The OECD argues in favour of complementary private pension savings to boost overall saving for retirement. Financial incentives may be needed, however, to encourage saving in complementary private pensions, especially when such arrangements are voluntary. Indeed, most OECD countries provide tax advantages and other financial incentives (e.g. subsidies) to encourage savings for retirement in funded private pensions in the hope of making complementary private savings more attractive. However, these incentives are costly and they have come under close scrutiny in an era of budget stringency. Is it better to use tax incentives to increase contributions into private pensions or is it better instead to withhold those tax incentives and increase public pensions instead? Are there other alternative approaches to encourage saving in private pensions that may be more efficient?

This project will therefore review the cost effectiveness of tax and other financial incentives, as well as assess what is the more efficient way of using public money to increase savings for retirement, retirement income and replacement rates. It will take into account the distributional impact of various measures and will examine alternative means of encouraging saving in complementary private pension plans other than current tax advantages.

**Structure of the project**

A core objective of the project will therefore be to assess how current tax advantages and financial incentives affect retirement savings. Tax advantages to encourage savings for retirement generally take the form of a tax deferral in which both contributions and returns on investment are exempt from taxes, while payments are taxed. In parallel to these tax advantages, there are also other means to encourage saving for retirement. These include direct financial assistance (e.g. flat subsidies) and matching contributions. There are also tax and financial incentives affecting the different forms in which retirees can take their accumulated savings at retirement (e.g. lump-sums, programmed withdrawals, annuities, or combinations therein). Moreover, the design of public retirement-income provision can also have a significant impact on the financial incentives for voluntary retirement savings. In particular, means-tested benefits and minimum pensions can effectively act as a tax on funded private pensions during the withdrawal stage. The analysis will take into account all these linkages and cross effects.

The analysis will cover the two main types of funded private pension arrangements -- employer-provided (occupational) and personal pension plans -- as well as public provision. It will examine the tax treatment of both employee and employer contributions, the type of returns on investments, and the form that payments take. It will also look at how financial incentives vary across the earnings range, taking account of both the tax treatment and public pension provision. Finally, it will cover treatment under both the personal income tax and social security contributions.

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1. The policy objective of increasing retirement savings can be achieved by reallocating savings without affecting overall national savings, or it can also be achieved by new savings increase national savings.
The project will address three key policy questions:

1. What are those tax and financial incentives, how do they work and what requirements need to be met to be eligible for those incentives?

2. Are those tax and financial incentives cost efficient in terms of increasing contributions into private pensions and, ultimately, contributing to adequate overall retirement incomes? Would it be better instead to withhold those tax incentives and increase public pensions instead?

3. Are there other alternative approaches to encourage saving in private pensions that may be more efficient?

The first two sections of the project will focus on describing and examining how the tax and financial incentives in place to encourage saving in private pension plans work. The study will first document the tax treatment of contributions, returns on investments and withdrawals from pension plans. It will also document other types of financial incentives to promote retirement savings (e.g., subsidies, matching contributions, mean-tested and minimum pensions). An important part of this section will be to examine the requirements that must be met to become eligible for these incentives, which can be used by governments to influence the design of private pension schemes.

Then, section 2 will combine these various incentives to produce estimates of their overall net tax incentive for different types of individuals according to income, labour market status, and other pension parameters. The third section will assess how public retirement income provision affects those tax and financial incentives. This will steer the analysis towards addressing the second policy question.

The fourth section will therefore assess whether those tax and financial incentives are cost efficient. Calculations of tax expenditures resulting from those incentives will provide an accurate assessment of their cost effectiveness. However, how to evaluate the cost efficiency of those incentives depends on the ultimate policy goal. In this regard, section 4 will assess whether those tax and financial incentives can be paid by themselves over time as people saves more and pay taxes on pension benefits at retirement.

Section five will assess whether those tax and financial incentives are cost efficient but considering an additional policy goal. Tax and financial incentives have as ultimate policy goal to promote savings in private pension plans in order to improve the adequacy of overall retirement incomes. However, they can also increase national savings as long as part of the savings in private pension plans are the result of new savings instead of the result of reallocating savings from other saving vehicle. Therefore, section 5 will focus on the effectiveness of tax and financial incentives in increasing retirement savings and national savings, involving both a review of the literature and some new empirical work using individual-level data.

The study will next broaden the analysis to examine a range of potential alternative to the current tax treatment and discuss their potential for improving both the effectiveness and the cost-effectiveness of current policies. Therefore, section 6 will be addressing this final policy question posed above.

The final result of the study, section 7, will be a set of policy recommendations and best practices.

