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Results Write Up: Exploring the financial impact of flat rate pensions tax relief

Analysis sponsored by the Pensions and Lifetime Savings Association (PLSA)

PENSIONS AND LIFETIME SAVINGS ASSOCIATION

About this paper

This write up details of analysis undertaken for the Pensions and Life Savings Association. It includes:

- Background to the analysis.
- Detail of the current pensions tax relief system and the reform scenarios.
- Key features of the vignettes modelled.
- Observations and commentary upon the results
- Conclusions

Full results of the modelling are available in a separate appendix.

Tim Pike, PPI Head of Modelling, carried out the modelling and produced this write up in May 2021.

The PPI is grateful for the input from Jackie Wells and Nicky Day, PLSA, in the production of this paper. Editing decisions remains with the author who takes responsibility for any remaining errors or omissions.

Section 1: Background and current system

Introduction

The Pensions and Lifetime Savings Association (PLSA) is interested to understand the impact of implementing reforms to pensions tax relief upon members of pension schemes. These are to be compared to the current system of pension tax relief administered through either Net Pay or Relief at Source arrangements. The reform options assessed include implementations of a TEE structure and flat rates of tax relief applied to both Defined Contribution (DC) and Defined Benefit (DB) pension schemes. These individual impact assessments will go towards informing the PLSA's discussions on pensions tax relief.

National Insurance contributions relief

The reforms and impacts considered here only relate to the relief of income tax. National Insurance contribution relief, whereby employer pension contributions do not attract a liability for National Insurance contributions, is out of scope of this modelling. All results and impacts detailed in this paper are before National Insurance contributions are taken into account.

The current system

The current system of tax relief is described as EET. This refers to the points at which tax is paid:

- **E**xempt from income tax on contributions paid into pension contributions;
- **E**xempt from tax on the investment returns generated by the savings;
- **T**axed as income when money is taken from the pension savings.

Defined Contribution schemes

The tax relief on pension contributions into a DC pension scheme can be administered through one of two arrangements, either a Net Pay arrangement or a Relief at Source arrangement.

Net Pay

Under a Net Pay arrangement, pension contributions are made before income tax liabilities are assessed. Contributions are deducted from gross earnings and income tax is never deducted. This means that tax relief received is for the highest rate of income tax the member pays. This results in non-taxpayers not receiving tax relief under a Net Pay arrangement as there was no income tax liability that could be relieved.

Relief at Source

Under a Relief at Source arrangement pension contributions are made after income tax has been deducted. The scheme claims tax relief on contributions from members at a flat rate of 20%, equivalent to the basic rate of income tax. This is a benefit to non-taxpayers as they receive the addition to their contributions, however, higher and additional rate taxpayers must claim the rest of the tax relief to which they are entitled through self-assessment tax returns. This additional tax relief will not necessarily contribute to pension savings (and in the modelling undertaken is assumed to contribute to net income rather than pension saving).

Defined Benefit schemes

DB pensions schemes are administered under Net Pay arrangements.

Section 2: The reforms

Alternative approaches to pensions tax relief have been modelled for Defined Contribution and Defined Benefit pension schemes.

Defined Contribution reform scenarios modelled

TEE

In place of the current EET system (described above) a TEE system is introduced such that employee pension contributions are subject to income tax and employer pension contributions become a taxable benefit increasing the income tax liability for members. However, income taken from the pension is exempt from income tax (the only modelled arrangement where this is the case).

Contribution rates have been adjusted so that the employee's take home pay is the same as under a Net Pay arrangement (allowing for income tax).

Flat Rate

To administer a flat rate of tax relief, employee contributions are subject to income tax, and employer contributions are subject to income tax as under the TEE system. However, the scheme claims tax relief at a flat rate (20%, 25%, 30%, 33%) upon the contributions paid into the scheme. This will result in a higher or lower total pension contribution dependent upon the marginal rate at which the member is liable for income tax.

Contribution rates have been adjusted so that the employee's take home pay is the same as under a Net Pay arrangement (allowing for income tax).

Defined Benefit reform scenarios modelled

Flat Rate

Under an approach of flat rate of tax relief, contributions are made to the pension scheme as under a Net Pay arrangement. The income tax liability associated with the Defined Benefit scheme contributions is fully relieved. The member's taxable income is reduced by the amount of their Defined Benefit scheme contribution. This ensures the contributions meet the needs of the scheme.

An additional income tax liability and corresponding income tax relief is calculated for each member (including deferred members) based upon the pension input amount as used for calculating any tax liability associated with the Annual Allowance. This may result in either an additional income tax liability or rebate for the member. The pension input amount is calculated using the formula (as applied for testing against the Annual Allowance):

Pension Input Amount =
16 × ([Opening entitlement] × [Increase in CPI] - [Closing entitlement])

16 – pension valuation factor
Opening entitlement – the annual benefit accrued at the beginning of the year
Increase in CPI – the factor by which the CPI index has changed over the year
Closing entitlement - the annual benefit accrued at the end of the year

The income tax liability is calculated by treating the Pension Input Amount as a taxable benefit. The income tax relief is calculated by multiplying the Pension Input Amount by the flat rate of tax relief. In the modelling undertaken the additional income tax due or rebate owed is applied to net income rather than being paid by the pension scheme.

