Impact on households:
distributional analysis to accompany Spending Review and Autumn Statement 2015

November 2015
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Impact on households

1.1 This document presents the impact of the government’s tax, welfare, and spending decisions on households. It considers how policy changes affect the share of public spending received by households, and the share of tax they pay. Alongside the direct impacts on household income because of changes to the tax and welfare system, this document also examines the impacts of benefits in kind from public services.

1.2 The analysis considers policy changes since June Budget 2010, up to and including the Spending Review and Autumn Statement 2015. It also includes the effects of policies that were announced before the June Budget 2010 and were implemented in the last Parliament, in order to present the impacts of the fiscal consolidation as a whole. The analysis is presented for 2019-20.

1.3 The analysis has been published online as a supplementary document to the Spending Review and Autumn Statement 2015.

Impact across the distribution of household incomes

1.4 The analysis in this document demonstrates the effect of government decisions on the distribution of tax and spending, abstracting from the level of government borrowing. This framework allows for analysis that does not present an extra pound of borrowing as a gain to households. Higher spending or lower taxes today would increase the deficit and the debt burden, with consequences for households in the future. For these reasons, the charts in this section focus on how public spending and taxes are distributed.

1.5 This document presents analysis of the distribution of public spending, and shows where the government has chosen to prioritise spending. It also considers the tax revenues that support that spending, and shows where tax is raised from, through both direct taxes (such as income tax) and indirect taxes (such as VAT). By considering relative proportions rather than cash amounts, it starts from the premise that all public spending has to be funded, whether through current, past or future revenues.

1.6 The analysis in Charts 1.A, 1.B, and 1.C considers the distributional impacts on households of government policy by comparing the share of public spending accruing to each income quintile and the share of taxes paid by each income quintile under the 2010-11 system with the system in 2019-20.

1.7 The analysis divides households into five income groups, called quintiles, ordered from the fifth of households with the lowest incomes to the fifth of households with the highest incomes. To control for differences in the size and composition of households, incomes are first adjusted through a process called equivalisation. The steps involved in this process are set out in Chapter 2.

1.8 Chart 1.A shows the distribution of public spending that directly benefits households and the distribution of the taxes that they would have paid under the 2010-11 system, and how these distributions will have changed under the 2019-20 system as a result of policy changes. The first series (labelled 2010-11) shows what the distributions would have looked like without any policy changes since 2010-11. The second series (labelled 2019-20) then adds in the effect of all the policy changes since 2010-11. Differences between these two series can therefore be attributed to policy. The figures behind this chart are set out in Table 1.A.1

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1 The total amount of tax raised in this chart is not the same number as the total amount of spending paid out to households. For this reason, it would be incorrect to calculate a net position using the tax and spending bars, and the chart does not present any net impacts of tax paid plus spending received.
1.9 If public spending were spread completely evenly, so that every household received exactly the same amount of welfare and public service spending, then all the spending bars in the chart would be 20%, as indicated by the dashed line. This also applies to the tax bars.

1.10 Chart 1.A shows that the proportion of public spending received by households in each income quintile remains similar between the 2010-11 system and the 2019-20 system, indicating that reductions in public spending since the start of the last Parliament will have not altered its overall distribution. In contrast, the share of taxes paid by the richest households will have increased, resulting in the richest 20% of households paying over 50% of taxes in the 2019-20 system.

Chart 1.A: Impacts of policy changes on the distribution of tax and public spending, comparing the 2010-11 system with the 2019-20 system

Table 1.A: Proportion of spending received and tax paid in each income quintile, comparing the 2010-11 system with the 2019-20 system

<table>
<thead>
<tr>
<th></th>
<th>Bottom quintile</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Top quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spending received</td>
<td>24%</td>
<td>24%</td>
<td>26%</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>Tax paid</td>
<td>6%</td>
<td>6%</td>
<td>9%</td>
<td>8%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: HM Treasury Microsimulation Model

