Tapering Over the Tax
Reforming taxation of income in the UK

Policy Paper
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Summary

**60-SECOND SUMMARY**

The taxation of incomes should be a key mechanism for making the tax system more progressive and efficient as a whole. As things stand, however, the variable treatment of different sources of income reduces the current system’s progressivity, creates perverse economic incentives and helps to create political opposition to tax rises. This policy paper proposes a major reform of the current system, with two elements. First, all rates and allowances within income tax and employee national insurance contributions would be combined into a single tax ‘schedule’, with all sources of income taxed at the same rate, and on the same basis. Second, the existing system of marginal tax bands would be replaced by a ‘formula-based’ system such that every taxpayer’s marginal rate would depend on their own precise level of income. Such a system would be more efficient and progressive, and in addition could be used to raise revenues in a way that is fairer and more politically acceptable than the current system.

**KEY FINDINGS**

The UK’s current system of taxing individual incomes combines two different tax schedules, for income tax and employees’ national insurance contributions (NiC), in a complicated arrangement of different tax rates, bands, thresholds, allowances and reliefs. Assessed against three simple principles of tax design – efficiency, progressivity and system coherence – the UK’s current system performs poorly.

In terms of efficiency, the rate of taxation on incomes often varies arbitrarily. For example, the effective rate of tax on annual earnings from employment above the tax-free allowance is 32 per cent, compared to 7.5 per cent for income paid in dividends from company profits. The marginal rate of income tax also jumps from 40 per cent to 60 per cent and back to 40 per cent as the personal allowance is withdrawn for incomes over £100,000. For income tax payers on the lowest earnings, effective marginal tax rates can be as high as 75 per cent as means tested benefits are withdrawn as a result of higher pay. This variable treatment of different sources of incomes, combined with sharp ‘cliffs’ in the marginal rate between tax bands, creates perverse economic incentives, makes tax avoidance more likely and is far from transparent.

Overall, the UK’s tax system is not progressive. On average, the poorest 20 per cent of households pay 35 per cent of their gross income in tax, far more than the average for all other households. The system of taxing an individual’s income should be the key mechanism to make the tax system more progressive and fair as a whole. In practice, the current system improves overall progressivity only marginally, and the Government’s most recent reforms are making things worse. Plans to raise the personal allowance and higher rate threshold of income tax (outside Scotland) will see post-tax earnings rise five times faster for the richest 10 per cent of households by 2020/21 than for the poorest 10 per cent.

In a context of rising pressures on public spending, particularly from an ageing population, the system of taxing incomes is structured in such a way that makes raising tax rates particularly difficult. Variable rates for different types of economic activity, combined with abrupt cliffs in marginal rates, create clear groups of ‘losers’ from any tax-raising proposals. This can also give false perceptions of how tax changes will affect different groups of taxpayers, often helping to grow political opposition to reform.
KEY RECOMMENDATIONS

To address these challenges, we propose two major reforms to the UK’s system of taxing incomes, with two key elements.

1. The rates and allowances for employee NICs and income tax should be combined into a single tax schedule, and applied to all incomes on an individual, annual basis. All income would be treated under the same rates, irrespective of whether it was sourced from labour earnings, savings, trusts, dividends or property rents.

2. The present system of marginal tax bands should be replaced with a ‘formula-based’ system. In effect, tax bands would no longer exist, and for most incomes the marginal rate would rise at a slow pace between a new tax-free allowance and a new threshold for the top marginal rate. Every taxpayer’s marginal rate, as well as their average rate, would depend on their own precise level of income.

An assessment of our proposed reforms against the current system shows that a tax system designed in this way would be more progressive and more efficient, and would enable government to raise taxes more fairly and more easily if required. By improving work incentives for low earners, as well as the variable treatment of different sources of income, perverse economic incentives and deliberate tax avoidance would be reduced.

Using illustrative versions of a formula-based tax system for the UK in the IPPR tax and benefit microsimulation model, we demonstrate that a fiscally neutral reform has significant redistributive potential. More than 80 per cent of taxpayers could see an increase in their post-tax income, with gains around the median income for all taxpayers as high as £1,200 a year.

At the same time, a reformed system would have significant revenue-raising potential. Illustrative modelling shows that the reformed system could raise between £6 to £16 billion in extra annual revenue while still increasing post-tax incomes for at least 75 per cent of individual taxpayers.

These reforms would make the UK’s tax system more efficient, more progressive and better able to meet the public spending challenges of the 21st century.
Introduction: Income taxes at home and abroad

The taxation of individuals on their earned income generates more receipts than any other single source of taxation. This is true in the UK and in most other developed countries. The UK raises funds from individuals on their earned income through two main taxes: income tax and employee national insurance contributions (NICs). Together, including devolved income tax revenues, these taxes are expected to generate around £237 billion in revenue during the 2017/18 financial year, accounting for over one-third (34.1 per cent) of all UK tax receipts and equivalent to 11.2 per cent of GDP (see table I.1).

### TABLE I.1

**Taxes on earned income are the single most important source of government revenue in the UK**

*Most important UK taxes in terms of revenue, 2017/18*

<table>
<thead>
<tr>
<th></th>
<th>£ billion</th>
<th>Share of all taxation (%)</th>
<th>Share of GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax</td>
<td>177.2</td>
<td>25.6</td>
<td>8.7</td>
</tr>
<tr>
<td>VAT</td>
<td>139.9</td>
<td>20.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Employer NICs</td>
<td>71.6</td>
<td>10.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Corporation tax</td>
<td>54.6</td>
<td>7.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Employee NICs*</td>
<td>59.4</td>
<td>8.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Council tax</td>
<td>32.2</td>
<td>4.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Fuel duties</td>
<td>27.9</td>
<td>4.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>130.0</td>
<td>18.8</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>692.8</strong></td>
<td><strong>100</strong></td>
<td><strong>33.9</strong></td>
</tr>
</tbody>
</table>

*Source: IPPR calculations based on Office for Budget Responsibility, ‘Historical official forecasts database’ (OBR 2018) and Office for Budget Responsibility, ‘November 2017 Economic and fiscal outlook’ (OBR 2017a)*

*Note: *Including all self-employed NICs.

Taxes on individuals’ earned income are administered through a system of reliefs, allowances and nominal rates that vary depending on the source and size of an individual’s income. The rate of taxation changes according to the range of an individual’s income to which it is applied, otherwise known as tax ‘bands’. These

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1. Employer national insurance contributions are also levied on earned income from paid employment, but the statutory incidence – that is to say the legal obligation to pay the tax – falls on the employer rather than the employee, which means this taxation will be considered by the Commission on Economic Justice through its separate work on business taxation. Capital gains tax is also levied from individuals on non-earned income from the disposal of assets, which the Commission will consider in its work on wealth taxation. The withdrawal of benefits as a function of earnings, such as through the taper rates applied under tax credits and universal credit, can also be regarded as an effective tax on individuals as a function of earned income. We return to this issue briefly in our analysis of work incentives and progressivity below. However, welfare policies as a whole are beyond the scope of the Commission and are therefore also not the focus for this policy paper.

