Taxes, benefits, redistribution and work incentives

The prime function of the tax system is to raise revenue. On that measure the current tax system looks in many ways remarkably similar to that in place 40 years ago in the late 1970s. In the current tax year, the UK government expects to raise 15% of national income from taxes on personal income, 10% from indirect taxes, and 2% from corporation taxes, little different from what it did in 1978-79.

Other effects though are quite different. If the tax system’s first job is to raise revenue, its second – alongside the benefit system – is to undertake redistribution in a way which minimises economic costs and disincentives. On these measures the UK tax and benefit system has undergone a dramatic transformation, leaving it almost unrecognisable from that in place 40 years ago, let alone from when the first edition of Tolley’s Income Tax was launched in 1916.

This chapter explores the consequences of just a few of these changes for how the tax and benefit system redistributes resources, and the incentive individuals face to increase their earnings.

**Redistribution**

We first look at how the degree of redistribution achieved by the tax and benefit system has changed between 1978-79 and 2014-15, the earliest and latest years for which comparable data are available. Figure 1 divides households into 10 equal-sized groups (decile groups) according to their income after direct taxes and benefits adjusted for household size. The stacked bars show the average (direct and indirect) taxes paid, state pension and other cash benefits received by each of these decile groups as a percentage of their disposable income in 2014-15. The sum of these bars, net taxes paid as a percentage of disposable income, is shown by the connected crosses, averaging 23% across all households.

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1 The authors are grateful for funding from the UK Economic and Social Research Council (ES/M010147/1ESRC). The Family Resources Survey (FRS), are UK Crown copyright, reproduced with the permission of the Controller of HMSO and the Queen’s Printer for Scotland. The FRS is produced by the Department for Work and Pensions and distributed by the UK Data Archive (UKDA).
Figure 1. Net taxes by income decile, 2014-15

Source: Author’s calculations from ONS (2016)

It is clear the tax and benefit system redistributes money from high to low income households, with the poorest 40% of households receiving more in benefits than they pay in taxes (that is, they have negative net taxes) on average, and taxes exceeding benefits for the richest 60%. Net taxes are lowest for the second poorest tenth of households at -25%, highest for the richest tenth of households at 42%, and rise gradually as a proportion of income for higher income deciles with the exception of the bottom decile.²

Figure 2 repeats this analysis for 1978-79. One difference is that benefits were slightly lower (17% against 19%) and taxes a bit higher (46% against 42%) as a percentage of households’ disposable income compared to 2014-15. More strikingly, net taxes were much lower for those in the bottom two deciles and much higher for those in deciles 5-10, partly because benefit income was far more concentrated among those in the bottom two deciles. The most striking difference between the two years, however, is the fall in net taxes for those in the third and fourth deciles. Those in the fourth decile have been brought into the net beneficiaries group, having been significant net contributors on average in 1978-79, while those in the third decile have seen their net taxes fall from -1% to -

² The reason for this is partly because indirect taxes are largest as a share of income for those in the bottom decile, and partly because those above the state pension age – who are underrepresented in the bottom decile – are subject to lower taxes than those below.
16% over this period – moving from a broadly neutral position to one of being significant net beneficiaries.

Figure 2. Net taxes by income decile, 1978-79

![Net taxes by income decile, 1978-79](image)

Source: Author’s calculations from ONS (2016)

Some of this reflects changes in the composition of deciles over time. For example, pensioners are relatively richer today than they were in 1978-79, meaning they make up a greater proportion of those in the middle deciles and a smaller proportion of lower income deciles. As a result, although state pension income is a similar share of overall household disposable income, it is spread more evenly across deciles, helping to lower average net taxes for those in deciles 4-10 but raise them for deciles 1-3.

But much of the change is a result of policy decisions which have substantially altered who pays taxes and who receives cash benefits. We now turn to look at three significant reforms in detail: reductions in income tax; increases in support for housing costs; and increases in support for families with children.³

Reducions in income tax

Figures 1 and 2 showed that taxes fell as a percentage of households’ disposable income between 1978-79 and 2014-15. One of the most

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dramatic changes to the UK tax system over this time period has been the
reform of income tax.