Figures may not sum to 100% due to rounding

1.11 Chart 1.A and Table 1.A show that:
- government reforms since 2010-11 have had little effect on the distribution of public spending
• the distribution of spending is progressive; half of all spending on public services goes to the poorest 40% of households

• the distribution of taxation is also highly progressive; the richest 20% of households will be paying a greater proportion of taxes in 2019-20 than in 2010-11

• in 2019-20 the richest 20% of households will contribute as much in taxes as all the remaining 80% put together

• as the richest will pay an increasing share of taxes, those in the remaining quintiles will be paying a smaller share; this is due to the increases to the personal allowance and policies that increase taxes on the richest

1.12 The spending bars in Chart 1.A above comprise spending on both public services, such as the NHS, schools, and early years childcare, as well as welfare spending, such as the state pension, out of work and disability benefits, and tax credits. Chart 1.B breaks these bars into their constituent parts to demonstrate the difference in the distributions of each type of spending, and how these have changed since 2010-11 as a result of government policy. Table 1.B shows the proportions of total public service spending received by each income quintile, split by welfare and public service spending.

1.13 Once again, the shape of a perfectly even distribution of spending 20% in each quintile is indicated by the dashed line. The fact that bars for the lower income quintiles are above this line, and for higher income quintiles are below, demonstrates that the bulk of public spending provides support for lower income families.

Chart 1.B: Impacts of policy changes on the distribution of public service spending and welfare spending, comparing the 2010-11 system with the 2019-20 system

Source: HM Treasury microsimulation model
Table 1.B: Proportion of overall public spending received in each income quintile, split by welfare and public service spending, and comparing the 2010-11 system with the 2019-20 system

<table>
<thead>
<tr>
<th></th>
<th>Bottom quintile</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Top quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare</td>
<td>11%</td>
<td>11%</td>
<td>13%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Public services</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: HM Treasury Microsimulation Model
Figures may not sum to 100%, or sum to totals in Table 1.A, due to rounding

1.14 Chart 1.B shows that the distributions of spending on both public services and welfare peak in quintile 2. This is because this quintile includes a lot of families with children who receive a relatively large share of public spending, notably through education.

1.15 Chart 1.B shows that:

- government reforms since 2010-11 have had little effect on the distribution of public spending, with around half of all spending on welfare and public services going to the poorest 40% of households
- while spending on both welfare and public services is progressive, a large part of public service spending goes on services of a universal nature, like the NHS
- the means-testing of much of welfare spending means that its distribution is more skewed towards the lower income quintiles than is the distribution of benefits in kind from public services; most of the spending on welfare that benefits households higher up the income distribution is spending on the state pension
- at the lower end of the income distribution, and the second income quintile in particular, support will have shifted since 2010-11 from cash transfers through welfare, to benefits in kind from public services

1.16 The tax bars in Chart 1.A above comprise both direct and indirect taxes\(^2\) paid by households, and show how the share of tax paid by each quintile will have changed since 2010-11 as a result of government policy. Unlike in Chart 1.A, Chart 1.C below expresses these as positive values, so a taller bar on this chart indicates a greater proportion of taxes being paid. Table 1.C shows the proportion of total tax paid by each income quintile, broken down by direct and indirect tax.

1.17 Chart 1.C shows that the highest income households pay the bulk of taxes; in fact, the 20% with the highest income will pay more in tax in 2019-20 than the remaining 80% put together.

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\(^2\) Direct tax is defined as tax which is directly incident upon, and paid by, households to the Exchequer. Income tax, for example, is drawn directly from an individual’s income. Indirect tax is paid by a third party. For example, Value Added Tax (VAT) is paid by businesses to the Exchequer, but the costs of this tax are passed through into prices, and therefore onto households.
Chart 1.C: Impacts of policy changes on the distribution of direct and indirect taxes, comparing the 2010-11 system with the 2019-20 system

Table 1.C: Proportion of total household taxes paid by each income quintile, split by direct and indirect taxes, and comparing the 2010-11 system with the 2019-20 system

<table>
<thead>
<tr>
<th>Bottom quintile</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Top quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct tax</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Indirect tax</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: HM Treasury Microsimulation Model

Figures may not sum to 100%, or sum to totals in Table 1.A, due to rounding

1.18 Chart 1.C shows that the majority of taxes paid, particularly at the higher end of the income distribution, are direct taxes. Because individuals in the lowest income households are often below the thresholds for Income Tax and National Insurance contributions, households in the lowest income quintiles tend to pay a relatively greater proportion of indirect tax than direct tax.