2. Non-dividend and non-savings income tax rates and thresholds (above the personal allowance) were devolved to the Scottish parliament from 2017/18. We have included revenue from this devolved income tax in our UK-wide analysis, though devolution means that the Scottish parliament would decide elements of income tax reform in Scotland.
bands are designed to make taxation of income ‘progressive’, meaning that higher-income individuals pay a higher average rate of tax. The system of rates is collectively known as the tax ‘schedule’. The majority of receipts under both income tax and employee NICs are levied on the same people, and as a function of largely the same economic activity: paid employment. Despite this, the respective schedules for income tax and national insurance differ significantly.

Proposed reform of both taxes often takes centre stage in UK economic and political debate, but can be controversial. In the March 2017 budget, the chancellor proposed to bring the rate of NICs between employed and self-employed workers closer into alignment. However, the political backlash, not least from his own party, led to a partial U-turn over the proposals. Each major UK-wide party also set out significant reforms to income tax in their respective 2017 manifestos. The Conservatives reaffirmed the commitment from their 2015 manifesto to raise both the personal allowance and the higher rate threshold. The Labour party proposed to increase taxes for the richest 5 per cent of taxpayers by lowering the threshold for the additional rate of 45 per cent to an annual salary of £80,000, and introducing a new top rate of tax of 50 per cent on incomes above £123,000. Meanwhile, the Liberal Democrats proposed a 1 percentage point increase on all current tax bands. It is notable that all three of these reforms, including those now being implemented by the Conservative Government, would have the effect of driving the respective schedules for income tax and employee NICs even further out of alignment.

Relative to the size of the UK economy, the levels of both overall taxation, and individual taxation of earned income, are lower than in most of the rest of western Europe. Of the 18 advanced west European economies, only five collect less tax from individuals’ earned income as a proportion of GDP than the UK (see figure I.1). Three of these five, however – France, the Netherlands and Portugal – more than offset this through higher general tax collection elsewhere. Such trends tend to reflect choices and dynamics in political economy. Higher levels of taxation reflect the resource requirement of the more economically and socially important role for the state favoured by most other west European countries. Higher levels of taxation on individual income also reflect, to some degree, greater priority being afforded to progressivity and equality in post-tax incomes across different European societies.

3 In tax policy, ‘progressivity’ has a specific technical definition. A tax is said to be progressive if the average rate of tax rises as the tax base – in this case an individual’s income – also rises.

4 Other forms of economy activity that are taxed as income include returns on company profits in the form of dividend income, income from property rental and interest on savings, among other things (see table 2.1 below).
FIGURE I.1
UK tax receipts, both in total and from earned income only, are among the lowest in western Europe
All taxation, by income taxes and other taxes, for west European countries, % GDP, 2016

Note: Taxes on earned income exclude employers’ social security payments

The UK is also unusual among advanced economies – and unique in the G7 – in seeing taxes on individuals’ earned income fall as a proportion of all tax receipts over the past 50 years. Significant reforms to rates, bands and thresholds under the Labour governments at the end of the 1970s and Conservative governments in the 1980s saw the share of receipts from individual income taxes fall significantly. Interestingly, this was at precisely the time when other advanced economies were moving in the opposite direction (see figure I.2). More recent reforms in the UK since the financial crisis, particularly around raising the personal allowance of income tax, have contributed to the share of overall receipts from individual income taxes falling still further. In most other advanced economies, revenues from income tax have either remained constant or else have risen over the period.
This policy paper will review the case for reform of the UK’s taxes on individuals’ income, and propose a number of reforms. The next chapter will set out a brief discussion of the goals and principles of income taxation, and measure the UK’s current taxes against these principles. Chapter 3 will set out IPPR’s new proposals for income tax and employee NICs. In doing so, we present new microsimulation modelling to test and assess our proposed reforms against our principles and in comparison with the current system.
1. Principles for taxing earned income

The seminal publication on economic tax theory in the UK, published by the Institute for Fiscal Studies in 2011, provides a useful basis from which to draw the key economic principles of the tax system (Mirrlees et al 2011). Based partly on this work, we can set out three principles for the tax system as a whole.

1. **Efficiency:** Taxes should seek to optimise economic efficiency (subject to also fulfilling the principle of progressivity and other social priorities such as environmental impact and public health). A key ingredient of efficiency is **neutrality:** that is to say, the differential treatment by the tax system of otherwise similar forms of economic activity should be minimised. To the extent that individuals make behavioural decisions based on the tax system, departures from neutrality are likely to lead to a loss in welfare for the individual and society as a whole. For this reason too, **transparency** should also be maximised to prevent unintended behavioural responses.\(^5\)

2. **Progressivity:** Taxation should be progressive in reference to household income, with higher-income households paying a higher average rate of taxation. From a normative perspective, this helps to improve equality of outcomes across society. From an economic perspective, this also helps to support aggregate demand and spending in the economy, as lower-income households have a higher marginal propensity to consume than richer households (Bunn et al 2017).

3. **System coherence:** Taxation should be structured as a system to meet the overall and variable spending needs of government. Raising funds should follow the government’s need to spend, rather than vice versa. Taxes should meet their objectives in aggregate. Not all taxes need to satisfy all principles, so long as these goals are met by the system as a whole. For example, not all taxes need to be progressive so long as the tax system is progressive as a whole.

This chapter sets out a brief assessment of the UK’s taxation on individuals’ earned income – income tax and employee national insurance contributions – in view of these high-level principles.

**EFFICIENCY**

The UK’s system for taxing earned income is inconsistent and inefficient. The system of allowances and rate schedules of income tax and employee NICs are not neutral in the sense defined above, either when considered in isolation from one another or as a combined tax on earned income. Important distortions include, but are not limited to, the following:

- non-aligned rate schedules
- tax ‘cliffs’
- variable allowances
- non-identical tax bases
- different units of taxation.

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\(^5\) Some differentiations in the tax system can be justified to meet policy goals, such as additional duties on unhealthy foods and tobacco, or levies on environmentally polluting activities, where tax-based incentives are designed to change behaviour.
Non-aligned rate schedules
Despite much of the tax base being identical for income tax and NICs, the two rate schedules differ significantly and largely fail to complement one another (see table 1.1 and figure 1.1 below). The threshold for tax-free earnings under NICs is significantly below that of income tax. This can lead to issues in transparency, for example when the Government claims that by raising the personal allowance it is lifting people out of tax altogether (House of Commons Library 2015a). Irrespective of the personal allowance of £11,500 for income tax, earnings above an annual equivalent of £8,163 are currently taxed at 12 per cent under NICS. And the effective tax rate for earnings above the personal allowance is therefore 32 per cent, far higher than the 20 per cent basic rate that most people associate with this level of income.

