	743	25,600	62,600	3,600	53,400	253	41,000	30,300	882,000	158,000	17.9	5,210

In 2011-12 all taxpayers are liable on taxable income other than savings and dividend income at the basic rate of 20 per cent on the first £35,000, 40 per cent over the basic rate limit of £35,000 and 50 per cent over the higher rate limit of £150,000. Dividend income is charged at 10 per cent up to the basic rate limit of £35,000, 32.5 per cent above £35,000 and 42.5 per cent above £150,000. Savings income is charged at 10 per cent up to the starting rate limit on the first £2,560, at 20 per cent up to £35,000, 40 per cent above £35,000 and 50 per cent above £150,000.

2.5 Income tax liabilities, by Income Range, 2010-11 to 2012-13

continued

2012-13 (6)

Numbers: thousands; Amounts: £ million

Range of total income (lower limit)	Starting rate (1) taxpayers		"Savers" rate (2) taxpayers		Basic rate (3) taxpayers		Higher rate (4) taxpayers		Additional rate (5) taxpayers		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	%
8,105	86	5	65	5	1,670	300	.	.	.	.	1,820	16,400	310	1.9	171
10,000	125	15	187	62	6,070	4,430	.	.	.	.	6,380	80,100	4,510	5.6	706
15,000	8	5	111	96	5,360	9,000	.	.	.	.	5,480	95,300	9,110	9.6	1,660
20,000	6	8	124	210	7,020	21,500	.	.	.	.	7,150	175,000	21,700	12.4	3,040
30,000	3	9	117	338	4,840	25,500	1,170	8,770	.	.	6,130	234,000	34,600	14.8	5,650
50,000	..	..	2	5	19	92	2,290	33,500	.	.	2,310	152,000	33,600	22.2	14,500
100,000	..	..	..	..	1	4	363	13,000	.	.	364	43,500	13,000	29.8	35,700
150,000	..	..	..	..	..	..	30	1,390	97	5,890	127	21,700	7,280	33.5	57,200
200,000	..	..	..	..	..	..	2	51	132	15,100	134	39,000	15,200	38.9	113,000
500,000	..	..	..	..	..	..	..	..	25	7,430	25	17,400	7,430	42.6	292,000
1,000,000	..	..	..	..	..	..	..	..	9	5,190	9	11,700	5,190	44.4	592,000
2,000,000+	..	..	..	..	..	..	..	..	4	7,120	4	15,700	7,120	45.4	1,920,000
All Ranges	229	42	606	716	25,000	60,800	3,860	56,700	267	40,700	29,900	901,000	159,000	17.7	5,310

In 2012-13 all taxpayers are liable on taxable income other than savings and dividend income at the basic rate of 20 per cent on the first £34,370, 40 per cent over the basic rate limit of £34,370 and 50 per cent over the higher rate limit of £150,000. Dividend income is charged at 10 per cent up to the basic rate limit of £34,370, 32.5 per cent above £34,370 and 42.5 per cent above £150,000. Savings income is charged at 10 per cent up to the starting rate limit on the first £2,710, at 20 per cent up to £34,370, 40 per cent above £34,370 and 50 per cent above £150,000.

Source: Survey of Personal Incomes

Table updated January 2013

Key

. not applicable

.. 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.

(2) 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.

(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 2010-11 Survey of Personal Incomes using economic assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

2.6 Income tax liabilities, by income source and tax band, 2010-11 to 2012-13

2010-11						
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 Earnings:						
Basic rate	.	.	67,000	20,900	1,720	89,600
Higher rate	.	.	.	22,600	9,810	32,400
Additional rate	.	.	.	.	20,300	20,300
Tax on Savings:						
Starting rate	20	35	33	4	-	92
Basic rate	.	136	772	222	16	1,150
Higher rate	.	.	.	725	167	892
Additional rate	.	.	.	.	595	595
Tax on Dividends:						
Ordinary rate	38	650	832	702	15	2,240
Higher rate	.	.	.	2,510	488	3,000
Additional rate	.	.	.	.	1,420	1,420
Allowances given as tax reductions	2	22	335	215	754	1,330
Tax liability after allowances given as income tax reduction	59	821	68,600	47,700	34,500	152,000
Average Rate of Tax %	2.1	6.5	12.5	23.1	39.9	17.7
Average amount of tax £	213	1,320	2,530	15,800	146,000	4,850
2011-12 (7)						
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 Earnings:						
Basic rate	.	.	61,300	22,900	1,720	85,900
Higher rate	.	.	.	25,500	10,700	36,200
Additional rate	.	.	.	.	25,100	25,100
Tax on Savings:						
Starting rate	20	32	33	5	-	91
Basic rate	.	128	713	237	15	1,090
Higher rate	.	.	.	807	176	983
Additional rate	.	.	.	.	626	626
Tax on Dividends:						
Ordinary rate	24	583	582	1,020	16	2,220
Higher rate	.	.	.	2,940	608	3,550
Additional rate	.	.	.	.	2,080	2,080
Allowances given as tax reductions	1	22	317	243	812	1,400
Tax liability after allowances given as income tax reduction	44	743	62,600	53,400	41,000	158,000
Average Rate of Tax %	1.7	6.0	11.8	22.5	41.1	17.9
Average amount of tax £	184	1,200	2,450	14,800	162,000	5,210

