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Where the money goes: How we benefit from public services

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Section one

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Executive Summary

This report attempts to set out the value of the benefits we receive from public services, using a new model of the distribution of public spending across households in the UK. The report also uses this analysis to estimate the losses to households as a result of the Government's proposed cuts in public spending by 2012-13, as well as discussing the impact of the fiscal consolidation measures as a whole (that is, including the impact of changes to taxes and benefits).

Chapter 1 sets out why we need to develop a fuller understanding of the benefits of public spending to households.

- Currently, research suggests that people do not have an awareness of the value of public services they receive in return for the taxes they pay. This, in turn, jeopardises support for public spending. A sense of 'public value' is the missing link in our tax and spending debates.

Chapter 2 describes the methodology used for analysing the distribution of spending across the population, and sets out the results of the analysis.

- The model is based on survey data about which households use particular public services and how much they use them. We have then combined this information with government spending data to produce a picture of how spending is distributed across households. For certain services that are consumed 'collectively' or where there is no basis for allocating different amounts of expenditure to different households, spending is allocated on a flat-rate basis. We believe this is the first time such an approach has been used to model the distribution of all public spending in the UK.
- We find that *all* households gain substantially from our system of spending on public services – the average benefit to households in 2007-08 was around £21,400 per year – but that those on low and modest incomes gain especially. Spending on public services is particularly valuable for families with children and pensioners.

Chapter 3 sets out why these estimates of the cash value of public services consumed by households is almost certainly a significant underestimate of the true value of public spending to them.

- For some services, households would have to pay more to acquire the same services on the open market. In other cases, public spending underpins public goods that are indispensable for human welfare – like property rights,

freedom from harm, and clean air – benefits that are literally invaluable. Furthermore, many households not currently using certain services still have the right to use them if they want, or will use them in future. And we all gain from other households using services like health and education.

Chapter 4 analyses the impact on households of the Government’s proposal to cut £34 billion from spending on public services by 2012-13 (excluding cuts to welfare benefits). And by combining this analysis with data on the impact of the Government’s proposed tax and benefit changes by 2012-13, we are also able to analyse the impact on households of all fiscal consolidation measures for this year.

- Even before the value of cuts to benefits and tax credits is taken into account, the impact of cuts in spending on public services will be severe, with an average cut to households of £1,308 per year. These cuts will also be regressive, with the poorest tenth of households losing income and services equivalent to 20.3% of their household income, compared to just 1.5% for the richest tenth of households (displayed in the chart below). The impact of these cuts is also proportionately greater for families with children and pensioners, as well as households living in the North and Midlands.

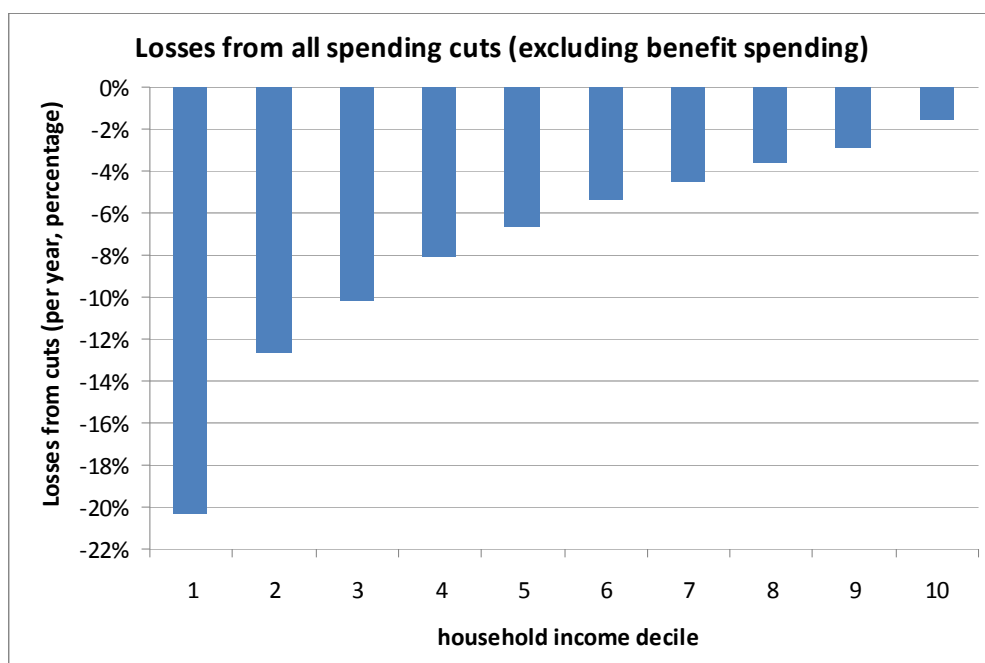


CHART: The distributional impact of the Government’s proposed spending cuts (excluding benefit cuts) by household income decile, 2012-13.

- We also find that the combined impact of all fiscal consolidation measures – both cuts to spending on public services and changes to tax and benefits – is also deeply regressive, with households in the poorest income decile on average losing income and services equivalent in value to 23.5% of their household income (£1,521), while households in the second richest decile

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lose income and services equivalent in value to 4.7% of their household income (£1,925) – see the chart below. The fact that the impact of spending cuts is so much more regressive than the impact of the tax changes creates real questions about the current Government's decision to rely so heavily on spending cuts for deficit reduction.

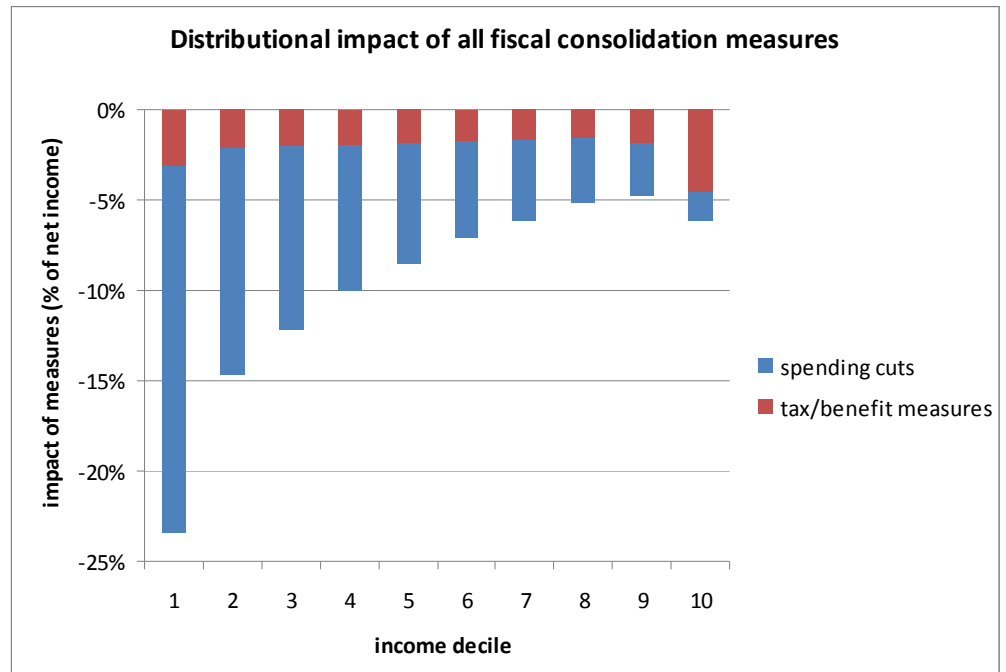


CHART: The distributional impact of all fiscal consolidation measures, by 2012-13, by household income – including both tax and benefit changes and cuts to non-benefit spending.

Chapter 5 concludes by highlighting some ways in which a keener awareness of the value of public spending to households could help to improve our political debates on tax and spending.

- Personalising the value of public spending to households can begin to correct an important asymmetry in public perceptions, whereby people have a more acute sense of the magnitude of their tax bill than they do of the value of public services to them. This in turn can help to improve the quality of our tax and spending debates.

'Public Value': the missing link in our tax and spending debates

“People tend to think of services like health and education as just ‘free’, and usually have little notion what these might be worth to them...They certainly don’t have anything approaching a synoptic figure in their heads that says ‘this is the amount I get back from the state in return for paying my taxes’...Thus, there is no vivid sense of a quantum of benefit to offset the more sharply visualised quantum of pain that paying tax causes.”

(Alan Hedges, Perceptions of redistribution, 2005)

On New Year’s Day 2008, the Daily Express front page screamed ‘GIVE US A 45% PENSIONS RISE’. The paper was joining campaigners who were complaining about the level of the basic state pension and arguing that a significant increase was needed. Meanwhile, over on its comment pages, its main editorial outlined the political credo it would be campaigning for over the year ahead. “We believe that making the state small is the key to unlocking human potential,” it argued, pledging to fight for tax cuts “every inch of the way”.

Perhaps the contradiction between these two positions had struck the newspaper’s staff; perhaps it hadn’t. (It should certainly remind us of a constant tension for the right-wing tabloids: that the small-state ideology they push is diametrically at odds with what they know to be the huge support of their readers for tax-funded public services.)

Either way, this is just one of a myriad of possible examples of the very low quality of tax and spending debates that we have in the UK. Picking any day over the last decade would have thrown up similar cases, where media commentators conveniently forget that the social provision we rely on has considerable financial costs – requiring significant taxation.

Routinely, the value of public spending is ignored, underplayed or simply forgotten in our tax and spending debates. Anti-tax campaigners, the tabloid press and right-wing critics of public services all talk about tax revenues as if they were taken and thrown into the sea. Tax cuts are touted as if they have no consequences for public services.

Of course, for some, this is part of a deliberate tactic to advance the cause of tax cuts over public spending. It is why, for example, the myth of huge ‘waste’ is so important to anti-tax campaigners: they simply do not feel confident

'Public Value': the missing link in our tax and spending debates

enough to argue for lower taxes on the basis of their true political vision: a society with fewer public services.

But the reason such a tactic is successful is that it takes advantage of a broader gap in our understanding of how public spending benefits us.

A gap in our understanding

People are unaware of the scale of the benefits they get from public services in return for the taxes they pay. In a recent study on public attitudes to tax and spending, Alan Hedges found that, "many people are sharply aware of the tax system draining money from them (even if they aren't certain about the precise amounts involved), but they don't have equivalent awareness of all the ways in which money flows back to them through services and benefits".¹ There is an important asymmetry here: while people have a keen awareness of the value of their own private finances, they often don't have a corresponding sense of the 'public value' they enjoy through benefits and services.

There are a couple of practical consequences that result from this lack of awareness of the value of public services.

First, it often leads to underestimation of the value of the services people receive from public spending, which in turn can lead to discontent about the level of taxation they pay. As Hedges puts it, "The effect of all this is that many people tend to underestimate the cash value of the benefits in kind they receive from the state – simply because they don't know the costs, and aren't reminded of the various benefits they receive... This means that the 'benefit pan' in the mental scales tends to weigh light relative to the 'tax pan'".²

Second, the 'invisibility' of the value of public spending feeds a broader sense of disconnection in how people think about paying taxes and receiving public services. Attitudes research done for the Fabian Society's Commission on Taxation and Citizenship in 2000 reported that the link had collapsed in many people's minds between paying tax and receiving public services: "The dominant sense to emerge [from the focus groups] was of a deep sense of 'disconnection' between the taxes people pay and the public services which these finance," which arose "mainly because most people did not feel they knew where their taxes were going"; "at best, people said they had a general feeling of contributing to the cost of public services; but while the link was fairly vivid in some people's minds it was much weaker and hazier for others". The Commission concluded that this feeling of disconnection "undermines public

¹ Hedges, A. (2005) *Perceptions of redistribution: Report on exploratory qualitative research*, CASE paper 96, London School of Economics.

² Ibid. Hedges notes that: "This applies even to the specific services they receive directly (like medical treatment), and even more to indirect benefits (like insurance value or freedom from worry) or systemic benefits (like living in a kindly, supportive or well-educated community)".

support for the whole purpose of government, and fuels a certain kind of ‘tax resistance’.”³

Clearly, both of these phenomena – the underestimation of value and the mental ‘disconnection’ of tax and spending – seriously jeopardise public support for the collective provision of services. A crucial part of any progressive agenda on tax and spending should therefore be to develop a fuller understanding of the benefits of public spending to households. This sense of ‘public value’ is the ‘missing link’ in our tax and spending debates.

A problem for policymakers too

The problem is not just a gap in the general public’s understanding. Policymakers and campaigners also currently lack a detailed analysis of the distribution of public spending across households. This is especially regrettable, since an understanding of the way in which spending on public services affects the overall distribution of resources in society should be an essential part of anti-poverty strategy.

After all, it is clear that public spending plays a vital role in reducing poverty and inequality in the UK. Transfer payments of course raise poorer households’ incomes directly, while public services provide an income ‘in kind’ (as well as saving households from having to buy those same services privately, which would often be more expensive). Both modes of provision clearly contain significant ‘pro-poor’ elements of spending. But little is known about how public spending as a whole contributes to the equalisation of resources in society.

Indeed, at a time when the Government is embarking on a programme of severe fiscal consolidation, this gap in understanding is now an urgent problem. It means that decision-makers lack sufficient information on the consequences of different choices on tax and spending – particularly in terms of the impact on the welfare of different social groups. We are also at a moment when demographic, economic and social changes are forcing policymakers to consider the future shape of welfare and public service provision – especially in the context of long-term affordability. Again, to do this responsibly, we have to understand the consequences of different policy choices for social and geographical equity.

The content of this report

So now is a crucial moment to rectify this gap in our understanding of public spending. Measures of the size and distribution of the benefits that households

³ Fabian Commission on Taxation and Citizenship (2000) *Paying for Progress: A New Politics of Tax for Public Spending*, London: Fabian Society. Quotes from pages 3, 48 and 55. The conclusions of this report were themselves based on attitudes research conducted by Alan Hedges and Catherine Bromley for the Fabian Commission (Hedges, A. and Bromley, C. (2001) *Public attitudes towards taxation*, Fabian Society.)

'Public Value': the missing link in our tax and spending debates

gain from public spending are badly needed to foster a keener awareness of the value of public services to households.

This project therefore attempts to produce a detailed analysis of how public spending is distributed across households in the UK, using a variety of techniques that allow us to allocate spending to households. The results are presented in Chapter 2, along with a discussion of the methodology that we have used to analyse spending.

Chapter 3 discusses in more detail how we might think about the 'value' of public services to households, highlighting some more sophisticated measures of value than those employed in this report. In particular, we discuss how the monetary values assigned to goods and services in Chapter 2 are almost certainly a very conservative measure of the actual value of public spending to households.

Understanding the current distribution of public spending also enables us to model the possible impact of changes in levels of spending – and so highlight the consequences of particular spending cuts or increases for the welfare of different social groups. In Chapter 4 we explore this in the context of the spending cuts recently announced by the Government, analysing their distributional impact and discussing how different sections of the population will fare.

Chapter 5 concludes, highlighting some of the ways in which the analysis presented here might be employed to influence tax and spending debates in the UK.

The distribution of public spending in the UK

The previous chapter described a gap in public understanding of the value of public spending to households.

To fill this gap, we have developed a new model for analysing how public spending is distributed across households. We do this by combining data on how much is spent on each area of service provision (health, education, transport, etc.), with data on which households in the population use each type of service and how much they use it. By reconciling these two types of data, we can calculate the distributional impact of all public expenditure across households.

Methodology

The spending framework

In our model, we analyse public spending using the ‘expenditure-on-services’ accounting framework, which HM Treasury uses for the Government’s Public Expenditure Statistical Analysis (PESA) series.⁴

The expenditure-on-services framework is a functional analysis of public sector expenditure, rather than a departmental one, so it differs from the standard ‘budgeting-and-control’ framework that the government uses to report departmental spending plans and outturns (and that is most closely aligned to the National Accounts).⁵ In the budgeting-and-control framework, spending is classified in terms of the government institution through which the resources flow; in the expenditure-on-services framework, by contrast, spending is classified in terms of the type of service it is spent on (health, education, etc.).⁶

⁴ *Public Expenditure Statistical Analyses 2009*. Cm 7630, HM Treasury, June 2009.

⁵ The expenditure-on-services framework used for PESA is broadly consistent with the UN’s system of Classification of the Functions of Government (COFOG). Unlike the budgeting-and-control framework, the expenditure-on-services framework excludes non-cash items such as depreciation and cost-of-capital charges.

