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DOI: https://doi.org/10.26504/qec2018sum\_sa\_doorley

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# THE TAX TREATMENT OF PENSION CONTRIBUTIONS IN IRELAND<sup>1</sup>

# Karina Doorley, Tim Callan, Mark Regan and John R. Walsh\*

#### **ABSTRACT**

Tax treatments of pensions vary widely across countries. This paper examines the current tax treatment of pension contributions in Ireland and some widely discussed alternatives, including equalising the tax relief available to low and high earners. The analysis takes into account both explicit contributions in the private sector, and the implicit value of publicly funded pensions.

#### **INTRODUCTION**

Most OECD countries are facing the 'twin challenge of ensuring both the adequacy and financial sustainability' of their pension systems (OECD, 2014). Ageing populations, falling fertility rates and stagnating employment levels mean that funding the income of the elderly by using taxes paid by the working age population is becoming more and more difficult. Similar pressures affect Ireland although its relatively high fertility rate does afford some advantage compared to many European countries.

Calls for reform of both public and private pension systems in Ireland have been frequent over the last decades and have come from many sources. The OECD, while acknowledging that Ireland is better positioned than many countries, recommends that Ireland 'continue to adapt and fine-tune its pension system so that it can provide affordable and adequate benefits to Irish retirees in the long term'. Collins and Hughes (2017) also call for reform of the pension system, questioning the effectiveness of the current set of policy instruments focused on getting people to save for their retirement. Reform of State pension entitlement is already under way. The retirement age has increased from 65 to 66, and further increases – to 67 in 2021 and 68 in 2028 – have been announced and passed in legislation.

This paper represents a development of work initially conducted for the Pensions Council. We thank the Council for initiating this project, and Council members Helen McDonald and Shane Whelan for helpful comments. We thank Gerry Reilly and the SILC team at the CSO for access to SILC data on which the SWITCH tax-benefit model is based.

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State pensions in Ireland are not earnings related. As a result, the attainment of adequate replacement of employment income depends, for those on middle and higher incomes, on being supplemented by private pensions. Policy instruments which can encourage such private sector provision include both tax incentives and, potentially, legislative provisions regarding the availability of pension schemes to employees, and the manner of their operation. These can range from making membership of a pension scheme mandatory, to arrangements by which membership is automatic unless individuals opt out of the scheme.

In this paper we focus on the tax treatment of pension contributions, which forms an important element of the overall tax treatment of pensions through pension contributions, investment income from pensions, and pensions in payment. This is a partial view of the overall territory, but offers some new insights. It does not lead directly to policy recommendations; several other factors would need to be taken into account in order to reach such conclusions.

There is wide variation the tax treatment of pension contributions across countries. Whitehouse (1999 and 2000) sets out four distinct options, characterised by whether or not contributions, pension fund income, and payments of pensions are taxable (T) or exempt (E). The current tax treatment of pensions in Ireland can be characterised as broadly following the principle that contributions are exempt from income tax. Pension fund income, which is the investment income derived from them, is also exempt, while income received from a pension is taxable in the normal way. Such an approach is not uncommon internationally and is labelled EET as contributions are Exempt, investment income is Exempt, and pensions in payment are Taxed. In the Irish system, there is a deviation from the strict EET framework, as lump sum payments at retirement are also exempted from tax. Whitehouse characterises EET as an expenditure tax, which could also be achieved under a TEE regime, taxing contributions on entry, but leaving pension fund income and pensions in payment exempt from tax. About half of the countries surveyed by Whitehouse (2000) had tax regimes which approximated an expenditure tax, or were more favourable to pensions than that.

However, the other half of the countries surveyed had tax treatments closer to the comprehensive income tax approach, either TTE or ETT. Given this wide variation in country practice, there is no single standard approach to the tax treatment of pensions which commands universal acceptance. Our analysis focuses solely on potential changes to the tax treatment of contributions. Thus, in the Irish context, we can contrast the impact of the current system — with

pension contributions exempt from tax — with alternatives where pension contributions are fully subject to tax, or have more restricted relief (e.g., through standardisation or hybridisation of the relief). It is not within the scope of this paper to move further to a full consideration of a move from EET to TEE (the prepaid expenditure tax) or TTE (one version of the comprehensive income tax). Nevertheless, the insights from this partial analysis of changes to the tax treatment of pensions may be of assistance in the broader debate regarding the tax treatment of pensions and alternative means (such as auto-enrolment) for the encouragement of pension savings.