TABLE 1.1
The schedules and tax base for the main taxes on earned income differ considerably
Rates, allowances and base of the UK’s main taxes on earned income, 2017/18

<table>
<thead>
<tr>
<th>Tax</th>
<th>Annual income (£)</th>
<th>Marginal rate (% unless otherwise stated)</th>
<th>Tax base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic rate threshold</td>
<td>11,500</td>
<td>20</td>
<td>Income from paid employment, savings, trusts, dividends, property rent, pensions, state benefits, occupational benefits</td>
</tr>
<tr>
<td>Higher rate</td>
<td>45,000*</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>threshold</td>
<td>100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal allowance</td>
<td>150,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>withdrawal threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee NICs (Class 1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary threshold</td>
<td>8,164**</td>
<td>12</td>
<td>Income from paid employment</td>
</tr>
<tr>
<td>Upper earnings limit</td>
<td>45,032**</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Self-employed NICs (Class 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary threshold</td>
<td>8,164**</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Upper earnings limit</td>
<td>45,032**</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* Technically the ‘higher rate threshold’ is £33,500. It is additive to the personal allowance, which means that the higher rate of income tax is only applied to income above £45,000.
** Figures reproduced on an annual basis for the purposes of comparison with income tax. Actual thresholds in the NICs schedule are calculated on a weekly basis. The primary threshold is set at £157, and the upper earnings limit at £866, per week.

Note: Despite devolution of some tax powers, most notably to the Scottish parliament, all NI payments and all income tax allowances are reserved to Westminster and are UK-wide. Scotland has seen devolution of the rates and bands for income tax above the personal allowance and has begun to use them in different ways to the rest of the UK. This included a different (and lower) higher rate tax threshold compared to the rest of the UK for 2017/18 and proposals for two new tax bands, and differing tax rates for 2018/19.

The reasons for these different rate schedules are also contradictory and in conflict. The marginal rate paid under NICs falls above earnings equivalent to around £45,000 per year. This is intended to embed a principle of ‘proportionality’, limiting the rate at which social security payments increase for higher earners given that there is a limit to how much support any one individual can claim in associated benefits in cash or kind. However, the marginal rate under the income tax schedule increases for incomes above £45,000. This is aimed at increasing the proportionate contribution of higher-income taxpayers in order to make taxation as a whole more progressive. After incomes exceed £45,000, therefore, the average effective rate of taxpayers is pulled in two directions simultaneously, trying to meet two contradictory objectives at once (see figure 1.2).
FIGURE 1.1
The rate schedules for income tax and employee NICs are not aligned
Marginal tax rate for income tax and employee NICs by income, 2017/18

Source: Authors analysis using HM Revenues and Customs, ‘Rates and allowances’ (HMRC 2018)

FIGURE 1.2
Average rates for income tax and employee NICs pull in opposite directions for incomes above £45,000
Average rate of tax for income tax and employee NICs by income, 2017/18

Source: Authors analysis using HMRC 2018
Tax ‘cliffs’
The level of earnings at which the tax rate changes – leading to so-called tax cliffs – can induce distortionary behaviour. The abrupt transitioning from one marginal rate to the next can affect incentives and influence employment decisions that have the potential to move income either side of a cliff. For incomes below a tax cliff, the financial incentives for promotion, or changing the number of hours worked, differ considerably depending on the proximity of an individual’s income to a cliff in the rate schedule. Tax cliffs allow the schedule to be more easily ‘gamed’ by the self-employed or by company owners who receive income through dividends. By controlling the timing of income to avoid breaching key tax thresholds, income can be managed and smoothed across multiple years to minimise an individual’s liabilities (Kleven and Waseem 2013, le Maire and Schjerning 2013).

Most damaging of all, the abrupt introduction of the main rate of NICs and basic rate of income tax, at an annual income of £8,163 and £11,500 respectively, reduces the financial rewards from moving from unemployment into paid work above either of these levels. The withdrawal of benefits under various means-testing regimes such as the taper rate under tax credits and universal credit, combined with an effective marginal tax rate of 32 per cent on earnings over £11,500, significantly erodes net financial gains from higher pay. For a main earner on minimum wage and from a couple with two children receiving universal credit, an increase in pay of £1 per hour could see net take-home pay increase by as little as 25p, implying an effective marginal tax rate of 75 per cent (Finch 2017).

The mechanism for withdrawing the personal allowance represents a particularly arbitrary (from an economic point of view) addition to the income tax schedule, and presents a further issue of transparency. For annual income above £100,000, every £1 of additional income leads to a reduction in an individual’s personal allowance by 50p. Since the marginal rate for income at this level is 40 per cent, the effect of the withdrawal mechanism is identical to having another band in the income tax schedule with a marginal rate of 60 per cent. When the personal allowance is set at £11,500, this effective band ends for incomes above £123,000, with the marginal rate of tax returning to 40 per cent until the additional rate takes effect for incomes above £150,000. However, the obfuscation caused by describing what is effectively another tax band as something different means that few people know that their effective marginal rate rises to 60 per cent (see figure 1.1 above) under income tax, or 62 per cent including NICs. For those that do, the dramatic rise and fall in the marginal rate also risks incentivising arbitrary economic decisions designed to manage income within and across years in order to minimise tax liabilities.

Variable allowances
Within income tax in particular, a number of separate allowances and tax rates on savings, dividends and earnings create perverse incentives for individuals to reclassify their employment status or income source solely for tax purposes. For example, all income tax payers get an additional £5,000 allowance for dividend income on top of their personal allowance. Basic rate taxpayers then pay 7.5 per cent on their dividend income above this allowance, and higher rate taxpayers pay 32.5 per cent, compared with 20 per cent and 40 per cent respectively for income from earnings. This can lead to lower average rates of tax for those individuals paying themselves through dividends – often people with large amounts of wealth and the resources to seek financial advice. Within NICs, a lower rate is also applied to self-employed earnings between the primary threshold and the upper earnings
limit, on the grounds that the welfare entitlements of self-employed people are less generous than those of contracted employees.

**Non-identical tax bases**
Income tax is paid on most forms of income while NICs are only paid on income from paid employment. Different types of income in the economy can therefore incur a highly variable tax liability depending on the type of economic activity that generates them.

**Different units of taxation**
Income tax liabilities are accrued on a per person, annual basis, whereas NICs are accrued on a per job, weekly basis. This means that NICs in particular can have variable and arbitrary effects depending on the manner in which someone is employed. Having multiple jobs can lead to a reduced tax liability, compared with an identical income from a single job, since the primary threshold is applied to earnings from each individual job separately, rather than a person’s income as a whole. With the rise of the ‘gig economy’ and the growing propensity for many people to have multiple low-paid, flexible jobs, the exchequer could see receipts eroded significantly over time unless the tax schedule is brought into line with the modern economy.

**PROGRESSIVITY**
The overall progressivity of the UK tax system is weak (see figure 1.3). Excluding taxes on income, the burden of indirect taxes is ‘perfectly regressive’, meaning that the average rate of tax is inversely correlated with current household income across every decile of the income distribution. In 2015/16, average liabilities from these taxes as a proportion of household income were more than twice as high for the poorest 20 per cent of households (at 30 per cent) as for the richest (at just 13 per cent). Taxes on earned income only partially offset this trend. Even after income tax and NICs are taken into account, the poorest 20 per cent of households pay more tax as a proportion of income than any other income quintile. To some extent, there is only limited scope for this to improve through reforms to income taxation.
taxes alone. For example, the poorest 20 per cent of households pay more through indirect taxes and council tax (in other words, even before taking into account income tax and NICs) than the fourth quintile pay in tax altogether. At the very least, however, reducing the relative burden of income tax and NICs for the poorest 20 per cent of households could help to bring their overall tax liability below that of the very top-income households.