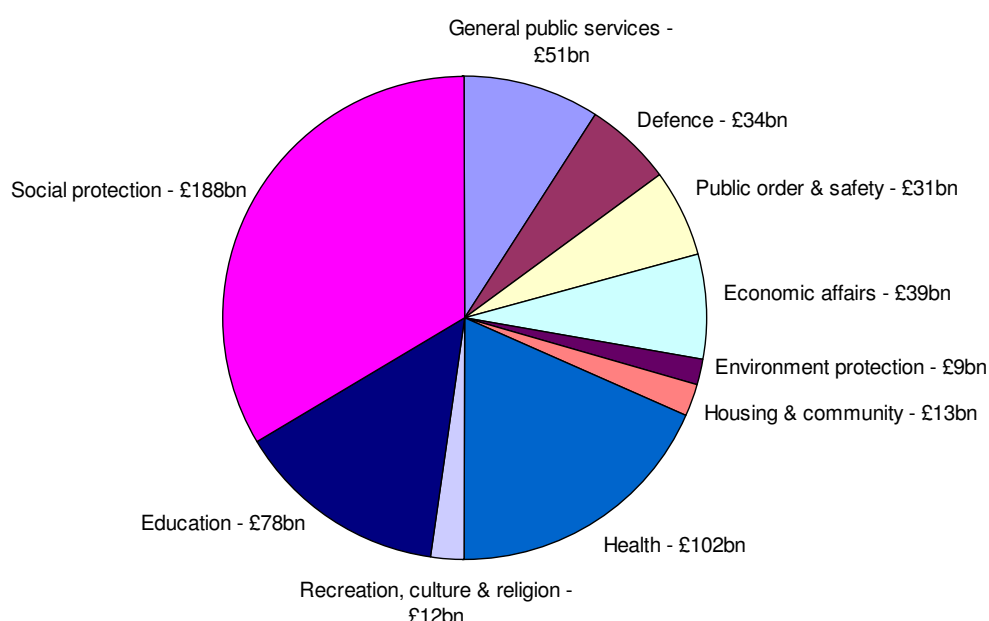
⁶ It is worth noting that the fiscal aggregate related to the budgeting-and-control framework, Total Managed Expenditure (TME), is broadly comparable to the fiscal aggregate derived from the expenditure-on-services framework, Total Expenditure on Services (TES), but with minor divergences. TES includes a small number of items not in TME, such as the grant-equivalent element of student loans. On the other hand, TES (unlike TME) excludes non-cash items and does not reverse the deduction of certain VAT refunds in the budget-based expenditure data. As a result, TES is generally about 95% of TME; for the year 2007-08, TES

The distribution of public spending in the UK

The expenditure-on-services framework is therefore the most appropriate one to use for analysing government spending on particular areas of service provision.

The chart below illustrates an expenditure-on-services analysis for 2007-08, showing spending broken down into ten broad functional categories.

Expenditure on services by function, 2007-08



Expenditure on services by function, 2007-08 (£ billion). In terms of the categories in the chart, 'General public services' refers to spending on executive and legislative organs, financial and fiscal affairs, external affairs and public debt transactions. 'Economic affairs' refers to spending on transport, communications, fuel and energy, agriculture, forestry, fishing and hunting, and so on. 'Recreation, culture and religion' refers to spending on recreational and sporting services, cultural services, broadcasting and publishing services, and so on. 'Social protection' refers to spending on benefits, payable tax credits, and personal social services. Total Expenditure on Services (TES) was £555.3 billion in 2007-08 (numbers in the chart above may not sum to this total due to rounding). Source: PESA (HMT, 2009).

was £555.3 billion, whereas TME was £582.7 billion. (For more information, see Annexes C and E of *Public Expenditure Statistical Analyses 2009*. Cm 7630, HM Treasury, June 2009.)

Expenditure on services for a particular function is derived by aggregating different departmental funding streams that are spent on that particular function. For example, the £31.4 billion spent on ‘public order and safety’ in 2007-08 included not just the £15.5 billion budget of the Home Office, but also £9.1 billion from the Ministry of Justice, £2.5 billion from the Department for Communities and Local Government, £731 million from the Law Officers’ Departments, £178 million from the Department for Transport, £109 million from the (then) Department for Children Schools and Families (DCSF), and £1 million from the Department of Energy and Climate Change, along with £3.3 billion of further spending through the devolved administrations and their corresponding UK government offices. Similarly, the £78.1 billion spent on ‘education’ in 2007-08 included not only £50.6 billion from DCSF, but also £13.7 billion from the (then) Department for Innovation, Universities and Skills and £113 million from the Department for Culture, Media and Sport, not to mention substantial further spending through the devolved administrations.

Our analysis uses a breakdown of expenditure on services at a very fine level of detail, decomposing the ten broad categories given in the chart above into hundreds of smaller categories. For example, ‘Health’ in the chart above, which is a category at the ‘functional’ level, is broken down further into ‘Medical Services’ and ‘Medical Research’ at the ‘sub-functional’ level; ‘Medical Services’ is then broken down into many further categories, such as ‘NHS Trusts’, ‘Hospitals and Community Services’, ‘General Medical Services’, ‘Pharmaceutical Services’ and so on – a level we will call the ‘sub-sub-functional level’.⁷ The sub-sub-functional level has been the most appropriate one to use for analysing the distribution of spending as it specifies spending on service areas at a level that tends to correspond to ‘everyday’ categories in which people think about services (such as, in health, ‘GP services’, ‘dental services’, ‘in-patient treatment’, etc.) and this allows us to take advantage of a wide range of information about how much different households use such services.

In constructing our model, we have used spending data for the fiscal year 2007-08, which was the most up-to-date year for which PESA data were available when this analysis was conducted. We will seek to update our model in future years as new data becomes available.

The allocation process

Having identified total government spending in each area of service provision, our model then allocates this spending to households on the basis of a range of information concerning which households receive and use particular services and how much they use them.

⁷ The finest level of detail tabulated in the PESA documents is the sub-functional level – see Table 5.2 of *Public Expenditure Statistical Analyses 2009* (Cm 7630, HM Treasury, June 2009). This level is broadly consistent with the UN’s COFOG level 2 categories in its Classification of the Functions of Government.

The distribution of public spending in the UK

First, and most straightforwardly, our model incorporates policy-driven constraints on how particular types of spending are distributed, for example, means-test thresholds for access to a service. For example, in 2007-08, households could only get public support towards the cost of a residential care if their assets were less than £22,250; as we have data on household assets across the population, our model can incorporate this constraint quite simply in allocating the £3.3 billion spent on residential care for older people in 2007-08.⁸

The main sources of information we have used to allocate spending to households are household surveys, conducted by the Office for National Statistics, which contain data on whether and how much households use different types of services, or data that allows us to deduce this. For example, the General Household Survey asks people how often they use hospital or GP services; the Expenditure and Food survey asks people how often they spend on bus travel (an indicator of how often they use bus services); and so on.

All in all, we have used five different surveys as data sources for the model, shown in the table below, as no one survey contains all the information we need.

Name of dataset	Examples of public services that the dataset provides information about
British Crime Survey (BCS)	police
British Household Panel Survey (BHPS)	social care (except residential care for old people)
Expenditure and Food Survey (EFS)	transport
General Household Survey (GHS)	health museums & galleries
Family Resources Survey (FRS)	education housing programmes for the unemployed

For all of these surveys, we use a single wave of data.⁹ In each case, we have used data from 2007-08 or the nearest available year. This enables us to analyse service use for the same financial year for which we have data on government spending and household incomes – which makes the analysis as coherent and integrated as possible.

Because it is easiest to model the impact of tax and benefit changes using the Family Resources Survey (FRS), we used the FRS as the main dataset for this analysis and matched in data on the probability of using public services such as health, social care, roads and public transport from other datasets using a

⁸ This £3 billion is a net figure, taking into account income from clients' fees and charges.

⁹ Although the British Household Panel Survey is a panel, we use it as a cross-sectional dataset.

statistical technique known as multiple regression analysis. This allowed us to make an estimate of the extent of each FRS household's use of, say, health services, based on information such as their income, size, age structure and region, even though the FRS itself does not contain information on use of health services. More information on the methodology is given in the Appendix.

In cases where it is possible to take account of differences in patterns of spending across the different nations of the UK, we have done so. For example, in Wales there are no charges for NHS prescriptions, and in Scotland local authorities provide free personal care. We have allowed for this by not means-testing these policies on households based in Wales and Scotland respectively.

Beyond this household-level survey data, we also occasionally drew on external academic studies of factors affecting service use in order to allocate spending for particular services. For example, none of the surveys listed above covers people in residential care – such as local-authority-funded care homes; hence, in order to model the probability of entering residential care for adults in the Family Resources Survey, we have used information on the probability of being in residential care (by characteristics such as age and gender) from research by the Personal Social Services Research Unit.¹⁰

Where there is no basis for allocating different amounts of expenditure to different households – for example, where no data exists that allows us to allocate spending on a particular service in a way that reflects households' differential service use – we allocate the spending on a flat-rate basis across households. In this 'flat-rate' allocation, each household is weighted according to the OECD equivalence scale used to adjust incomes for household size in the Department for Work and Pensions' Household Below Average Income (HBAI) series. So for example, the flat-rate allocation of spending for a household with two adults and three children (aged under 14) is 1.6 times the flat-rate allocation of spending for a household with two adults but no children.

Collectively consumed goods

All of the types of public services that we have been discussing so far are services like health and education that are consumed individually by people, in the sense that one person's consumption of them excludes others from consuming the same quantities of services. These are what economists call private goods (albeit in this case publicly-provided private goods). In particular, they have a property of 'rivalrousness', meaning that when one person consumes them it reduces the amount available for others to consume. Since people consume these services individually, spending on them is easily allocable to different households on the basis of their service use.

¹⁰ Darton, R., Forder, J. et al. (2006) *Analysis to Support the Development of the Relative Needs Formula for Older People: Final Report*, PSSRU Discussion Paper 2265/3

The distribution of public spending in the UK

But there is another group of goods and services provided by government that are consumed collectively, in the sense that one person's consumption of them does not exclude others from consuming the same services. Classic examples are national defence and environmental protection. These are public goods, and they are not rivalrous: when one person consumes them it does not reduce the amount available for others to consume.

In this study, we allocate spending on such collectively-consumed goods on a flat-rate basis, since the benefits of such spending are enjoyed by all. In particular, public goods such as national defence and environmental protection are not only non-excludable, meaning no-one can be prevented from consuming them, but also unavoidable, meaning that if anyone consumes them, all must consume them. This provides a particularly strong rationale for dividing the cost of spending on them equally among the population.

Relation to existing work

To summarise, by reconciling government spending data with household-level survey data, our model shows how public spending on services is distributed amongst households taking into account (where possible) the extent to which households use those services.

At present there is little analysis available of the distribution of public spending. The Office for National Statistics (ONS) conducts an annual study, *The effects of taxes and benefits*, which, as well as analysing the distributional impact of personal taxes and benefits, also analyses the distribution of spending on 'benefits in kind' such as health and education services and housing subsidies (as well as a few smaller items such as welfare milk).¹¹ Though an invaluable study, the ONS' allocation of some spending across households is made on the basis of fairly crude formulae, rather than households' use of these services. For example, health spending is allocated according to the age and gender of household members, rather than actual use of health services.¹²

Tom Sefton has previously sought to improve on these ONS calculations by incorporating data from a wider range of surveys and apportioning spending according to households' reported use of services.¹³ Sefton's studies therefore give a more sensitive picture of the distribution of spending on benefits in kind.

However, because both the ONS and Sefton studies are primarily concerned with the distribution of these classic 'benefits in kind', particularly their

¹¹ For the latest version, see Barnard, A. (2009) *The effects of taxes and benefits on household income, 2007/08*, Office for National Statistics.

¹² This is because the ONS study is based on the Expenditure and Food Survey, which does not contain information about use of health and education.

¹³ This approach therefore takes into account variations in households' service use by characteristics over and above age and gender, such as income, tenure, etc. See, for example, Sefton, T. (2002) *Recent Changes in the Distribution of the Social Wage*, CASEpaper 62, London School of Economics.

contribution to reducing inequality, they only analyse spending on this particular subset of public services, which equate to only around half of total public spending.

Here, our concern is with allocation of all public spending across households, in order to get a better sense of the overall value of public spending to households, to help understand how this relates to the taxes we pay, and to think about the impact on households of cuts in public spending as a whole.

In an illuminating study in 2009, Volterra Consulting – whose concern, like us, was also to understand the distribution of all spending – took the ONS analysis and allocated the remainder of public spending (about 46%) to households on a flat-rate basis.¹⁴

In our analysis, like the Volterra study, we seek to allocate all public spending to households, but, like the Sefton study, we seek to do so in a way that reflects' households use of services – at least, to the maximum extent that data allows. There are a variety of types of public spending beyond these classic 'benefits in kind' where quality survey data exists on service use – for example, on use of museums and galleries, or use of roads. Our approach has therefore been to allocate as much spending as possible in line with this micro-data, only using flat-rate allocation for areas of spending where either no data exists to allow us to allocate different amounts of spending to different households, or where goods and services are consumed collectively. We think this is the first time such an approach has been applied to all public spending in the UK.

Out of a total of £555 billion of public spending in 2007-08, our model allows us to allocate about 70% of spending in line with household micro-data, with just 30% allocated on a flat-rate basis.

The distribution of public spending

So what does the distribution of public spending across the population look like? Having allocated all public spending to households, we can then explore the shape of this distribution according to various household characteristics for which information exists in the survey data.

In this section, we explore the distribution of public spending by three types of characteristics: household income; household type (which includes information about the age of the head of household and whether or not there are children in the household); and the geographical region in which the household is located.

¹⁴ Volterra did allocate some further health and education spending in line with ONS estimates, taking the total non-flat-rate allocation to 54% of all spending (up from the ONS' 49%). (See: Volterra Consulting (2009), *2020 Public Services Trust: Distribution of Public Finances*, Volterra Consulting.)

The distribution of public spending in the UK

Distribution of public spending by household income

The first chart below shows the distribution of all public spending by household income decile, expressed in cash terms.¹⁵ As can be seen, annual public spending received per household ranges from an average of £27,400 in the second decile (1 = poorest and 10 = richest) to £14,200 in the richest. With the exception of the poorest decile, where average spending is £21,300 per household, the average spending per household falls gradually as you move up the household income spectrum.¹⁶ For all households, the mean spending per household is £21,400; the median spending per household is £18,200.¹⁷

The chart also breaks these totals down into spending on benefits and tax credits versus spending on public services. Of the £27,400 average spending per household in the second decile, £9,100 of this comes from benefits and tax credits, whereas £18,300 comes from spending on public services; of the £14,200 in the richest decile, £1,700 of this comes from benefits and tax credits, whereas £12,500 comes from spending on public services.

¹⁵ These are 'equivalised' income deciles. Equivalisation is a process used to adjust incomes for family size, on the basis that larger households need a bigger amount of income than smaller households to achieve the same standard of living. We use the OECD equivalence scale (see DWP, *Households Below Average Income 2008-09*, Appendix 2, Table A 2.1 for details).

¹⁶ There are two main reasons why spending is lower for the lowest decile than for the second lowest decile. One is that the lowest decile contains a high proportion of non-working single households without children. This group receive relatively low levels of benefits and tax credits compared with other household types (such as poorer families with children). They also receive very little education spending (most of this goes to families with children), and education spending is a large component of spending (at around £80 billion in total). Also, the lowest decile contains a number of households whose incomes in the 2007-08 FRS are *negative*; in most cases these are households with a self-employed person whose business is trading at a loss. Again these households receive relatively few benefits or tax credits compared with other poorer households.

¹⁷ In fact, median spending is £18,200 if sampling weights are used to make the FRS more representative of the population. The unweighted median is £19,500.

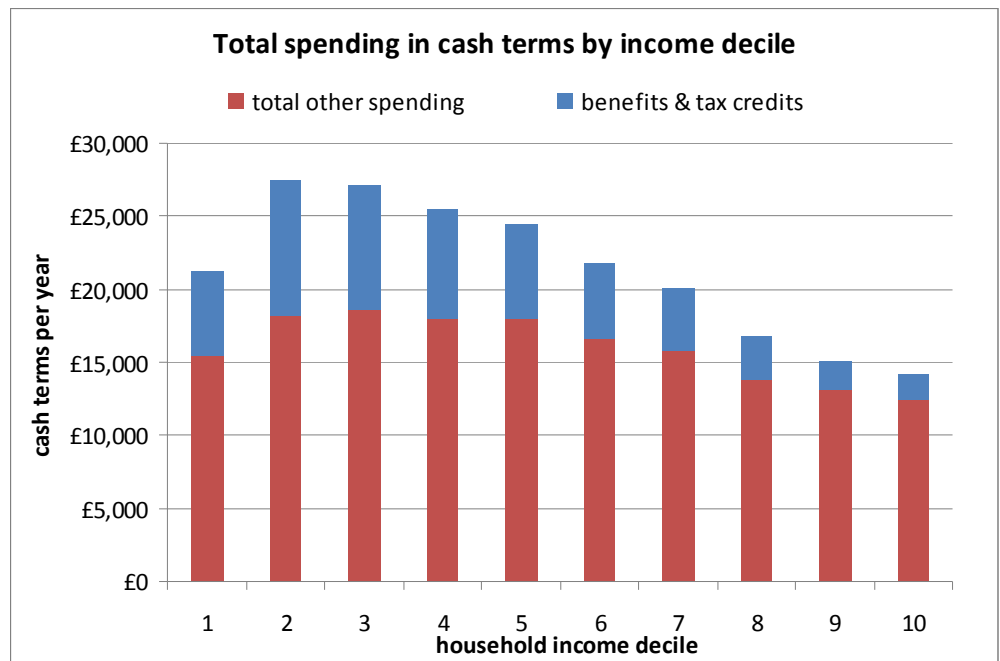


CHART: Average annual spending per household, in cash terms, by household income decile (2007-08).