In 1978, there was a starting rate of 25%, a basic rate of 33% and higher
rates ranging from 40% to 83%. In addition, an investment income
surcharge of 15% was applied to those with very high investment income,
resulting in a maximum income tax rate of 98%. By 1988, the top rate of
tax had been cut to 40% the basic rate to 25%, and the starting rate
abolished, producing a very simple regime with three effective rates – zero
up to the tax allowance, 25% over a range that covered almost 95% of
taxpayers and 40% for a small group of those with high incomes.

Subsequent reforms have resulted in the basic rate being further cut to
20%, but have also led to a considerable complication of the income tax
rate structure for those on the highest incomes: since 2010-11, the
personal allowance has been withdrawn from those with incomes greater
than £100,000, creating a band of income in which income tax liability
increases by 60 pence for each additional pound of income; and incomes
above £150,000 are taxed at a rate of 45%.

The income levels to which the various tax rates apply have also changed
significantly. Over the period as a whole (but especially since 2010-11),
the basic-rate limit, beyond which higher-rate tax becomes due, has failed
to keep pace with price inflation and has fallen by 49% relative to average
earnings. At the same time the personal allowance has risen relative to
both prices and earnings, particularly in recent years.

The overall effect of these rate, allowance and threshold changes on the
shape of the income tax schedule is shown in Figure 3, with 1978–79
values expressed in April 2015 prices for ease of comparison. At each level
of earnings the amount of tax paid has fallen, with those earning more than
£100,000 a year in today’s terms seeing the proportionally largest cuts.
Figure 3. Income tax schedule for earned income, 1978–79 and 2015–16

Note: 1978–79 thresholds have been uprated to April 2015 prices using the retail prices index (RPI). Assumes individual is aged under 65, unmarried and without children.
Source: Authors’ calculations using Tolley’s Income Tax, various years.

Table 1 shows that while rates of income tax have been cut, the number of higher- and additional-rate taxpayers has grown quickly from less than 3% of the taxpaying population in 1979–80 to around 17% in 2015–16. Some of this growth reflects periods when the threshold above which higher-rate tax is due has not been raised in line with price inflation, some reflects the fact that incomes on average have grown more quickly than prices, and some the fact that the dispersion of incomes has grown, pushing more into higher-rate income tax liability.
Table 1. Numbers liable for income tax (thousands)

<table>
<thead>
<tr>
<th></th>
<th>Number of individuals paying tax</th>
<th>Number of starting-rate taxpayers</th>
<th>Number of basic-rate taxpayers&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Number of higher-rate taxpayers&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979–80</td>
<td>25,900</td>
<td>—&lt;sup&gt;c&lt;/sup&gt;</td>
<td>25,226&lt;sup&gt;c&lt;/sup&gt;</td>
<td>674</td>
</tr>
<tr>
<td>1984–85</td>
<td>23,800</td>
<td>—</td>
<td>22,870</td>
<td>930</td>
</tr>
<tr>
<td>1989–90</td>
<td>25,600</td>
<td>—</td>
<td>24,040</td>
<td>1,560</td>
</tr>
<tr>
<td>1994–95</td>
<td>25,300</td>
<td>5,180</td>
<td>18,200</td>
<td>2,000</td>
</tr>
<tr>
<td>1999–2000</td>
<td>27,200</td>
<td>2,280</td>
<td>22,354</td>
<td>2,510</td>
</tr>
<tr>
<td>2004–05</td>
<td>30,300</td>
<td>3,570</td>
<td>23,333</td>
<td>3,330</td>
</tr>
<tr>
<td>2009–10</td>
<td>30,600</td>
<td>163&lt;sup&gt;e&lt;/sup&gt;</td>
<td>27,202</td>
<td>3,190</td>
</tr>
<tr>
<td>2014–15&lt;sup&gt;d&lt;/sup&gt;</td>
<td>29,800</td>
<td>205&lt;sup&gt;e&lt;/sup&gt;</td>
<td>24,818</td>
<td>4,782</td>
</tr>
<tr>
<td>2015–16&lt;sup&gt;d&lt;/sup&gt;</td>
<td>29,700</td>
<td>—</td>
<td>24,691</td>
<td>4,982</td>
</tr>
</tbody>
</table>

<sup>a</sup> Includes those whose only income above the starting-rate limit is from savings or dividends.

<sup>b</sup> Includes additional-rate taxpayers from 2010–11.

<sup>c</sup> Figure for 1979–80 covers both starting-rate and basic-rate taxpayers.

<sup>d</sup> Projected.