2.6 Income tax liabilities, by income source and tax band, 2010-11 to 2012-13

continued

2012-13 (7)						
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 Earnings:						
Basic rate	.	.	59,600	24,100	1,780	85,400
Higher rate	.	.	.	27,300	11,300	38,500
Additional rate	.	.	.	.	24,500	24,500
Tax on Savings:						
Starting rate	18	28	32	5	-	84
Basic rate	.	109	638	210	13	971
Higher rate	.	.	.	757	159	916
Additional rate	.	.	.	.	572	572
Tax on Dividends:						
Ordinary rate	24	579	552	1,120	19	2,290
Higher rate	.	.	.	3,290	736	4,020
Additional rate	.	.	.	.	1,680	1,680
Allowances given as tax reductions	1	21	299	246	857	1,420
Tax liability after allowances given as income tax reduction	42	716	60,800	56,700	40,700	159,000
Average Rate of Tax %	1.6	5.8	11.4	22.3	40.8	17.7
Average amount of tax £	183	1,180	2,440	14,700	152,000	5,310

Source: Survey of Personal Incomes.

Table updated January 2013

Key

- negligible
- . not applicable

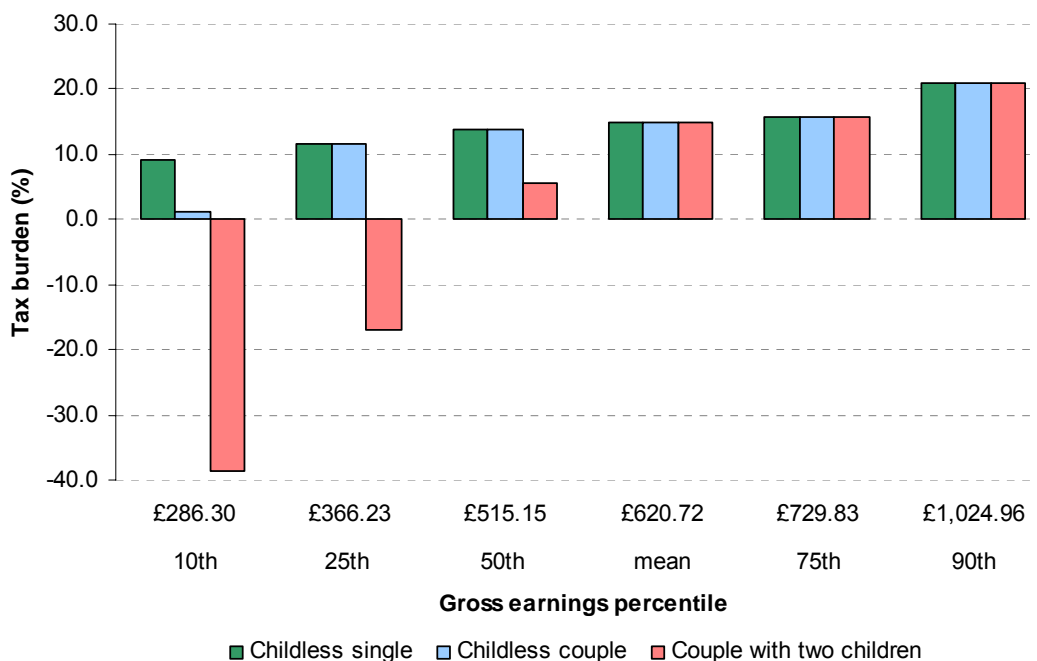
Footnotes for table 2.6

- (1) Taxpayers with no taxable earnings and total taxable income from savings below the starting rate limit.
- (2) 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.
- (3) Taxpayers with total taxable income below the basic rate limit.
- (4) For 2009-10 taxpayers with total taxable income above the basic rate limit. From 2010-11 onwards 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 allowances given at a fixed rate, for example the Married Couples Allowance.
- (7) Projected estimates based upon the 2010-11 Survey of Personal Incomes using economic assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

SECTION B: Illustrative tax burdens

Table 2.7 – Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2012-13: 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

Figure 6: Income tax (net of tax credits) as a per cent of gross earnings, 2012-13



In 2011-12, the latest tax year for which earnings outturns are available, childless single persons with gross earnings at the 10th percentile of the earnings distribution had an estimated income tax burden of 9.7% of gross earnings. This increases to 14.3% at the median (50th percentile) and 20.8% at the 90th percentile. For single-earner childless couples, the tax burden is the same except for those at the 10th percentile who would still be entitled in 2011-12 to Working Tax Credit, which reduces their net income tax burden to 0.4%. 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 is 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 all but the highest earning levels shown in the table. At the 10th percentile the amount of CTC and WTC received in 2011-12 significantly exceeds income tax liabilities due, giving a net tax burden of -38.6% of gross earnings. As the child element of tax credits is withdrawn at higher earnings levels, the difference in tax burdens for couple families with and without

children steadily falls. At mean earnings, the CTC family element only is received, reducing the income tax burden for the two child family from 15.2% to 13.5%.