These are large sums of money. But, as Tom Sefton points out, it would be wrong to view the quantity of public services consumed as increasing a household's standard of living in the same way that we would for cash incomes.¹⁸ This is because many public services are provided to meet specific needs, and differences in the amounts of public services used by households often relate to different underlying needs. For example, the fact that an ill person uses a large quantity of health services does not necessarily make him or her better off than a fit person who does not need to use these services. To measure the impact on people's living standards, you would need to adjust for these differences in needs.

The real importance of the figures in the chart above are to show how much better off individuals are with the provision of publicly funded welfare services than they would be without them (that is, if they had to pay the full cost of these services themselves).

The next chart shows the same distribution of spending, this time expressed as a proportion of net household income – the conventional way in which to express distributional impact. This gives, if you want, a measure of how 'meaningful' different cash values are for different households in relation to their existing standard of living. Expressing cash values as a proportion of household income also highlights the impact of gains or losses on relative inequality within society.

This chart shows the distribution of public spending is fully progressive across the household income distribution. Households in the poorest decile, whose

¹⁸ Sefton, T. (2002) *Recent Changes in the Distribution of the Social Wage*, CASEpaper 62, London School of Economics.

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average annual income is £6,500, receive transfers and services equivalent to 328% of their original household income. Benefits and tax credits increase their original income by 90%, while spending on services increases their original income by 238%. Households in the richest decile, whose average annual income is £76,200, receive transfers and services equivalent to 19% of their original household income. Benefits and tax credits increase their original income by just over 2%, while spending on services increases their original income by over 16%. So spending on public services, like spending on cash transfers, makes a substantial contribution to the reduction of inequality in society.

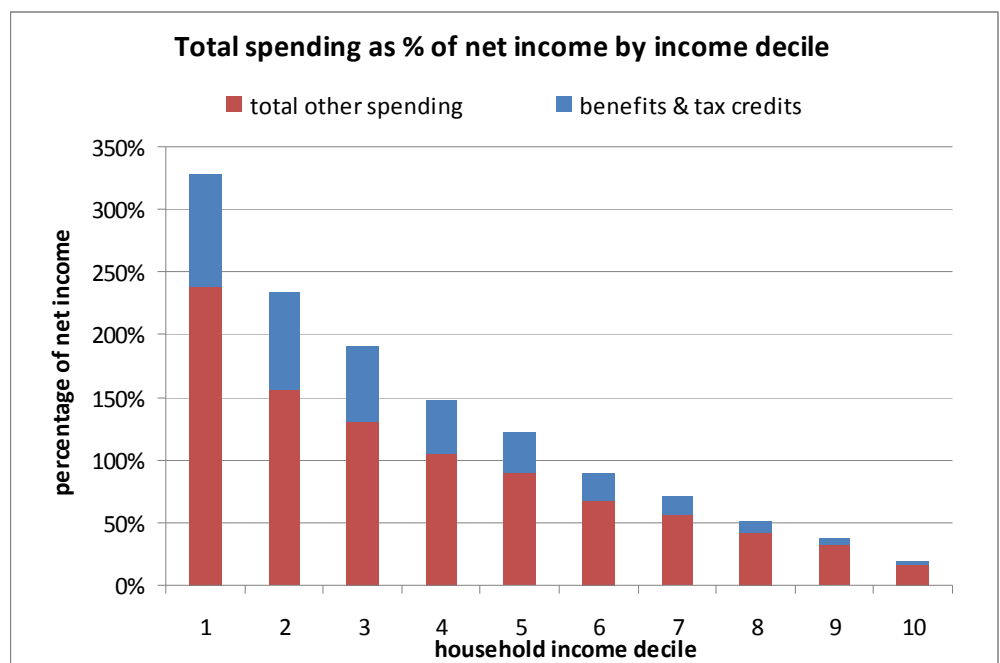


CHART: Average annual spending per household, as a proportion of net household income, by household income decile (2007-08).

How do different areas of service provision contribute to these overall patterns? Below is a set of charts which illustrate the distribution of public spending by household income decile in four important areas: education, housing, health and transport, respectively. (Note that 'housing' here does not include spending on Housing Benefit, which is included in benefit spending, discussed elsewhere – though it does include spending on the administration of Housing Benefit. The main spending included in this category is spend on new social housing, and also the implicit subsidy in the difference between social rental levels and market rental levels.) For each area of service provision, there are two charts, one expressing average annual spending per household in cash terms (left hand panel) and one expressing average annual spending per household as a proportion of net household income (right hand panel). Each chart has the

same scale for illustrating the quantity of spending – running from £0-£6,000 for expressing quantities in cash terms and from 0%-50% for expressing quantities as a proportion of net household income. For each chart, the household income deciles run from the poorest on the left-hand side to the richest on the right-hand side.

Apart from the lowest income decile, spending on education and housing both reveal progressive gradients, with poorer households receiving more on average than middle-income and richer households – both in cash terms and as a proportion of household income. With education, part of the explanation for this lies in policy: extra resources tend to be spent on pupils from low-income households – such as free school meals, or disadvantage-related school funding. But a large part of the explanation for this pro-poor pattern is demographic, lying in the composition of different income deciles: there are more households with children in lower-income deciles than in higher ones (especially after household incomes have been equivalised). With housing spending, however, far more of the responsibility for the overall progressive distribution lies with policy: assistance with housing in the UK is mostly income-related, with more support going to poorer households.

The distribution of health spending in the third set of charts is interesting, showing that households in the middle of the income distribution are more intensive users of health services than either those at the bottom or those at the top. Again, part of this is demographic, with a higher concentration of older people in lower income deciles, who tend to be more intensive users of services; Sefton (2002) points out that many pensioners with a long-standing illness are concentrated in middle-income groups, which could partly explain the 'hump' in the distribution in the middle of the income spectrum. Another factor here could well be differential propensity to access health services, where households at the bottom of the income spectrum are less likely to use health services as regularly as higher-income groups. Note, however, that when the distribution of this spending is expressed as a proportion of household income, the impact is fully progressive across all income deciles.

Finally, as can be seen from the final set of graphs, transport spending is pro-rich in cash terms. While those in lower income deciles are more intensive users of bus services, those in higher income deciles are much more intensive users of road and rail.

The distribution of public spending in the UK

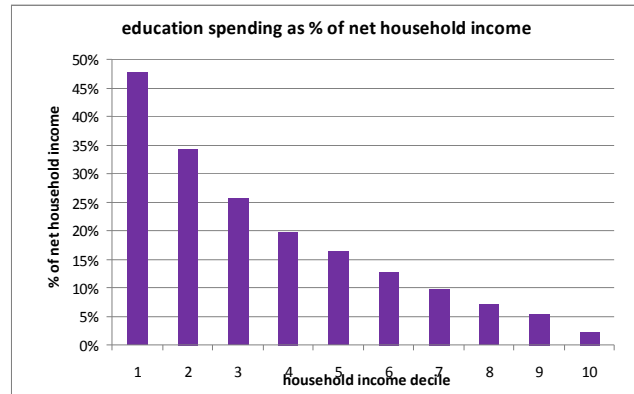
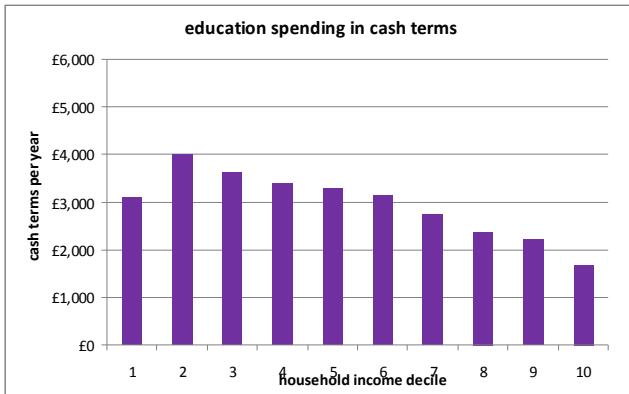


CHART: Education spending per household by income decile, in cash terms (left) and as % of household income (right)

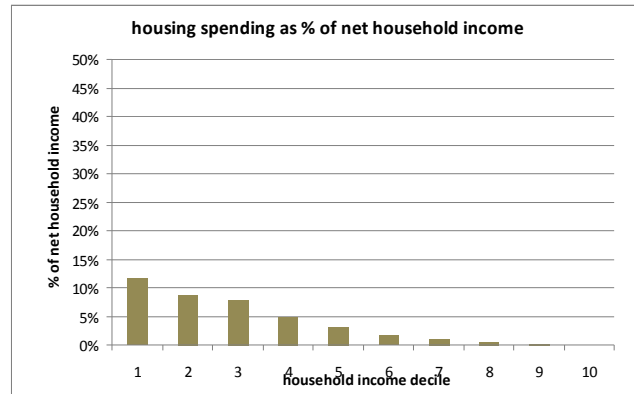
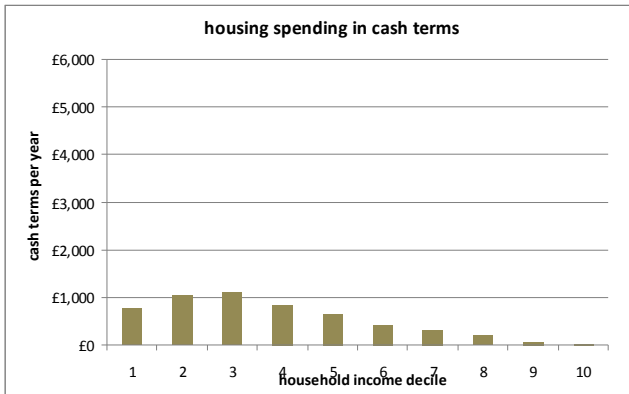


CHART: Housing spending per household by income decile, in cash terms (left) and as % of household income (right)

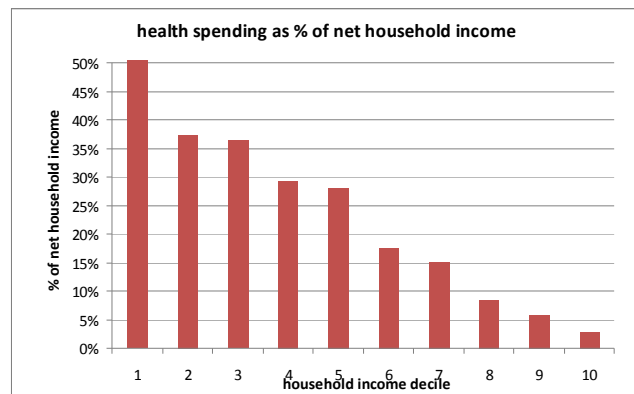
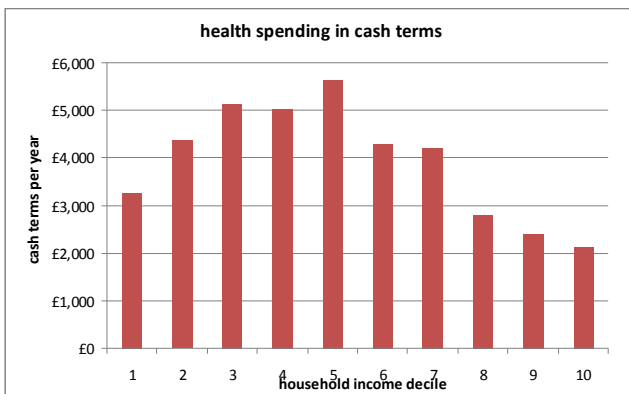


CHART: Health spending per household by income decile, in cash terms (left) and as % of household income (right)

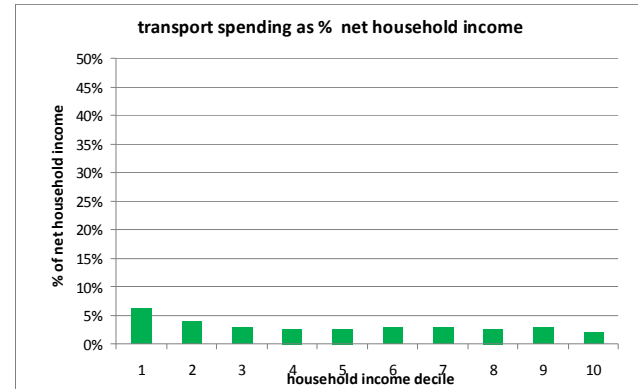
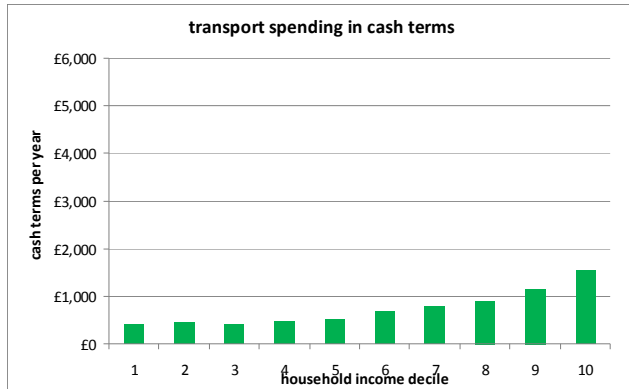


CHART: Transport spending per household by income decile, in cash terms (left) and as % of household income (right)

Distribution of public spending by household type

The next two charts show the distribution of all public spending by household type, depending on the age of the head of household and whether or not the household has children, again, expressed in cash terms and as a proportion of net income. Here, we can see that households with children are beneficiaries of considerable spending on public services (around £23,200 per year for both lone parent households and couples with children); additionally, households with children get significant income support, with lone parents getting correspondingly more, reflecting their lower household incomes. We can also see that pensioners are considerable beneficiaries from benefits and tax credits, reflecting state pensions and other support. Pensioner couples, as we might expect, tend to receive both more public services and more benefits and tax credits than single pensioners, but – as the second chart shows – these quantities are a higher proportion of household income for single pensioners than couples.

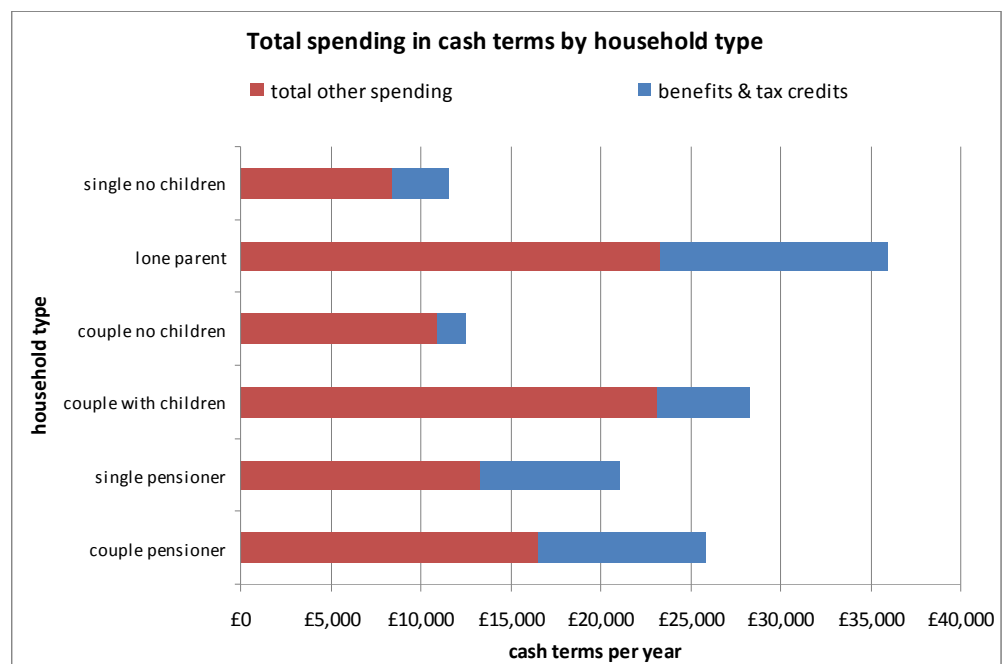


CHART: Average annual spending per household, in cash terms, by household type (2007-08).