Section 3: Vignettes considered

Introduction

Several vignettes have been projected to illustrate the potential impact of the reform scenarios. They have been selected to show how the reforms could impact individuals earning at different levels and thus the effect of the reform under different income tax rates.

Seven individuals have been modelled with each exhibiting three different pension saving patterns. The impact of the pension tax reform scenarios have been projected for:

- DB pension saving: four flat rates of tax relief reform compared to the current system;
- DC pension saving: TEE and four flat rates of tax relief reform compared to the current system under both Net Pay and Relief at Source arrangements.

Results for every scenario are available in the separate Appendix which can be downloaded here.

The reforms are modelled to be implemented immediately. While there is no timescale for any potential reform to be enacted this illustrates the impact for individuals subject to the reform over the entirety of their working life.

No consideration is given here of the complexity of introducing these reforms, either politically or practically. For instance, charges and fees associated with schemes remain the same across each reform scenario.

The projections have been made using the PPI's Individual Model. For further detail upon the model and the assumptions used to project the scenarios please see the Appendix: The PPI Individual Model.

Metrics

The analysis focuses on:

- Working life income as a result of paying pension contributions and income tax liabilities;
- Retirement income as a result of any impact on pension savings or the tax position.

There is no consideration of the economics of the pension scheme, including how costs and charges may be impacted. There is no impact analysis on the total cost of tax relief to the exchequer under each scenario, nor is there analysis of how representative each vignette is.

Pension participation and behaviour

Each of the individuals has been modelled under three alternative pension provisions. These reflect current DC and DB pension schemes in the workplace.

Defined Contributions (DC)

Two variations of DC pension schemes have been projected. The first is at automatic enrolment minimum contribution levels, the second uses a contribution rate of 12% (split 6% from the employee and 6% from the employer) in line with PLSA's recommendation for DC pension contribution levels.[1]

Under a Relief at Source pension arrangement, higher rate tax-payers are assumed to make a self-assessment tax return to claim tax relief beyond the 20% claimed by the scheme. This amount is assumed to not become part of pension saving, but is taken by the individual as a component of take home pay.

Members are assumed to maintain their contribution level (allowing for their personal income tax liability) in each scenario.

At retirement (at State Pension age) it is assumed the member withdraws 25% of the pot as a tax-free lump sum, and the remainder of the pot is used to generate an income using a drawdown arrangement. The drawdown amount in the first year is set at 3.5% of the fund (after lump sum), and the amount increases in line with CPI throughout retirement (subject to available funds).

Defined Benefits (DB)

The illustrative DB pension scheme modelled is derived from the 2015 NHS pension scheme. Including the following features:

Contribution rates

Employee contributions are tiered, based on salary, from 5% to 14.5%. Employer contributions are fixed at 20.6%.

Benefit accrual

The scheme uses an accrual rate of 54^{ths}. At retirement 25% of the income is converted to a lump sum under scheme rules.

Benefit revaluation

Accrued benefit is increased as Career Average Revalued Earnings (CARE), with benefits for active members increasing at CPI + 1.5% and for deferred members at CPI.

Tax relief scenarios

The individuals have been modelled under the tax relief systems detailed above. The systems modelled are: Net Pay; Relief at Source (DC schemes only); TEE (DC schemes only); flat rate of relief at 4 different rates (20%, 25%, 30%, 33%).

The individuals

Figure 1: The individuals modelled

This identifies the key features of each individual as projected from 2021

Individual	Age in 2021	Ret. age	Ret. year	Working age income trajectory	Working age tax trajectory	Pension saving trajectory	Ref
Low pay	22	68	2067	Income of £12,000 a year, increasing in line with average earnings (constant in real terms)	Pays no income tax as income is below personal allowance.	DC scheme, automatic enrolment minimum contributions	1.1
						DC scheme, 12% contributions	1.2
						DB scheme, CARE	1.3
Median pay	22	68	2067	Median male income by age	Pays basic rate income tax throughout working life	DC scheme, automatic enrolment minimum contributions	2.1
						DC scheme, 12% contributions	2.2
						DB scheme, CARE	2.3
Higher rate tax threshold	22	68	2067	Income of £50,000 a year, increasing in line with average earnings (constant in real terms)	On the cusp of higher rate tax	DC scheme, automatic enrolment minimum contributions	3.1
						DC scheme, 12% contributions	3.2
						DB scheme, CARE	3.3
Limited pay of higher rate tax	22	68	2067	Scaled pay levels by age to breach higher rate tax threshold for 10 years (aged 45-54)	Pays higher rate income tax for ten years (aged 45-54), basic rate income tax at other working ages	DC scheme, automatic enrolment minimum contributions	4.1
						DC scheme, 12% contributions	4.2