The Irish system exempts private pension contributions from income tax through its EET approach. EET systems are generally considered to result in higher pension contributions than TEE (Taxed, Exempt, Exempt) systems (Armstrong, 2015). There is limited evidence that this kind of tax relief is cost effective in incentivising individuals or households to save for retirement. Rather, findings from international policy reforms indicate that when these incentives are introduced or removed, households divert private savings into pension contributions or vice versa (Attanasio and Rohwedder, 2003; Attanasio et al., 2004; Chetty et al., 2014). Benjamin (2003) estimates that one-quarter of the savings under the US scheme known as 401(k) represents new national savings. In addition to this, households who normally save the most were found to be largely contributing funds that they would have saved anyway. This suggests that tax incentives for pension contributions face a 'deadweight' problem, whereby they subsidise savings that would have taken place anyway and this seems to be particularly so for those at higher incomes.

As the tax relief afforded in Ireland is at the individual's marginal tax rate, this makes it more beneficial to those with higher earnings. Potential paths to restructuring tax incentives for pension contributions were discussed in the Green Paper on Pensions (Department of Social and Family Affairs, 2007). Among other reforms suggested, equalising the tax relief available to low and high earners was considered in order to increase the financial incentive for low earners to make pension contributions. Callan et al. (2009) and Collins and Hughes (2018) also discuss the distributional implications of the provision of tax relief at the individual's marginal tax rate: the research reported here provides a more up-to-date picture, and examines the distributional implications of a move to alternative forms of tax relief such as standard rating of the relief.

Pension funds are exempt from income and capital gains tax while pension income is subject to partial taxation on withdrawal from the fund. Estimates of the revenue foregone due to tax relief on pension contributions are available

from The Revenue Commissioners but should be interpreted with some caution. These estimates quantify the revenue foregone from exempting pension contributions from taxation, without adjustment for the change in pension contribution and investment behaviour that such a switch would result in. Nevertheless, the TET system provides a useful benchmark system against which we measure some reform scenarios – but the TET system is *not* proposed here as a policy reform. According to the Revenue Commissioners (2013), comparing the current EET Irish system with a hypothetical TET system yields a revenue foregone figure of approximately €1.3 billion.

#### In this report we:

- Quantify the cost of tax relief on private, occupational and public pension contributions relative to a scenario with no tax relief on pension contributions (i.e. a TET scenario). These calculations are on a similar basis to those undertaken by Revenue, and subject to the same limitations and qualifications;
- Simulate the cost of changing the structure of tax relief by simulating a lower cap on tax relief and by investigating a standard rate relief and a hybrid rate relief;
- Simulate the distributional consequences of such reforms;
- Discuss potential behavioural responses to any reforms.

### THE IRISH PENSION SYSTEM

The Irish public pension system consists of a basic public pension, complemented by a means-tested non-contributory pension. There is no earnings-related pillar or any mandatory occupational or personal pension. This makes voluntary contributions to private pension plans a very important overall component of retirement income. However, more than 50 per cent of workers do not make private pension contributions or do so during only part of their working careers (OECD, 2014).

In a measure designed to promote complementary pension participation, contributions made by employees to public, private or occupational pension schemes are deductible for income tax purposes and tax relief is applied at the individual's marginal income tax rate. The amount of employee contributions that can be tax-relieved is limited to an age-related percentage amount of the employee's remuneration. Since 2011, tax-relievable contributions are subject to an annual earnings cap of €115,000 (€150,000 in 2010 and €250,000 prior to that). Employer contributions are also deductible in computing the employer's profits.

