The distributional impact of personal tax and benefit reforms, 2010 to 2019

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Key findings

- The tax and benefit system has undergone significant reform since 2010, with large cuts to working-age benefits, increases in the state pension, a rise in VAT, and reductions in direct tax, including a big rise in the tax free personal allowance.

- Low income households have lost out from these changes overall, especially those with children. The poorest 10% of households have seen losses of 7% of their income (£800 per year) as a direct result of these reforms; among those with children the figure rises to 18% (£3,800).

- The highest income households have also lost out from tax rises. The highest income 10% have seen losses of 4% (£2,200 per year).

- Pensioners have broadly been protected, seeing on average a 1-2% gain as a consequence of tax and benefit policies.

- These reforms have broadly served to strengthen work incentives, with workers in poorer households in particular keeping more of an extra pound of earnings.
The tax and benefit system has undergone significant reform since 2010, with large cuts to working-age benefits, a rise in the main rate of VAT, increases in the rate of the state pension, and reductions in direct tax, including a big rise in the income tax personal allowance. In this briefing note we investigate the impact that these reforms have had on household incomes. An earlier briefing note discussed the benefits policy challenges that the next government will face.

**Methodology**

It is worth noting a few brief methodological points.

First, we restrict our analysis to the ‘pre-behavioural’ effect of reforms – in other words, how they change household incomes if individuals do not alter their patterns of work and spending as a result.

Second, since 2010 the ‘uprating rules’ that determine how tax and benefit thresholds and amounts increase each year by default have changed. In April 2010, most amounts and thresholds went up in line with RPI inflation by default; since then most have been changed to using CPI inflation. In addition, the default uprating of the state pension has changed from growth in average earnings to ‘triple lock’ of the greater of growth in earnings, prices, and 2.5%. In our main results we do not include the impact of such reforms. It would be odd to continue counting these as reforms forever: their impact will grow every year into the future, and RPI inflation is now a discredited measure of inflation so the impact of not using it for tax and benefit uprating seems increasingly uninteresting. Nevertheless, these decisions are in another sense an important part of how benefit levels have changed since 2010, so in Appendix B we also present the results which include the impact of indexation changes made since 2010.

Third, we additionally present some statistics where include not just the reforms that have happened over the past three parliaments (since April 2010), but also the reforms that happened in April 2010 itself, just before the outgoing Labour government left office. This incorporates the significant reforms to income tax for those on the highest incomes that were undertaken in that month. We discuss these in further detail below.

Fourth, our analysis covers changes to income tax, National Insurance contributions (NICs), council tax, value added tax (VAT), duties on fuel, alcohol and tobacco, state pension rates, benefits and tax credits. We do not include most ‘business taxes’ such as corporation tax, nor capital taxes such as capital gains tax. A full list of the policies we analyse is available in Appendix A.

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1 The impacts of temporary changes to the way in which benefits are uprated are still included in all of our analysis – in particular the uprating of most working-age benefits by 1% per year in 2013, 2014 and 2015 and the 4-year freeze between 2015 and 2019.

2 Excluding the impact of changes to default uprating means that the ‘baseline system’ that we compare the current one to is the April 2010 system uprated each year using the uprating rules that prevailed in each year in question. Including the impact of changes to default uprating means that the ‘baseline system’ is the April 2010 one uprated using the default uprating rules that were in place in 2010.

3 We do include employer NICs, assuming that changes in employer NICs are passed on to employees in higher or lower wages such that the total cost to employers remains constant.
Fifth, we model the impact of reforms on benefit entitlements, rather than benefit receipt. These can differ because some people do not take-up their full entitlement.

Sixth, for policies which only affect very high income individuals, we use administrative data and (pre-behavioural) costings to assess their total effects, and apportion those effects across household income deciles using our household survey data. We also calculate total income in high income deciles using information from the Survey of Personal Incomes.

**Distributional impact of reforms**

Figure 1 shows the impact of reforms implemented or announced since 2010–11, once they are all fully rolled out. All cash figures are in current (2019–20) prices. There are several things to note from the figure.

First, over most of the income distribution, poorer households have seen larger (proportional) losses as a result of reforms: as shown shortly, this is a consequence of benefit cuts affecting low income households more and tax cuts affecting higher income households more.