Income tax burdens for childless single persons generally declined in 2011-12 compared with the previous year, by 0.7 percentage points at median earnings, and by more for lower earners. This was due to the £1,000 cash increase in the personal allowance to £7,475 in 2011-12. However, the tax burden rose by 0.3 percentage points for the illustrative high earner at the 90th earnings percentile, reflecting increased higher rate tax paid due to the larger reduction in the basic rate limit.

Changes in tax burdens in 2011-12 for single-earner childless were the same as those for single persons, except at the 10th earnings percentile, where reductions in WTC relative to earnings offset tax reductions to leave the net tax burden broadly unchanged. For couples with children up to median earnings, net tax burdens fell more significantly compared with 2010-11, for example by 3.2 percentage points at the 10th earnings percentile, reflecting a large increase in the CTC child element. At higher earnings, however, the CTC child element is not received, and the reduction in the second income threshold to £40,000 in 2011-12 took the family at the 90th earnings percentile out of tax credits, adding to the increase in their net tax burden.

Projections for 2012-13 show income tax burdens declining further in 2012-13 for most families without children, reflecting another cash increase in the personal allowance to £8,105, notwithstanding some recovery in projected earnings growth. The tax burden for single earner families without children is expected to fall by 0.4 percentage points at median earnings though, as in 2011-12, is expected to increase for the illustrative higher rate taxpayer at the 90th earnings percentile as earnings increase against a falling basic rate limit. For couples without children tax burdens likewise fall, though at the 10th earnings percentile, the tax reduction is more than offset by the freeze in WTC rates, and their net tax burden is projected to rise by 0.7 percentage points.

For lower earning families with children, net tax burdens are projected to change little in 2012-13, as the reduction in the income tax burden is broadly offset by the freeze in most tax credit rates relative to earnings. However, abolition of the CTC family element plateau in 2012-13 equalises tax burdens for those with and without children at mean and 75th percentile earnings, raising net tax burdens by more than 1 percentage point compared with the previous year.

Interpreting Table 2.7. Table 2.7 is different to 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. Earnings levels assumed in the table are derived from the Office for National Statistics's Annual Survey of Hours and Earnings, with latest available outturn data for April 2012. Outturns for tax burdens therefore are published to 2011-12, with projections for 2012-13.

2.7 Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2012-13

Per cent of gross earnings	Position in earnings (1) distribution					
	10th percentile	25th Percentile	50th Percentile	mean	75th percentile	90th 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						
Gross earnings (£ weekly)	171.1	223.0	308.0	359.6	428.9	580.1
Tax burden (per cent of gross earnings)						
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

2.7

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2012-13

continued

	Position in earnings (1) distribution					
	10th percentile	25th Percentile	50th Percentile	mean	75th percentile	90th 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

2.7

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2012-13

continued

	Position in earnings (1) distribution					
	10th percentile	25th Percentile	50th Percentile	mean	75th percentile	90th Percentile
2004-05						
Gross earnings (£ weekly)	232.8	301.8	425.4	507.8	601.6	833.0
Tax burden (per cent of gross earnings)						
Childless single	11.4	13.8	16.2	17.1	17.9	22.0
Childless couple	1.9	13.8	16.2	17.1	17.9	22.0
With two children	-29.5	-9.3	10.5	15.1	16.1	20.7
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

2.7

Income tax (net of tax credits) as a per cent of gross earnings for specimen families, 1990-91 to 2012-13

continued

	Position in earnings (1) distribution					
	10th percentile	25th Percentile	50th Percentile	mean	75th percentile	90th Percentile
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	0.5	13.0	15.0	15.9	16.5	20.5
Couple with two children	-35.4	-14.5	6.7	14.1	15.0	19.6
2011-12						
Gross earnings (£ weekly)	279.1	357.0	502.1	605.0	711.4	999.0
Tax burden (per cent of gross earnings)						
Childless single	9.7	11.9	14.3	15.2	16.0	20.8
Childless couple	0.4	11.9	14.3	15.2	16.0	20.8
Couple with two children	-38.6	-16.9	5.6	13.5	14.5	20.8
2012-13 (3)						
Gross earnings (£ weekly)	286.3	366.2	515.1	620.7	729.8	1,025.0
Tax burden (per cent of gross earnings)						
Childless single	9.1	11.5	13.9	15.0	15.7	21.0
Childless couple	1.1	11.5	13.9	15.0	15.7	21.0
Couple with two children	-38.7	-17.0	5.6	15.0	15.7	21.0

Source: Survey of Personal Incomes.

Table updated January 2013

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 Allowance.

(3) Earnings projections based on Annual Survey of Hours and Earning (ASHE) data to April 2012, and earnings growth assumptions consistent with the OBR's December 2012 economic and fiscal outlook. These projections fall outside the scope of National Statistics.

Annex A: Context and background information

Income tax

An introduction to income tax is available on the HMRC website:

<http://www.hmrc.gov.uk/incometax/basics.htm>

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 net of tax credits contributing £148.0 billion to total current receipts of £569.5 billion in 2011-12.