Pension fund investments are generally exempt from tax on their capital gains and income. A temporary pension levy (introduced in 2011) taxed the entire accumulated fund but was phased out in 2016. Pension income is taxable on withdrawal as income at the individual's marginal income tax rate although individuals can take tax-free lump sums. Debate about the tax treatment of pensions sometimes refers to the idea that the EET system involves a 'deferral' of taxation to the final stage, when pensions are in payment. Whelan and Hally (2018) argue that Ireland's current, broadly EET system recoups a rather small proportion of the tax which would be raised under an alternative TTE system. Essentially, this contrast is between the higher revenue from a comprehensive income tax system (TTE), and the lower revenue from an expenditure tax approach (EET or the prepaid expenditure tax TEE). Cremer and Pestieau (2016) note that 'the optimal policy is in general neither TEE nor TTE and which of these regimes is preferable is not clear'.

### **METHODOLOGY**

#### **SWITCH**

Our analysis uses SWITCH, the ESRI tax-benefit model, linked to data from SILC (Survey of Income and Living Conditions), the Central Statistics Office's (CSO) main survey of household income. SILC is an annual survey conducted since 2003 by the CSO in order to obtain information regarding the income and living conditions of Irish households. It is the Irish component of an EU-wide survey which aims to capture information on poverty and social exclusion across Europe. The survey is cross-sectional and also has a panel dimension with households surveyed annually. The SWITCH database is currently based on a pooled sample of households from the 2013 and 2014 waves of SILC. The SWITCH database contains almost 8,000 households or over 20,000 individuals.

SWITCH simulates the disposable income each family would obtain under the current set of income tax and social welfare policies as well as in a counterfactual 'what-if' scenario. For this analysis, SWITCH is used to simulate:

- disposable income in the 'baseline' scenario, i.e. using the existing 2017 tax and benefit rules;
- disposable income in the absence of any tax relief on pension contributions;

See Callan et al. (2013) for a full description of the model.

The sample of households used to construct the SWITCH database contains all households from the 2014 survey, and all additional households from the 2013 survey that were not interviewed in the 2014 survey. This ensures that households that were interviewed for both the 2013 and 2014 waves of SILC are present only once in the SWITCH database.

 disposable income under alternative tax treatments of pension contributions.

### Estimating pension contributions

SILC data contain information about the existence and amount of pension contributions made by an individual from their last wage, including amounts paid to personal pension plans such as Retirement Annuity Contracts (RACs) and Personal Retirement Savings Accounts (PRSAs). For current purposes - the examination of tax relief related to pension contributions - we judge that it is best to exclude the 'Pension-related Deduction' (PRD) from the analysis. PRD was introduced in March 2009 for public service employees. The deduction is calculated on gross income and is treated as a pension contribution with tax relief provided at the marginal rate. However, the deduction does not affect the overall threshold levels for tax relief on pension contributions. We exclude PRD from the analysis because PRD is not, in fact, a contribution which increases an individual's pension entitlement. In our view, it is more correctly treated as a mechanism designed to reduce payroll costs and net wages. The PRD is paid by the employee, this attracts a tax relief, and the net impact is a saving to the State and a reduction in disposable income. The level of PRD was chosen with the level of State saving, and hence reduction in disposable income, in mind. If the tax status of PRD were changed so that it no longer attracted tax relief, then the desired outcome could have been achieved with a smaller PRD contribution. This element does not really belong in the broader debate about the treatment of genuine pension contributions, which do raise retirement income.

For those who indicate that they make a contribution from their wage, we take the reported amount, less any PRD. For those who report that they make a contribution from their wage, but do not report the amount of the deduction, we assume a contribution equal to the average contribution within their age group<sup>4</sup> and income quartile. There is no direct information on the amount of contributions by employers. Employer contributions are, therefore, imputed for those individuals who are covered by an occupational pension. Employer contributions are calculated as 8 per cent of employee gross earnings for all employees who contribute to a pension and state that their employer also contributes. This method is in line with how the Central Statistics Office estimates employer pension contributions. It also brings the total (employee + employer) average contribution to around 15 per cent, which was found to be the approximate average in previous work on this topic (Callan et al., 2008). Self-

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<sup>&</sup>lt;sup>4</sup> The age groups include: <30; 30-39; 40-49; 50-59; >=60.

employed pension contributions are reported in the data and relate to contributions to individual private pension plans.