Second, the top 10% (decile) of households has seen a 2.0% fall in income as a result of reforms. Importantly, because we are looking at the impacts of reforms over the past three parliaments (since May 2010), this does not include the effect of reforms that happened in April 2010, immediately before the Coalition took office. Those reforms included the introduction of the additional rate of income tax for those with incomes over £150,000 and the reduction or removal of the personal allowance for those with incomes over £100,000. If we compare the current tax and benefit system to that which was in place in March (rather than May) 2010, the picture is very different for those with the highest incomes: the top decile loses 5.2% (£5,700 per year) instead of the 2.0% (£2,100 per year) presented in Figure 1.

Third, while reforms under the Coalition led to the biggest gains for households in the upper middle part of the income distribution – with takeaways for those at the top and bottom – the tax and benefit reforms under the Conservative governments have been regressive, with higher income deciles gaining more (losing less) than lower income ones. Reforms introduced between April 2010 and May 2015 resulted in a 4% decrease in the incomes of the top decile (richest 10%), while those introduced since May 2015 increase their incomes by 2%.

As noted above, this analysis excludes the effects of changing the default uprating rules for tax and benefits thresholds and amounts. An equivalent to Figure 1 (and subsequent figures) which does include these changes is available in Appendix B. The main difference

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4 Policies which are currently being rolled out include the transition to Universal Credit, the ‘two child limit’ in means-tested benefits, the removal of the family premium in means-tested benefits, the removal of the Work Related Activity Group premium in Employment and Support Allowance and Universal Credit, and the transition from Disability Living Allowance to Personal Independence Payments. We model these policies as fully in place.
from including changes to uprating rules is to make the estimated losses larger (or gains smaller) by 1-2% across most of the distribution.

**Figure 1. Impact of tax and benefit reforms, April 2010 to April 2019, with all reforms fully in place**

Note: For the cash equivalents of these impacts, see Figure 7 in Appendix C. Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, TAXBEN, the IFS tax and benefit microsimulation model, and the Survey of Personal Incomes.

Figure 2 repeats the exercise from Figure 1 but splits reforms into those which changed taxes and those which changed benefits (including tax credits). Not surprisingly, benefit cuts have had the largest impact on poorer households as benefit income is not as important source of income for households in the top half of the income distribution. Conversely, tax reforms have had the largest proportional impact on households around the middle of the income distribution. This is because lower income households do not benefit as much from reductions in direct tax, as they often have little in the way of taxable income. Households across the distribution are affected by increases in indirect taxes roughly equally. Furthermore, higher income households have seen smaller gains than middle income households (as a share of net income) both because increases in the personal allowance do not have as a large proportional impact on them and because cuts to the higher rate threshold disproportionately affect them.

5 Figure 2 shows the impact of all taxes as a share of income. On this basis, indirect tax rises look slightly regressive; however, as argued in Mirrlees (2010), the distributional effect of indirect taxes is better analysed as a share of a household’s expenditure. On this basis indirect taxes are roughly distributionally neutral.
The distributional impact of personal tax and benefit reforms, 2010 to 2019

Figure 2. Impact of tax and benefit reforms, April 2010 to April 2019, with all reforms fully in place, split into tax and benefit reforms

Note: For the cash equivalents of these impacts, see Figure 8 in Appendix C. Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.

Figure 3 splits the impact of reforms on different household types. Pensioner households have on average been little affected by reforms since 2010: they have benefited from increases to pension credit and reductions in income tax, but have lost out from increases in indirect tax and cuts to housing benefit. As previously discussed, this analysis excludes the effect of introducing the ‘triple lock’ to the state pension. If we were to include that in our analysis, the impact on pensioner incomes would be to have increased them by more. Excluding those on the highest and lowest incomes, working-age households without children have if anything gained slightly on average: they are largely not entitled to benefits and so do not lose out from benefit cuts, whereas many gain from income tax cuts. But those in the bottom 10% are more likely to be exposed to benefit cuts and so have lost out from reforms. Working-age families with children, especially poorer ones, have clearly done the worst out of changes in tax and benefit policy since 2010. Poor families with children typically have relatively high benefit entitlements and so are more exposed to cuts. This has resulted in very large average losses at the bottom for this group.
As discussed above, the analysis presented here does not incorporate any impacts of the reforms on patterns of work or spending. We can however investigate what these reforms do to work incentives. We find that tax and benefit reforms since April 2010 mean that across the income distribution the incentive to be in work is on average strengthened, especially for those in low income households. Across most of the distribution those in work also on average keep more of an extra pound earned, though this is not true for those at the top, who, due to the cut in the higher rate threshold, have experienced a slight decrease in the amount of an extra earned pound that they can take home.6