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 who are living together where at least one spouse or partner was born before 6th April 1935, who can still claim Married Couples Allowance (MCA).

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): <http://www.hmrc.gov.uk/incometax/taxable-income.htm>

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 2012-13, the basic PA is £8,105 for individuals aged under 65. Individuals aged 65 to 74, and 75 and over receive higher allowances (£10,500 and £10,660 respectively), although these are reduced by £1 for every £2 above the income limit of £25,400. All individuals, regardless of age, 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.

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.

Income tax rates 2012-13 by type of income and tax band

Source	Starting rate for savings ¹	Basic rate	Higher rate	Additional rate
Taxable income after allowances	£0 - £2,710	£0 - £34,370	£34,371 - £150,000	More than £150,000
Earnings ²	-	20%	40%	50%
Savings	10%	20%	40%	50%
Dividends ³	-	10%	32.5%	42.5%

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.

³ Dividends are paid with a non-reclaimable 10 per cent tax credit that satisfies the 10% liability for dividends.

Note that a non-reclaimable dividend tax credit exists that satisfies the 10% tax liability due on grossed dividends at the basic rate (or 10% of liabilities due on dividends at higher rates). In that sense, tax rates effectively paid by individuals themselves are lower than shown in the table above (e.g. 0% for grossed dividends in the basic rate band). Irrespective of how such liabilities are satisfied, liabilities on dividends at 10% or higher rates still arise for all individuals with dividends income exceeding the personal allowance. For this reason, in this release statistics on individuals' dividends tax and therefore total tax liabilities, in turn partly determining estimated taxpayer numbers, are compiled on a “liabilities basis”, i.e. gross of (i.e. before) the dividends tax credit discussed above.

A series of example tax calculations using 2012-13 rates and allowances are provided below.

Table: Examples of tax liability calculations for 2012-13

Liabilities rounded to nearest whole £

Example 1: Individual aged under 65 with earnings only

Tax allowance 8,105

	income:		income after allowance at:			income tax liabilities at:			Total liabilities
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	
Earnings	50,000	41,895	-	34,370	7,525	-	@20% = 6874	@40% = 3010	9,884
Savings	0	0	0	0	0	0	0	0	0
Dividends	0	0	-	0	0	-	0	0	0
Total	50,000	41,895	0	34,370	7,525	0	6,874	3,010	9,884

Example 2: Individual aged under 65 with earnings, savings and dividends

Tax allowance 8,105

	income:		income after allowance at:			income tax liabilities at:			Total liabilities
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	
Earnings	40,000	31,895	-	31,895	0	-	@20% = 6379	0	6,379
Savings	2,000	2,000	0	2,000	0	0	@20% = 400	0	400
Dividends	5,000	5,000	-	475	4,525	-	@10% = 48	@32.5% = 1471	1,518
Total	47,000	38,895	0	34,370	4,525	0	6,827	1,471	8,297

Example 3: Individual aged under 65 with starting rate savings tax

Tax allowance 8,105

	income:		income after allowance at:			income tax liabilities at:			Total liabilities
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	
Earnings	8,500	395	-	395	0	-	@20% = 79	0	79
Savings	5,000	5,000	2,315	2,685	0	@10% = 231.5	@20% = 537	0	769
Dividends	0	0	-	0	0	-	0	0	0
Total	13,500	5,395	2,315	3,080	0	232	616	0	848

Example 4: Individual aged 65-74 with pension and savings income

Tax allowance 10,500

	income:		income after allowance at:			income tax liabilities at:			Total liabilities
	before allowance	after allowance	starting rate	basic rate	higher rate	starting rate	basic rate	higher rate	
Earnings	12,000	1,500	-	1,500	0	-	@20% = 300	0	300
Savings	500	500	500	0	0	@10% = 50	0	0	50
Dividends	0	0	-	0	0	-	0	0	0
Total	12,500	2,000	500	1,500	0	50	300	0	350

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. Tax on savings income is usually 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 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 Self Assessment (SA):

<http://www.hmrc.gov.uk/sa/need-tax-return.htm>

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 Retail Price Index (RPI) for September in the previous year ('indexation'). 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: <http://www.hmrc.gov.uk/statistics/tax-structure.htm>

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 tax 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.

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 pensions 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.

Note that the High Income Child Benefit charge applicable from 7 January 2013 is not included in the ITLS projections for 2012-13.

2013-14

Changes to income tax rates, allowances and thresholds announced in the 2012 Budget and Autumn Statements will come into effect from 2013-14 or later, and so do not directly affect the statistics on tax liabilities shown in this release of ITLS. However, an adjustment for expected deferral of 2012-13 incomes among high earners in advance of the announced reduction in the additional rate of tax in April 2013 is built into the projections for 2012-13 (Annex B).

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.

A Tables 2.1 to 2.6

Data sources and sampling

The published estimates of the number of persons in the UK 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, and these amounts are summarised in Tables 2.1 to 2.6 of this release.

The SPI sample totalled 679,000 individual records in 2010-11, the latest available, representing an approximate 1½ per cent 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 (e.g. on savings income) and claim a repayment from HMRC.