We distinguish between public and private sector workers using the individual's self-reported status. The public sector scheme is designed on a pay-as-you-go basis and therefore not funded on explicit contributions. However, we attribute value to the government's implicit contribution. The rationale for this is explained more fully in Callan et al. (2007), and a similar point is also made by the Irish Association of Pension Funds IAPF (2008). If explicit contributions made by employees and employers were to become taxable at any point, then the tax-free status of the State's implicit contribution would lead to a horizontal inequity. The accrual of pension benefits would be similar to 'benefit-in-kind' for public sector workers and the question of how to value and tax this benefit would arise. In our work, we try to incorporate the value of the implicit public service pension contributions in a similar way to the explicit contributions of employers and employees in the private sector. The Report of the Public Service Benchmarking Body (2007) includes a special study on the relative value of public and private sector pensions. 5 Based on this, we assign an implicit employer contribution from the State of 20 per cent of gross income, minus employee contributions.<sup>6</sup>

#### **RESULTS**

# Scale of pension tax relief

We begin by examining the aggregate extent of tax relief as estimated by SWITCH. In order to do so, we adopt the same framework as in Revenue estimates of the cost of pension tax reliefs i.e. the scale of tax relief is measured by the increase in revenue attained by moving from an EET system to a TET system. This analysis is a purely technical construct: it does not imply that a TET system is an appropriate one. It gives some information, but not a complete picture, of the changes involved in moving to a TEE (prepaid expenditure tax) or a TTE (comprehensive income tax) system. More specific potential reforms, which have been considered in the Green Paper on pensions (DSP, 2007) are examined in the next section.

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The introduction of the Single Public Service Pension Scheme for new entrants to the public sector from 2013 will affect the implicit contribution rate of the State for those subject to it. While this could be addressed in further work, the main impacts are well captured in the current analysis attributing the 20 per cent contribution to all staff, because the numbers of new entrants since 2013 is small in data collected in 2013 and 2014.

If we were to include PRD in the contribution of the public sector employee, the amount of the imputed government contribution would decrease mechanically as it is calculated as 20 per cent of gross employee income minus employee contributions. This alternative method would result in no overall change to the total cost of tax relief or to its distributional implications.

As noted earlier, these characterisations of potential future systems are related to arguments concerning the extent of 'deferred taxation'.

Table 1 shows the total cost of tax relief on private pension contributions i.e. the additional cost of an EET system compared to a TET system. We focus on simulations for 2017 but also report simulations from 2013 which can be compared to the latest publicly available Revenue Commissioners' data. In 2017, the cost of tax relief on pension contributions is estimated to be in the region of €2.2 billion. Of this figure, most of the cost relates to tax relief on employee contributions (€729 million) and government contributions (€778 million), but employer contributions also account for €541 million, and the cost of tax relief on pension contributions of the self-employed is estimated at around €185 million.

TABLE 1 ALTERNATIVE ESTIMATES OF TAX RELIEF ON PENSION CONTRIBUTIONS

	SWITCH 2013	SWITCH 2017	Revenue Commissioners 2013
Employee Contributions	653	729	552
<b>Employer Contributions</b>	486	541	497
Personal Pensions	155	185	211
Sub-total	1,295	1,455	1,260
Government Contributions	764	778	
Overall Total	2,058	2,232	

Source: SWITCH 2013 results based on 2013 policies used with 2013 SILC. SWITCH 2017 results based on 2017 policies used with pooled 2013-2014 data. Revenue Commissioners figures taken from Revenue Commissioners on-line statistics (https://www.revenue.ie/en/corporate/documents/statistics/tax-expenditures/costs-tax-expenditures.pdf).