Individual	Age in 2021	Ret. age	Ret. year	Working age income trajectory	Working age tax trajectory	Pension saving trajectory	Ref
						DB scheme, CARE	4.3
High pay	22	68	2067	High earner, 90th percentile of male earnings by age	Becomes liable for higher rate income tax from age 29 onwards	DC scheme, automatic enrolment minimum contributions	5.1
						DC scheme, 12% contributions	5.2
						DB scheme, CARE	5.3
Mid-career median pay	40	68	2049	Median male income by age	Pays basic rate income tax throughout the rest of their working life	DC scheme, automatic enrolment minimum contributions from 2012	6.1
						DC scheme, 12% contributions from 2012	6.2
						DB scheme, CARE from 2012	6.3
Mid-career high pay	40	68	2049	High earner, 90th percentile of male earnings by age	Pays higher rate income tax throughout the rest of their working life	DC scheme, automatic enrolment minimum contributions from 2012	7.1
						DC scheme, 12% contributions from 2012	7.2
						DB scheme, CARE from 2012	7.3

Section 4: Observations from the reforms and vignette modelling

Introduction

This section includes high level commentary drawn from the vignette projections. Trends and implications are considered by:

- Pension scheme type and how the impact manifests at working ages or in retirement;
- Earnings level and how the interaction of individuals with income tax bands determines the outcome.

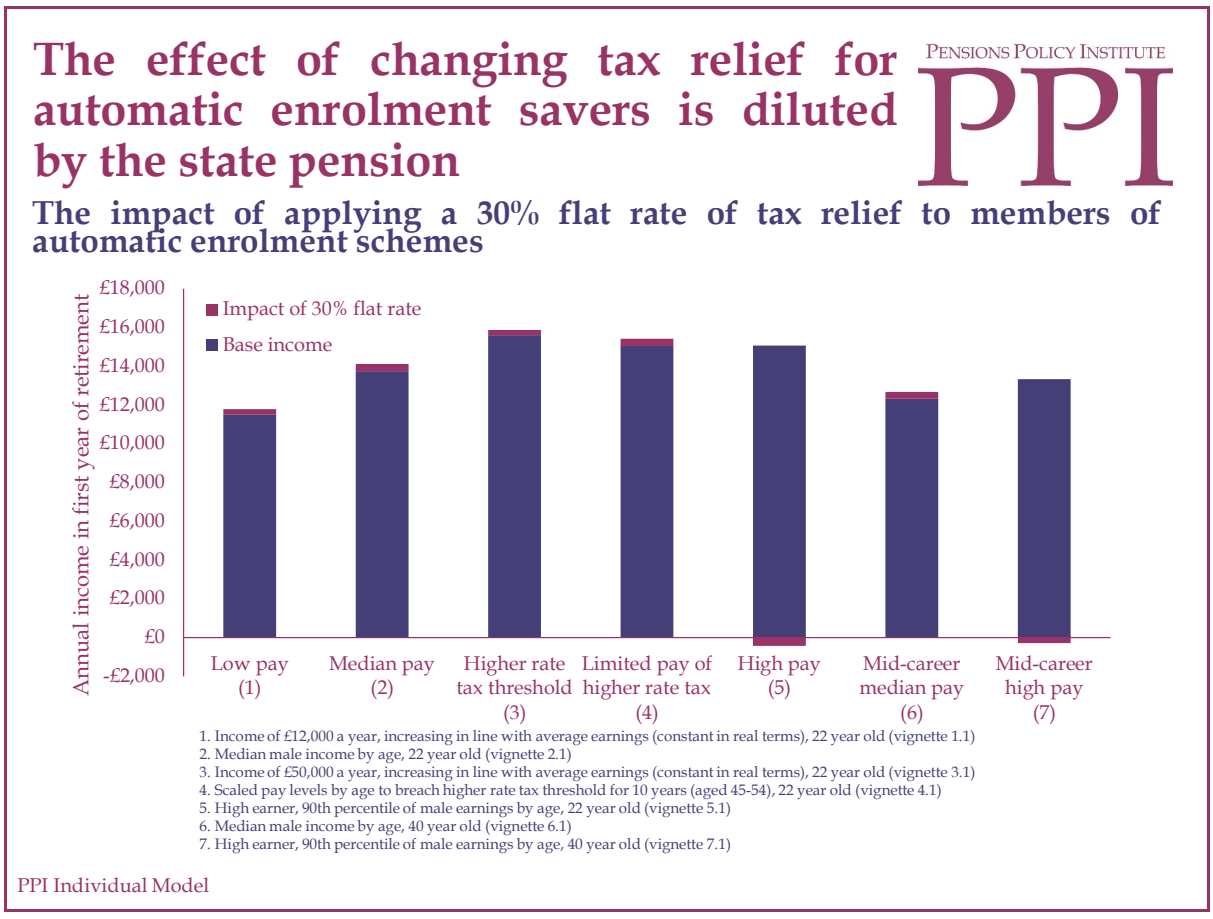
This section reflects upon a limited number of the vignette results to illustrate key themes identified in the broader results. Full results of all the modelling are available in the separate Appendix here.