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 taxpayer for the current tax year based on information available at the time the sample was drawn. The sampling fractions varied from 1 in 10 for individuals with high incomes and rare allowances to about 1 in 200 for people with low combined pay and pensions. In all, about 400,000 individuals were selected from NPS for inclusion in the 2010-11 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 200 for employees and occupational pensioners with smaller income or tax for 2010-11. In all, about 268,000 individuals were selected from SA for inclusion in the 2010-11 SPI.
- For claims cases, a random sample of about 1 in 20 was selected for inclusion in the SPI. This led to around 11,000 cases being selected for the survey.

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. 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 679,000 valid cases on the 2010-11 final SPI file.

Coverage of SPI and imputation of missing data items

Not all of the individuals in the SPI sample are taxpayers. About 20 per cent of sample cases (32 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, 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, and the lowest level of total income in any of these tables is the personal allowance (£6,475 in 2010-11).

The coverage of investment income for the sample drawn from NPS is incomplete. This is because HMRC does not need information on interest from which tax has been deducted at source nor dividends and associated tax credit to operate the PAYE system for most individuals. 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 savings income, the number of non SA cases with savings income and the distribution of imputed amounts are inferred from survey and external data sources for 2010-11, controlling to an overall estimate of taxpayers with savings income and its total. For dividends income, the number of non SA cases with dividends income and distribution of imputed amounts were inferred from Family Resources Survey (FRS) data for 2010-11. Imputations at case level are determined by probabilistic methods. Note also that no attempt is made to control for sub-UK geographical units.

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 most others, their total amount of superannuation contributions has been imputed 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 pensions 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 pensions reliefs and included in these statistics.

There were some modifications to imputation methods introduced for the 2010-11 SPI survey. First, imputation of bank and building society interest was enhanced using FRS survey data to better reflect the numbers and levels of savings income among the lowest income taxpayers. This raises estimates of taxpayers by over 100,000. Second, dividends are no longer imputed to non SA cases to represent individuals incorporating as businesses, as these individuals should be captured in the SPI sample within SA. This reduces imputed dividends income by around £2.5 billion. Finally, the number of individuals to which employee personal pension contributions are imputed has been significantly reduced in 2010-11 to exclude those individuals whose contributions are made only by their employer; the imputed value of personal pension contributions, however, is unaffected by this change.

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 microsimulation model of the UK income tax system. 'Microsimulation' 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.⁶ 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 and, from 2010-11, the excess of income after deductions over £100,000 for all SPI cases.

⁶ For charitable donations, basic rate income tax is given by means of a repayment of the tax by HMRC to the charity receiving the donation. Any relief at the higher or additional rate is claimed by the individual donor.

- 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 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 and Enterprise Investment Scheme 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.

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 2012-13; the same rate would apply to an extra pound of savings, whereas a 10% rate would apply for dividends in 2012-13.

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 higher rate limit (£150,000) are classified as additional rate taxpayers.
- Cases with total taxable income above the basic rate limit are classified as higher rate taxpayers.
- Remaining cases with non-zero total taxable income lying at or below the basic rate limit are classified as either starting, savers or basic rate taxpayers according to the make-up of their total taxable income:
 - Those with any taxable earnings are classified as basic rate taxpayers.

- Those without taxable earnings, and with taxable savings only below the starting rate limit for savings income are classified as starting rate taxpayers.
- Those without taxable earnings, and with taxable savings exceeding the starting rate limit or taxable dividends, are classified as “savers” rate taxpayers.
- Note that this marginal rate classification does take account of the impact of allowances given as tax reductions (Step 6 of modelling process above). For example, an SPI case with taxable earnings only just above the basic rate limit may have tax reductions sufficient to eliminate any higher rate liabilities, and would be classified as a basic rate taxpayer.

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 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 relate. The latest available SPI survey data is for 2010-11, and was first published in December 2012.

Projections up to the current tax year, 2012-13, 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 2010-11 and earlier years (see Annex C).

The projections 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/re-scaled according to published Office for National Statistics (ONS) population projections by single year of age (implying initially constant employment and self-employment rates by age band).
- grossing factors are then further re-scaled uniformly across all age bands so that grossed SPI main source employment and self-employment case totals change in percentage terms from 2010-11 in line with the OBR's most recently published forecast for total employment and self-employment (Labour Force Survey definitions).
- remaining SPI cases are re-scaled uniformly so that population growth remains consistent with the ONS projections.
- 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 six quantile groups, partitioned according to percentiles P10, P25, P75, P90 and P95 of the ASHE weekly pay distribution.
- Earnings growth for cases in the 'middle group' (P25-P75) is projected according to the OBR forecast for whole economy average earnings growth.
- For other groups, average earnings growth is adjusted according to the deviation (ratio) of implied average earnings growth over the past seven years at the relevant ASHE percentile relative to mean ASHE earnings growth. 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.

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.