**FIGURE 1.3**
As a proportion of income, the poorest 20 per cent of households in the UK have the highest overall burden of tax

*Total average tax liability by equivalised household income quintile as a proportion of gross income, 2015/16*

Income taxes are, however, particularly important for managing the distribution of overall tax liability for households further up the income distribution. For the middle of the distribution – between the second and fourth quintiles – the tax system was marginally progressive in 2015/16 thanks to the effect of these taxes offsetting the rest of the system. Nonetheless, for the top 60 per cent of households the overall effect was almost entirely flat: the richest fifth of households paid exactly the same average rate of tax as the next richest 20 per cent, and only one percentage point more than the middle 20 per cent.

This unconvincing performance against a key principle of taxation – progressivity – has been made worse by the present Government’s reform agenda. Since 2015, the Government’s reforms to income tax have served to make the system more regressive, not less. The Conservative party’s 2015 manifesto set out plans to increase the level of income an individual can earn before paying income tax from £10,600 to £12,500, while also raising the level at which the 40 per cent higher rate takes effect, from £42,385 to £50,000 by 2020/21. The Government is already well on course to meeting this commitment, with the two thresholds rising to £11,850 and £45,000 respectively for 2018/19 (outside Scotland). The impact of both these reforms is perfectly regressive (see figure 2.4). Lifting the higher rate threshold as planned represents an effective giveaway of more than £1,500 to all individuals with annual income higher than £50,000 in 2020/21. These people make up the richest 10 per cent of all income tax payers and will be concentrated in the top
third of the equivalised household income distribution (IPPR calculations using HMRC 2017a).\(^1\)

Raising the personal allowance is regressive as families at the bottom end of the distribution with no adults in work miss out on the benefits altogether, while families with two or more people in work – which tend to be higher up the distribution on average – can see twice the benefit compared with single-earner households. Our analysis shows that if the Government’s manifesto commitments are met in full, the richest 10 per cent of households will see their annual incomes rise by an average of £1,200 (1.4 per cent of household income) compared to less than £30 (0.1 per cent) for the poorest 10 per cent (see figure 1.4)\(^2\)

FIGURE 1.4
The effects of the Conservative manifesto’s income tax plans disproportionately benefit the richest households

Effects of moving the personal allowance to £12,500 and the higher rate threshold to £37,500 compared with a world where the 2015/16 schedule is uprated with inflation, equivalised household disposable income before housing costs, 2020/21

![Graph showing income distribution]

Source: Author’s analysis using the IPPR tax and benefit model based on Department for Work and Pensions, ‘Family Resources Survey: financial year 2015/16’ (DWP 2017b)

The existing system of relief on pension contributions in the income tax system also undermines its progressivity. All employees can pay into pension schemes out of their gross salaries, which in effect makes contributions tax free. The size of the relief is given by the marginal rate at which a pension contribution would have otherwise been taxed, which means that higher-income individuals accrue a significantly more generous relief compared to lower-income taxpayers. The effect is the inverse of whatever tax schedule is applied: the more progressive the schedule, the more regressive the relief. For example, a pension contribution

\(^1\) Household income is equivalised on a like-for-like basis depending on the number of individual adults and children in the family.

\(^2\) 2020/21 prices and compared with a counterfactual world where neither manifesto commitment was implemented.
from an annual salary worth £25,000 receives a 20 per cent tax relief, while a contribution from a salary worth over £150,000 receives relief worth 45 per cent.

Given that progressivity is measured in terms of income, taxes on earned income have the single most important role to play in achieving progressive outcomes. This is true for all households other than for the very poorest, for whom the taxation of earned income makes up a particularly small share of their overall tax liability. We argue here that, at present, taxes on earned income in the UK are not doing enough to offset the effects of the rest of the system. Furthermore, on the Government’s present plans, this will get even worse over the next few years.

A REVENUE-RAISING SYSTEM
The efficiency, progressivity and coherence of the tax system are important considerations whatever the level of revenues that are required from tax as a whole. But these principles also come into play if and when governments decide that they need to raise more revenue. This is likely to be a priority over the coming years and decades, due to the fiscal pressures arising from an ageing population, along with other pressures on government spending and services caused by the austerity of recent years. Between 2015 and 2050, the proportion of the UK population aged over 65 is expected to rise from around one-in-six to one-in-four (author’s calculations using ONS 2017c). This is expected to contribute to an increase in public expenditure of as much as 2.5 percentage points of GDP between 2019/20 and 2034/35 (OBR 2017b).

As they are the largest sources of revenue of any single form of taxation, it is likely that taxes on earned income will be called upon to do their part for the public finances. In these circumstances, the current structure of income tax and employee NICs makes raising revenue harder than it needs to be. Variable treatment of different sources of income (see section 1.1 above) facilitate avoidance, and cause significant leakages in revenues. But perhaps more importantly, the present schedules of income tax and employee NICs also make it politically difficult to achieve increases in tax revenue. The combination of a limited number of tax bands, differential treatment for different forms of income and significant cliffs in the rate schedule has the effect both of creating political opposition to change and making tax increases on higher-income individuals easier to avoid.

This has been demonstrated by recent attempts to reform the schedule. In 2017, the chancellor’s attempt to raise revenues by bringing the schedule for self-employed (Class 4) NIC closer into line with the rest of the NICs system was abandoned due to the perception of clear losers that it created. Attempts to raise more revenue from the very highest earners with a 50 per cent additional rate also failed, when the original Labour policy of 2009/10 was reversed by the Coalition Government in 2013/14. A combination of forewarning that the rate would fall from 50 to 45 per cent, and the ease with which income can be moved from one year to the next to avoid breaching significant cliffs in the tax schedule, mean that it is likely the 50 per cent rate barely increased revenues at all (House of Commons Library 2015b). By contrast, it is telling that the successful attempts to raise significant revenue UK-wide within the system in recent years often do not involve a transparent increase in the rate of income.

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13 For these households, and in the absence of significant tax rises for everyone else, the tax system as a whole can only be made genuinely progressive by either reducing their liability for other taxes, or by increasing their level of overall income, either through paid work or state redistribution. Outside of welfare policy, these alternative means of distribution will be considered by the Commission in its final report, but they remain outside the scope for this paper.

14 The Scottish Government currently has proposals to increase income tax receipts from 2018/19 with new bands and higher rates overall.
tax. Instead, successful attempts include the introduction of the personal allowance withdrawal mechanism in 2010/11 (see section 1.1 above) – which concealed what was effectively the introduction of a new 60 per cent tax band (Mirrlees et al 2011) – and increases in the rates of NICs, which many people do not see as a tax in the same way. Obfuscation is not a desirable or sustainable strategy to raise revenues in a functioning democracy, and tends to lead to undesirable outcomes in the long term.

CONCLUSION
The current income tax system scores poorly against the principles of efficiency, progressivity and system coherence. In doing so, it also weakens the ability of government to raise the revenues required for the future. All three of these failings can be traced back to the design of income taxes, not just to the present configuration of rates and allowances. If income taxes are going to help our tax system meet its goals, their structure needs to change.
2. Proposals for reform

In this paper, we propose a significant reform to the structure of income taxation in the UK. The proposal has two main elements:

- alignment of the tax rate schedule for all sources of income currently taxed under income tax and employee NICs
- replacement of the various schedules of cliffs and tax bands with a ‘formula-based’ tax schedule, providing for progressive, linear increases in the marginal rate.