1.19 The difference between the 2010-11 series and 2019-20 series shows that the proportion of taxes paid by the highest income quintile will have risen as a result of policy changes since 2010, and that this has primarily been driven by changes that increase the direct tax liability of high income households. By contrast, the proportion of direct taxes paid by households in lower and middle income quintiles will have fallen. This is largely due to increases in the personal allowance.
1.20 Chart 1.C shows that:

- the richest 20% will be paying a greater proportion of taxes in 2019-20 than in 2010-11 as a result of government policy
- as the richest will be paying an increasing share of the total tax revenue collected from households, those in the remaining quintiles will be paying a smaller share; the proportion of direct tax that will be paid by the bottom quintile has fallen due to the increases to the personal allowance and policies that increase taxes on the richest
- the distribution of indirect taxes by income quintile will remain similar when comparing the 2010-11 system and the 2019-20 system

**Impacts of public service spending by type of household**

1.21 Analysis across the income distribution shows the extent to which the state targets spending according to the level of income in the household, and raises taxes from those with the most ability to pay. Public spending is also distributed according to the circumstances of the household. For example, families with children would be expected to be the main recipients of spending by the Department for Education. In this section, we present detail on how public service spending is distributed to different types of households.

1.22 Chart 1.D shows the average amount of public service spending (with a direct benefit to households) that will be received by different household types, in 2019-20, on a per capita basis. These values reflect the cost of the benefit in kind provided by public services. This spending is further broken down by spending area, of which the two largest are health and education.

**Chart 1.D: Average amount of spending on public services used, by household type and spending area, per capita (£ per year, 2019-20)**
1.23 Chart 1.D shows that in general, public service spending is targeted to support households with children and pensioners. It can also be seen here that, on average, pensioner households are most likely to receive higher levels of support from health spending. Families with children benefit primarily from education spending, and childless families of working age particularly benefit from employment support and skills spending.

**Wider economy changes**

1.24 The previous section shows that the state plays a significant role in the distribution of income through taxes and public spending. Wider economic factors, such as employment, the rate of earnings growth, and inflation also have impacts on households' standard of living. This section draws on a range of data sources to provide the wider economic context.

1.25 Chart 1.E presents the distribution and level of original (underlying) incomes i.e. earnings, private pensions, and incomes from savings and investments, between 2007-08 and 2013-14, the final year for which data by income quintile are available. The two key drivers of change in this chart are (i) changes in the employment rate and (ii) the rate at which earnings are increasing. This sense of how household incomes have changed over this earlier period provides a backdrop for considering the effects of the government’s tax and spending decisions presented in the previous sections.

**Chart 1.E: Contributions to real changes in original (before benefits and taxes) income 2007-08 to 2013-14, as a percentage of 2007-08 original income, by income quintile**

![Chart 1.E: Contributions to real changes in original (before benefits and taxes) income 2007-08 to 2013-14, as a percentage of 2007-08 original income, by income quintile](image)

Source: *The Effects of Taxes and Benefits on Household Income* (ONS)

1.26 The chart shows that:

- on average, households in the top three quintiles saw the largest reductions in real original income between 2007-08 and 2013-14
- on average, households in the bottom two quintiles saw their incomes protected against the effects of inflation
The trend in original incomes can be explained by a combination of increases to the protection to low income workers from the national minimum wage, increases in private pensions, and a fall in worklessness during this period.