Pension scheme type

Defined Contribution (DC) pension schemes

For lifelong savers in a DC pension scheme with contributions of only automatic enrolment minimums, the State Pension provides an underpin that accounts for the majority of income in retirement. This dilutes the impact that any change in DC pension wealth has upon the individual's total retirement income. A flat rate of tax relief of 30% increases private pension savings by 14% for a basic rate taxpayer. However, any headline increase in DC pension saving only results in a smaller proportionate increase in retirement income after other income and tax have been taken into account [Figure 2]. For a median earner who pays basic rate income tax throughout their working life their pension saving increases by 14%, but as their private pension income only accounts for less than a quarter of their retirement income the impact upon their retirement income is a more modest 3%.

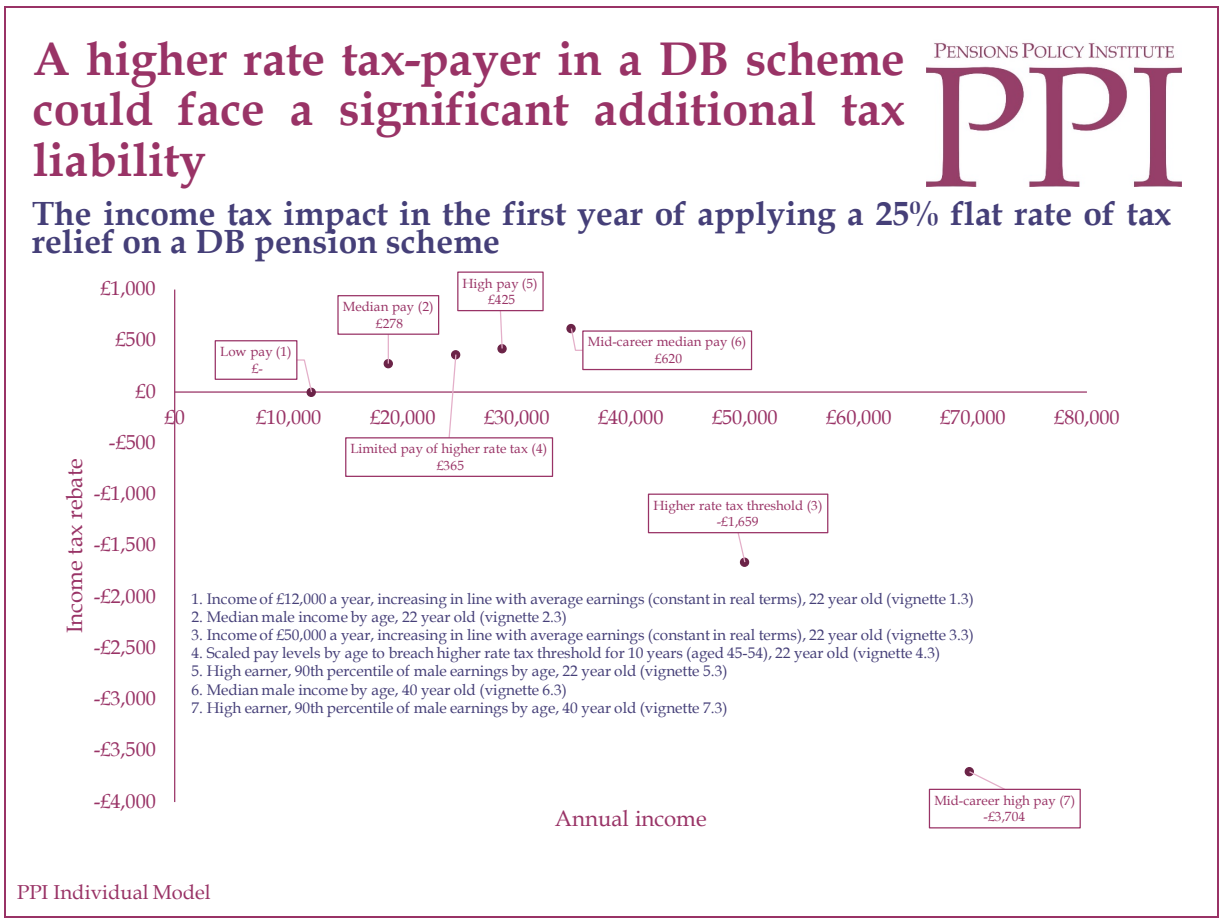
Figure 2: Income in retirement for members of an automatic enrolment minimum contribution scheme with a flat rate of tax relief of 30%



Defined Benefit (DB) pension schemes

The tax relief on DB schemes offers a rebate where the flat rate exceeds the marginal rate of income tax of the member. The rebate or additional liability may appear disproportionate to a member as the amount is based upon the increase in their benefit for which the employee's contributions only covered a fraction [Figure 3]. The result is that higher earners may be significantly penalised as the additional income tax liability (calculated using a flat rate of relief at 25%) is over 40% of the gross contribution they would have made as an employee.