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

Table: Summary of economic assumptions used in ITLS projections

SPI population totals:	SPI taxpayer total 2010-11 £ 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	605	Implied whole economy average earnings (Wages and salaries divided by LFS employees), with allowance for differential growth across distribution (see main text)
Profits	78.2	Total self-employed (mixed) income
Personal pension income	72.3	Weighted average Retail Prices Index and whole economy average earnings
Dividends	36.1	Household and Non-profit institutions serving households dividend receipts
State pension income	37.7	Announced rates
Bank & building society interest	7.9	Household bank & building society deposits multiplied by weighted average of building society deposit and 5-year rates
Property income	10.8	Retail Prices Index
Taxable employer benefits	8.7	Retail Prices Index

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 2012-13, where economic outturns for most series are not yet available.

The projections in the January 2013 release of ITLS use economic series consistent with the OBR's December 2012 *Economic and fiscal outlook*. Outturns and OBR forecasts for key series including employment, earnings, prices and interest rates are published by the OBR (Table 4.1 'Determinants of the fiscal forecast'):

<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-EFO-charts-and-tables2342.xls>

The OBR's release policy for supplementary forecast information is available here:

http://budgetresponsibility.independent.gov.uk/wordpress/docs/release_policy.pdf

Population projections used in this ITLS release are published by ONS (Table A3-1 'Principal projection - UK population single year of age'):

<http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-229866>

Projections of incomes for high earners for 2011-12 and 2012-13 also allow for possible behavioural responses following the introduction of the additional rate of tax in April 2010, specifically: (a) continued temporary reductions in incomes below 'normal' levels for those affected during 2011-12 and 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 that may arise in advance of the reduction in the additional rate of tax to 45% in April 2013, as announced in Budget 2012.

Separate to the ITLS statistics, 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 returns:

<http://www.hmrc.gov.uk/budget2012/excheq-income-tax-2042.pdf>

Forestalling of incomes in 2009-10 for example was estimated at £16-18 billion in total, together with significant temporary reductions in incomes for those affected in later years, but especially in 2010-11. While these assessments are subject to significant uncertainties, simple projection of the outturn SPI 2010-11 survey data therefore would be likely to lead to significant under-prediction of incomes for high earners and associated liabilities in later years.

Consistent with the published report, among individuals with income after deductions above £150,000 in 2010-11, the ITLS projections for 2011-12 and 2012-13 therefore allow for:

- a gradual recovery in incomes back towards 'normal' levels from their 2010-11 outturn, which is assumed to be especially depressed by incomes brought forward to 2009-10. Forestalling in 2009-10 was estimated to be split approximately equally between pay and dividends, with unwinding concentrated in 2010-11 for forestalled pay, but split more equally across the three tax years to 2012-13 for dividends; and
- temporary reductions in incomes totalling around £6¼ billion in 2012-13, representing income deferrals to 2013-14, ahead of the reduction in the additional rate in 2013-14.

Ignoring temporary forestalling effects, underlying behavioural responses to the introduction of the additional rate in April 2010 are assumed to be captured in the 2010-11 SPI survey data; and underlying responses to the reduction in the additional rate to 45% are assumed to occur only from 2013-14, beyond the projection horizon for this edition of ITLS.

The projection adjustments are applied to most SPI cases with income above £150,000. The degree of forestalling/unwinding is assumed to increase by broad income band, consistent also with the evidence from 2010-11 SA returns.

These adjustments have a significant impact on ITLS projections of the incomes and tax liabilities of taxpayers with total income above £150,000 from 2011-12, compared with the 2010-11 SPI outturn. For example, shares of income and tax accounted for by the top 1% of taxpayer by income (Table 2.4) are projected to rise in 2011-12, as incomes return to more normal levels, but are projected to fall back again in 2012-13 as incomes are deferred to benefit from the reduction in the additional rate to 45%.

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 50% rate. It is not possible to infer the additional yield arising from the additional tax rate using ITLS Table 2.6, as this gives no indication of reductions in income and yield arising due to behavioural responses.

Income tax structures, rates, allowances and thresholds are known for the current tax year 2012-13. 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 earlier with respect to re-grossed and uprated SPI dataset, and announced tax rates, allowances and thresholds.

B Table 2.7

Introduction

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:

<http://www.hmrc.gov.uk/statistics/personal-tax-credits.htm>

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):
<http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2012-provisional-results/index.html>

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. Figures for tax years are derived by HMRC as an average of the ASHE results for the adjacent Apriils.

Projections

The most recently published ASHE results are for April 2012, published on 22 November 2012, permitting derivation of estimates of earnings across the distribution up to tax year 2011-12.

Projections of income tax burdens are also provided for 2012-13. Earnings are projected to grow uniformly across the earnings distribution according to the OBR's December 2012 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:

<http://www.hmrc.gov.uk/statistics/>

This report, last updated in January 2013, 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.