The study will cover all OECD countries. However, the analysis of tax expenditures – not the calculations - will be done for country types as many countries will behave similarly. Moreover, the

2. Reallocating saving into earmarked retirement saving is worthy policy goal in itself. Countries with already high national saving rates may not need to increase national savings but to make sure that a large share of total savings are earmarked for retirement.
analysis of the impact of incentives and alternative approaches (section 5) can only be done for a limited number of countries with the appropriate data.

What follows describes the different sections of the project in more detail. The final part of the project discusses the expected timetable and the different outputs.

**Section 1: Stocktaking on tax and financial incentives for saving for retirement**

Virtually all OECD countries provide tax advantages for saving for retirement in funded private pensions. Traditionally, they allow individuals to deduct their contributions to funded private pensions from their personal income tax base, and also exempt the returns on investments from tax (or tax them at a preferential rate), while withdrawals or pension payments tend to be taxed at the relevant tax rates. These tax arrangements are commonly referred to as “exempt-exempt-tax” or EET. 3

Additionally, there are other tax incentives that depend on manner in which individuals allocate their accumulated assets once they reach retirement. Across countries different tax rules apply depending on whether individuals take lump-sums, programmed withdrawals, annuities or any combination of them.

In recent years, governments and employers have introduced other mechanisms such as flat subsidies and matching contributions to promote saving for retirement in funded private pension plans.

**Section 2: Financial incentives for saving for retirement in funded private pension plans**

This section will assess the impact on retirement savings of the variety of tax and financial incentives described in the previous section. The assessment of the different tax incentives will be done according to different income levels, reflecting both the bracket structure and the progressivity of the income tax.

The analysis of incentives will look first at the different constituent parts, assessing the actual financial incentives generated by the tax treatment of contributions, returns on investment and pension withdrawals in funded private pension plans. The second part of this section will combine the various incentives in order to assess the overall financial incentive for saving for retirement.

**Financial incentives from the tax treatment of contributions to funded private pensions**

Traditionally, employee contributions were fully deductible against the personal income tax base, meaning that tax relief was granted at the level of individuals’ marginal tax rates. Employer contributions were also tax-favoured as they were not taxed as a benefit-in-kind in the hands of the employee. Typically, social security contributions were not levied on private pension contributions. While this traditional pattern still generally holds, there have been some developments since the OECD last examined the issue. 4 First, many countries have capped these tax privileges through limits on the amount of contributions that attract tax relief, ceilings on the lifetime value of private pension funds, removing deductibility at higher marginal rates of income tax or often a combination of all three. Secondly, flat-rate or matching government and/or employer contributions have become much more common.

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3. The tax incentive is the exclusion of investment income from income tax as long as benefits are taxed at the same rate that exempt contributions would have been.
These developments show the need for an update of earlier work, which was based on tax parameters in 2003, and to broaden the approach. The value of the tax relief varies with earnings, from zero to people who are below the general tax allowances or credits through the range of marginal rates in the tax schedule. This is complicated further by caps (reducing the tax incentive for higher earners), matching government contributions (which affect taxpayers from zero to higher rates in the same way) and by flat-rate government contributions, which are of greater proportional benefit to low earners.

The project will then assess the value of the exemption from the tax on contributions to people at different levels of earnings. These will then be combined with data on the distribution of earnings to show the overall variation in tax incentives at the contribution stage.

Financial incentives from the tax treatment of returns on investment and fund accumulations

The traditional tax treatment of returns on investments obtained with the money accumulated in funded private pension funds has been to exempt them or to tax them at a preferential rate (i.e. at a lower rate than returns on investment from other saving vehicles). Again, however, there have been some important policy developments. The United Kingdom, for example, has progressively eliminated the tax relief on dividend payments received by pension funds.

The CTPA will also be collecting information on the tax treatment at this stage of private pension investments. This is likely to cover just two types of investment: equities and interest (from deposits or bonds). Again, the CTPA’s work can be extended to include EU, non-OECD countries. This information will include both the treatment of income accruing to the fund from interest payments or dividends and capital gains on increases in the value of holdings, particularly equities.

To assess the impact of this tax incentive on returns, it is necessary to make assumptions about the investment portfolio of pension funds and the rates of return on different assets. Earlier OECD work assumed that 60% of investments were interest-bearing and the remaining 40% in equities. Further, one-third of the return on equities was assumed to be in the form of dividends with the remaining two-thirds arising from capital gains. To calculate the impact of turnover taxes, such as stamp duties, shares were assumed to be held 6.7 years on average. The rate of return on equities and interest-bearing instruments was assumed to be the same. Information on actual portfolios of pension funds will come from the OECD’s Global Pension Statistics database.