Figure 3: Income tax rebate in first year for members of DB schemes applying a 25% flat rate of tax relief

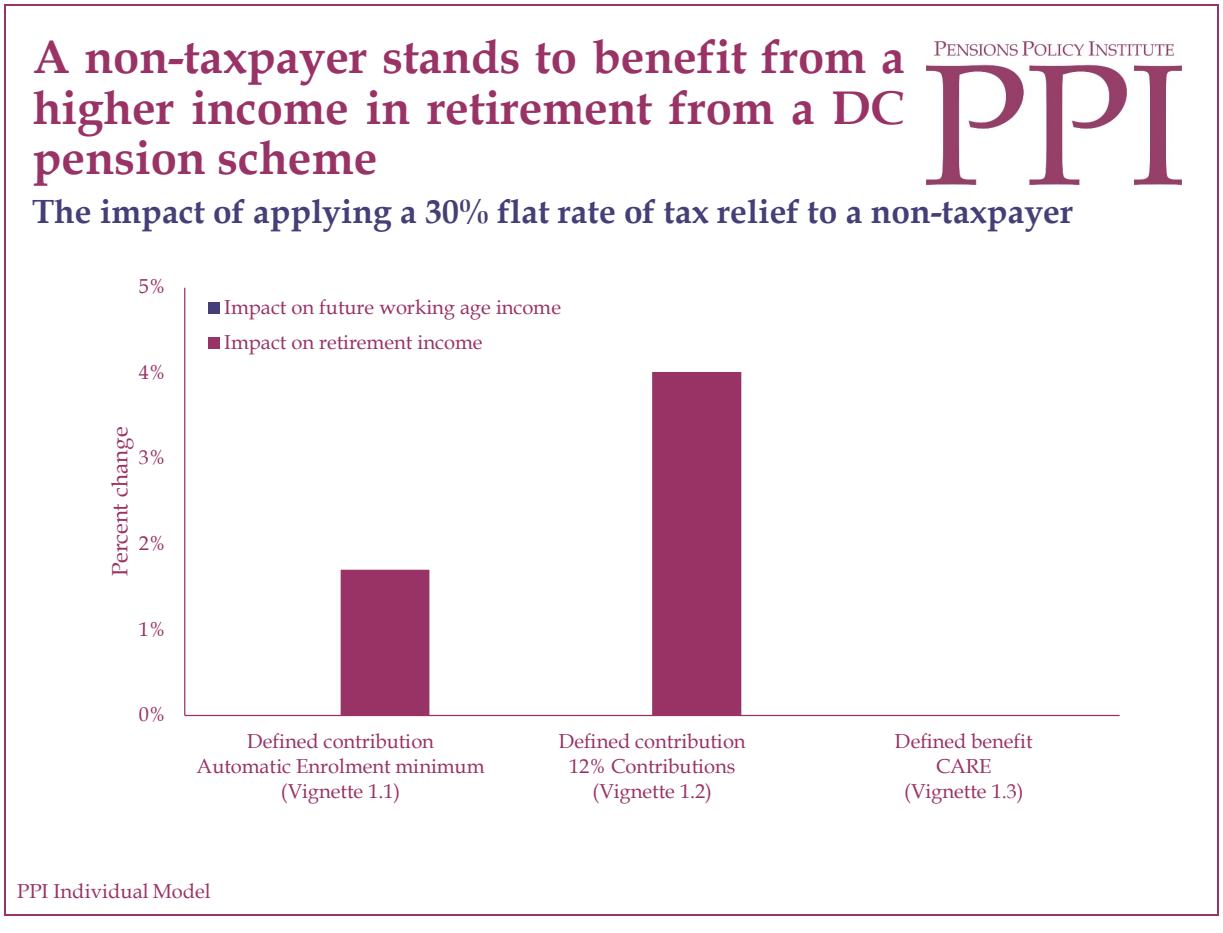


Earnings levels

Low earners

Low earners stand to benefit from a flat rate of tax relief either in working life or retirement [Figure 4].

Figure 4: The increase in take home income (after tax and pension contributions) before and after retirement



Non-taxpayers are unlikely to amass a large DC pension entitlement due to their low lifetime earnings. Their income in retirement is primarily derived from the State Pension and they may not be liable for any income tax as their income may be below the personal allowance.