<sup>e</sup> From 2008–09, the starting rate applies only to savings income that is below the starting-rate limit when counted as the top slice of taxable income (except dividends).


Although fewer than 17% of income taxpayers face higher rates of income tax, that group pays a very large share of the total, a share that has risen substantially since 1978–79 despite lower top tax rates. Table 2 shows that the top 10% of income taxpayers now pay over half of all the income tax paid, and the top 1% (most of whom face the additional 45% marginal tax rate) pay 28% of all that is paid - more than double the 11% of income tax paid by the top 1% in 1978-79 when the top tax rate was 98%.
So just looking at the income tax system, cuts in rates have reduced the average burden on higher income households. But much higher incomes at the top have meant these households pay much more tax, both in absolute terms and as a fraction of the total. In fact given how different the underlying income distribution is, comparisons of the kind “the current income tax system is more/less redistributive than that in 1978–79” are hard to make. It’s difficult to believe that a system like the one we had then could coexist with the underlying income distribution that we have now.

Of course much else has changed in the tax system, not least restrictions on the amount that can be saved in a pension free of income tax, increases in rates of National Insurance Contributions and big increases in the main rates of VAT. And as those who pay income tax make up less than three-fifths of the UK’s adult population, we must look beyond reforms to income tax to understand the changes in redistribution described above.

**Increases in support for housing costs**

The second big area of change we choose to focus on is housing benefit – a means-tested payment made to families with low incomes who rent their homes. Spending on this has grown enormously over the last few decades. Figure 5 shows in today’s terms, spending rose from around £3 billion in 1978–79 to nearly £25 billion in 2014–15. This reflects a range of...
economic and social changes which mean Housing Benefit now has a profound effect on household incomes and on work incentives.

Expenditure rose particularly quickly in the early 1990s, increasing by 84% in only four years from 1989–90 to 1993–94. While partly the result of the early 1990s recession, this increase was also a result of the removal of rent controls on new tenancies from 1989; as private rents increased sharply, so did the cost of the subsidy provided through housing benefit. As a result, spending per claimant rose by 56% over those four years, while claimant numbers rose by 18%. Recent government policy has been to reduce the generosity of housing benefit, but this has only slowed the sharp increase seen since 2007-08; a product of falling incomes (widening eligibility to housing benefit) and rising rents (boosting the amount of housing benefit recipients receive).

**Figure 5. Spending on housing benefit (in 2014-15 prices)**

In addition growth in housing benefit reflects a change in the way governments have chosen to support low-income households. As the Hills Review of social housing noted, ‘there has been a pronounced switch in the way housing subsidies are provided from supply-side subsidies (which reduce the cost of housing) to demand-side subsidies (which help people pay for it)’. The review estimates that the government’s capital spending on housing fell by more than half between 1975–76 and 2003–04, from around £14 billion to less than £7 billion (in 2014–15 prices). The decline
in supply-side subsidies is also evident in the fall in the number of dwellings built by the government, from nearly 130,000 in 1975 to fewer than 25,000 in 2013.

Around 5 million families received housing benefit in March 2014, with more than three-fifths of these receiving the maximum amount. Receipt of housing benefit now stretches far beyond the bottom decile, with the increases in expenditure and eligibility helping to explain why net taxes have fallen for those in lower income deciles.

*Increases in support for families with children*

Another part of the explanation lies in a set of big policy decisions over how much support, through benefits and tax credits, should be paid to families with children. As Figure 4 shows, spending on child support rose slowly (and somewhat unsteadily) relative to prices between 1978 and 1999, with almost half that increase caused not by policy change but by the changing characteristics of households with children – particularly increases in the numbers of single parents and the rising proportion of workless households with children. By contrast, spending rose dramatically in the 2000s, more than doubling from £19.7 billion in 1999-00 to £43.5 billion in 2009-10, with almost all of the increase due to policy changes.

**Figure 4. Expenditure on main child contingent supports (in 2014-15 prices)**

These reforms also represented a significant shift towards means-tested (and away from universal) support for families with children. Withdrawal of child benefit after 2013 from families containing an individual with taxable income of over £50,000 a year moved the system further away from providing universal support for families with children.