Since 2014, new data on earnings growth have become available. These show that median full-time weekly earnings grew by 1.9% in real terms in the period April 2014 to April 2015. In addition, growth was strongest at the 10th percentile, where earnings grew by 3.4%. At the 90th percentile, earnings grew by 0.5%. There were also 191,000 fewer workless households in April-June 2015, compared to a year beforehand.

Chart 1.F shows trends in income inequality since 1995. In this chart, income inequality is measured by the Gini co-efficient, which aims to assess the level of inequality as a single measure between 0 and 1. Where the Gini is 0, the distribution of income is entirely equal, and no household has more income than any other. Where the Gini is 1, the distribution of income is completely unequal, and income is entirely concentrated in a single household.

It can be seen that original income inequality – inequality before any taxes and welfare – fell in 2013-14. In addition, the inequality of disposable income – that is, income inequality after taxes and benefits – is lower than its pre-recession peak. Strong income growth, coupled with an increase in the share of tax paid by those on higher incomes, and tax and public spending that remains broadly as progressive as in 2010-11, combine to produce a picture of falling inequality across both original income and disposable income.

3 Source: Office for National Statistics, Annual Survey of Hours and Earnings
4 Source: Office for National Statistics, Working and Workless Households
5 Original income is comprised of: earnings, and income from pensions, savings, dividends, and investments. This measure does not consider any redistribution through the tax and welfare system.
Data sources and methodology

2.1 This section explains in detail the data sources and methodology used to produce the charts presented in this document. All figures in this document are calculated as economic estimates, including the effects of assumptions and results from economic analyses that have a material impact. They are therefore outside the domain of official statistics.

Defining income

2.2 This analysis uses equivalised net household income, before housing costs, as the key measure through which to rank households from lowest income to highest income. This measure comprises a number of details:

- **Equivalised**: equivalisation is a process that adjusts a household’s net income to take into account the size and composition of the household. This reflects the fact that larger households will require a higher net income to achieve the same economic well-being and standard of living as a household with fewer members. Net incomes are adjusted in comparison to a couple with no children. To calculate the net equivalised income for a household, each person is given a factor based on their position in the household relative to the head of the household and their age. The equivalisation factors used in the analysis are the modified OECD factors (as used in the Department for Work and Pensions’ Households Below Average Income publication).

- **Net**: household incomes are ranked after deductions from direct taxes, and after additions from welfare benefits. Deductions from indirect taxes, or additions through benefits in kind from public services, are not used to rank households.

- **Household**: incomes are assessed in aggregate at the household, not individual, level. A household can comprise a single individual, a single family (referred to as a benefit unit), or multiple families.

- **Before Housing Costs**: housing costs such as rent or the cost of servicing a mortgage are not deducted from household incomes.

The household income distribution

2.3 Table 2.A below shows the median gross income (private income, including earnings, private pensions, savings and investments, plus benefit income) for different household types in each equivalised net income quintile.

2.4 The incomes in this analysis are calculated on an equivalised net income basis (i.e. after tax and benefits) to better capture households’ standard of living. The table below shows median gross (pre-tax) incomes within each quintile, which gives a less precise estimation of a household’s position on the income distribution than net income but, because many people think about their incomes or salaries in gross rather than net terms, is easier to understand.

2.5 Table 2.A should therefore be used to approximate where a household will be found in the income distribution. For example, if a household consisting of two adults earns £32,800 per year between them, there is a high likelihood that this household will be found in the third income quintile. However, this is not guaranteed, because different gross household incomes
can result in different net household incomes, depending on how many earners there are in the household, the size of the household, and which benefits the household qualifies for.