The distribution of public spending in the UK

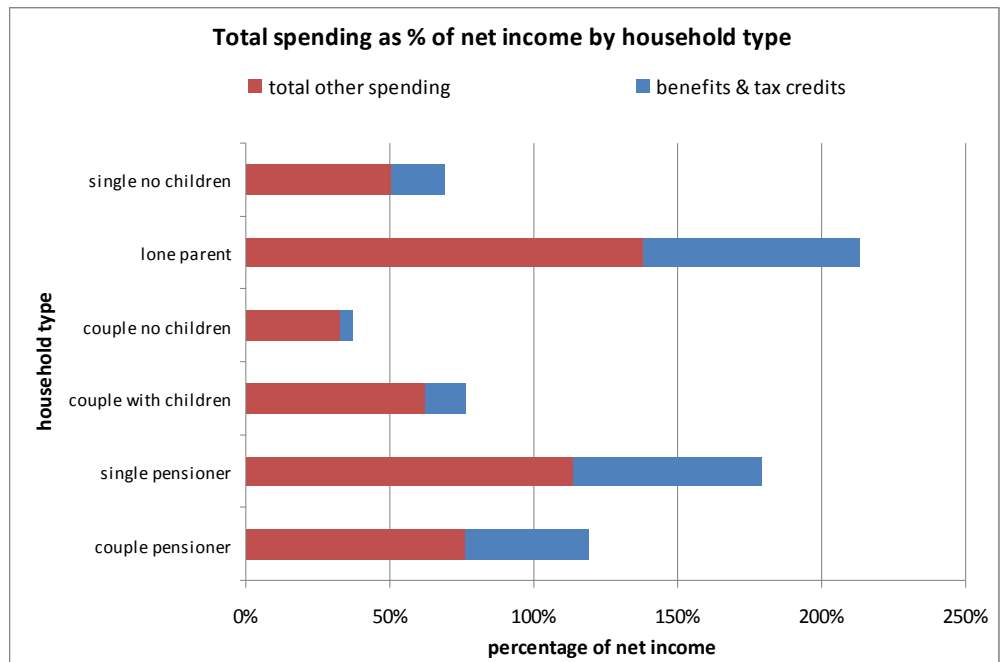


CHART: Average annual spending per household, as a proportion of net household income, by household type (2007-08).

The distribution of spending on most services by household type shows the patterns that we might expect. For example, the two graphs below show spending on health and education by household type. In the case of health, we can see that pensioner households are consuming more health services than other household types, reflecting their greater health needs. In the case of education, we can see that nearly all of the services are being used by couples with children and lone parent households.¹⁹

¹⁹ In our model, spending on higher and further education is allocated to the parents of students who are living in halls of residence away from the parental home (the FRS does not sample students in halls of residence as separate households but it does include a record so that they can be identified as 'extended' members of their parental households. This is a reasonable assumption given that, in the absence of government spending here, it is almost certainly parents that would bear most of the cost of funding their children's education. Students who are living in private households (either on their own, with other students or with their parents) are included in the FRS and the value of spending on HE and FE is assigned to these households directly.

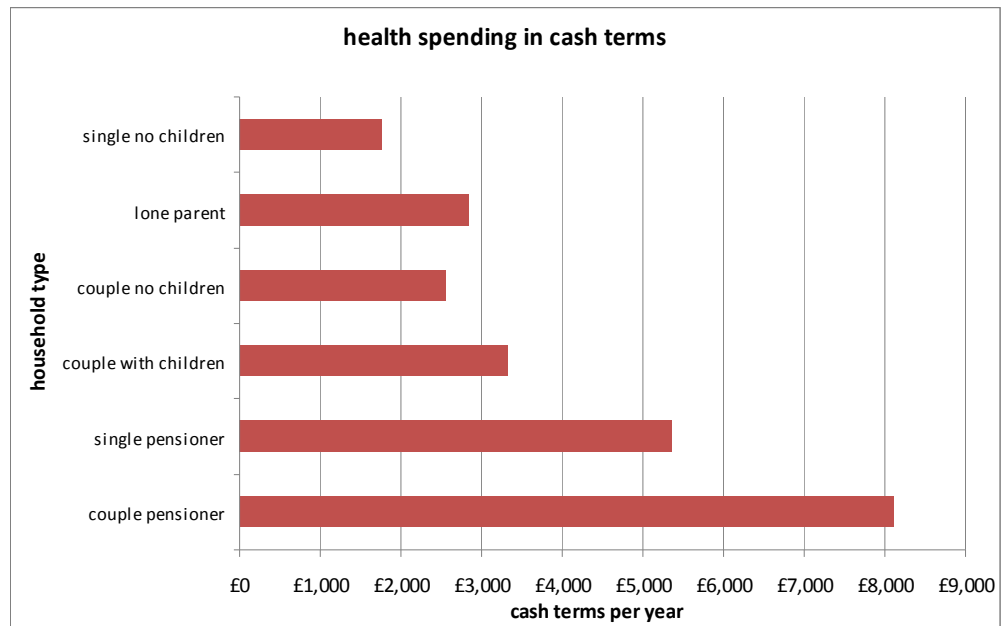


CHART: Health spending per household in cash terms, by household type (2007-08)

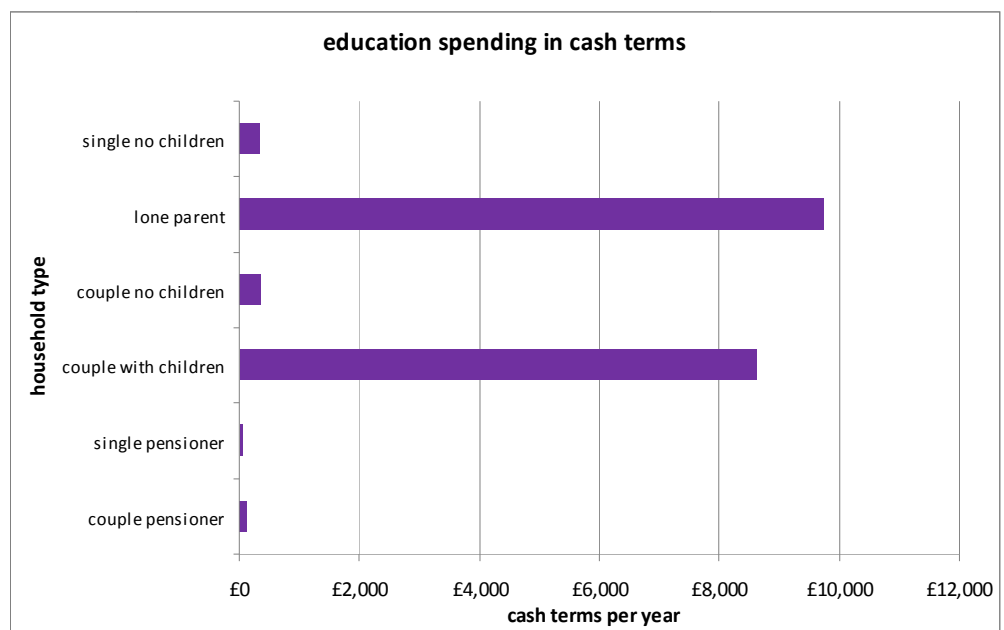


CHART: Education spending per household in cash terms, by household type (2007-08)

The distribution of public spending in the UK

Distribution of public spending by region

The final set of charts show the distribution of spending by region. As can be seen, regions with lower average household incomes and more deprivation (such as the North East and Northern Ireland) tend to have higher spending per household than more affluent regions (such as the South East and East of England), though the overall pattern also reflects variations in policy in the devolved administrations too. This pattern is obviously further emphasised when the spending figures are expressed as a proportion of net household incomes.

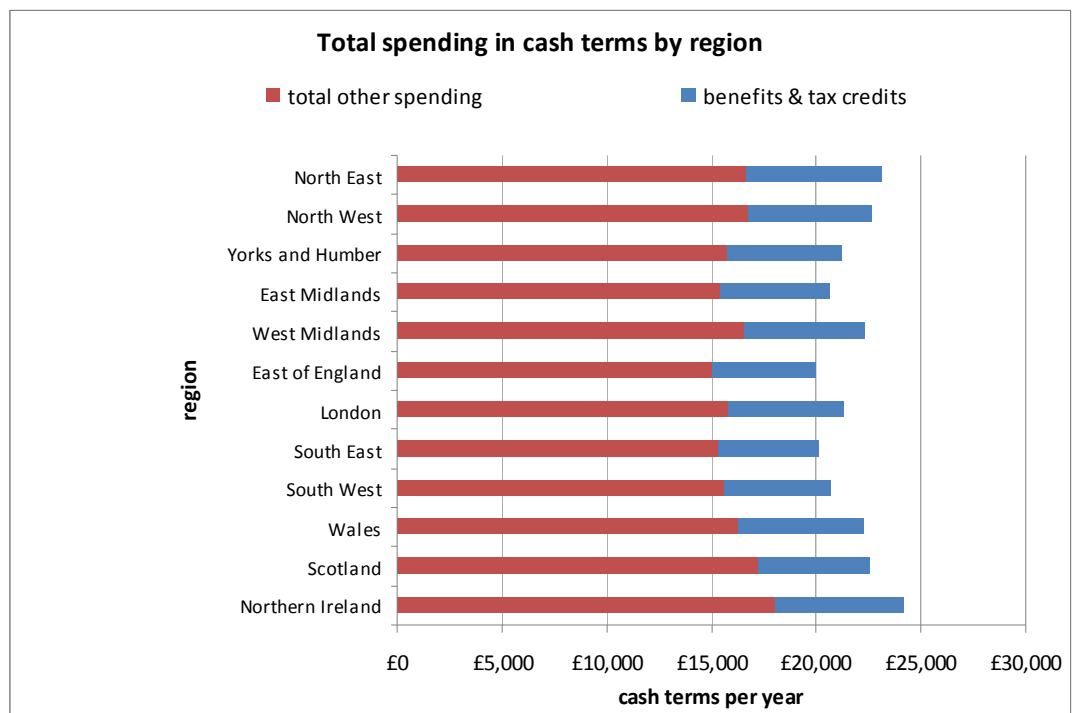


CHART: Average annual spending per household, in cash terms, by region (2007-08).

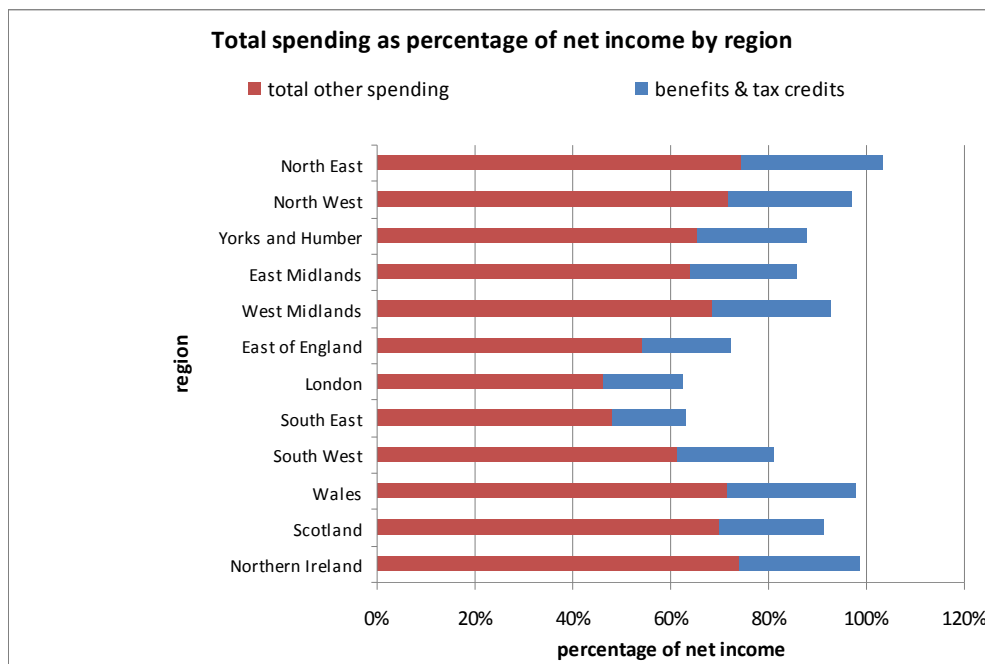


CHART: Average annual spending per household, as a proportion of household income, by region (2007-08).

Analyses of the distribution of spending on particular services reveal some interesting regional variations. A full discussion of this is beyond the scope of this report, but one example is given below – that of spending on housing services. As well as spending on housing services rising in regions with lower average incomes and more deprivation, the analysis reveals a significant spike in spending on housing services in London, reflecting higher house and land prices in the capital. For while this spending category does not include Housing Benefit, it does include both spending on new social housing, and also the implicit subsidy in the difference between social rental levels and market rental levels.

The distribution of public spending in the UK

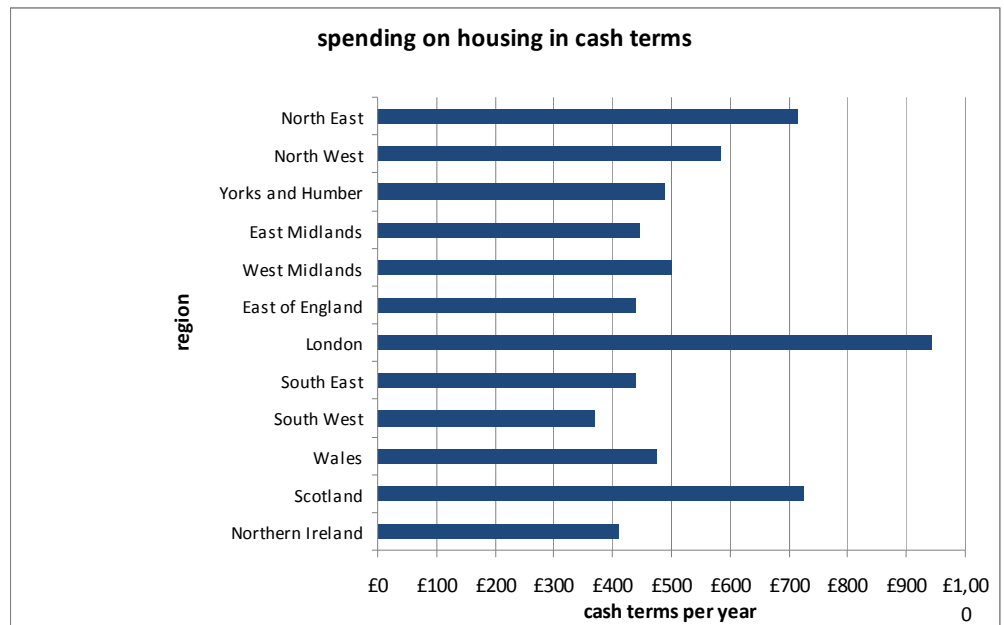


CHART: Spending on housing services per household in cash terms, by region (2007-08).

Having explored the distribution of public spending by various household characteristics, in the next chapter we consider to what extent these figures actually capture the benefits of public spending to households.

Sample families

Here, we illustrate the value of public services received by some sample families. We do not look at the value of the benefits and tax credits that they might get, but rather the value of the public services they make use of. Note that, in each case, the value of services received by each family reflects the amount that households with this income and these demographic characteristics typically receive. Characteristics that have been taken into account in deriving these figures include: income, housing tenure, age, household structure, region, and receipt of certain benefits.

FAMILY 1

Andy (35) and Anne (34) live in the North West of England with their two children Richard (13) and Chloe (10). Andy works full time on a salary of £25,000 a year, while Anne works part-time on a salary of £12,000 a year. They own their house with a mortgage. Richard and Chloe both go to state school and Andy and Anne are getting Child Benefit and Child Tax Credit (family element).

Excluding benefits and tax credits, Andy, Anne, Richard and Chloe receive public services and spending worth £24,569 a year, which includes £11,533 of education spending and £2,856 of services from the NHS. The table below shows what the main categories of services are worth to them.

Type of spending	Value received (£)	Value received (% of net income)
Health	£2,856	9.5%
social care	£596	2.0%
Housing	£0	0.0%
Transport	£611	2.0%
Education	£11,533	38.5%
other services allocated by income	£790	2.6%
other services allocated flat-rate	£8,183	27.3%
TOTAL	£24,569	82.1%

The value of this spending is equivalent to 82% of their household income. If state education services were withdrawn, and the family instead had to purchase services at the same cost, this would take up 39% of their household income.

FAMILY 2

Miles (55) and Gemma (50) live in the South East of England with their two children, Mary (23) and Jane (20). Miles works full-time with a salary of £60,000 per year; Gemma works part-time with a salary of £18,000 per year. They own their house outright. Mary is a recent graduate, living at home while she studies for an MA; Jane is currently at university, but still living with her parents in between terms.

Miles, Gemma, Mary and Jane benefit from spending on public services to the tune of £24,503 a year, including £7,087 for subsidising their daughters' education, and also £1,842 spent on transport services – mainly on roads and rail subsidies. The table below shows what the main categories of services are worth to them.

Type of spending	Value received (£)	Value received (% of net income)
health	£2,424	4.5%
social care	£758	1.4%
housing	£0	0.0%
transport	£1,842	3.4%
education	£7,087	13.3%
other services allocated by income	£761	1.4%
other services allocated flat-rate	£11,631	21.7%
TOTAL	£24,503	45.8%

The distribution of public spending in the UK

The value of this spending is equivalent to 46% of their household income.

FAMILY 3

Kath (32) is a single parent, looking after her two kids Rob (8) and Tim (6), while holding down a full-time job with a salary of £18,000 per year. They live in Wales, and their house is rented from the local authority. Rob and Tim are both at state primary school. The family gets Child Benefit, Child Tax Credit and Working Tax Credit to help with living costs.

Aside from their Child Benefit and tax credits, Kath, Rob and Tim use public services and support amounting to £23,706 a year, with £10,791 spent on Rob and Tim's education and £2,957 spent on housing support, not including Housing Benefit. The table below shows what the main categories of services are worth to them.