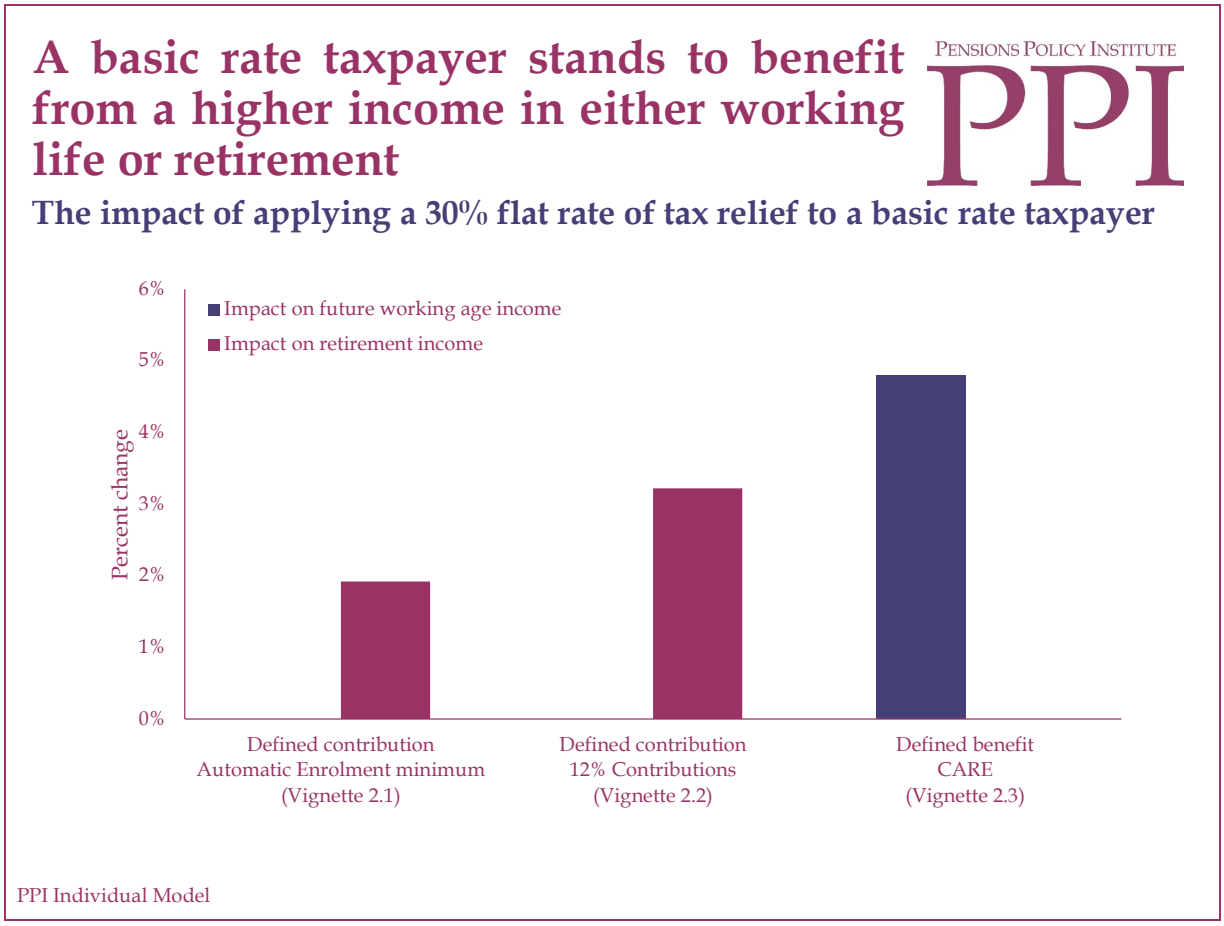
Contributions at automatic enrolment minimum levels yield DC savings at retirement of less than £30,000 (in current earnings terms) which will generate a very limited income. Pension savings would be boosted in any system which adds tax relief to their savings when compared to a current, Net Pay arrangement where they do not obtain any tax relief. A flat rate of relief of 30% would add 40% to their pension saving and, potentially, take-home income in retirement higher than they experienced through working life. Under a more generous DC contribution rate they may incur an income tax liability as a result of employer contributions being considered a taxable benefit.

In a DB scheme the application of a fixed rate of tax relief of 30% based upon the Pension Input Amount would generate a tax credit of over £1,000 a year, however there is no income tax to offset this against, so they will not stand to benefit during working life.

Typical earners

For a typical earner (using median earnings by age and gender), the potential improvements in outcome before and after retirement are lower than for the non-taxpayer as they already receive relief on pension contributions under a Net Pay arrangement [Figure 5].

Figure 5: The increase in take home income (after tax and pension contributions) before and after retirement



The increase in tax relief to DC pension savings of a flat rate of 30% increases DC savings by 14%. This improvement is reduced in withdrawal as there is an increased income tax liability and further diluted by the inclusion of the State Pension.