Accuracy and Reliability

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 2010-11, together with a range of other variables, are published in HMRC Table 3.13a:

<http://www.hmrc.gov.uk/statistics/income-by-year.htm>

Key results are repeated in the table below. For the United Kingdom, the width of the 95% confidence intervals for numbers of taxpayers and total income tax liabilities are 100 thousand and £1 billion (0.3% and 0.7% 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: Confidence intervals for estimates of taxpayer numbers and total tax liabilities

SPI 2010-11	Taxpayers, thousands				Income tax liabilities, £million			
	95% CI		95% CI	CI width	95% CI		95% CI	CI width
	Lower Limit	Central estimate	Upper Limit	as % estimate	Lower Limit	Central estimate	Upper Limit	as % estimate
United Kingdom	31,200	31,300	31,300	0.3	151,000	152,000	152,000	0.7
North East	1,170	1,190	1,210	3.4	3,940	4,020	4,110	4.2
North West	3,310	3,340	3,370	1.8	12,400	12,600	12,800	3.2
Yorkshire and the Humber	2,440	2,470	2,500	2.4	8,910	9,040	9,180	3.0
East Midlands	2,190	2,220	2,240	2.3	8,320	8,440	8,560	2.8
West Midlands	2,580	2,610	2,630	1.9	9,550	9,680	9,820	2.8
East of England	2,950	2,980	3,010	2.0	15,300	15,500	15,800	3.2
London	3,900	3,930	3,960	1.5	33,200	33,700	34,200	3.0
South East	4,530	4,570	4,600	1.5	27,000	27,300	27,700	2.6
South West	2,740	2,760	2,790	1.8	10,700	10,800	11,000	2.8
Wales	1,420	1,440	1,470	3.5	4,590	4,670	4,750	3.4
Scotland	2,690	2,720	2,750	2.2	10,800	11,000	11,100	2.7
Northern Ireland	746	762	777	4.1	2,570	2,640	2,720	5.7

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 2½ per cent.

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 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 is deducted at source via a separate scheme operated by deposit takers. These missing data items are imputed for most SPI sample cases in PAYE only as described in the annex.

The table below shows the total contribution to key SPI income aggregates from imputed values in 2010-11. 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 £18 billion (occupational pension contributions are included in gross pay) to grossed total income across all taxpayers of £857 billion in 2010-11.

Table: Extent of imputation**SPI 2010-11 grossed totals**

	Number of individuals (thousands)		Total amount (£million)	
	imputed	total	imputed	total
Individuals' age	123	45900	-	-
Bank and building society interest income	21,900	27,000	2,950	9,140
Dividends	2,580	5,640	1,830	36,600
Occupational pension contributions	7,740	7,740	13,500	13,500
Personal pension contributions	2,980	3,790	4,300	8,390

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 PTM tax modelling process 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 2010-11 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 is 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 2010-11 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 2010-11. 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 2010-11 SPI survey data, which gives a 'one-year ahead' projection for 2011-12.

Table: 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 = 10)				
Mean	610	120	19	5
Max	1,400	290	40	9
Standard deviation	520	110	13	3
Mean	2%	4%	3%	4%
Max	5%	10%	7%	8%
Standard deviation	2%	4%	2%	2%
Two-year ahead projections (N = 9)				
Mean	860	170	32	8
Max	1,900	400	63	14
Standard deviation	540	150	19	4
Mean	3%	5%	5%	6%
Max	6%	11%	8%	10%
Standard deviation	2%	5%	3%	3%
Three-year ahead projections (N = 9)				
Mean	1,110	220	40	10
Max	2,300	480	84	19
Standard deviation	700	140	26	6
Mean	4%	7%	5%	7%
Max	8%	13%	10%	13%
Standard deviation	2%	4%	3%	4%
Memo: Evolution of projections for 2010-11				
Three-year ahead projection (April 2010)	30,600	3,410	878	161
Two-year ahead projection ³	-	-	-	-
One-year ahead projection (April 2012)	31,000	3,260	851	149
SPI 2010-11 outturn	31,300	3,250	857	152

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.

³ Two year ahead projection for 2010-11 not published due to delay in publication of 2008-09 SPI.

The table indicates mean absolute projection errors of 2-4% for key UK aggregates in respect of the one-year ahead projections, roughly doubling 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 2010-11, the latest SPI outturn.

Ex ante uncertainty in the projections may be illustrated via 'ready reckoners'. The table below shows estimated changes from the April 2013 ITLS central projections 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: Sensitivity of central projections to changes in key economic assumptions

	2010-11 outturn	2011-12 projection	2012-13 projection
Central projection			
Taxpayers	31,300	30,300	29,900
o/w non higher rate taxpayers	28,000	26,500	25,800
o/w higher/additional rate taxpayers	3,250	3,850	4,130
Total liabilities	152,000	158,000	159,000
o/w liabilities of non higher rate taxpayers	69,500	63,400	61,600
o/w liabilities of higher/additional rate taxpayers	82,200	94,500	97,400
Working-age employees+1%¹			
Taxpayers		127	132
o/w non higher rate taxpayers		104	106
o/w higher/additional rate taxpayers		23	26
Total liabilities		790	833
o/w liabilities of non higher rate taxpayers		360	357
o/w liabilities of higher/additional rate taxpayers		431	476
Pay+1%²			
Taxpayers		53	55
o/w non higher rate taxpayers		-25	-30
o/w higher/additional rate taxpayers		78	85
Total liabilities		1,800	1,870
o/w liabilities of non higher rate taxpayers		779	784
o/w liabilities of higher/additional rate taxpayers		1,020	1,080
Profits+1%²			
Taxpayers		16	14
o/w non higher rate taxpayers		10	10
o/w higher/additional rate taxpayers		6	5
Total liabilities		244	230
o/w liabilities of non higher rate taxpayers		71	67
o/w liabilities of higher/additional rate taxpayers		173	163
Interest rates+1ppt³			
Taxpayers		172	177
o/w non higher rate taxpayers		110	114
o/w higher/additional rate taxpayers		63	62
Total liabilities		2,190	2,220
o/w liabilities of non higher rate taxpayers		750	749
o/w liabilities of higher/additional rate taxpayers		1,420	1,450

¹ 1% point increase in numbers employed (SPI cases with pay > 0 aged 16-59) relative to central projection, holding SPI population aged 16-59 constant.