Type of spending	Value received (£)	Value received (% of net income)
health	£1,994	10.7%
social care	£641	3.4%
housing	£2,957	15.8%
transport	£154	0.8%
education	£10,791	57.8%
other services allocated by income	£916	4.9%
other services allocated flat-rate	£6,254	33.5%
TOTAL	£23,706	127.0%

All in all, the support they receive from spending on public services, not including benefits and tax credits, amounts to 127% of their household income

FAMILY 4

Eric (76) and Judith (70) are a retired couple living in the West Midlands, where they rent their house from a housing association. They get Pension Credit to help them get by, and have no other sources of income.

As well as their Pension Credit, Eric and Judith receive public goods and services worth £18,965 a year. Being older, they are more intensive users of the NHS, with the value of health services received coming to £5,799. They also make use of some £3,301 of social care services. The table below shows what the main categories of services are worth to them.

Type of spending	Value received (£)	Value received (% of net income)
Health	£5,799	55.1%
social care	£3,301	31.4%
housing	£3,098	29.4%
transport	£106	1.0%
education	£0	0.0%
other services allocated by income	£815	7.7%
other services allocated flat-rate	£5,845	55.5%
TOTAL	£18,965	180.2%

The support Eric and Judith receive from the public sector each year, not counting their Pension Credit, is worth around 180% of their household income. If they were given no support with care services, and instead had to purchase them from their own pocket, their household income would fall by around 31%.

Why this approach is a conservative estimate of the real value of public spending

The analysis in the previous chapter illustrated the distribution of public spending by allocating to households the money spent on providing public services in proportion to the amount that households use those services. This exercise is important in its own right, showing how revenue flowing out of the exchequer gets distributed across the population.

But if we wish to take this analysis not simply as showing the distribution of public spending across households, but also as measuring the amount of benefit we each derive from public spending, then it is necessary to point out two important ways in which our analysis does not capture very important aspects of the value of public services.

First, what has been allocated to households is the money spent on providing the services they use – their cost. And while it could be argued that the cost to government of providing such services is a good metric of their value to households, it could also be argued that ‘cost’ and ‘value’ are different things, and that the cost of services doesn’t capture their true value to us.

Second, for individually-consumed services, we have allocated spending on particular services in proportion to households’ use of those services. (Indeed, where survey data exist that allow us to allocate spending on the basis of service usage, we have generally allocated the entire cost of a particular service or programme in line with that data.) To read this as measuring ‘benefit’ would therefore be to assume that only current users of services benefit from them. But, in fact, it may well be that the benefits of services extend more widely than simply the current group of users.

In this chapter, we briefly explore why these two issues mean that the kind of analysis set out in this report does not capture important aspects of the value of public services to households. In our view, in both cases, a more sensitive approach to the question of ‘value’ would show that the benefits of public spending to households are actually vastly greater than the monetary values placed on them by our analysis.

Why value might be more than cost

If the value of a service is different from its cost to government, how could we establish its true value? To do this, we have to consider the hypothetical world where the goods and services in question were not provided publicly. One approach is then to ask what price someone would have to pay in order to acquire the services in question on the open market (in cases where markets exist provide an alternative supply of the goods and services in question). If the existing market price is different from the cost to government, one could argue that the market price was a better measure of the economic value of the good or service.

Another approach is to ask what price someone would be willing to pay to acquire the good or service. Of course, market prices are themselves potentially one source of this information, reflecting aggregate willingness to pay. An alternative approach is to ask people what they would be willing to pay – a technique called contingent valuation – and this approach can also be used in situations where there is no alternative market supply of the goods or service in question (such as national defence and clean air).²⁰

While there is debate about just how accurate such techniques can be – especially when applied to large and abstract public goods – contingent valuation should, in principle, allow us to infer the value of a large range of government activity. A deeper concern with contingent valuation – and the ‘willingness to pay’ approach more generally – is that the values deduced also depend on someone’s ability to pay, relating to what a household would choose to consume given its disposable income. This, in turn, can produce very different measures of the value of a good or service for households with different incomes.²¹ Arguably, however, when many welfare services relate to basic needs, there is merit in conceiving of ‘value’ in a way that is independent of any particular household’s ability to pay.²²

In this section, we offer some brief comments on what these more sophisticated approaches to assessing ‘value’ might tell us about the value of public services to households.

²⁰ Sometimes valuation surveys ask this directly; another common technique that is used is to ask people to make trade-offs between different options, from which willingness to pay can be estimated. In all cases, contingent valuation deals with ‘stated preferences’ – as opposed to market behaviours, which are ‘revealed preferences’.

²¹ See Preston and O’Dea (2010), for a sophisticated version of this approach to value. In their framework, individuals have identical preferences and differences in the value of benefits come from individuals having different incomes. (Preston, I. and O’Dea, C. (2010) *The distributional impact of public spending in the UK*. Paper for the 2020 Public Services Trust.)

²² This, indeed, is one of the attractive features of democratic political institutions as a means for making policy decisions; in a one-person one-vote system, the weighting of political preferences is unaffected by the personal distribution of incomes (except insofar as voter turnout is correlated with income).

Why this approach is a conservative estimate of the real value of public spending

Private sector comparators

There are considerable difficulties in attempting a like-for-like comparison of public- and private-sector prices. Even in areas of service provision where comparable public and private sectors exist in tandem, the constraints they operate under and the nature of their 'markets' might be very different, hindering legitimate comparisons of costs. Indeed, the very objectives of providers might be different in public or private sectors: for example, public services might have universal service obligations, where loss-making services have to be cross-subsidised (reducing the returns on capital compared to private companies); or, to take another example, investment patterns in the public sector may be externally inflated or depressed if the government also seeks to use the services concerned to influence aggregate demand in the economy.²³

However, there are certainly sectors where analyses often show that the cost of like-for-like services is higher in the private sector. One example is healthcare, where there is a large body of evidence suggesting that procedures performed by private / for-profit clinics cost more than the same procedures done in public / non-profit facilities. For example, the *British Medical Journal* recently reported that the cost of coronary bypass operations at private clinics in England averaged 91% more than in the public sector.²⁴ Similarly, in 2006 the Government acknowledged that procedures purchased from Independent Treatment Centres (private) cost on average 11.2% more than the NHS equivalent.²⁵ Similar findings have been reported in other OECD countries.

In many studies, explanations for higher prices in the private sector have focussed on profit taking.²⁶ But there are often more prosaic explanations. Private providers are rarely able to benefit from the kind of economies of scale that can be achieved in the public sector. Furthermore, providers of services in the public sector often face considerably reduced risks compared to their private-sector counterparts: the positions of public sector providers ensure them guaranteed 'markets', while their provision of services is coordinated by the same organisation (government) that regulates and shapes their 'market' in other respects. In many cases, these fundamental factors clearly outweigh other

²³ For a discussion of such differences, see Bailey, S. (2002) *Public Sector Economics: Theory, Policy and Practice*, Palgrave.

²⁴ Dyer, O. (2004). 'NHS overcharged for private surgery.' *British Medical Journal*, 328, p.1158

²⁵ Ivan Lewis, Hansard (written answer), 20 September 2006 – cited in UNISON (2007) *In the Interests of Patients? The impact of the creation of a commercial market in the provision of NHS Care*.

²⁶ See, for example, Devereaux, P.J. *et al.* (2004). 'Payments for care at private for-profit and private not-for-profit hospitals: a systematic review and meta-analysis.' *Canadian Medical Association Journal*, 170(12), p.1817-24. For some further examples, see Canadian Union of Public Employees, *Private for-profit clinics* (2008).

dynamics that could otherwise produce lower prices in the private sector, such as increased competition.²⁷

The aim of this report is not to argue that public sector provision should necessarily be cheaper than private sector provision, or vice versa. But on current evidence it is hard to resist the conclusion that there are important areas of service provision where withdrawing public services and requiring users to fare for themselves in the private market would increase the cost of services to them considerably. In such cases, it could well be justified to describe the 'value' of public services to households not in terms of the costs to the exchequer of providing them, but in terms of what the household would have to pay in the hypothetical world where the public services did not exist.

In fact, there are a couple of areas where government spending data (within the expenditure-on-services accounting framework) actually takes into account this private sector comparator, and costs the implicit 'subsidy' that government is providing by supplying goods and services beneath their market cost. One is with social housing, where not only does government support tenants through Housing Benefit, but also sets rents lower than market values; here, the difference is calculated between rents paid by social tenants and the additional amount they would have needed to pay if they had to rent at market prices in the same location, in order to derive a measure of the implicit subsidy. Another is with student loans, where the subsidy implied in these loans being issued at the inflation rate (rather than the market interest rate) is again calculated in the spending data. However, a deeper use of private sector comparators to estimate value as well as cost is well beyond the scope of our work.

The indispensability of key public goods

Many goods and services provided by government are unique and not traded in any market. Often – especially in the case of fundamental public goods such as national security and clean air – it is because they can only be provided by governments. Markets cannot supply public goods because they are non-excludable, making it impossible for individuals to capture their value (without bearing excessive costs to exclude people). As such, many public goods are subject to problems of 'collective action', where it is in no-one's interest to pay to provide them privately, even though all would be better off if the good was provided.

Many of the public goods provided by government are indispensable for human welfare, guaranteeing freedom from harm, property rights, contractual rights, public health, basic environmental goods, and so on. It would theoretically be possible to attempt to assign a monetary value to such goods through a process like contingent valuation. But we don't have to do this in order to make our point here: that the value placed upon such goods would be vastly greater than

²⁷ What's more, dynamics like competition, which were once held to be a unique advantage of the private sector in driving efficiency, can also be replicated within the public sector.

Why this approach is a conservative estimate of the real value of public spending

the financial cost of providing or maintaining them. Take environmental protection. There isn't much that is more important than clean air and water. In the UK it is the Environment Agency and local authority inspectors (annual spending: around £1.1 billion) who regulate and monitor industrial and agricultural pollution; we think, in the cold light of day, that for guaranteeing decent air and water quality, the £44 a year that households pay on average towards this is a clear bargain.

The reality is that a good chunk of government spending finances bureaucracy, laws and policy frameworks that change the world in ways that create fundamental goods, many of which we simply take for granted. In countries that lack a food standards and inspection regime, people tend to eat only at places where they know and trust the proprietor; the ability to eat with confidence in establishments around the UK is probably well worth the £6 that each household pays annually for the Food Standards Agency. Or, to take another example, a vast range of economic activity presupposes the existence of national measurement standards; estimates are that the UK's National Measurement System contributes around £5 billion a year to the UK economy (worth 0.8% of GDP), well worth the £60 million we spend on the National Physical Laboratory each year.²⁸

Indeed, while a standard technique for valuation is to compare public costs with market prices, this technique can't be applied here since it is clear that markets would simply not exist without a system of public law that could underpin contracts, an inspectorate to monitor those contracts, a judicial system to resolve disputes, and so on. The more you value free markets, the more you must value public spending on bureaucracies such as the Office of Fair Trading, Financial Services Authority, and Competition Commission.

In short, the value of the public goods produced by much government activity is vast, considerably outweighing the cost to the exchequer of producing those goods.

'Hidden value': benefits to non-users

In this section, we discuss some ways in which the benefits of public services go wider than simply the pool of households using them at any one moment in time. This suggests that allocating the benefits of such services only to service users fails to capture an important aspect of the value of public services to households.

²⁸ *Review of the Rationale for and Economic Benefit of the UK National Measurement System*, PA Consulting, (1999).

The right to use services

Many services and cash transfers provided by government are really a form of insurance against various kinds of risk. Unemployment benefit is paid in the event of loss of work. Health services are (usually) provided in the event of ill health. You pay your tax into the system in advance; then if you need assistance further downstream, the system is there to protect you.

So an individual might not be receiving or making use of certain public services at any given moment in time, but they still have the right to use them if the relevant contingency befalls them. It is not, for example, that someone who does not happen to fall ill in one year is not benefitting from the existence of the NHS, or that someone who does happen to fall ill that year and uses the NHS is one of the lucky 'gainers' from the system. All individuals benefit from such services to the extent that they face the risk of adversity. As Ian Preston and Cormac O'Dea point out in a recent paper exploring the benefits of public services, in cases such as these, service use is really akin to an insurance 'payout'; it doesn't reflect the whole value of the insurance contract to the individual or household.²⁹ The value of such services and cash transfers could therefore be better analysed in actuarial terms – reflecting the extent someone would expect to benefit on average.

Future use of services

The pattern of receipt and use of services and transfers within the welfare state varies predictably over the life course of an individual. Education services are consumed primarily during childhood and youth, while health and care services are consumed especially intensively during old age. Pensions are provided for older households, while Child Benefit tends to be paid to households in the middle of the age range.

So current use of services, or current lack of use of them, isn't necessarily a good guide to use throughout life. Many of those not currently receiving state pensions, for example, will certainly do so in future. Given that, in the 21st Century, old age is more of a certainty than a risk, pension provision is much more like 'assurance' than 'insurance', and can be valued in the same way that other forward contracts are (such as in the trading of futures).

The analysis in this report is cross-sectional, looking at a snapshot of the population at one particular moment in time. This is a valuable perspective for looking at the distribution of resources, but it ignores this important life-cycle dimension to the distribution of resources in the welfare state. Indeed, one estimate suggests that, when the taxes paid by individuals throughout their life are weighed against the services and cash transfers received throughout their life, as much as 75% of what the welfare state does is 'life-cycle redistribution'

²⁹ For further discussion, see Preston, I. and O'Dea, C. (2010) *The distributional impact of public spending in the UK*. Paper for the 2020 Public Services Trust.

Why this approach is a conservative estimate of the real value of public spending

– shifting resources across a each individual’s life course, while only 25% of what it does is actually redistributing resources from one individual to another.³⁰ So if we took a longer time horizon, rather than just a snapshot, it would be clear that households benefit greatly from a variety of services and transfers that they might not necessarily be receiving at any particular point in time.³¹

Externalities from others’ service use

Another way in which public services are valuable to households is the value we get from other people using them. In the analysis earlier in this report, we made the assumption that, where particular services can be consumed individually by households, then all of the corresponding spending on those services was allocated to those households using them.

But, in truth, there are many ways in which we all benefit from the consequences of other households using public services. For example, other people using the NHS is of value to you because it means you are protected from infectious disease. Other people getting educated is of value to you because you can then enjoy the economic and social advantages of having an educated population. You might drive around in a car and not use public transport; but you still rely on other people using public transport for there to be sufficient road space for you to drive on. And so on. In these and many other ways, we constantly enjoy huge benefits from the rest of the population having access to, and receiving, all kinds of public services.

These benefits are akin to the ‘public goods’ arising from services like national defence and environmental protection: they are non-rival (for example, one person benefitting from good public health does not reduce the benefit available to others) and non-excludable (no-one can be prevented from receiving the benefits of good public health). Indeed, they are ‘unavoidable’ too – if one person receives these benefits, all must do so.

Within the framework in which we have chosen to analyse services like health and education, as individually-consumed services akin to ‘private goods’, these wider public benefits that arise from service use constitute externalities – spin-off benefits received by all (including non-users) that are not valued in the ‘market price’ of such goods and services. If one were trying to capture these benefits in the distribution of public spending, then, as well as allocating benefits to households in proportion to their service use, one would also need to allocate some benefit to every household on a flat-rate basis to reflect the public-good benefits generated by such services. Theoretically, it would be possible to do this within the allocation of spending to households, by holding

³⁰ Hills, J. (2004) *Inequality and the State*, Oxford: Oxford University Press - drawing on Falkingham, J. and Hills, J. (eds.) (1995). *The Dynamic of Welfare: The Welfare State and the Life Cycle*. Hemel Hempstead: Harvester Wheatsheaf.

³¹ For more on this life-cycle dimension to the welfare state, see Barr, N. (2001). *The Welfare State as a Piggy Bank*. Oxford: Oxford University Press.

back a portion of the costs of providing such services and allocating this spending to all households on a flat-rate basis. But here we come up against the issue discussed in the previous section: these public goods, such as public health and an educated population, are so indispensable to our welfare that the cost of providing them is actually a very poor metric of their value to us. In reality, the value of these indispensable goods is incalculable and vast.

For all of the reasons discussed here, the true value of public services to households is likely to be substantially greater than the cost to government of providing such services. In many cases, such services are simply invaluable. So while the allocation of public spending to households, as set out in the previous chapter, is an important way to illustrate the distribution of benefits across society, we should also remember the ways in which these cash values are likely to be a significant underestimate of the real value of public services to households.

Having discussed deeper notions of 'value' in public services, we now return to the issue of how public spending is distributed across households. In the next chapter, we look at effects on households of changes in the levels of public spending.

The impact of spending cuts in households

Earlier, we analysed the distribution of public spending across households in the UK, using a model that allocates spending to households in relation to their use of services. In this chapter, we use a similar technique to estimate the impact on households of cuts in levels of public spending.

Modelling the impact of changes in public spending

Understanding the current distribution of public spending across households can help us to model the possible impact of changes in levels of that spending.