**Implications for effective marginal tax rates**

The three sets of changes we have discussed are the most important in explaining not just how the distributional effects of the tax and benefit system have changed, but also its effects on incentives to be in paid work, and the incentive for someone already in work to earn a little more. The latter is best measured by the effective marginal tax rate (EMTR), the proportion of a small increase in earnings taken in tax and withdrawn benefits. Figure 5 illustrates how average EMTRs varied with earnings in 1978-79 and 2014-15, measured in terms of the cost to an employer, shown in percentiles (100 equally sized groups) on the horizontal axis.

**Figure 6. Mean Effective Marginal Tax Rate (EMTR) by percentile of employer cost**

![Figure 6](image)

Notes: Estimates from non-parametric regression of EMTR on percentile of employer cost, defined as gross earnings plus employer National Insurance contributions.

Source: Authors’ calculations using the IFS tax and benefit microsimulation model, TAXBEN, and uprated data from the 2013-14 Family Resources Survey, and 1978 Family Expenditure Survey.

While some of those on very low incomes face high EMTRs as a result of benefit withdraw, in both years, the top 1% of earners faced the highest EMTRs on average. Cuts to higher rates of income tax helped reduce this from 61% in 1978-79 to 53% in 2014-15, but these EMTRs are still higher than headline rates of income tax that feature in most policy debates. The
reason for this is that earnings are also subject to employee and employer National Insurance contributions (NICs; which have risen over this period), while some high earners now also face the withdrawal of their income tax-free personal allowance with the associated 60% effective rate of income tax this implies.

The average EMTRs faced by other high earners, those in percentiles 86-98, have actually increased between 1978-79 and 2014-15. This is due to the rise in rates of NICs, the rise in the numbers facing the (much reduced) higher rates of income tax, and the withdrawal of child benefit from some high-income families.

Average EMTRs have also increased for most of the bottom half of the earnings distribution, but for very different reasons. Here, the expansion of means-tested benefits – most notably housing benefit and tax credits for those with children – have meant more families receive support from the government, but face its withdrawal if they increase their earnings. The receipt of multiple benefits can leave some individuals facing very high EMTRs: for example, those in receipt of housing benefit, tax credits, and council tax support can be left keeping less than 15% of any increase in earnings due to the simultaneous withdrawal of these benefits. This is particularly common for those around the 30th percentile of earnings, where average EMTRs have risen from 43% to 50% between 1978-79 and 2014-15. In part motivated by the effect such high EMTRs might have on the incentives faced by low earners, the government are in the process of introducing a single means-tested payment, known as universal credit, to replace six existing means-tested benefits and tax credits for those of working age, strengthening incentives for those who currently face the weakest incentive to increase their earnings.

The 10th-20th percentiles of earnings have, like 60th-85th percentiles, seen small reduction in average EMTRs. People at these levels of earnings either earn too little to face the withdrawal of any benefit income they receive, or do not receive any benefit income and face only the basic rate of income tax and NICs, which – taken together – have fallen over this period.

**Conclusion**

Over long periods the role of the tax and benefit system can change dramatically as a result of a combination of policy decisions and underlying social and economic change. It can also change in ways which
are not obvious from simply looking at headline rates of tax or benefit payments.

At first sight marginal tax rates have fallen dramatically for high earners as a result of large cuts in the top rates of income tax. Yet once one accounts for reductions in the level of income that these rates apply to, as well as increases in rates of NICs, effective marginal tax rates have in fact risen for those close to the top of the earnings distribution, and only fallen for the top 2% of earners. And despite reductions in tax as a share of disposable income, the richest individuals pay a much higher fraction of total tax receipts than they did. These developments are in part a response to the much wider dispersion of income today, but they may also be thought of as facilitating it: it is hard to imagine top incomes would have raced quite so far away had top tax rates remained at the level they were in 1978.

Benefit reforms have been even more substantial. What has happened to Housing Benefit is an example of changes resulting from a combination of policy change elsewhere, notably with respect to social rents, and other economic changes. Spending has risen by a factor of eight despite cuts to its generosity. Increases in spending on benefits for families with children, on the other hand, reflect decisions to increase support for poorer families. The combination of these, and other, reforms has increased redistribution to households in the lower half of, but not right at the bottom of, the income distribution. One consequence has been higher effective marginal tax rates faced by lower earners in receipt of multiple means-tested benefits.

The tax and benefit system will continue to change in response to changing social preferences and underlying economic conditions. Those changes need to be made in view of inevitable trade-offs between distributional aims and incentive effects. And they have to be made taking account of the system as a whole, not looking at just one part of the system in isolation.