TABLE 2 ESTIMATES OF TAX RELIEF ON PENSION CONTRIBUTIONS BY SECTOR

	SWITCH 2017
Private sector (employee + employer)	935
Public sector (employee + government)	1,112
Personal pensions	185
Total	2,232

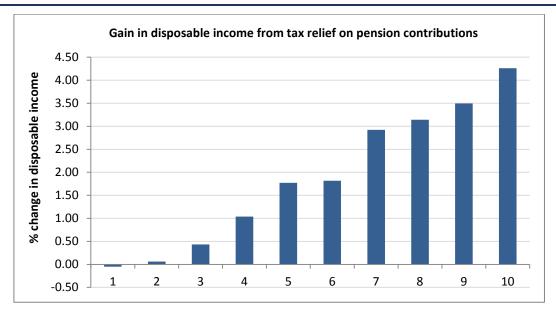
Source: SWITCH 2017 results based on 2017 policies used with pooled 2013-2014 data.

We can also look at the split of tax relief between the public and private sector. Table 2 shows that employee and employer tax relief in the private sector accounts for almost half of the total cost at €935 million. Tax relief on employee and government contributions in the public sector account for a further €1.1 billion.

From our simulations, we can also identify how gains from this tax relief are distributed. Figure 1 shows the pattern of gains and clearly indicates that higher earners benefit more from tax relief on pension contributions than lower earners. The top four deciles of the income distribution gain between 3-4.5 per cent of

disposable income due to tax relief on pension contributions. Gains are more modest around the middle of the income distribution (1-2 per cent) and there is virtually no impact for the bottom three deciles. This pattern of gains is similar to that reported by Collins and Hughes (2017) for employer and employee pension contributions.

FIGURE 1 THE DIFFERENCE IN HOUSEHOLD DISPOSABLE INCOME BY DECILE DUE TO TAX RELIEF ON PENSION CONTRIBUTIONS



Source: Authors' own calculations using SWITCH 2017 policies linked to pooled 2013-2014 SILC data.

Lastly, Table 3 looks at the pattern of gains by family type. Overall, tax relief on pension contributions leads to an average gain of around 2.6 per cent of household disposable income. However, this gain is not uniform across household types. Dual earner couples (with and without children) gain the most (around 4 per cent of disposable income) followed closely by employed lone parents (4 per cent); single earner couples with children (2.5 per cent) and without children (2.9 per cent); and single employed individuals without children (2.8 per cent). Altogether, around 65 per cent of all households would lose in excess of 2.5 per cent of their disposable income on average if tax relief on pension contributions was abolished.

TABLE 3 THE DIFFERENCE IN DISPOSABLE INCOME BY HOUSEHOLD TYPE IN THE ABSENCE OF TAX RELIEF ON PENSION CONTRIBUTIONS

	Baseline	Proportion of the population
Dual Earner Couple with Children	4.3	9.1
Dual Earner Couple without Children	4.1	5.0
Employed Lone Parent	4.0	5.1
Single Earner Couple without Children	2.9	5.6
Single Employed without Children	2.8	32.5
Dual Earner Couple with Relative Assisting	2.7	0.3
Single Earner Couple with Children	2.5	8.3
Retired Couple	0.4	8.5
Single Retired Tax Unit	0.0	10.1
All Other Tax Units	0.0	9.6
Non-Earning Lone Parent	0.0	1.7
Non-Earning Couple (>= 1 UE) with Kids	0.0	0.5
Non-Earning Couple (>= 1 UE) no Kids	0.0	0.3
Single Unemployed without Children	-0.1	3.3
All	2.6	100.0

Source: Baseline figures represent the 2017 situation compared to a situation with no tax relief on pension contributions.