First, if we know which households are using each type of service in the first place, we know which households lose if we cut spending on those services and which households gain if we increase it.³²

Second, we can make the assumption that cuts or increases in spending on any particular service affect households in proportion to the amount that they use that service. This allows us to work out how much the households in question lose if we cut spending. In other words, we are assuming that the spending forgone on a particular service (in the case of cuts) or the new spending (in the case of spending increases) has the same distributional impact as existing spending on that service. So, for example, we assume that cuts in spending on hospital services will hit intensive users of hospital services proportionately more than households who make little use of hospital services. Similarly, we assume that increases spending on hospital services will benefit intensive users of hospital services proportionately more than households who make little use of hospital services.

In this way, we can quantify the impact of spending cuts on households in terms of the reduced value of public spending they receive, and so highlight the consequences of particular cuts for the welfare of different social groups – something particularly important given the scale of spending cuts currently being planned.

³² Based on the assumption, discussed in the previous chapter, that we should allocate the benefits of spending on any particular service to those households currently using that service.

The extent of the planned fiscal consolidation

In the recent emergency Budget, the Coalition government announced a programme of spending cuts to reduce the deficit. By 2015-16, there will be reductions in spending of £99 billion per year (compared with the situation at the start of 2010-11).³³ There will also be net tax rises of some £29 billion in order to further reduce the deficit.

This report looks at a two-year period, discussing the impact of these cuts in the year 2012-13. This is a useful year to assess, not simply because it is in the relatively near future, but also because both the Government itself and the Institute for Fiscal Studies have produced analyses of the impact of the Government's proposed tax and benefit changes for this year.

Here we examine the impact of the proposed cuts to public services for 2012-13 (that is, cuts in non-benefit spending), in order to compare this with the impact of the Government's proposed tax and benefit changes for that year. Furthermore, at the end of this chapter, we combine our set of results with analysis of the impact of tax and benefit changes, in order to produce a picture of the overall impact.

By 2012-13, there will be £42 billion of cuts in public spending. Some £25 billion of these were inherited from the previous government; but a further £17 billion are new – cuts that the Coalition government have decided to pursue over and above any measures that they inherited.

In fact, some £3 billion of this £42 billion reduction in public spending comes from projected reductions in debt interest payments; we discount these from consideration here, since they do not correspond to cuts in any type of public service provision.³⁴ A further £5 billion comes from cuts in benefits and welfare measures. In the analysis immediately below, we discount these welfare cuts for the moment since they are already included in the Government's and IFS's own analysis of tax and benefit changes (and we wish to combine the two sets of results later).

So, excluding benefit cuts, the Budget announced £34 billion of cuts to public services by 2012-2013.

The Government has also announced that spending on health and international development will be protected – or 'ringfenced' – from these cuts. In the following analysis, we therefore assume that these £34 billion cuts fall across all areas of non-benefit spending other than health and international development.

³³ Budget 2010, Table 1.1, page 15

³⁴ This £3 billion reduction in debt interest payments comes from a projected £1 billion reduction resulting from discretionary measures newly announced in the June 2010 budget (see Table 1, page 4), coupled with a projected £2 billion reduction resulting from measures inherited from the previous Labour government (Footnote 2, Table 1.1, page 15).

The impact of spending cuts in households

In previous calculations of the impact of these cuts, we assumed that they fall evenly and proportionately across all non-ringfenced departments.³⁵ However, over the summer, the Government has also said that education and defence will not suffer quite the same proportionate cuts as other departments.³⁶ To take this into account, we assume that spending on education and defence is partially ringfenced.

All things being equal, the overall path of spending cuts that the Government has set out would imply cuts of around 25% to all departments (except health and international development) by 2015-16.³⁷ In line with Government briefings, we have assumed that the equivalent figures for cuts to education and defence are 10% and 15% by 2015-16, respectively.³⁸ So when calculating the impact of cuts by 2012-13, we have applied proportionately less cuts to education and defence than to the non-ringfenced departments, consistent with these totals for 2015-16.

Beyond health, international development, education and defence, we then assume that all remaining spending cuts fall evenly and proportionately across non-ringfenced departments. This is of course a simplifying assumption, since it may be the case that in the autumn spending review some areas will suffer more severe cuts than others. But it is also necessary to make this assumption, since we will not know how these cuts will actually be implemented until after the spending review.

Our analysis is therefore a 'baseline scenario', illustrating what would happen if all non-ringfenced spending areas were to suffer the same proportionate cuts. We shall update the picture later in the autumn when we have a more detailed picture of where the cuts will fall.

The impact of the spending cuts

In this section, we explore the impact on households of the proposed cuts, focussing on all public spending except that on benefits (which we incorporate later on, along with the impact of proposed tax changes).

³⁵ See Horton, T. and Reed, H. (2010) *Don't forget the spending cuts! The impact of Budget 2010*. TUC.

³⁶ See, for example: <http://www.guardian.co.uk/politics/2010/jul/03/treasury-orders-cabinet-plan-40-percent-cuts>

³⁷ Budget 2010, paragraph 1.40

³⁸ Other organisations have made similar estimates; for example, on defence, see RUSI, *Prognosis for defence spending after Budget 2010*.

The impact of cuts by household income

The first chart below shows the cash value of the proposed spending cuts by income decile. As can be seen, with the exception of the lowest decile, lower income deciles lose more than higher income deciles, with the amount lost on average per decile falling as you move up the income spectrum. The second poorest decile loses an average of £1,473 in spending per household per year, while the richest decile loses £1,171.

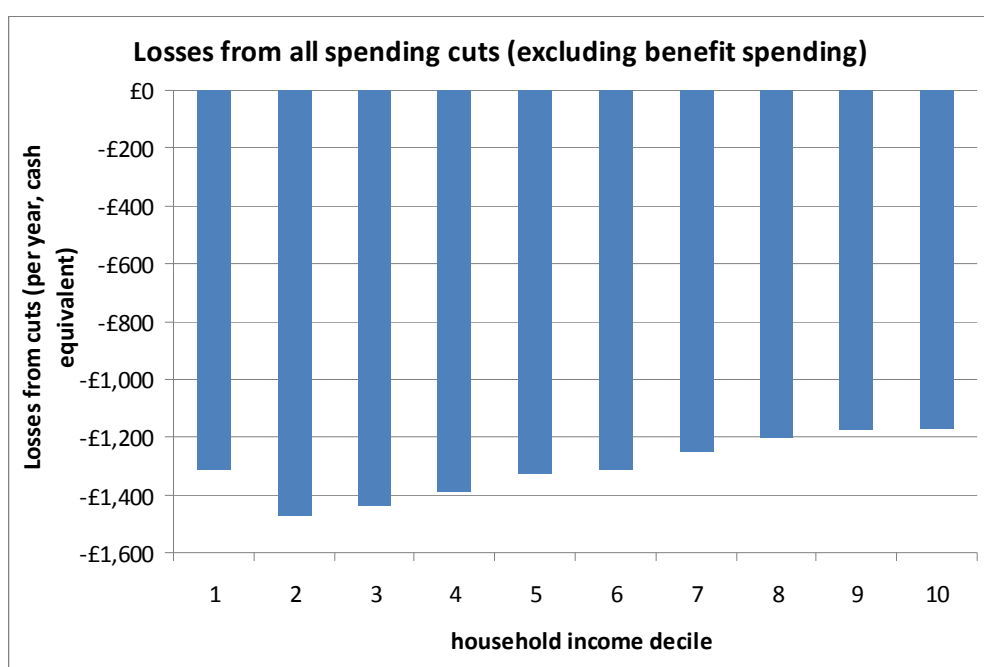


CHART: Losses, in cash terms, from the Government’s proposed cuts in non-benefit spending, by household income decile, for the year 2012-13.

The next chart shows the proportion of this due to cuts in areas of spending (excluding benefits) whose distribution varies with household income – in other words, spending on those services where the existence of either means-test thresholds or data on service use has allowed us to allocate different amounts to different households in a way that varies with their income. So this is all of the (non-benefit) spending that is not allocated on a flat-rate basis, including the classic ‘benefits in kind’, such as education, housing, and social care, as well as spending on police and transport. (The category ‘pensioners’ here includes spending on bus subsidies and free TV licences.)

In terms of the impact of cuts to this specific group of welfare services, households in the second poorest decile lose on average £751 per year (the poorest lose £626), while households in the second richest decile lose £418 (the richest lose £422). These cuts resulting larger losses for households in lower

The impact of spending cuts in households

income deciles than in higher income deciles – reflecting the fact that much of the public spending on these services is ‘pro-poor’ (with poorer households receiving a greater value of services to meet their greater welfare needs). This pattern is driven in particular by cuts in education, housing and social care provision.

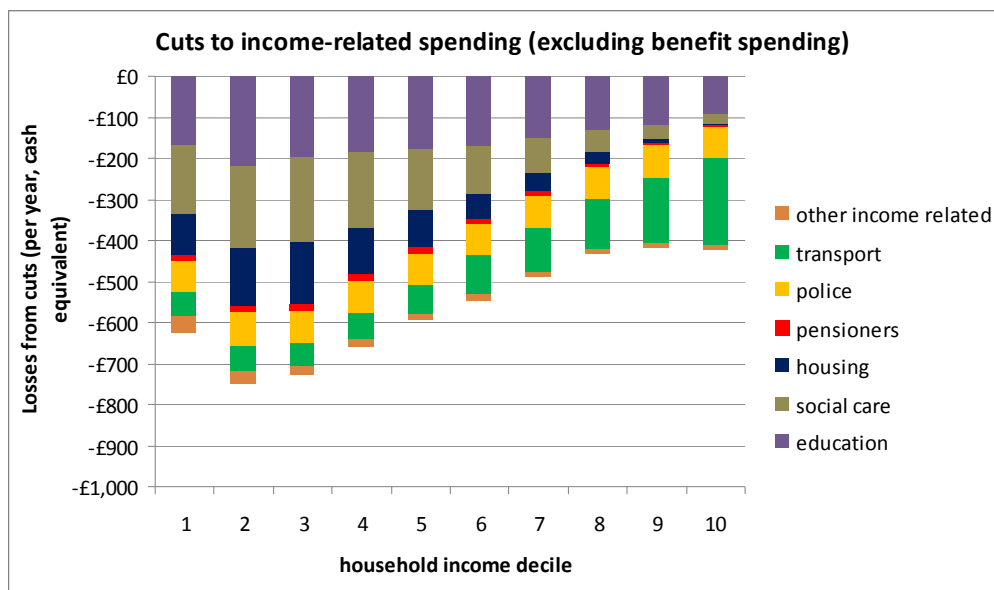


CHART: Losses, in cash terms, from the Government’s proposed cuts to those areas of (non-benefit) spending that vary with income (that is, spending that has been allocated in a non-flat-rate way), by household income decile, for the year 2012-13.

The next chart shows the distributional impact of all spending cuts (except benefit cuts), that is, the average loss in spending per household by income decile, expressed as a proportion of net household income. The graph shows that the impact of the cuts is highly regressive across the population. Lower income households lose a far larger value of spending relative to their household income than higher income households, with the impact of the losses decreasing as you move up the income spectrum. Households in the poorest tenth of the population lose services whose value is equivalent to 20.3% of their net household income; households in the richest tenth lose services equivalent to 1.5% of their net household income.

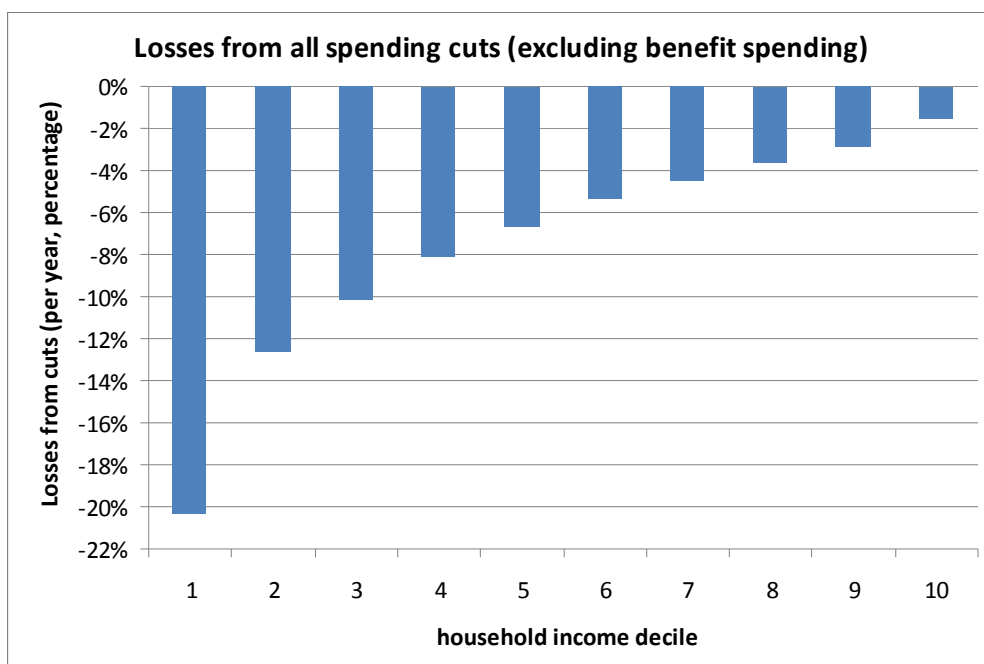


CHART: The distributional impact of the Government’s proposed spending cuts (excluding benefit cuts) by household income decile, 2012-13.

There are two important reasons for this regressive impact across the population. One, discussed above, is that quite a lot of spending on public services is pro-poor, meaning that cuts in this spending will tend to hit the poorest hardest. Another is that for a given cash value of services lost, the impact will be larger relative to household income for poorer households than for richer households. This latter point captures the intuition that low-income households would be proportionately worse off if services were withdrawn and households had to replace them with services (at the same cost) paid for out of their own income.

The impact of cuts by household type

The next set of charts show the same data broken down by household type: the losses from all cuts to non-benefit spending in cash terms; the losses from cuts to income-related spending in cash terms; and the distributional impact of the cuts (expressed as a proportion of household income).

As the first chart shows, in cash terms, families with children are the big losers – both lone parent households and couples with children. These households are losing services worth around £1,900 per year. As the second chart shows, for lone parents, this is driven particularly by cuts to income-related spending, especially in housing and social care, and also (as for couples with children) in education.

The impact of spending cuts in households

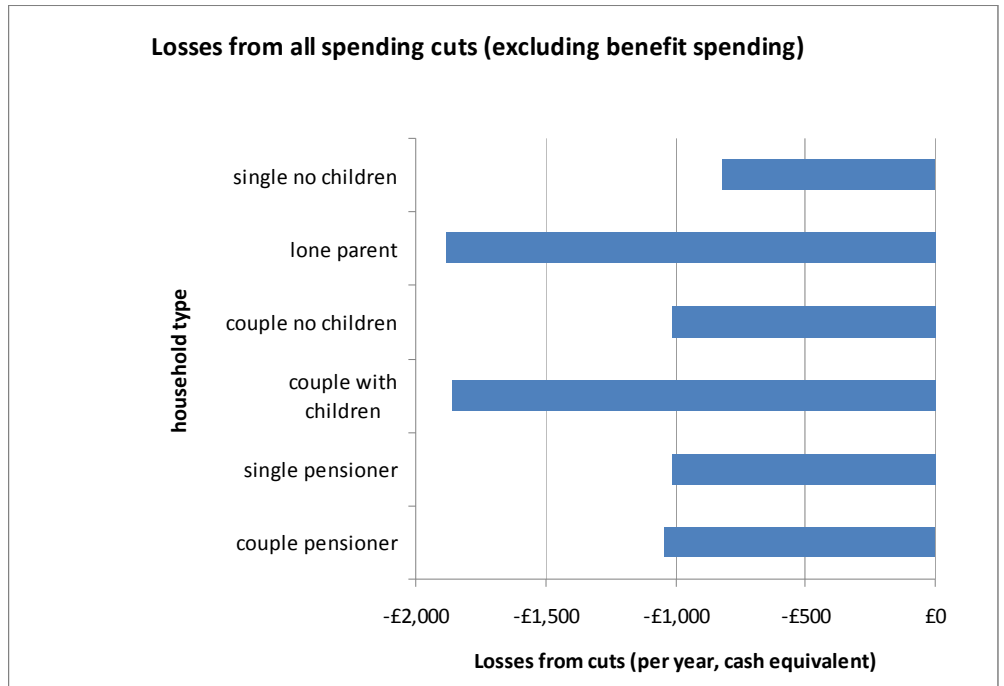


CHART: Losses, in cash terms, from the Government's proposed cuts in non-benefit spending, by household type, for the year 2012-13

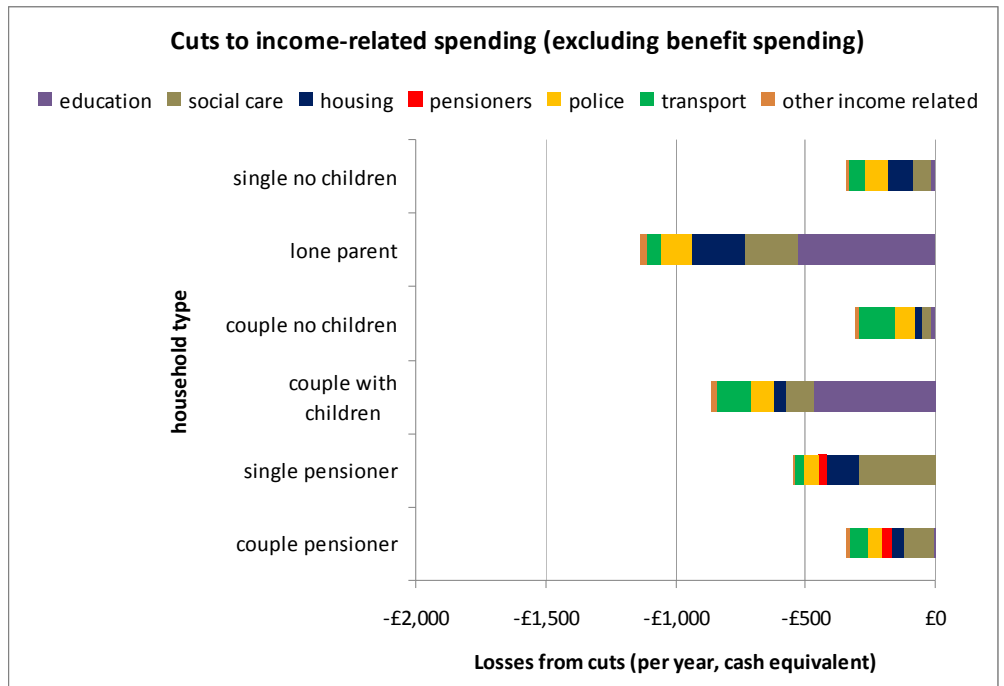


CHART: Losses, in cash terms, from the Government's proposed cuts to those areas of (non-benefit) spending that vary with income (that is, spending that has been allocated in a non-flat-rate way), by household type, for the year 2012-13.