Table 2.A: Median gross income for each income quintile for different household compositions (£ per year, 2019-20)

<table>
<thead>
<tr>
<th>Median gross income of households in quintile</th>
<th>1 adult (£)</th>
<th>1 adult and 1 child (£)</th>
<th>2 adults (£)</th>
<th>2 adults and 1 child (£)</th>
<th>2 adults and 2 children (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top quintile</td>
<td>51,100</td>
<td>62,500</td>
<td>78,500</td>
<td>101,000</td>
<td>126,600</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>31,300</td>
<td>45,200</td>
<td>47,200</td>
<td>62,200</td>
<td>74,600</td>
</tr>
<tr>
<td>Third quintile</td>
<td>21,500</td>
<td>28,000</td>
<td>32,800</td>
<td>43,600</td>
<td>52,900</td>
</tr>
<tr>
<td>Second quintile</td>
<td>15,400</td>
<td>20,600</td>
<td>23,700</td>
<td>30,400</td>
<td>37,700</td>
</tr>
<tr>
<td>Bottom quintile</td>
<td>10,600</td>
<td>14,600</td>
<td>16,400</td>
<td>20,800</td>
<td>25,900</td>
</tr>
</tbody>
</table>

Source: HM Treasury microsimulation model

Analysis of the tax and welfare system

2.6 Analysis of the tax and welfare system is calculated using the Intra-Governmental Tax and Benefit microsimulation model (IGOTM). This model is underpinned by data from the Living Costs and Food Survey (LCF). The small sample size of the LCF means that to be able to produce robust analysis three years of data have been pooled together, specifically 2010-11 to 2012-13. This data is then projected forward to reflect the financial year being modelled, using historical Annual Survey of Hours and Earnings (ASHE) data on earnings growth at different points across the distribution as well as the latest OBR average earnings and inflation forecasts.

2.7 Throughout the analysis, individual employees are assumed to be paid at least the appropriate level of the National Minimum Wage or National Living Wage, which has been uprated from announced levels to 2019-20 based on the OBR forecast for average earnings. The model makes no changes to the underlying employment levels or expenditure patterns in the base data.

2.8 The impacts of tax and welfare measures that can be modelled robustly at a household level are derived using this projected data. We model two policy settings: the first is a view of 2019-20 that reflects all government policy changes announced at this Autumn Statement, and all other fiscal events since June Budget 2010. This also includes policies that were announced by the previous government, but implemented after April 2010. The second is a view of 2019-20 which assumes that the system as it was before June Budget 2010 continued, where tax and benefit thresholds are increased in line with the policy at the time. Detail of the process by which these policy settings are constructed is given below.

2.9 This analysis does not capture:

- changes to regulation (e.g. the National Living Wage)
- inheritance taxes and changes to them, as the liability falls on deceased people who do not form part of the analysis and an attempt to capture the effects by modelling them as incident on the recipient of the bequest would distort the analysis by presenting a one-off tax on wealth as a change in income
- exchequer impacts resulting from reduced fraud, error, or debt (FED) in the welfare system, as full compliance with the rules of the welfare system is assumed throughout the modelling
2.10 Within the tax system, the main taxes covered in this analysis are: income tax, employee National Insurance Contributions, council tax, VAT, insurance premium tax, fuel duty, alcohol duty, tobacco duty, and stamp duty land tax (SDLT).

2.11 Within the welfare system, the most significant welfare benefits covered are: the state pension, pension credit, winter fuel payments, attendance allowance, jobseeker’s allowance, employment and support allowance, income support, Working Tax Credit, Child Tax Credit, child benefit, disability living allowance, personal independence payments, housing benefit, and Universal Credit.

Analysis of tax and welfare measures that are not microsimulated

2.12 Not all measures can be reliably modelled using IGOTM due to data and/or modelling constraints. Tax and welfare changes that cannot be modelled robustly using microsimulation modelling are apportioned to quintiles, according to the Exchequer costs or savings from the measures, based on assumptions about where the impacts are likely to fall.

2.13 The IGOTM model is currently a model of the pre Universal Credit (legacy) welfare system. That means that HMT microsimulation modelling cannot currently capture the effects of Universal Credit (UC), or of any changes to it, and so these impacts are instead apportioned across households.