1. We propose that the rates and allowances for employee NICs and income tax are combined into a single tax schedule, which is applied to all incomes on an individual, annual basis.

Income tax and NICs would no longer exist as separate taxes and income would be treated under a single schedule (the Institute for Fiscal Studies and the Office for Tax Simplification have made similar proposals in the past, for examples see OTS 2016 and Mirrlees 2011). Property income – such as from dividends – would be taxed at the same effective rate as income from labour, but this could include a mechanism to deduct any corporation tax already paid on company profits, in order to avoid ‘double taxation’. This principle is being considered more fully as part of the Commission’s work on the taxation of wealth. Deployment of the new tax regime could use similar administrative apparatus to that currently used to collect income tax. Entitlement to contributory benefits, such as the state pension, could remain the same, with eligibility determined through contributions to the new income tax, based on similar rules to those that are applied today. Employee NICs would no longer exist as a separate tax schedule. But national insurance could continue just as it does today, with a portion of receipts from the new income tax hypothecated on a similar basis to employee NICs today and alongside existing employer NICs. Hypothecated payments to fund national insurance could also remain itemised on individual payslips. Where income tax is already part devolved, such as in Scotland, this new combined single tax would be devolved in a similar way.

2. We propose that the present schedule of flat marginal tax bands is replaced with a marginal tax rate that rises gradually for the whole of the income distribution, between lower and upper thresholds.

We describe this as a ‘formula-based’ tax schedule. In effect, tax bands would no longer exist; for most incomes, the marginal rate would rise at a slow pace between a new tax-free allowance and a new threshold for the top marginal rate of tax. (An example of how such a schedule might look in the UK is presented in figure 3.1 below.) Every taxpayer’s final marginal rate would depend on their own precise level of income. This is the system used for part of the tax schedule in Germany. There, the first part of the tax schedule is divided into two ‘progression zones’ in which two different linear functions (respectively) are used to calculate rises in the marginal rate. Above a tax-free allowance, the marginal rate rises gradually from 14 per cent to 42 per cent for income between €8,821 and €54,057. Under the German system, contracted employees do not need to fill out a tax return.

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15 The taxation of capital gains is outside the remit of this paper but will be considered as part of the Commission’s work on wealth. However, the principle is likely to be the same.

16 Any devolved administrations, such as Scotland, would only move to a formula-based schedule at their discretion.
return unless they receive income from more than one employment, or if their income from another source exceeds a small nominal amount (around €400). Administering a formula-based system in the UK could take a similar approach. Overall, however, this would likely lead to an increase in the number of individuals required to complete annual tax returns.

As a secondary reform, we also propose that pension contributions are no longer deducted from gross earnings and instead attract a single, flat rate of relief. The rate could be set anywhere between 1 per cent and the top rate of tax, depending on the trade-off a government wanted to make between raising revenues and incentivising individuals to save for a pension. For anyone with an effective tax rate below the fixed rate of relief, the difference between the rates could either be offset against their tax bill, or else paid as an additional government contribution to their pension investment. This would mean that higher-income individuals received no better incentive to save than anyone else, but incentives would become far stronger at the bottom of the distribution, where they are most needed. Taxation of pension income could also be reformed to incur a flat rate of tax, designed to mirror the flat rate of relief on contributions.17

Because pensioners do not pay employee NICs, there is also a case to be made for applying a separate, formula-based schedule with lower rates to income received by pensioners, outside of their pension pots. Alternatively, there could be a transition phase for pensioners whereby the new formula-based schedule is only applied to income received by pensioners who paid tax under a formula-based schedule while of working age. A government could also choose to use higher overall receipts from a formula-based schedule to top-up the state pension or pensioner credits to match the bigger contribution by pensioners.

In this chapter, we present and analyse illustrative, formula-based tax schedules that could be adopted in the UK to replace the effective combined schedule for income tax and employee NICs. In designing these schedules, the aim is not to construct the most conceptually optimal solution from economic tax theory where there is the luxury of starting from a blank slate. This is partly because the academic literature remains divided on what such theory might prescribe (Diamond and Saez 2011); but, more importantly, it is because the history – both recent and past – of tax reform shows that politics matters. In designing reforms, we therefore start with the system as it is today and attempt to show how a small number of design features could improve the political attractiveness of a new system.

These features are prioritised in addition to maximising the progressivity, efficiency and revenue-raising potential of the reformed system. They include the following.

- Maximising the number of net ‘winners’ as a result of moving to the new schedule. We aim to ensure that between 75 and 85 per cent of income taxpayers are better off under the new schedule and that the net gains are highest at around the median income for taxpayers in the UK.
- Ensuring that there is a single threshold of income, below which as many people as possible contribute less under the formula based schedule, and above which as many people as possible contribute more, compared with

17 The design and effectiveness of other tax reliefs designed to incentivise saving, such as on ISA accounts and when drawing down a lump sum from a pension fund, should also be reviewed in the context of these proposals. A similar review would also need to be conducted into the best way to administer ‘gift aid’ and similar reliefs under the new system.
the present schedule.\textsuperscript{18} This requires that the top-income taxpayers with total salaries above £100,000 see their average rate of income tax fall slightly under the formula-based structure, despite no longer having their tax-free allowance withdrawn. It also requires that there is a tax-free allowance no smaller than the current allowance under employee NICs.

- Setting the top rate of tax no higher than 50 per cent. This rate is familiar to recent UK voters, since it was the top rate as recently as 2014 and it also featured in the Labour party’s 2017 manifesto. In order to cap the top marginal rate of tax, a flat rate of tax is required above the highest income threshold.

In the rest of this section we present modelling of illustrative formula-based tax schedules applied to income from employment in order to assess their performance across efficiency, progressivity and revenue-raising capacity, compared with the current system.\textsuperscript{19} We argue that this package of reforms as a whole could greatly improve the efficiency and progressivity of income taxation in the UK, while also making it easier to raise significant additional revenues if required.

\textbf{EFFICIENCY AND PROGRESSIVITY}

Figure 2.1 presents a sample schedule of marginal rates for a formula-based tax schedule that is revenue neutral, before behavioural effects,\textsuperscript{20} compared with receipts under current income tax and employee NICs combined. An initial tax-free allowance is set at £8,163 (the equivalent annual income of the primary threshold in employee NICs). Between this tax-free allowance and incomes of £100,000, our schedule uses three progression zones where the marginal rate increases gradually for every pound of income earned. The first zone would see the marginal rate of tax start at 3 per cent and rise to 32 per cent (the same as the effective marginal rate on incomes above £11,500 in the present system) for annual incomes of £21,000. For incomes between £21,000 and £50,000, the marginal rate rises from 32 per cent to around 45 per cent, before rising a further 5 percentage points in the final progression zone up to £100,000. Under this illustration of the schedule, the top marginal rate of tax would remain at 50 per cent for the rest of the income distribution. The difference between reaching the top rate of 50 per cent at a threshold of £100,000, rather than say £150,000, is fairly small in terms of overall revenues raised: roughly half a billion pounds a year depending on the steepness of the final progression zone. However, our stress-testing found that it was necessary in order to ensure that individuals with incomes at around £120,000 didn’t see their tax liability fall relative to the current system, which would have undermined both material and perceived progressivity.