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6 This paragraph refers to two measures of financial work incentives: the average marginal effective tax rate (METR) and the average participation tax rate (PTR), calculated by household disposable income decile for those in work. The METR measures the proportion of a small increase in gross earnings is lost due to transfers (an increase in taxes and/or reduced benefit entitlements), The PTR measures the proportion of gross earnings taken in tax or reduced benefits if an individual moves into work.
Appendix A – policies modelled

The policies modelled as having been implemented between April 2010 and May 2015 include:

• Reduction in the additional rate of income tax from 50% to 45%
• Reductions in annual and life allowances for tax relief on pension contributions
• Reduction of local housing allowance rates from the median to the 30th percentile of the Broad Rental Market Area, and subsequent real terms cuts
• Removal of the local housing allowance ‘excess’
• 1% nominal cap on increases in most working-age benefits and tax credits from April 2013
• Time-limiting contributory ESA to one year for the Work Related Activity Group
• Various discretionary changes (largely cuts) to tax credits
• Increase in the main VAT rate
• Increases in NICs rates
• Increases in the personal allowance
• Reduction in the higher rate threshold and upper earnings limit
• Fuel duty freezes
• Real terms changes in council tax
• Increases in insurance premium tax
• Cuts to council tax support
• Introduction of high income child benefit tax charge
• Introduction of the so-called ‘bedroom tax’
• Increases in tobacco duty
• Reductions in duties on beer, increases in duties on wine and spirits
• Introduction of the transferable marriage allowance

The policies modelled as having been implemented since May 2015 include:
• Tapering of the annual allowance for pensions tax relief for those with total income above £150,000

• Reduction in the lifetime allowance for pension contributions

• Freeze of most working age benefits between April 2015 and March 2020

• Local housing allowance rate freeze between April 2015 and March 2020

• The cut in the benefit cap, the introduction of higher caps in London, and the introduction of the cap in Northern Ireland

• Increase of the personal allowance to £12,500

• Increase of the higher-rate threshold and upper earnings limit to £50,000

• Real terms changes in council tax

• Council tax increases for bands E–H in Scotland

• Introduction of the personal savings allowance

• ‘Tax free childcare’

• Fuel duty freezes

• Increase in insurance premium tax

• Reductions and freezes in beer, wine and spirits duties

• Transition from disability living allowance to personal independence payment

• Abolition of the work-related activity group premium in ESA

• Abolition of Class 2 National Insurance contributions

• Transition from the legacy system to universal credit (UC)

• Limiting the child element in tax credits and UC to two children

• Removal of the family element in tax credits and UC and family premium in housing benefit

• Support for mortgage interest switched from a benefit to a loan

• Increase in UC work allowances

• Partial implementation of the single tier pension
Appendix B – analysis incorporating effects of changing default uprating rules

Figure 4. Impact of tax and benefit reforms, April 2010 to April 2019, including the effects of changing default uprating rules, with all reforms fully in place

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.
Figure 5. Impact of tax and benefit reforms, April 2010 to April 2019, including the effects of changing default uprating rules, with all reforms fully in place, split into tax and benefit reforms.

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.
Figure 6. Impact of tax and benefit reforms, April 2010 to April 2019, including the effects of changing default uprating rules, with all reforms fully in place, split by household type

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place. A pensioner household is one which contains at least one person over state pension age.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.
Appendix C – distributional analysis in cash terms

Figure 7. Impact of tax and benefit reforms, April 2010 to April 2019, with all reforms fully in place, in £ per year

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.
Figure 8. Impact of tax and benefit reforms, April 2010 to April 2019, with all reforms fully in place, split into direct tax, indirect tax, and benefit reforms, in £ per year

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.
Figure 9. Impact of tax and benefit reforms, April 2010 to April 2019, with all reforms fully in place, split by household type, in £ per year

Note: Income decile groups are derived by dividing all households into 10 equal-sized groups according to net income adjusted for household size using the modified OECD equivalence scale. Assumes full take-up of means-tested benefits and tax credits, and that all planned changes are fully in place. A pensioner household is one which contains at least one person over state pension age.

Source: Authors’ calculations using the Family Resources Survey 2017–18, the Living Costs and Food Survey 2017–18, and TAXBEN, the IFS tax and benefit microsimulation model.