# Reform

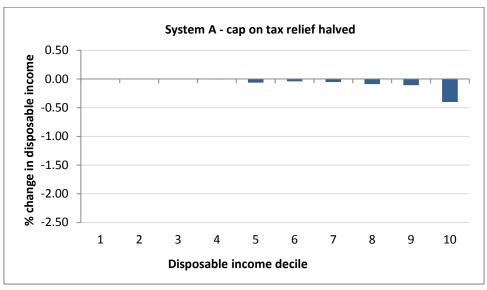
We consider three potential reforms to the policy of tax relief on pension contributions. In System A, the cap on tax relief for pension contributions is halved from €115,000 to €57,500. In System B, tax relief is granted at the standard rate only, i.e. 20 per cent rather than the marginal tax rate of the individual. In System C, tax relief is granted at a hybrid standardised rate of 30 per cent. The cost of each of these systems is set out in Table 4. System A costs just 5 per cent less than the baseline 2017 system. Systems B and C, which standardise the rate of relief at 20 per cent and 30 per cent respectively, result in higher savings. These amount to 46 per cent of the total cost of tax relief for System B and 19 per cent for System C.

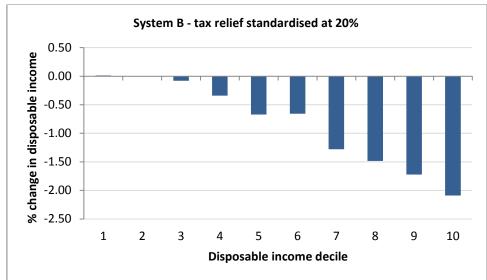
TABLE 4 ESTIMATES OF THE CHANGE IN THE COST OF TAX RELIEF ON PENSION CONTRIBUTIONS

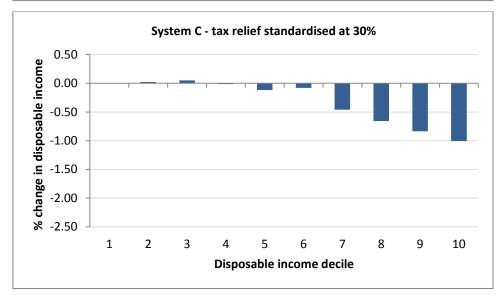
	System A	System B	System C
Change in tax relief on pension contributions (€ million)	-114	-1,022	-420
	-5%	-46%	-19%

Source: All costs are calculated relative to a system with no tax relief on pension contributions. System A halves the cap on tax relief from €115,000 to €57,500. System B and System C introduce standardisation of tax relief on pension contributions at 20 per cent and 30 per cent respectively.

FIGURE 2 THE DIFFERENCE IN HOUSEHOLD DISPOSABLE INCOME BY DECILE DUE TO ALTERNATIVE SYSTEMS OF TAX RELIEF ON PENSION CONTRIBUTIONS







 $\textit{Source:} \quad \text{Authors' own calculations using SWITCH 2017 policies linked to pooled 2013-2014 SILC data}$ 

Figure 2 shows how disposable income by decile changes under the three alternative systems of tax relief on pension contributions. In System A, which decreases the cap on tax relief, there is little change to the distribution of tax relief on pension contributions. There are small losses for the top three deciles of disposable income but little change elsewhere in the income distribution. In System B, which standardises tax relief at 20 per cent, gains from tax relief on pension contributions are lower at all deciles (except Decile 1) but there is convergence in gains across the income distribution as richer households lose more than poorer households. The same logic applies to System C, which standardises tax relief at 30 per cent. In System C, households in the upper half of the income distribution lose compared to the baseline scenario but losses are not as large as with standardisation at 20 per cent (System B) because the rate at which the tax relief rate is standardised is higher. By standardising tax relief at 30 per cent (System C), the gains of the top four deciles of the income distribution fall while the gains to the lower half of the income distribution are largely unchanged.

Table 5 shows how the gains from tax relief on pension contributions by family type change in the three reform scenarios. Changes in these gains are modest in System A with most household types losing between 1 per cent and 7 per cent of disposable income compared to the baseline. System B and System C result in larger losses in comparison to the baseline. In System B, the households who benefit from tax relief on pension contributions lose just under half of this benefit compared to the baseline. In System C, most households who benefit from tax relief lose between 15-20 per cent of the benefit. There are no household types which stand out as losing relatively more or less than others in these reform systems.