² 1% point increase in pay/profits for all SPI cases with pay/profits relative to central projection.

³ 1% 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 0.4% and tax liabilities by 2.8% in 2012-13, with increases in taxpayer numbers and liabilities both at non-higher and higher/additional rates.
- An illustrative 1 percentage point increase in earnings has a larger 6.3% impact on liabilities in 2012-13, as marginal rates of tax exceed average rates (the latter relevant to the employment change). Taxpayer numbers rise by 0.2% overall, but with numbers of non-higher rate taxpayers declining a little as numbers moving into higher rate tax (from basic rate) exceeds those moving into basic rate tax.
- An illustrative 1 percentage point increase in average profits raises liabilities and by 0.8% reflecting the much lower level of profits in total taxpayer income relative to earnings.
- An illustrative 1 percentage point increase in interest rates increases liabilities by 7.4%. 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.

Annex D: Glossary

Allowance / Personal allowance

The amount of income which an individual can receive before being liable for income tax. The personal allowance is an example of a tax-free allowance.

Average rate of tax

(Tables 2.5 and 2.6) The ratio of income tax liability to total income, where total 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 SA from which SA data for the SPI has been extracted since 1996-97.

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 income

(Table 2.6) Income derived from shares.

“Earnings” / “Earned income”

(Table 2.6) Comprises all incomes taxed like earnings: income from employment, self-employment and pensions (state, occupational and personal), rental income, income paid from trusts, and some social security benefits.

Government Office Region (GOR)

(Table 2.2) Primary classification for regional statistics in England comprising nine GORs since 1988 which, together with countries Wales, Scotland and Northern Ireland form 12 UK geographical units for ITLS statistics. For the SPI, the areas are attached by matching the individual's residential postcode to the Office for National Statistics Postcode Directory.

Marginal rate of tax

(Tables 2.1, 2.2, 2.5 and 2.6) ITLS classification of taxpayers according to the highest rate of tax an individual has paid, which depends on the level of total taxable income and the composition of that taxable income. Higher and additional rate taxpayers are those with taxable income (after allowances) exceeding the relevant limits in a given year (£34,370 and £150,000 in 2012-13). Basic rate taxpayers with taxable income below the basic rate limit (£34,370 in 2012-13) are sub-divided into starting, savers and ordinary basic rate taxpayers according to the composition of their income, recognising that different tax rates apply to different forms of income within the basic rate tax band. Note that the classification also takes account of the effect of tax allowances given as tax reductions. For example, an SPI case with taxable earnings only just above the

basic rate limit may have tax reductions sufficient to eliminate any higher rate liabilities, and would be classified as a basic rate taxpayer. Annex B provides more details.

National Insurance and PAYE System (NPS)

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

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.

Savings Income

(Table 2.6) 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.

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 applies now only to savings income.

Survey of Personal Incomes (SPI)

An annual sample 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 burden

Income tax liabilities expressed as a percent of gross income.

Tax credits / Tax reducers

There are other allowances and reliefs that can reduce tax bills, for example Married Couples Allowance. 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.

Tax liabilities

(All tables) The amount of income tax due after applying prevailing tax rates to individuals' taxable income (after allowances). The income tax liability for each sample case in SPI is estimated by reference to the amounts of income by type, allowances, deductions and reliefs due, and the tax regime parameters that apply for the year. The calculated liabilities for a tax year will differ from the amount of tax receipts collected in a financial year due to collection lags (particularly for SA receipts), measurement differences (e.g. dividends tax liabilities are measured gross of dividends tax credits whereas tax receipts are net of dividends tax credits), and differences in data sources and methods.

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 deductions and allowances. Levels of taxable income will correspond to announced tax bands, e.g. individuals with taxable income above £34,370 in 2012-13 will be higher/additional rate taxpayers, except where tax credits eliminate higher rate liabilities.

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

(Tables 2.5 and 2.5) The sum of an individual's earned, savings and dividends income taken into account in calculating income tax liabilities (see entries for each). Total income is measured before personal allowances, relief for individuals' contributions to occupational and personal pensions, and any other deductions have been taken into account. It includes, via gross pay, individuals' (but not employers) contributions to occupational pensions under net pay arrangements, and may be seen as 'gross income' in this sense. Levels of total income will not generally correspond to announced tax bands, e.g. individuals with total income above £34,370 in 2012-13 may not be higher/additional rate taxpayers, due to allowances and deductions.