This illustrative scenario, while being fiscally neutral compared with the current regime, improves the system considerably in terms of progressivity. The average tax rate under our system is lower for all people with incomes between £8,163 and £44,000 (more than 80 per cent of taxpayers). This suggests it would have the

\textsuperscript{18} Because NICs are levied on a per job, per week basis and our new schedule will be applied on a per person, per year basis, this cannot be true for every possible pattern of employment across a year. Some employed pensioners may also lose out since under the current system they do not pay employee NICs, so their effective average tax rate may be lower.

\textsuperscript{19} Our model uses the data from the most recent available year of the Family Resources Survey (DWP 2016b). Because of limitations in the FRS in accurately measuring income from some sources, we do not attempt to apply our illustrative schedules to either savings or dividends in any of our illustrative scenarios. This means the tax base that we apply our illustrative scenarios to is therefore slightly smaller than that of the real world. This means that our aggregate costings are likely to slightly underestimate total receipts from a given formula-based schedule. The IPPR tax and benefit model also does not take into account any behavioural responses to a change in tax policy.

\textsuperscript{20} Different behavioural effects are likely to work in opposite directions. Higher marginal rates of tax for the top 20 per cent of incomes could reduce incentives to increase income, but lower marginal rates for the rest of the distribution would improve incentives to increase income or move into work.
potential to unite a broad coalition of political support for change. The benefits are maximised for individuals on or around the UK median for gross income; around £24,700 for tax payers only (see table 2.1 below). For example, a person earning around £23,000 would see their average income tax fall by 5 percentage points compared with the current system, allowing them to keep more than £1,100 more per year in take-home pay.\footnote{21}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2.1.png}
\caption{A formula-based schedule produces a more even increase in marginal and average tax rates}
\end{figure}

\begin{table}
\begin{center}
\begin{tabular}{|c|c|c|c|c|c|}
\hline
Gross income & Position in the income distribution & Net income after tax & Difference \\
\hline
17,300 & 25th percentile & 15,024 & 16,058 & 1,034 \\
24,700 & 50th percentile & 20,056 & 21,208 & 1,152 \\
37,500 & 75th percentile & 28,760 & 29,339 & 579 \\
55,400 & 90th percentile & 39,892 & 39,557 & -335 \\
171,000 & 99th percentile & 102,320 & 98,409 & -3,911 \\
\hline
\end{tabular}
\end{center}
\caption{Effect of different tax schedules on key percentiles of all taxpayers, 2017/18}
\end{table}

\footnotetext{21}{Average tax rates are calculated by dividing the total tax liability under income tax and Class 1 employee NICs combined by gross annual income.}

Source: Authors analysis using HM Revenues and Customs, ‘Rates and allowances’ (HMRC 2018)

*The current system represents the effective tax rates from income tax and Class 1 employee NICs combined.
Our distributional analysis of household income shows that the effects of moving to our illustrative tax schedule would be highly progressive for the top half of the income distribution (see figure 2.2). Families in the top two deciles would have to contribute more in tax, while households in the middle of the distribution would on average keep an extra £500 to £600 in take-home pay.

**FIGURE 2.2**

A fiscally neutral transition to a formula-based tax schedule could boost incomes for most families

*Effects of moving to an illustrative formula-based tax schedule compared with a world where the 2017/18 schedule remains in place, disposable household income before housing costs by equivalised income deciles, 2017/18*

Comparing our illustrative scenario to the present system, all families in the bottom half of the distribution would take home more of their income after tax, but the gains get smaller for lower-income families (see figure 2.2 above). This reflects the fact that earnings from employment above the tax-free allowance make up an increasingly small share of their overall income. In practice our reforms would likely be even more progressive still. Our modelling results don’t show the effects of taxing income from dividends and savings, which would be likely to disproportionately affect individuals with higher incomes and higher stocks of wealth. Nonetheless, as demonstrated in section 1.2 above, there is likely to be a limit to what can be achieved at the bottom end of the income distribution through reforms to income taxes alone. The best way of achieving greater progressivity for the very poorest families would be to increase generosity in the welfare system, paid for by increased revenue from the highest-income families, including through income taxes.

The effects of our reforms all but maximise the extent to which income taxes alone can be used to make the tax system as a whole more progressive. Further marginal gains (in terms of progressivity) could be made by increasing the tax-free allowance and paying for it through even steeper progressive tax functions further up the distribution. However even this would not reach the lowest-income families and individuals, who are either out of work or on earnings below the existing tax-free allowance. Meanwhile, higher marginal rates in the middle and at the top of the distribution would reduce the likely coalition of support for
the policy. Our reforms would affect the relative burden of the whole tax system. Compared with total tax liabilities as a proportion of income under the current system, our reforms would make the whole system clearly progressive between the second and fifth quintiles, while, unlike the current system, also ensuring that the top quintile pays the most tax overall (see figure 2.3).

**FIGURE 2.3**

A formula-based income tax would make the overall burden of taxes more progressive, but its effects for the poorest households would be limited

*Total average tax liability by equivalised household income quintile as a proportion of gross income, 2015/16*

![Figure 2.3 Graph](image)

Source: Author’s analysis using Office for National Statistics, ‘The effects of taxes and benefits on household income’ (ONS 2017a) and the IPPR tax and benefit model based on Department for Work and Pensions, ‘Family Resources Survey: financial year 2015/16’ (DWP 2017b)

Using a single, formula-based tax schedule could also improve on the current system in terms of efficiency. Marginal rates are decreased at the lower end of the income distribution by virtue of swapping out the large ‘cliff’ after the personal allowance, for a gradual increase in the marginal rate. For the most part, the effect of moving to our illustrative scenario would see tax rates cut the most, the closer an income is to the current personal allowance. This means incentives to either start or increase work are targeted to where they are most needed: the point at which effective marginal tax rates can be at their highest for income tax payers due to the withdrawal of means tested benefits for low earners.22

For a main earner on minimum wage and from a couple with two children, an increase in pay of £1 per hour could see net take-home pay increase by 10p for every hour worked under our illustrative formula-based schedule, compared with the current system (IPPR analysis using HMRC 2018 and Finch 2017). This would represent an increase in hourly take-home pay of up to 40 per cent compared with the current system.

At the same time, increases to the average and marginal rates – which are required to keep the system cost neutral overall – are spread fairly evenly across the rest of the income distribution. For the very highest earners, for benefit withdrawal even lower down the income distribution can mean that effective marginal rates are higher still for people who pay no tax at all.
whom behavioural responses are thought to be keener compared with the middle of the distribution, effective marginal rates are only 3 percentage points higher than under the current system. Whether or not our illustrative scenario judges correctly the precise balance between lower rates at the bottom and higher rates at the top, a formula-based approach provides an advantage in being able to fine tune marginal rates right across the income distribution. This gives policy makers far more precision in improving the work incentives and efficiency of the tax schedule, depending on changes in the distribution and composition of the labour market across time.