The third chart, directly below, shows the impact of all spending cuts (excluding benefit cuts) relative to household income. The proportionate losses are greatest for lone parents and single pensioners, who lose services whose value is equivalent to 11.2% and 8.7% of their net household incomes, respectively.

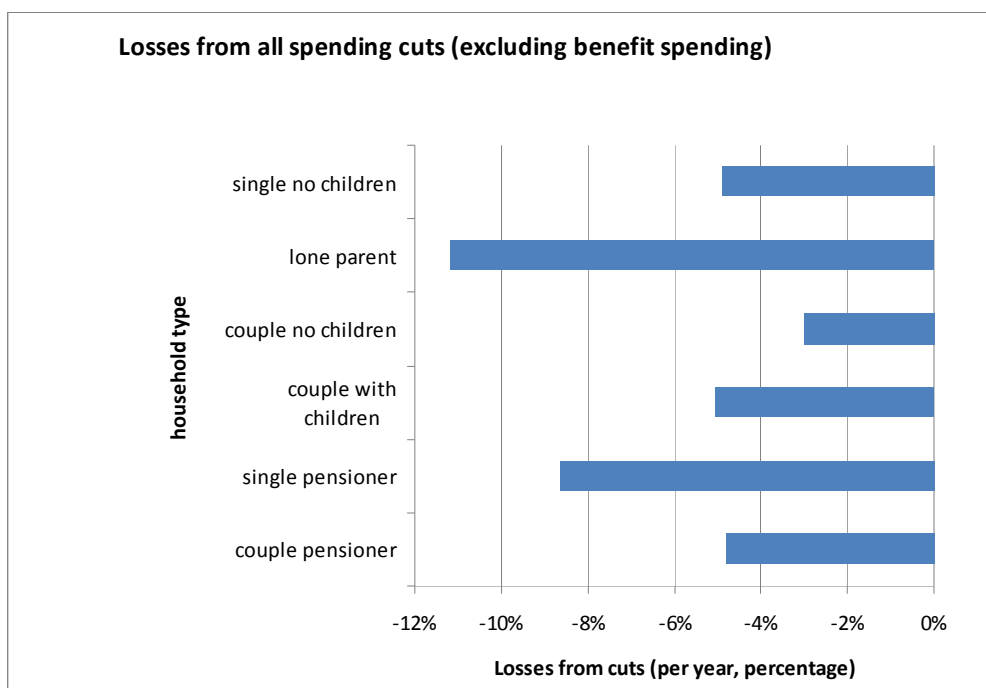


CHART: The distributional impact of the Government’s proposed spending cuts (excluding benefit cuts) by household type, 2012-13.

The impact of cuts by English region

The final set of charts in this section show the same data, broken down by English government region. The scale and distribution of the cuts in Wales, Scotland and Northern Ireland will partly depend upon the settlements received, and allocation decisions made, by the devolved administrations, and these may differ from the pattern of spending decisions across England. For simplification, we have therefore considered only the English government regions in this analysis.

As the first chart shows, the largest cuts are received by households in London (£1,345 per year on average) and the North East (£1,328), though households in all regions receive a significant cut (on this analysis, the smallest cuts, faced by households in the South West, are still £1,260). As the second chart shows, for households in the North East, this relatively high figure is driven in particular by the larger-than-average impact of cuts to housing and

social care; for households in London, it is driven by the larger-than-average impact of cuts to transport, housing and education.

The impact of spending cuts in households

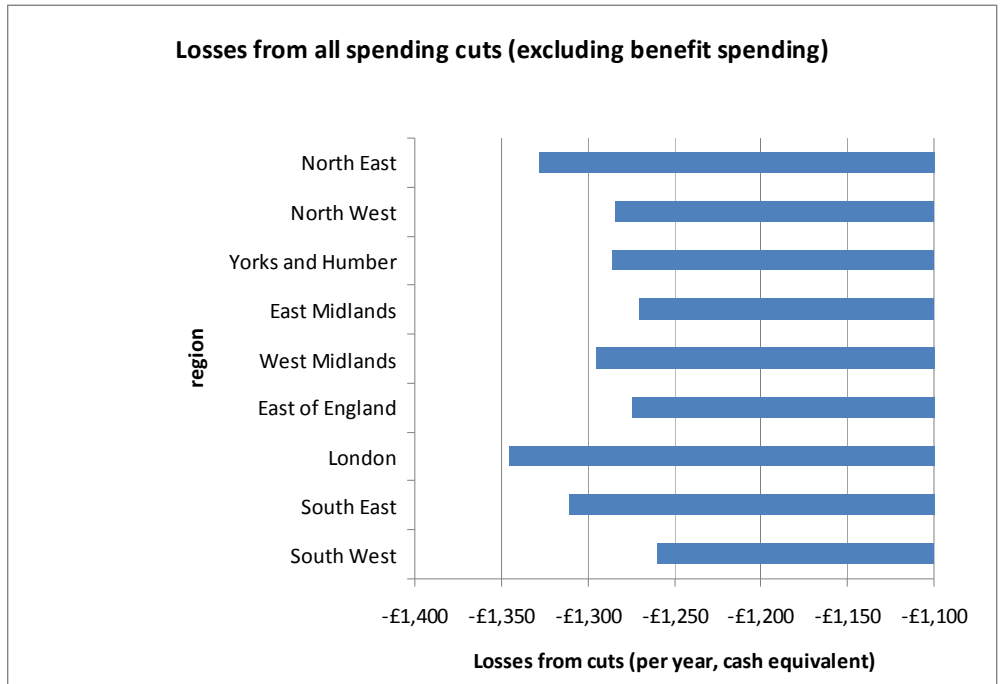


CHART: Losses, in cash terms, from the Government's proposed cuts in non-benefit spending, by English government region, for the year 2012-13.

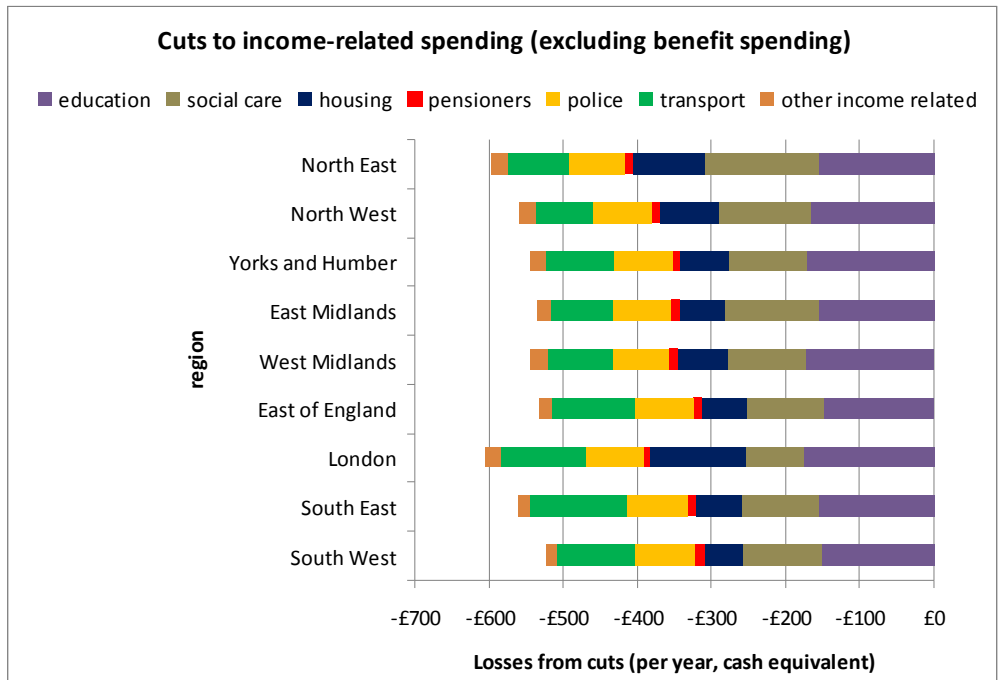


CHART: Losses, in cash terms, from the Government's proposed cuts to those areas of (non-benefit) spending that vary with income (that is, spending that has been allocated in a non-flat-rate way), by English government region, for the year 2012-13.

The third chart, directly below, shows the impact of all spending cuts (excluding benefit cuts), this time expressed as a proportion of household income. Whereas households in London suffer the highest cuts in cash terms, relative to household income these cuts have a smaller impact compared to the other regions – on average, equivalent in value to 3.9% of household income (though 3.9% of household income is still a very significant figure!). By contrast, the cuts for households in the North East are on average equivalent to 5.9% of household income, the highest of all the regions.

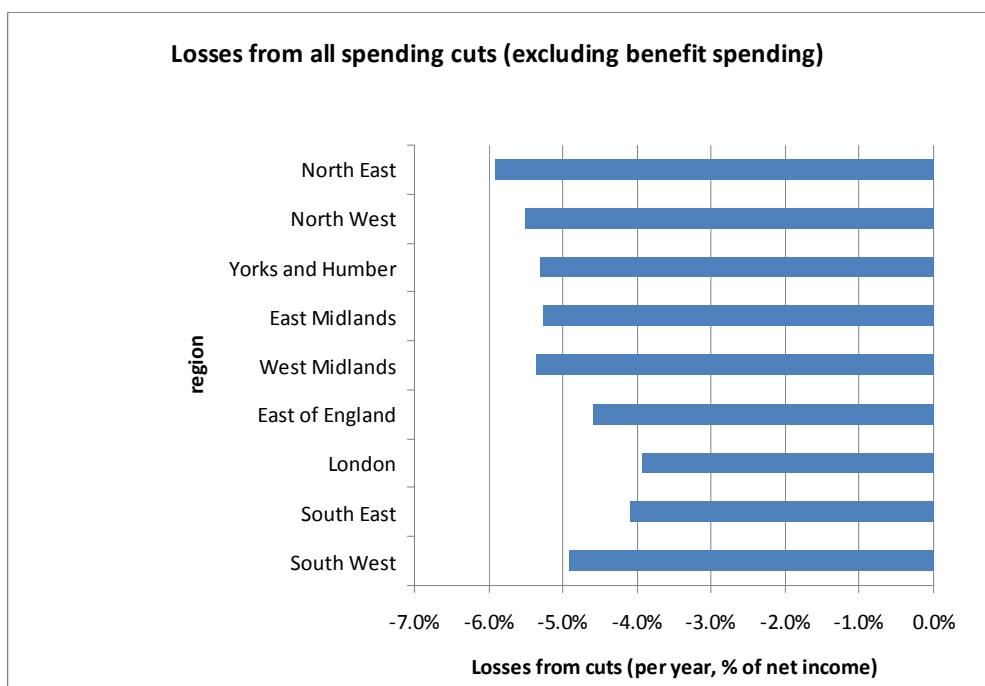


CHART: The distributional impact of the Government’s proposed spending cuts (excluding benefit cuts) by English government region, 2012-13.

What is clear from the various analyses contained in this section is that all households will suffer significant cuts in service provision, but the impact of these cuts (relative to household income) will be proportionately greater for poorer households, for families with children and pensioners, and for households in the North and Midlands.

The impact of spending cuts in households

Sample Families

Here we illustrate the impact of the cuts to public services by 2012-13 as experienced by some sample families. We do not look at the impact of cuts to benefits and tax credits, but instead focus on the value of cuts to services received by each household. In each case, the value of cuts for each family reflects the amount that households with this income and these demographic characteristics will typically suffer. Characteristics that have been taken into account in deriving these figures include: income, housing tenure, age, household structure, region, and receipt of certain benefits.

FAMILY 1

Andy (35) and Anne (34) live in the North West of England with their two children Richard (13) and Chloe (10). Andy works full time on a salary of £25,000 a year, while Anne works part-time on a salary of £12,000 a year. They own their house with a mortgage. Richard and Chloe both go to state school and Andy and Anne are getting Child Benefit and Child Tax Credit (family element).

Under the Government's proposed spending cuts, Andy, Anne, Richard and Chloe will see cuts to their public services worth £1,859 per year by 2012 – and that's before you get to cuts in Child Benefit and tax credits. This cuts figure includes £600 of cuts to their education services, though the ringfencing of health spending means there are no cuts to health services. As the table shows, the cuts mean they lose spending on services equivalent to 6.2% of their household income.

Type of spending	Value of cuts (£)	Value of cuts (% of net income)
Health	£0	0.0%
social care	-£81	-0.3%
Housing	£0	0.0%
transport	-£83	-0.3%
education	-£600	-2.0%
other services allocated by income	-£107	-0.4%
other services allocated flat-rate	-£987	-3.3%
TOTAL	-£1,859	-6.2%

FAMILY 2

Miles (55) and Gemma (50) live in the South East of England with their two children, Mary (23) and Jane (20). Miles works full-time with a salary of £60,000 per year; Gemma works part-time with a salary of £18,000 per year. They own their house outright. Mary is a recent graduate, living at home while she studies

for an MA; Jane is currently at university, but still living with her parents in between terms.

Under the Government's cuts, Miles, Gemma, Mary and Jane see cuts to spending on their services of £2,229 per year by 2012. As the table below shows, this includes cuts to their transport services of £250 and education cuts of £369; if these translated directly into higher rail fares and course fees, then the extra money they will need pay amounts to 1.2% of their household income. In total, the family lose a value of spending on public services equivalent to 4.2% of their household income.

Type of spending	Value of cuts (£)	Value of cuts (% of net income)
Health	£0	0.0%
social care	-£103	-0.2%
Housing	£0	0.0%
Transport	-£250	-0.5%
Education	-£369	-0.7%
other services allocated by income	-£103	-0.2%
other services allocated flat-rate	-£1,403	-2.6%
TOTAL	-£2,229	-4.2%

FAMILY 3

Kath (32) is a single parent, looking after her two kids Rob (8) and Tim (6), while holding down a full-time job with a salary of £18,000 per year. They live in Wales, and their house is rented from the local authority. Rob and Tim are both at state primary school. The family gets Child Benefit, Child Tax Credit and Working Tax Credit to help with living costs.

Kath, Rob and Tim are hit particularly hard by the proposed spending cuts, with cuts to their public services equivalent to 10.4% of their household income by 2012, or £1,951 per year. Big cuts are felt in the areas of education services (£561) and housing services (£402) –this doesn't include the effect of Housing Benefit cuts or the freeze in Child Benefit.

Type of spending	Value of cuts (£)	Value of cuts (% of net income)
health	£0	0.0%
social care	-£87	-0.5%
housing	-£402	-2.2%
transport	-£21	-0.1%
education	-£561	-3.0%
other services allocated by income	-£125	-0.7%
other services allocated flat-rate	-£755	-4.0%
TOTAL	-£1,951	-10.4%

The impact of spending cuts in households

FAMILY 4

Eric (76) and Judith (70) are a retired couple living in the West Midlands, where they rent their house from a housing association. They get Pension Credit to help them get by, and have no other sources of income.

Because of their low household income and their reliance on social care and housing provision, Eric and Judith are especially vulnerable to the cuts, even if they get more Pension Credit. In total, they lose spending on services equivalent to 16.2% of their household income, or £1,701 per year by 2012 – including £449 worth of annual cuts to their social care services. If they had to make up this spending on care services themselves, it would reduce their household income by over 4%.