Therefore, this part of the project would explore the results both under a uniform portfolio assumed for all countries as well as the actual investment structure, and it will look at other investment strategies such as life-cycle arrangements. However, this work will look only at the two asset classes – equities and interest-bearing – discussed above. It is not proposed to collect tax information on other investments, such as property. For each set of assumptions, the result will be a single effective tax rate on pension investments for each country studied.

Financial incentives from the tax treatment of pension payments or withdrawals from funded private pension plans

The tax treatment of income from funded private pensions during the payout phase varies across countries and also differs according to the form in which the assets accumulated are allocated either as lump sums, programmed withdrawals, annuities, or combinations thereof.

The OECD will use the information document in section 1 on how withdrawals from funded private pension plans are taxed to assess the impact on withdrawals of different tax treatments taking into account different income structures.
The overall financial incentive from the tax treatment of retirement income

This sub-section will put together the fiscal impact from the tax treatment of contributions, returns on investment and withdrawals in funded private pension plans. The study will use relevant benchmarks, both for theoretical tax systems and for other saving vehicles, to construct indicators of tax incentives:

1. The average net tax incentive per unit of pre-tax contribution in tax-favoured retirement saving plans across age groups. This is the net present value of one currency unit of contribution. It will be calculated for different individuals according to their income level. It will assess the tax incentive for individuals contributing continuously a certain percentage of wages from age 25 until retirement (e.g. 40 years), investing in a portfolio (e.g. life-cycle portfolio), and retiring with a life annuity given certain life expectancy. The tax incentive will also be calculated for other scenarios (e.g. shorter contribution periods, balanced portfolio, and programmed withdrawals).

2. The total fiscal cost of those tax incentives per person, the tax expenditure per person. This indicator will measure the cost over time of those fiscal and financial incentives to the budget and the Treasury per person. It will have an important temporal perspective as during the accumulation phase there is a clear cost to the Treasury (a benefit to the individual), while during the payout phase, the Treasury will get revenues. In this way the study will measure the next tax expenditure per person during their working and retirement life. This will be done for different types of individuals according to income, labour market status, contributions and contribution periods, and life expectancy.

Section 3: The impact on financial incentives of public retirement-income provision

This section will extend the previous analysis by incorporating the potential effect that public retirement-income provision may have on the incentives to save for retirement in funded private pensions. The interaction between means-tested public benefits and minimum pensions with private pensions affects the final value of the financial incentives examined in the previous section.

The personal tax system plays a wider role in old-age support. Pensioners often do not pay social security contributions. Personal income taxes are progressive and pension entitlements are usually lower than earnings before retirement, so the average tax rate on pension income is typically less than the tax rate on earned income. In addition, most income tax systems give preferential treatment either to pension incomes or to pensioners, by giving additional allowances or credits to older people. Overall, 24 OECD countries provide older people with additional basic relief under the personal income tax. Generally, this takes the form of an extra tax allowance or tax credit. In many cases,

5. The incentive comes from comparing the tax payments when saving in a pension vehicle that is EET with the tax payments of saving in an alternative vehicle, like a savings account or mutual fund, where contributions and returns on investment are taxed, and withdrawals are exempted (i.e. TTE). A rational individual with perfect foresight will assess the tax incentive of saving in an EET scheme as compared to a TTE scheme by calculating the net present value of each of the two saving alternatives. The net present value of saving in a EET scheme is the difference between the present value of all the exempt contributions and returns on investment during their entire future working career compared with the present value of all future taxes that s/he will have to pay from her/his pension benefits, pension benefits that would be conditional on the assets accumulated at retirement and future tax rates. The net present value of saving in a TTE scheme is the present value of taxed contributions and taxed returns on investment compared with the present value of exempt benefits or withdrawals.


7. Slightly more than half of all OECD countries provide older people with additional basic relief under the personal income tax. Generally, this takes the form of an extra tax allowance or tax credit. In many cases,
countries have some concession for older people or pension income under their personal income taxes. In only ten is the tax treatment of pensions and pensioners the same as it is for people of working age. These differences are analysed in the indicator on “Tax treatment of pensions and pensioners” in OECD (2011).

The calculations in this section will illustrate the role that the tax system plays in old-age support. This work will examine the differentials in tax burdens during retirement relative to those when working across countries and within countries between workers at different levels of earnings.

Preferential treatment under the personal income tax and social security contributions mean that older people pay less than people of working age at the same income. It is possible to compare the net replacement rate under actual tax treatment with that under the same treatment of pensioners as workers using the OECD pensions, tax-benefit and pensioner tax models. This will show that a sizeable proportion of the net replacement rate is a result of the tax system (about 16% on average in OECD countries from preliminary calculations).