Our proposals would also improve efficiency by removing the arbitrary treatment of different sources of income. Compared with the current system, higher rates for income from paid employment would be abolished and perverse financial incentives to have multiple jobs would be reduced. Arbitrary employment and economic decisions for the sole purpose of minimising tax liability would therefore be reduced.

Transparency could also be improved, since everyone’s tax rate would be published under a single schedule, and allowances and schedules would not vary depending on the source of income. However, the system would be mathematically more complex, and perhaps less intuitive to taxpayers than the current system. This could potentially allow government to deliberately obfuscate and hide its objectives within a system that nobody fully understood: if this were the case, it would undermine transparency, rather than improve upon it. However, we do not believe this would necessarily be the case. First, although the current system may be perceived by some to be simpler, it is likely that few people actually know their true effective rate of tax across all current schedules and allowances. The point of withdrawal of the personal allowance, and the effects of employee NICs and income tax on incomes above £45,000 are good examples. Second, this asymmetry between perceived and actual understanding means that governments can currently describe policy changes in their technical form (for example, promising to raise the personal allowance) while using their counter-intuitive effects to ensure that few people recognise the actual regressive implications. By contrast, the perceived complexity of a formula-based schedule could actually be advantageous for the purposes of transparency. Governments would be forced to describe tax reforms not in their technical form – because this would be too complex – but in terms of what they would actually mean for different income groups. This could move the debate on to a more transparent discussion about policy objectives and impacts, providing less cover to hide behind technical descriptions of reforms.

**REVENUE RAISING**

For a government that is prepared to take seriously the need to raise significant additional revenue over the coming decades, a formula-based tax schedule presents considerable advantages compared with the current system. Because the effect of our formula-based illustration is to redistribute the tax burden from lower to higher earners, there is significant scope to increase revenues by giving slightly less back to those individuals that stand to gain.

Figure 3.4 presents the proposed schedules of the Labour party and Liberal Democrats at the 2017 general election. Each was designed to bring in around £6 billion in additional revenue. The Liberal Democrat proposal was to raise the rate of tax by 1 per cent for each current tax band, while Labour proposed to lower the threshold for the additional rate to £80,000 and introduce a new top rate of tax at 50 per cent for incomes above £123,000.
Alongside these proposals we present a second illustration of the formula-based system, this time designed to also bring in around £6 billion extra per year compared with the current system. Because of data limitations (see footnote 19 above) this illustrative scenario for a formula-based tax schedule does not apply higher rates to income from savings and dividends. This means it is likely to represent an underestimate of the increase in total receipts. In addition to these scenarios, we also show the present tax schedule for 2017/18.

Both the Labour and Liberal Democrat solutions build incrementally on the existing system of tax bands, and so retain the effect of cliffs in the schedule, as well as the anomalous effect of withdrawing the personal allowance. However, the additional receipts under the Labour proposal are drawn solely from the 5 per cent of income tax payers earning over £80,000 per year. This means significant increases in the marginal rate at the top of the distribution, and an effective marginal rate of 67 per cent for incomes between £100,000 and £123,000, which may be avoided by some individuals by income shifting from one year to the next. In general, Labour’s proposals are open to the critique that they make the UK tax base vulnerable by increasing its reliance on just 5 per cent of income tax payers (Miller and Roantree 2017). The Liberal Democrat proposals avoid the problem of narrowing the distribution. But, because they rely on an unreformed version of the existing system of thresholds and bands, they increase tax liabilities even further.

23 Although the Labour party estimates that its proposals would raise £6 billion, the possibility of behaviour responses from the very richest taxpayers – such as changing employment status or ‘income shifting’ – means that the actual revenues raised could be less. A formula-based schedule is less vulnerable to such behavioral responses since taxes are raised from a broader base.

FIGURE 2.4
A formula-based tax can raise as much revenue as both the Labour and Liberal Democrat manifesto proposals by raising the starting rate of tax after the tax-free allowance

Effective marginal rate for taxation of income under an illustrative formula-based schedule, the current schedule* and the Labour and Liberal Democrat party UK manifesto proposals, 2017/18

Source: Authors analysis using HM Revenues and Customs ‘Rates and allowances’ (HMRC 2018), Labour Party, Funding Britain’s future (Labour Party 2017) and Liberal Democrats, Our Plan (Liberal Democrats 2017)

Note: *The current system represents the effective tax rates from income tax and Class 1 employee NICs combined.

24

Alongside these proposals we present a second illustration of the formula-based system, this time designed to also bring in around £6 billion extra per year compared with the current system. Because of data limitations (see footnote 19 above) this illustrative scenario for a formula-based tax schedule does not apply higher rates to income from savings and dividends. This means it is likely to represent an underestimate of the increase in total receipts. In addition to these scenarios, we also show the present tax schedule for 2017/18.
for the very poorest taxpayers (see figures 2.5 and 2.6). Nobody ‘wins’ under their proposals, which makes the politics of this approach all the more challenging.

Our illustrative, formula-based scenario raises similar amounts of revenue compared with both the Labour and Liberal Democrat proposals. However, it avoids the pitfalls of overly narrowing the tax base, while also still creating a significant majority of ‘winners’ through the reform. The schedule is identical to our revenue-neutral scenario, except that the first phase of linear progression starts at 7 per cent rather than 3 per cent (and is slightly less steep). Under this scenario, the £6 billion in revenue is raised with less vulnerability to income shifting compared with Labour’s proposals, while 80 per cent of income tax payers would still see a rise in their take-home pay.

**FIGURE 2.5**

A formula-based tax can raise more than £6 billion and still increase post-tax incomes for salaries below £42,000

Effective average rate for taxation of income under an illustrative formula-based schedule, the current schedule* and the Labour and Liberal Democrat party UK manifesto proposals, 2017/18

Source: Authors analysis using HM Revenues and Customs ‘Rates and allowances’ (HMRC 2018), Labour Party, *Funding Britain’s future* (Labour Party 2017) and Liberal Democrats, *Our Plan* (Liberal Democrats 2017)

Note: *The current system represents the effective tax rates from income tax and Class 1 employee NICs combined.
FIGURE 2.6
A formula-based tax can raise more than £6 billion and still increase post-tax incomes for most households

Distributional effects of raising around £6 billion per year from Liberal Democrat, Labour and illustrative IPPR proposals compared with a world where the 2017/18 schedule remains in place, disposable household income after housing costs by equivalised income deciles, 2017/18

Source: Author’s analysis using the IPPR tax and benefit model based on Department for Work and Pensions, ‘Family Resources Survey: financial year 2015/16’ (DWP 2017b)

In order to stress-test the revenue-raising potential of a formula-based schedule we also conducted a third illustrative scenario aimed at raising more than double this level of additional receipts – around £16 billion per year. This would raise overall taxation by less than a single percentage point of GDP, so it is not implausible that increases on this scale could be required to meet a future government’s spending priorities. In our third illustrative scenario we increase additional revenues by more than £15 billion by reducing the gains in the system at the lower end of the distribution. Despite this, the scenario shows that these revenues could be found while keeping the schedule for incomes above £45,000 almost identical to our first two illustrations. This would mean that no one with an annual income below £38,000 – more than 75 per cent all taxpayers – would lose out compared with the present schedule. Attempting to raise similar levels of funds by extending the approach of the Labour party or Liberal Democrats would lead either to extremely high top rates of tax or else significant losses for the UK’s poorest households, respectively. Our full analysis of marginal tax rate schedules, average tax rates and household distributional results for these even higher revenue-raising scenarios are set out in figures 2.7 to 2.9 below. Table 2.1 presents a summary scorecard of all tax schedules explored in detail by this policy paper.
### TABLE 2.2
Scorecard of alternative systems for taxing incomes, 2017/18