TABLE 5 THE CHANGE IN DISPOSABLE INCOME BY HOUSEHOLD TYPE RESULTING FROM ALTERNATIVE SYSTEMS OF TAX RELIEF ON PENSION CONTRIBUTIONS

	System A %	System B %	System C %	Proportion of the population
Dual Earner Couple with Children	-5	-47	-20	9.1
Dual Earner Couple without Children	-7	-47	-20	5.0
Employed Lone Parent	-4	-45	-17	5.1
Single Earner Couple without Children	-5	-42	-14	5.6
Single Employed without Children	-4	-47	-21	32.5
Dual Earner Couple with Relative Assisting	-2	-43	-16	0.3
Single Earner Couple with Children	-7	-43	-15	8.3
Retired Couple	-1	-40	-11	8.5
Single Retired Tax Unit	0	-27	9	10.1
All Other Tax Units	0	0	50	9.6
Non-Earning Lone Parent	0	0	0	1.7
Non-Earning Couple (>= 1 UE) with Kids	0	0	0	0.5
Non-Earning Couple (>= 1 UE) no Kids	0	0	0	0.3
Single Unemployed without Children	0	-100	-100	3.3
All	-5	-46	-19	100.0

Source: All figures show differences in disposable income compared to the 2017 system of tax relief on pension contributions.

# Behavioural effects

So far, our analysis has refrained from discussing behavioural changes to any reform of the tax treatment of pensions. However, individuals may well react to a reform by increasing or decreasing the level of their contribution, thus changing the overall cost or saving from the reform. The literature indicates that these effects are likely to be small. Policy reforms which require individuals to actively change their contributions in order to benefit are likely to have a low response rate and, of those who respond, these are more likely to shift money destined for pension contributions to another savings account (which may also be used as a form of retirement income) rather than stop saving for retirement altogether (Attanasio et al., 2004; Chetty et al., 2014). As such, tax incentives for pension contributions face a substantial 'deadweight' problem, of subsidising savings that would have taken place anyway. This is particularly true for higher earners. As the reforms discussed in this report mainly affect the amount of tax deductible by higher earners, we might expect small behavioural responses from this group, who can be expected to decrease their pension contributions in response to the reform (thus increasing the total State savings from the reform). However, this decrease in pension contributions is likely to be at least partly offset by an increase in other types of saving.

#### CONCLUSION

This report has re-examined the cost of tax relief on pension contributions compared to a benchmark scenario in which pension contributions are taxed both on the way in and on the way out of pension funds, as is done in Revenue costings. This analysis shows that the SWITCH model, using pooled data from the CSO's Survey on Income and Living Conditions for 2013 and 2014, broadly replicates the scale of pension tax relief identified by Revenue − around €1.3 billion annually − and confirms that most of the gains from tax relief on contributions are concentrated in the upper half of the income distribution. Dual earner couples gain the most, followed by employed lone parents, single earner couples and single employed individuals without children.

Taking into account the government's financial support of public sector pensions – which constitutes a 'benefit-in-kind' to public sector employees - increases the estimated cost of tax relief on pension contributions by almost €0.8 billion annually. The cost of tax relief on public sector pensions, given the addition of these implicit employer contributions by the government, accounts for more than half of the total cost of tax relief on pension contributions.

Given the wide variation across countries in the tax treatment of pensions (see, for example, Whitehouse, 1999), there is no single tax treatment which can be identified as commanding universal acceptance as a standard. Our analysis focuses on the first-round implications (before any responses in savings or labour supply behaviour) to some widely discussed potential changes in the tax treatment of pensions (Department of Social and Family Affairs, 2007).

Using SWITCH, we simulate a number of reforms to the current tax treatment of pensions including a halving of the cap on tax relief and a switch to a standardised rate of relief of 20 per cent or 30 per cent. These scenarios result in savings of between 5 and 46 per cent of the total cost of tax relief on pension contributions before behavioural responses. In all scenarios, richer households lose the most from any reform but losses are minimal in the case of altering the cap on tax relief. In the case of standardisation of tax relief, richer households lose much more than poorer ones leading to a convergence in the distribution of gains from tax relief.

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