**Section 4: Assessment of the fiscal cost of the tax treatment of saving for retirement and other financial incentives.**

Tax incentives for pensions necessarily involve a fiscal cost in terms of revenues forgone. The study will calculate at one point in time how much the Treasury fails to collect in terms of foregone revenues on contributions, foregone revenues on accrued investment income, and revenues collected on withdrawals, as a percentage of GDP. This will follow previous OECD work on tax expenditures (Antolin et al. 2004; and OECD, 2010).

To assess the overall tax expenditure for the Treasury, the study would have to consider the current and future population structure. This therefore expands the tax expenditure per person measure discussed at the end of section 3. In addition, to have an assessment of the overall tax expenditure, the analysis will have to account for potential indirect effects in case fiscal and other financial incentives to save for retirement lead to higher national savings. Higher national savings will affect investment, GDP growth and consumptions taxes (higher national savings as oppose to just reallocations come from lower consumption).

**Section 5: Empirical evidence on the impact of tax and other financial incentives on retirement savings**

This section will assess the empirical literature on the impact on retirement savings of tax and other financial incentives and it will provide case studies on whether the introduction of such incentives has been an effective way of increasing retirement savings.

Tax incentives embedded in funded pension plans may increase retirement savings. The increase in retirement savings can come from increased contributions from people who are already contributing or from increased participation. Additionally, this increase in retirement saving could be the result of people however, this additional relief is phased out for older people with higher incomes. A significant number of countries offer tax relief for particular sources of retirement income. Relief from income tax for public pensions, either full or partial, is available in 12 OECD countries. Another four countries offer relief for private-pension income.
actually increasing their overall savings (i.e. new savings) or of people shifting savings from other saving vehicles (i.e. reallocation) but leaving their total savings unchanged. The balance between new saving and reallocation depends on the interplay between income and substitution effects in saving behaviour.

This distinction is relevant for public policy because an increase in household savings may suggest that the policy has been a success. Nevertheless, increased retirement savings due to reallocation instead of those resulting from new savings, may still have a policy purpose if the objective is to lock-in savings into long-term savings that are earmarked for retirement. The distinction between new savings and reallocation also matters because the tax incentive may involve dis-saving by the government. The extent to which this occurs is related to the tax expenditure concepts discussed above. If reallocation occurs from other tax privileged savings instruments, then the effect on the public finances may be small. But if savings instead are diverted from taxed vehicles, such as bank deposits, then the impact will be larger. These issues will be investigated using two different approaches.

The first approach will involve new empirical work. It is proposed to use longitudinal datasets from selected countries (such as Australia, Chile, Germany, New Zealand and the United States) that have changed tax or other financial incentives to promote retirement savings. This can be used to illustrate whether changes in policies have led to higher retirement savings. The idea is to use the longitudinal aspect of the data to examine people both before a particular incentive was introduced and afterwards to observe the effect on their finances. This should yield useful insights, although it is very difficult to assess definitively whether increased retirement saving is due to reallocation or to new savings because of the complex behavioural issues involved.

The second approach will be a review the existing literature on the impact of tax incentives on retirement savings. A considerable body of work has been published since the earlier surveys contained in Antolin, de Serres and de la Maisonneuve (2004), Antolin and Lopez-Ponton (2007) and OECD (2007). This new review would focus in particular on studies of countries other than the United States, which has tended to dominate published research in the past. Again, the objective would be to summarise research findings on whether higher retirement savings come from new savings or reallocation. The earlier surveys imply that the empirical evidence on this matter tends to be inconclusive. Following on from this review of the empirical evidence, the wider impact of tax incentives on the public finances and the economy would be discussed. For example, there may be impacts on investment, productivity growth and thus future tax revenues (Feldstein, 1995).

Section 6: The potential impact on retirement savings of alternative tax and financial incentives

The opening of this proposal alluded to the many policy developments, both in taxation and in alternative financial incentives for retirement savings such as government matching contributions. Examples outlined above included matching government contributions, government flat-rate contributions, and providing tax credits rather than relief (of equal value to zero and higher-rate taxpayers). Many of these potential policies would significantly alter the pattern of incentives facing different workers. The burgeoning behavioural-economics literature contains many proposals for alternatives to the current kind of tax incentives that predominate in EU and OECD countries. These different innovations will be reviewed.

This component of the project would then assess alternative strategies for designing financial incentives. This would build on the calculation of marginal effective tax rates for different workers carried out in section 2 above to show how these would change under different policies.
Section 7: Policy Recommendations

The ultimate output of this project will be a set of policy recommendations and best-practices on how to design tax or financial incentives to promote retirement saving, especially for groups with low coverage and low retirement savings.
REFERENCES