<table>
<thead>
<tr>
<th>Variables</th>
<th>Current schedule*</th>
<th>IPPR illustration 1</th>
<th>IPPR illustration 2</th>
<th>Labour</th>
<th>Liberal Democr ate</th>
<th>IPPR illustration 3</th>
<th>Labour counter factual**</th>
<th>Liberal Democrat counter factual**</th>
</tr>
</thead>
<tbody>
<tr>
<td>rates and allowances depending on income source</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cliffs in the marginal tax schedule after the starting rate of tax</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Highest effective rate of tax (%)</td>
<td>62</td>
<td>50</td>
<td>50</td>
<td>67</td>
<td>63</td>
<td>50</td>
<td>77</td>
<td>64.5</td>
</tr>
<tr>
<td>Final effective flat rate of tax (%)</td>
<td>47</td>
<td>50</td>
<td>50</td>
<td>52</td>
<td>48</td>
<td>50</td>
<td>62</td>
<td>49.5</td>
</tr>
<tr>
<td>Effective tax-free allowance (£)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8,163</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues raised (£ billion)**</td>
<td>-</td>
<td>0</td>
<td>6.1</td>
<td>5.8</td>
<td>6.5</td>
<td>15.8</td>
<td>16.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Net 'winners' (% of all taxpayers)</td>
<td>-</td>
<td>84</td>
<td>80</td>
<td>No</td>
<td>No</td>
<td>75</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Net 'losers' (% of all taxpayers)</td>
<td>-</td>
<td>16</td>
<td>20</td>
<td>5</td>
<td>100</td>
<td>25</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s analysis using the IPPR tax and benefit model based on Department for Work and Pensions, ‘Family Resources Survey: financial year 2015/16’ (DWP 2017d), HM Revenues and Customs, ‘Rates and allowances’ (HMRC 2018), HM Revenues and Customs, ‘Percentile points from 1 to 99 for total income before and after tax’ (HMRC 2017), Labour Party, Funding Britain’s future (Labour Party 2017) and Liberal Democrats, Our Plan (Liberal Democrats 2017)

Note:
* The current system represents the effective tax rates from income tax and Class 1 employee NICs combined.
** Our ‘Labour counterfactual’ scenario requires a marginal rate of 57 per cent on incomes above £80,000, an effective marginal rate of 77 per cent on incomes between £100,000 and £123,000 and a final marginal rate of 62 per cent on incomes above £123,000. Our ‘Liberal Democrat counterfactual’ scenario requires an increase of 2.5 percentage points on every tax band.
*** Estimates of receipts based on analysis using the IPPR tax and benefit model and exclude behavioural effects. IPPR illustrations exclude the effects of taxing dividends and savings at the same effective rate as income from employment, and so represent slight underestimates of increased receipts.
A formula-based tax can raise around £16 billion without excessively high top rates of tax

Source: Authors analysis using HM Revenues and Customs ‘Rates and allowances’ (HMRC 2018), Labour Party, Funding Britain’s future (Labour Party 2017) and Liberal Democrats, Our Plan (Liberal Democrats 2017)

Notes: *The current system represents the effective tax rates from income tax and Class 1 employee NICs combined.
**Our ‘Labour counterfactual’ scenario requires a marginal rate of 57 per cent on incomes above £80,000, an effective marginal rate of 77 per cent on incomes between £100,000 and £123,000 and a final marginal rate of 62 per cent on incomes above £123,000. Our ‘Liberal Democrat counterfactual’ scenario requires an increase of 2.5 percentage points on every tax band.

Effective marginal rate for taxation of income under an illustrative formula-based schedule, the current schedule* and Labour and Liberal Democrat counter factual scenarios**, 2017/18
FIGURE 2.8
A formula-based tax can raise around £16 billion and still increase post-tax incomes for salaries below £38,000

Effective average rate for taxation of income under an illustrative formula-based schedule, the current schedule and Labour and Liberal Democrat counterfactual scenarios*, 2017/18

Source: Authors analysis using HM Revenues and Customs ‘Rates and allowances’ (HMRC 2018), Labour Party, Funding Britain’s future (Labour Party 2017) and Liberal Democrats, Our Plan (Liberal Democrats 2017)

Notes: *The current system represents the effective tax rates from income tax and Class 1 employee NICs combined. **Our ‘Labour counterfactual’ scenario requires a marginal rate of 57 per cent on incomes above £80,000, an effective marginal rate of 77 per cent on incomes between £100,000 and £123,000 and a final marginal rate of 62 per cent on incomes above £123,000. Our ‘Liberal Democrat counterfactual’ scenario requires an increase of 2.5 percentage points on every tax band.
FIGURE 2.9
A formula-based tax can raise around £16 billion and still increase post-tax incomes for the poorest 40 per cent of households

Distributional effects of raising around £16 billion per year from counterfactual Liberal Democrat and Labour proposals, an illustrative IPPR proposal, and compared with a world where the 2017/18 schedule remains in place, disposable household income after housing costs by equivalised income deciles, 2017/18

Source: Author’s analysis using Office for National Statistics, ‘The effects of taxes and benefits on household income’ (ONS 2017a) and the IPPR tax and benefit model based on Department for Work and Pensions, ‘Family Resources Survey: financial year 2015/16’ (DWP 2017b)

Note: Our ‘Labour counterfactual’ scenario requires a marginal rate of 57 per cent on incomes above £80,000, an effective marginal rate of 77 per cent on incomes between £100,000 and £123,000 and a final marginal rate of 62 per cent on incomes above £123,000. Our ‘Liberal Democrat counterfactual’ scenario requires an increase of 2.5 percentage points on every tax band.
Conclusion

The UK’s system of taxing incomes fails against three simple tests of efficiency, progressivity and system coherence. Replacing it with a formula-based system that combines income tax and employees’ national insurance contributions would improve both efficiency and progressivity. It would also make revenue-raising fairer and almost certainly politically easier. Such a system is already used in Germany and there is now a strong case for introducing it here.
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The IPPR Commission on Economic Justice is a landmark initiative to rethink economic policy for post-Brexit Britain. The Commission brings together leading figures from across society to examine the challenges facing the UK economy and make practical recommendations for reform.

This policy paper sets out a mechanism for improving the progressivity, efficiency and revenue raising potential of income taxes in the UK. It proposes a major reform of the current system, with two elements. First, income tax and employee national insurance contributions would be combined into a single tax ‘schedule’, with all sources of income taxed at the same rate, and on the same basis. Second, the existing system of marginal tax bands would be replaced by a ‘formula-based’ system such that every taxpayer’s marginal rate would depend on their own precise level of income. The paper argues that such a system would be more efficient and progressive, and in addition could be used to raise revenues in a way that is fairer and more politically acceptable than the current system.