Type of spending	Value of cuts (£)	Value of cuts (% of net income)
health	£0	0.0%
social care	-£449	-4.3%
housing	-£421	-4.0%
transport	-£14	-0.1%
education	£0	0.0%
other services allocated by income	-£111	-1.1%
other services allocated flat-rate	-£705	-6.7%
TOTAL	-£1,701	-16.2%

The overall impact of the fiscal consolidation measures

In the final section of this chapter, we combine the results above on the distributional impact of cuts to all non-benefit spending, by 2012-13, with results on the distributional impact, again by 2012-13, of all tax and benefit changes that the government has announced.

There have been various evaluations of the distributional impact of the tax and benefit measures announced in the June 2010 Budget. The Government itself produced an analysis in the Budget document (Chart A2, p.67), and the Institute for Fiscal Studies (IFS) produced a similar version in its post-Budget analysis.³⁹ However, neither of these early analyses included the impact of certain tax and benefit changes that are complex to model, including reforms

³⁹ See Chart A2 (p.67), *Budget 2010*, HM Treasury; and, Browne, J. (2010) *Personal taxes and distributional impact of budget measures*, Presentation at the IFS 'Post- Emergency Budget Briefing 2010', 23 June 2010. Unlike the Treasury, the Institute for Fiscal Studies included in their June analysis changes in employer National Insurance contributions (assuming it is incident on workers in the form of lower wages) and changes to tax relief on pension contributions for those on high incomes.

announced to Housing Benefit and the Disability Living Allowance, and also certain changes to the tax credit system.

Since then, the IFS has produced a more detailed assessment of the Budget’s distributional impact, one that includes the impact of these measures omitted from the earlier analysis, and it is this later analysis that we use in this section to discuss the overall impact of the Budget measures.⁴⁰

The chart below shows the IFS’ latest assessment of the distributional impact of the Budget’s tax and benefit changes by household income decile. As the IFS explains, “the overall package of reforms is regressive within the poorest nine decile groups, although the richest tenth of households lose the most in both cash and percentage terms”. The average losses to households as a proportion of their household income falls as you move up the income spectrum, from losses of 3.1% for the poorest decile to 1.6% for the 8th decile and 1.8% for the 9th decile (the second richest). The losses are greater on average for households in the richest decile (4.6%).⁴¹

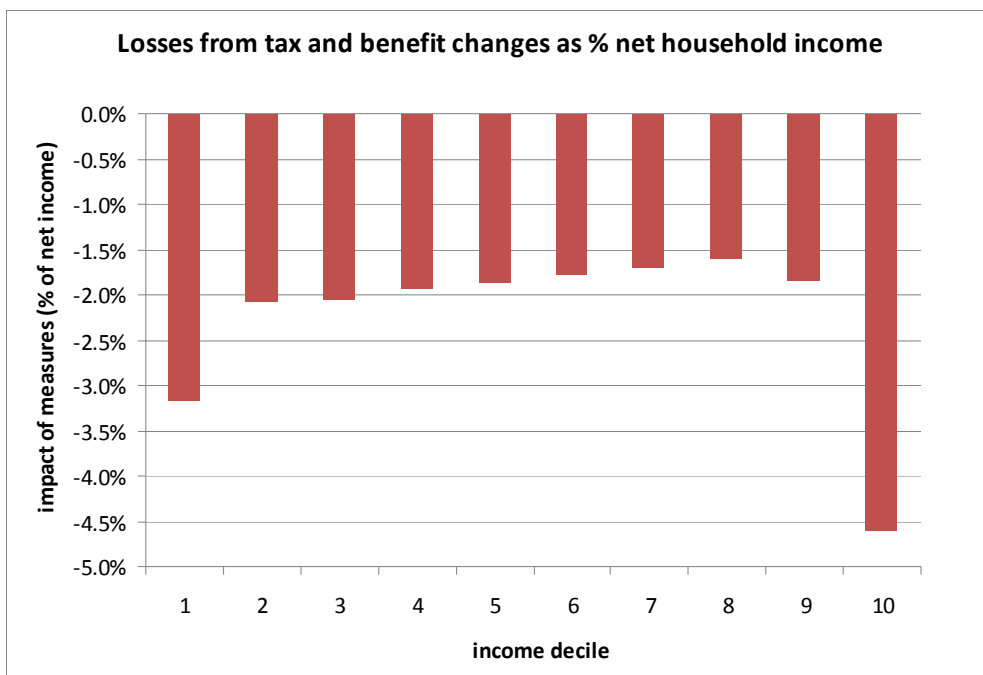


CHART: The distributional impact of the Budget’s tax and benefit changes, by 2012-13, by household income decile. Data: Institute for Fiscal Studies

⁴⁰ Browne, J. and Levell, P. (2010) *The distributional effect of tax and benefit reforms to be introduced between June 2010 and April 2014: a revised assessment*. Institute for Fiscal Studies, 25 August 2010. We would like to thank the Institute for Fiscal Studies for sharing the data underlying Figure 3.1 of this report.

⁴¹ Ibid. Interestingly, the IFS also note that: “most of the losses for the bottom half of the income distribution are coming from measures announced in the June 2010 Budget, whereas most of the losses for the upper half result from pre-announced measures”.

The impact of spending cuts in households

Here, we combine the impact of these tax and benefit changes with the impact of the Government's proposed spending cuts, analysed in the section above. The chart below shows the combined impact of all these measures, expressed as a proportion of household income. (Note that the scale on this chart is very different from the one above.)

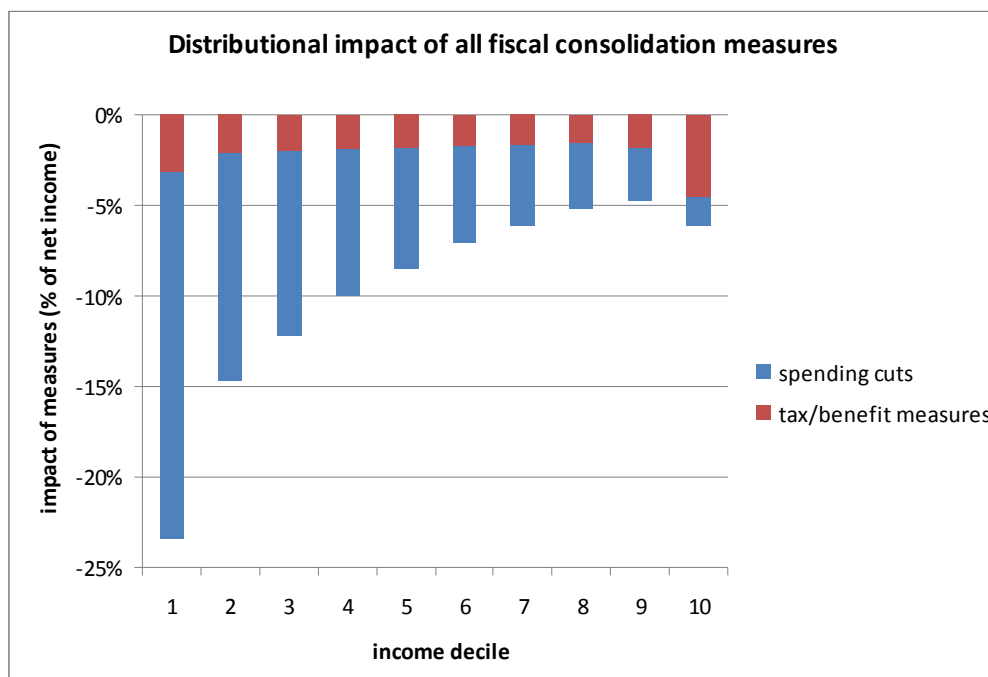


CHART: The distributional impact of all fiscal consolidation measures, by 2012-13, by household income – including both tax and benefit changes and cuts to non-benefit spending.

As can be seen, the combined impact of all of these measures is deeply regressive; with the exception of the richest decile, the losses get proportionately smaller as you move up the income spectrum (and households in the richest decile still lose less proportionately on average than in all other deciles except the 8th and 9th decile).

The poorest income decile lose income and services equivalent in value to 23.5% of their household income (£1,521); the second richest decile lose income and services equivalent in value to 4.7% of their household income (£1,925). The 5th and 6th deciles, between which the median household lies, lose income and services equivalent in value to 8.5% (£1,700) and 7.1% (£1,749) of their household incomes, respectively.

There is an important reason why the impact of the whole package is significantly more regressive than for the tax and benefit changes alone. Whereas the impact of both the tax and benefit changes, on the one hand, and the spending cuts, on the other, are regressive when considered in isolation, the impact of the spending cuts is much more regressive than that of the tax and benefit changes; and it is the impact of these spending cuts that predominantly

shapes the pattern of the overall impact, because the magnitude of these spending cuts is much greater than that of the tax increases and benefit cuts.

This observation throws into question the Government's decision to rely to a much greater extent on spending cuts for deficit reduction than they might otherwise have done. What is more, the regressivity of the fiscal consolidation measures looks set to increase in the years beyond 2012-13, because the ratio of spending cuts to tax increases under the Government's consolidation plans is only 64-36 by 2012-13, but will widen to 77-23 by 2015-16.⁴²

⁴² The reason that the percentage contribution of spending cuts gradually increases to 77% over the course of the five-year plan is that the tax increases – notably the VAT rise – tend to kick in early on and remain, while the spending reductions gradually intensify.

Conclusion - Re-shaping our debates on tax and spending

In this report, we have presented an analysis of the distribution of public spending across households in the UK. It shows that all households gain substantially from our system of spending on public services – the average benefit to households in 2007-08 was around £21,400 per year – but that those on low and modest incomes gain especially. In this way, we can see how spending on public services makes a central contribution to creating a fairer society.

Furthermore, we have also set out the ways in which the value of public services to households goes way beyond the financial cost of services that people use. Some public spending helps to guarantee public goods that are indispensable for human welfare and create basic freedoms – like property rights, freedom from harm, and clean air – benefits that are literally invaluable. And, of course, we all benefit from the right to use services, not to mention from others' use of services.

We have also used this analysis of the distribution of public spending to model the impact of the Government's proposed spending cuts in the year 2012-13. The analysis shows that, even before the value of cuts to benefits and tax credits is taken into account, the impact of cuts in spending on public services will be severe, with an average cut to households of £1,308 per year. These cuts will also be regressive, with the poorest tenth of households losing income and services equivalent to 20.3% of their household income, compared to just 1.5% for the richest tenth of households. Indeed, the regressivity of these impacts creates real questions about the current Government's decision to rely so heavily on spending cuts for deficit reduction.

Beyond the current debate about cuts to public spending, we hope this analysis can contribute to redressing the gaps in our understanding about how we benefit from public spending – and, in the process, can begin to go some way towards rebalancing our political debates on tax and spending. Of course, in a world where citizens had a keener awareness of the value of their public services, those on the right would still argue for low taxes, and those on the left would still argue for a generous welfare state; that is a perfectly legitimate debate. But we should have that debate in full sight of how we benefit from public services, not through a right-wing media commentary that so often seeks to downplay the importance of public spending.

In particular, we think that putting a figure on the amount of spending that people receive can help in dealing with some of the problems outlined in the opening chapter. It can help to correct the tendency to underestimate the value of public services. Research shows that when people are presented with evidence on what their use of, say, the NHS actually costs, they are pleasantly surprised. The Shadow Secretary of State for Health, Andy Burnham, once suggested that when people have an NHS operation, they should be presented with a mock bill with 'PAID' stamped on it – just to show them how much it was worth.

Putting a figure on the value of spending that households receive can also help by providing a personalised view of benefit from the public sector. Aggregate figures for spending on services, expressed in billions, can be abstract and leave people cold. By contrast, showing households how much they personally benefit from spending can help people to understand the consequences of spending decisions more easily, and in doing so can begin to tackle the second problem outlined in the opening chapter – a sense of disconnection between paying taxes and receiving public services.

Crucially, providing a personalised view of how much households benefit from public spending can begin to correct the asymmetry in people's perceptions, whereby they have a more acute sense of the magnitude of their tax bill than they do of the fruits of public spending. To take one example, we think this could transform debates about 'waste' in public services. When public spending is presented as a £600 billion black hole, it is perhaps easy to believe that 5% of this could be wasted – and sign up to £30 billion of cuts. But highlighting instead that the government was planning on cutting £1,000 from your own £20,000 pot of public services might make people more prepared to consider the issues in detail. Which isn't to say that we don't believe there are efficiencies to be had in the public sector; but we badly need a grown-up debate about efficiency, not one that is designed to drive discontent with taxation.

Indeed, our analysis of the distribution of public spending allows us to connect up decisions about tax and spending directly. Normally when tax cuts are announced, people consider solely who 'gains' from them. But, in cases where tax cuts are paid for by reductions in public spending, our model allows us to calculate the net impact of the tax cut, weighing any gains to households against the resulting losses from the corresponding reduction in spending.

The chart below gives one example of this: a revenue-neutral income tax cut paid for by a reduction in health spending. Specifically, the graph shows the gains and losses (in cash terms) from a 1% cut in the basic rate of income tax (costing around £4 billion), paid for by a £4 billion reduction in health spending. The bars rising above the horizontal axis show the financial gains by income decile from the tax cut; the bars below the horizontal axis show the cash-equivalent losses from the reduction in spending on health services; and the line

Conclusion

shows the net effect when you take both of these impacts into account. As can be seen, the poorest 63% of households are in fact net losers from this particular tax cut, paid for by a reduction in spending.

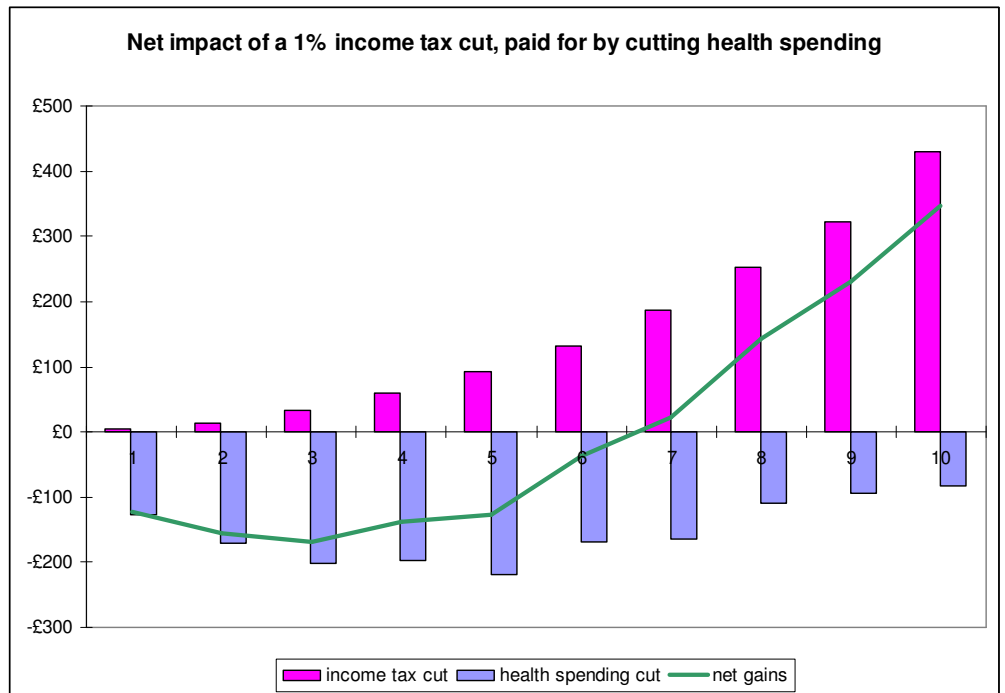


CHART: The net impact of a 1% cut in income tax, paid for by a corresponding reduction in health spending.

Here we should add that we don't think making decisions about tax and spending should be a narrow, individualised game of considering who gains and who loses in a purely financial sense. For example, as a society we might especially value gains for particular social groups, such as the elderly. And, as discussed in Chapter 3, these financial figures fail to capture deeper aspects of the value of public services, such as their insurance value to us, or the real societal benefits where we gain from living amongst a healthy and educated population. Contrary to the impression given by the graph above, we don't think for a single moment that the richest third of society are somehow 'losers' from a decision to maintain NHS spending and not cut income tax.

But such analyses suggest that if campaigners for tax cuts do want to make the debate about individual gains and losses, they will probably lose when the value of public services to households is also taken into account.

Finally, being able to combine analyses of tax and spending should also remind us that, the analysis in this report notwithstanding, decisions about fairness will always ultimately be about how to combine the impact of tax and spending, and not merely about trying to achieve the most progressive possible distribution of public spending when considered in isolation.

For example, a concern about the distribution of public spending does not necessarily imply the means-testing universal services to make them more progressive; in fact, any distributional effect that you can achieve by means-testing services can also be achieved by retaining universal services and increasing progressive taxation. And there are clearly very strong arguments in favour of maintaining universal services. Ultimately, dealing with deficit reduction isn't just about the right distribution of public spending, but about the right distribution of taxation too.

Whatever your political perspective on these issues, though, it is our belief that a proper consideration of the value of public spending to households can only be a good thing in helping to ensure a better quality of political debate.



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