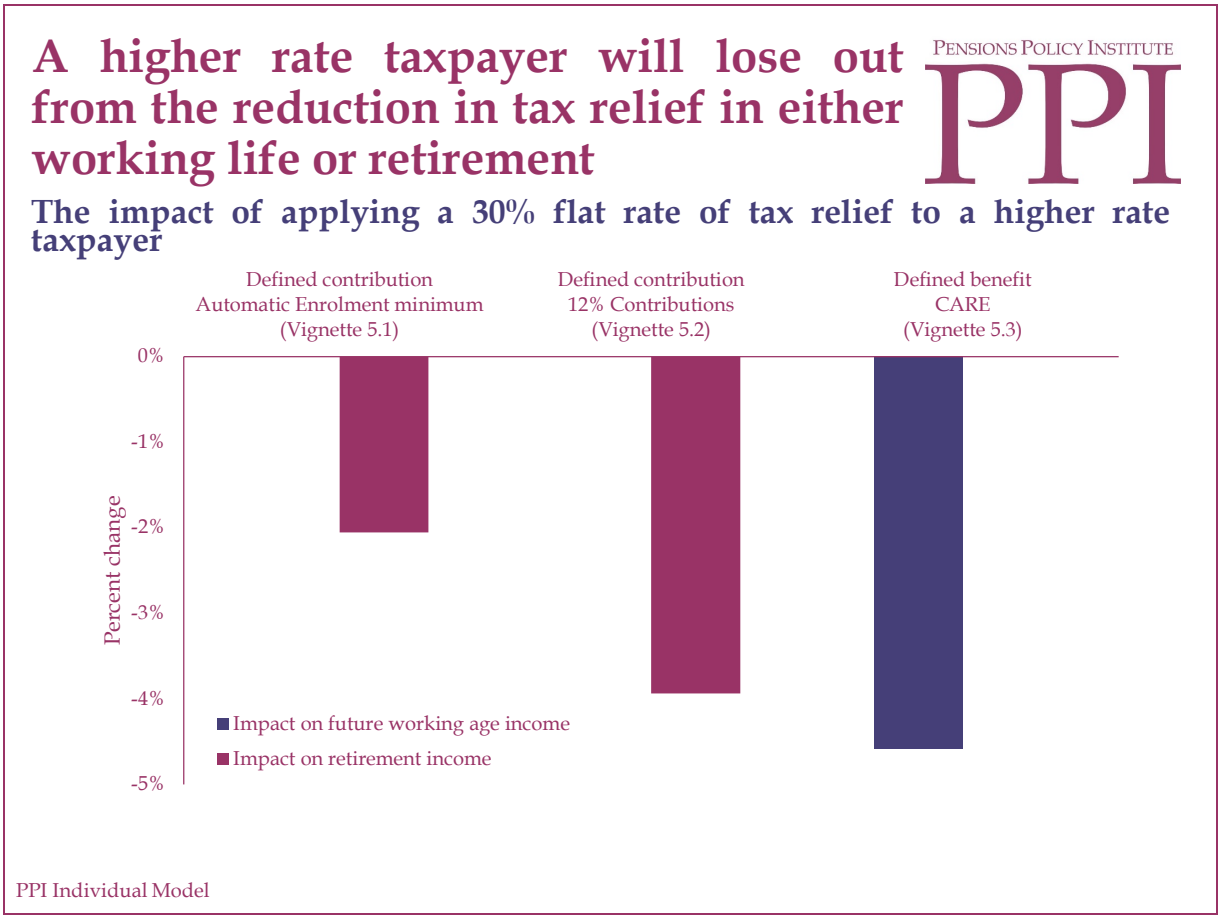
Under a DB pension scheme a typical earner stands to benefit from reduction in income tax liability. Applying a rate of tax relief above their marginal rate of income tax to the Pension Input Amount credits the balance of the tax relief impact to the member. The rebate is not linked to the contribution paid, but is linked to the benefit accrual with higher accrual generating a higher rebate. The generation of a tax rebate for typical earners may result in questions around the fairness of pension scheme that also include tiered contribution rates. The effect is that a higher paid individual may contribute a higher amount for the same retirement benefit, and further, there is also a tax rebate paid at working ages to basic rate

taxpayers. As a result, the application of such an approach will lead to cliff-edge impacts at income tax thresholds and a higher salary may result in lower take home pay around these income levels.

High earners

People who pay higher rate tax for a large part of their working life stand to lose out from reducing the amount of tax relief they may benefit from [Figure 6].

Figure 6: The reduction in take home income (after tax and pension contributions) before and after retirement



In a DC scheme where a member pays automatic enrolment minimum contributions a reduction in tax relief could reduce the value of contributions to the scheme and bring them below 8% of qualifying earnings. With higher lifetime earnings the value of a DC pension scheme will be higher and form a more significant portion of an individual's retirement income. This makes the impact on retirement income for high earners more significant than for lower paid individuals as the dilution effect of the State Pension is not as large.

A member of a DB pension scheme who paid the additional tax liability if flat rate relief was implemented at a rate of 30% could find their lifetime income reduced by around 4.6%. That is equivalent to a cost of around £2,000 a year. An alternative approach to paying this tax liability might be through a scheme pays arrangement with a subsequent reduction in benefit

accrual. Based on the modelled scheme for a member earning £60,000 the additional tax liability would be around £1,800. This is around 9% of the total contribution to the pension scheme, though the contributions are proportionally higher than scheme average due to the tiered contribution structure. An appropriate benefit reduction could be expected to be of a similar order applied to the benefit accrual, reducing the annual accrual rate from 54^{ths} to around 60^{ths} if the scheme were to pay.

Section 5: Conclusions

Implementing a flat rate of tax relief to DC pension schemes would necessitate making employer pension contributions a taxable benefit otherwise higher rate taxpayers would be able to effectively claim a higher rate of tax relief through salary sacrifice. Implementation of flat rate tax relief could also be used to allow non-taxpayers to benefit from tax relief where they may currently miss out on tax relief on their contributions through being a member of a pension scheme with a Net Pay arrangement.