2.14 The fact that Universal Credit will be largely rolled out in 2019-20 means that households will be receiving a different amount of welfare in 2019-20 that they would have done without UC; we refer to this as the marginal impact of UC over the legacy system. In order to capture this marginal impact in 2019-20, the microsimulation modelling of the legacy benefits that people would have received is added to the net Exchequer cost of the marginal impact of UC. The difference between the welfare spending under the legacy and the UC systems in 2019-20 is apportioned across the distribution of the marginal impact of Universal Credit using estimates from the Department for Work and Pensions.

2.15 The net impact used for this analysis excludes Exchequer savings from reductions to fraud, error, and debt which result from the introduction of UC, because the modelling assumes full compliance with the rules of the tax and welfare systems. The updated rollout schedule and increased transitional protection resulting from the maintenance of the income threshold and taper in tax credits also use costings net of FED and are apportioned across the distribution of the marginal impact.

2.16 In order to capture the measures from this fiscal event which will affect UC claimants and which fall within the scope of the analysis, distributions have been drawn from the legacy IGOTM model and the impacts apportioned. The impact of uprating the Minimum Income Floor for over 25s in line with the National Living Wage is apportioned across the distribution of self-employed people of the relevant age with earnings below this floor.

2.17 The Housing Benefit measure, to limit social sector rates to the equivalent private sector rate, is apportioned across the distribution obtained by applying the same policy change in legacy Housing Benefit.

2.18 HM Treasury runs a continuous programme of model development and anticipates including full microsimulation modelling of the Universal Credit system in the near future.
Analysis of spending on public services

2.19 The analysis of the benefits in kind provided by public service spending is also derived from HM Treasury’s IGOTM model. However, the modelling approach taken for public services is slightly different. There are two general approaches to the modelling of resource spending on public services (referred to as Resource Departmental Expenditure Limits: RDEL) depending on whether service use is reported in the Living Costs and Food Survey (LCF), which underpins the modelling. Where this is the case, no additional data is required and the approach is similar to that used for most tax and welfare modelling. An example of this is spending on schools, which can be modelled directly because the LCF contains information on the number of children by age in each household who attend a state-funded school.

2.20 Where the LCF does not contain information about use of the service, additional data sources are required. This additional data is used to identify characteristics associated with the use of the service and then to derive probabilities of service use conditional on these characteristics. This could include a wide range of characteristics, although the variables considered must be common to both the additional data and the LCF data used in the microsimulation model. For example, use may vary by age, income, family composition and geographic location.

2.21 Where possible the probability of using a given public service is estimated through a regression model. However, because of data limitations, this is not always possible and many probabilities have instead been estimated through cross-tabulations.

2.22 These probabilities are then applied to the LCF data in the microsimulation model. Total spending (both actual and for the baseline) is then allocated according to each household’s relative likelihood of using the service. Impacts of changes in RDEL spending are calculated alongside tax and welfare and presented across the income distribution.

2.23 This analysis only includes spending on frontline public services with a direct benefit to households. It therefore excludes spending on capital and administration, and figures do not include the effect of depreciation.


2.25 The analysis of public services does not capture:

- capital and administrative spending
- spending funded through the reserve

Constructing charts 1.A – 1.C

2.26 Charts 1.A to 1.C are derived through analysis of the combined impacts of all tax, welfare, and public service spending decisions since June Budget 2010, in order to present the impacts of all the current and coalition governments’ consolidation decisions. Whilst each chart shows a different facet of the overall shape of tax and public spending, the broad principles behind each of these charts are similar. All analysis of public spending is limited to England only.

2.27 This analysis is modelled in two stages. First, we take the impacts over the 2010-2015 Parliament that were calculated at Budget 2015. In this stage, we used LCF input data that covers 2008-09 to 2010-11 in order to construct the baseline and the impacts of policy changes
through to 2015-16 announced in the last Parliament. Second, impacts of policy changes in the current parliament, up to and including Autumn Statement and Spending Review 2015 are estimated on top of this. In this second stage the newest available LCF input data, covering 2010-11 to 2012-13, are used, and the counterfactual is updated to be the policy setting at the end of the 2010 to 2015 Parliament.

2.28 The two sets of impacts are combined with the modelling of the 2010-11 baseline, and all figures are converted into the same year’s price terms. This two-stage approach ensures that analysis of policy decisions in the current Parliament is underpinned by the data that most accurately reflects the present composition of the underlying population, while avoiding the double counting of policy impacts that would occur in trying to re-run analysis from the last Parliament on the new data.

2.29 Households are then ranked from lowest income to highest income, using household equivalised net incomes (as outlined above), and this ranking is divided into five equally sized groups called quintiles, across which analysis is performed.

2.30 Within each quintile, we then determine the share of public spending received in the 2010-11 baseline, and then the 2019-20 policy setting, and express this as a percentage. We then do the same with the share of tax received.

**Constructing chart 1.D**

2.31 Chart 1.D takes the aggregate amount of spending on public services, and divides it across three households types. This chart presents per capita spending, but values within this chart are not equivalised in any other way.

2.32 Household groupings are defined as follows:

- if a household contains a person aged over the State Pension Age, it is classed as a pensioner household
- within those households that remain, those that contain children aged 17 or under are classified as a household with children
- remaining households are classified as households without children

2.33 This means that, for example, a pensioner couple living with a family with children would be classed as a pensioner household. These mixed households are not separated out in this chart, but have a relatively minor impact on the overall figures.

2.34 Spending is separated into four categories:

- health spending consists entirely of NHS spending
- education spending consists of Department for Education spending on primary and secondary education, and the Department for Business, Innovation, and Skills spending on further and higher education
- social care consists of local authority spending on residential and domiciliary social care
- employment support consists of spending on employment skills and jobseeker support through the Department for Business, Innovation, and Skills and the Department for Work and Pensions
- all other departmental spending with a direct benefit to households is included in the “other” category
Constructing charts 1.E and 1.F

2.35 Chart 1.E is constructed using the ONS series “The Effects of Taxes and Benefits on Household Income, 2013-14” (Table 1.A). Figures are deflated using the implied household deflator. Chart 1.F is also constructed using the ONS series “The Effects of Taxes and Benefits on Household Income, 2013-14” (Table 27).

Autumn statement 2015 measures included in this analysis

2.36 This analysis includes the following tax measures announced at the Autumn Statement and Spending Review 2015:

- Stamp Duty Land Tax: higher rates on additional properties
- Increased flexibility for local areas to raise funding from council tax

2.37 This analysis includes the following welfare measures announced at the Autumn Statement and Spending Review 2015:

- Tax Credits: maintain taper and income threshold
- Universal Credit: uprate Minimum Income Floor with National Living Wage
- Universal Credit: updated delivery schedule (excluding impact on HMRC operational measures, which do not form part of the distributional analysis)
- Housing Benefit: limit social sector rates to the equivalent private sector rate
- Pension Credit Savings Credit: freeze

2.38 This analysis also reflects the spending settlements announced at Spending Review 2015. As noted above, these figures exclude spending on public goods, capital spending, and admin spending. Full detail on departmental spending settlements can be found in the main Spending Review and Autumn Statement 2015 document.

2.39 Certain personal tax and welfare measures announced at the Autumn Statement and Spending Review remain out of scope of this analysis. These include:

- Housing Benefit and Pension Credit: limit temporary absence (absence is not captured in the data underpinning the model)
- Temporary accommodation: impact of new funding mechanism (spending which benefits homeless families is not captured in the model on the basis that these families are not well captured in the base data)
- Childcare: revised eligibility criteria (this element of the welfare system is not yet captured in the IGOTM analysis due to insufficient information on childcare costs in the base data)
- Social care reforms: updated implementation date (this refers to behavioural changes affecting take up of Attendance Allowance)
HM Treasury contacts

This document can be downloaded from www.gov.uk

If you require this information in an alternative format or have general enquiries about HM Treasury and its work, contact:

Correspondence Team
HM Treasury
1 Horse Guards Road
London
SW1A 2HQ
Tel: 020 7270 5000
Email: public.enquiries@hmtreasury.gsi.gov.uk