Implementing a flat rate of tax relief to DB pension schemes would require a tax rebate or additional liability for members. Members due a rebate may not ultimately benefit from this if they need to actively claim the amount and fail to do so. The additional income tax liability for higher rate taxpayers could involve significant amounts of money. This could potentially be managed through a system of scheme pays alongside the approach to the annual allowance, however, this would result in a burden placed upon the scheme and could be perceived as devaluing DB pension schemes to higher paid members. There could also be perceptions of fairness within the scheme and challenges at pay levels around income tax thresholds where there may be cliff-edge impacts.

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Appendix

Additional results

Full results for all individuals are available in the separate Appendix published on the PPI website, which can be downloaded here.

The PPI Individual Model

The Individual Model is the PPI's tool for modelling illustrative individual's income during retirement. It can model income for different individuals under current policy or look at how an individual's income would be affected by policy changes. This income includes benefits from the State Pension system and private pension arrangements and can also include income from earnings and equity release. It is useful to see how changes in policy can affect individuals' incomes in the future.

The PPI's individual model calculates streams of retirement incomes for constructed individuals. The streams of income include State Pension, private pension and various state benefits in retirement. The individual model uses flexible policy parameters to define the pension landscape throughout the individual's working life and retirement. The individual is constructed by setting out the work history in terms of working patterns and salary level throughout their working life, along with pension scheme membership details.

All individuals were assumed to exhibit the same illustrative behaviour at retirement with any Defined Contribution pension saving:

- Withdrawing 25% of their pension wealth as a tax-free lump sum at retirement;
- Drawing an income from their remaining wealth, initially at a rate of 3.5% of their remaining pension wealth and increasing the amount in line with CPI until they have exhausted their pot.

This gives an indicative income to quantify the impact of their private pension saving in accumulation.

Key assumptions

Except where explicitly stated in the report, the key assumptions used in the report are detailed below.

The pensions system

The pension system modelled is as currently legislated. The triple lock is assumed to be maintained. It is assumed that automatic enrolment minimum contribution levels continue to be based upon qualifying earnings.

Other economic assumptions

Other economic assumptions are taken from the Office for Budget Responsibility's Economic and Fiscal Outlook[2] (for short-term assumptions) and Fiscal Sustainability Report[3] (for long-term assumptions). Investment returns are assumed to be 1.5% above the rate of increase in average earnings.

Limitations of analysis

Care should be taken when interpreting the modelling results used in this report. In particular, individuals are not considered to change their behaviour in response to their

pension provision or personal circumstances. For example, an individual will not increase their contributions to pension saving as they approach retirement or have higher incomes.

Key results

The key output from the model is the built-up pension wealth and entitlement over the course of the individual's work history and the post-retirement income that results from this.

The post-retirement income is presented as projected cashflows from retirement over the future lifespan of the individual. These are annual cashflows which include the following key items:

- State Pension
  - Reflects entitlement and the projected benefit level of State Pension components.
- Private pension
  - Derived from the decumulation of the pension pot, allowing for tax-free cash lump sum and the chosen decumulation style (e.g. annuity or drawdown).
- Other state benefits
  - Other benefits contributing to post-retirement income such as pension credit.
- Tax
  - Tax payable on the post-retirement income, to understand the net income available to the individual.

These cashflows are calculated as nominal amounts and restated in current earnings terms.

Outcomes are expressed in current earnings terms for two reasons; it improves the comprehension of the results and reduces the liability of either overly optimistic or cautious economic assumptions.

Application of output

The model is best used to compare outcomes between different individuals, policy options, or other scenarios. The results are best used in conjunction with an appropriate counterfactual to illustrate the variables under test.

Key data sources

The specification of a model run is based upon three areas:

1. The individual

The individual to be modelled is specified based upon an earnings and career profile. Saving behaviour for private pension accumulation is considered, as well as the behaviour at retirement.

These are generally parameterised according to the project in question, designed to create vignettes to highlight representative individuals of the groups under investigation.

2. The policy options

The policy option maps the pension framework in which the individual exists. It can accommodate the current system and alternatives derived through parameterisation. This allows flexing of the current system to consider potential policy options to assess their impact upon individuals under investigation.

This area has the scope to consider the build-up of pensions in their framework such as the automatic enrolment regulations for private pensions and the qualification for entitlement to state benefits.

The framework in retirement allows for the tax treatment and decumulation options taken by the individual as well as other sources of state benefits which influence the post-retirement outcomes for individuals.

3. Economic assumptions

The deterministic assumptions used in this analysis are taken from the Office of Budget Responsibility (OBR) Economic and Fiscal Outlook (EFO) [2] to ensure consistency. They cover both historical data and future projected values.

References

1. Retirement Income Adequacy: Generation By Generation (2016) *Pensions and Lifetime Savings Association.* Available from: plsa.co.uk/Policy-and-Research/Defined-Contribution/Retirement-Income-Adequacy
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