OECD Roadmap for the Good Design of Defined Contribution Retirement Savings Plans
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Introduction

1. This document presents a proposal for adjusting the OECD Roadmap for the Good Design of Defined Contribution Pension Plans (the Roadmap). The goal of revising the Roadmap is to update the policy messages in it, in order to incorporate all the work conducted by the OECD Working Party on Private Pensions (WPPP) and the OECD Secretariat. All this work makes it possible to update and improve the OECD Roadmap to maintain its relevance given current contextual realities and the cumulated experience observed in OECD jurisdictions.

2. The messages and policy guidelines on improving the design of defined contribution retirement plans contained in the OECD Roadmap have been either amended or revised. The policy guidelines in the Roadmap that have been revised mostly reflect additional work that the Secretariat and the WPPP have carried out since the initial guidelines were agreed upon back in 2011-2012. In all cases, the document provides an argument for the changes.

3. The structure of the policy guidelines and messages has changed to first emphasise key objectives in bold, followed by tangible guidelines for achieving that objective.

4. Following the spirit of the current Roadmap, the revised Roadmap strives to provide simple and concise messages that are broadly applicable for all types of retirement arrangements where retirement income depends on contributions paid, investment returns and the way assets are paid out over retirement (ie. All types of defined contribution DC retirement plans). They also aim to be enduring and not simply aimed at resolving current problems.

5. This document examines each of the 10 policy messages of the Roadmap one by one, proposes adjustments and revisions, and provides arguments for the changes that have been made to reach to the proposed new 10 policy messages. This document is intended to provide support for the proposed Roadmap for the Good Design of Defined Contribution Retirement Savings Plans, which is the subject a public consultation.

Preamble

6. The current preamble of the OECD Roadmap is an introduction to the current ten messages for the good design of defined contribution (DC) retirement plans from the OECD Working Party on Private Pensions (WPPP) (Box 1). This introduction puts the messages into the context of growing importance of DC plans worldwide. It also explains the rationale and objective of the roadmap.

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1 The WPPP comprises pension and insurance regulators and supervisors from OECD countries, guest countries (observers) and other international organisations.
Box 1. Preamble

Existing preamble
Defined contribution, private pension plans are increasingly an integral part of most countries’ overall pension system, while for some countries they are the main component of their pension system. Therefore, overall retirement income adequacy depends importantly on the pension benefits stemming from these plans.

In seeking to assist countries to strengthen retirement income adequacy in a defined contribution environment, the OECD Working Party on Private Pensions has identified elements of good design and public policy. This roadmap for the good design of defined contribution plans consists of the following recommendations:

Revised preamble
Defined contribution retirement savings plans are increasingly an integral part of most countries’ overall retirement system, while for some countries they are the main component of their pension system. Therefore, overall retirement income adequacy depends on the retirement income stemming from these plans.

The purpose of this Roadmap is to assist countries in designing both occupational and personal pension plans in which retirement income depends on contributions paid, investment returns, and the way assets are paid out over retirement. This Roadmap complements the OECD Core Principles of Private Pension Regulation to improve the robustness of retirement systems and build trust that people’s best interest is taken into account.

7. The current preamble mentions one of the ongoing trends in the private pension sector and implicitly specifies the scope of application of the roadmap. The roadmap is relevant for the design of any DC plan. The main messages are applicable to personal pension plans although the OECD WPPP taxonomy does not explicitly classify them as DC.

8. The revised preamble maintains the reference to the evolution of the pension landscape, and intends to clarify the scope of the roadmap further. The revised version specifies that the roadmap applies to all pension plans (occupational and personal) where retirement income depends on the amount of contributions paid, investment returns, and the way assets are paid out over retirement. The new text also specifies that the retirement income from these plans depends on their pay-out options.

9. The revised preamble also aims at broadening the objective of the roadmap. The current one focuses on the role of the roadmap to strengthen retirement income adequacy. The revised version brings in another important standard setting document from the WPPP: the OECD Core Principles of Private Pension Regulation. These two documents together aim at improving the robustness of pension systems (including their adequacy, sustainability). Another key goal of these two WPPP documents is to ensure that people’s best interest is at the core of

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1. Ensure the design of DC pension plans is internally coherent between the accumulation and payout phases and with the overall pension system. Consequently, the target retirement income in DC plans should be determined consistently with the benefits provided by the other components of the pension system. To define and achieve this target, all possible risks (i.e., labour, financial and demographic risks) affecting retirement income of DC pension plans should be monitored.

Proposed message

1. The design of DC pension plans should be coherent with their purpose and role in the pension system. DC pension plans should be designed consistently with the other components of the pension system and its objectives. Their design should also be coherent across the accumulation and pay-out phases. Policy makers should regularly assess current and potential retirement incomes taking into account broader economic and demographic factors and risks to assess whether DC plans are able to fulfil their role in meeting adequacy objectives.

12. The two sub-messages on pension coherence are preserved in the proposed wording. The first relates to global coherence, or the coherence of a DC pension component within a broader pension system. The proposed wording aims to more explicitly link policy makers’ objectives and DC design, rather than through a reference to projected benefits. The second sub-message is about internal coherence of the DC system’s design between the accumulation phase and the pay-out phase. The proposed wording moves the main message from the bold part to the body of the text. This is done to ensure that the bold part is focussed on the overall objective of the message, with detail in the body. This change is consistent with the key messages from Chapter 1 of the OECD Pensions Outlook 2018, which concludes that countries should reflect on their policy objectives and risk tolerances
when optimising the combination of PAYG and funded, DB and DC, public and private provision.

13. The proposed message removes a reference to target retirement income to shift the focus from targeting to designing pensions with particular outcomes in mind. The current message makes a reference to target retirement income to make the point that complementarity between DC and other components is needed to achieve an overall adequacy standard. However, using the language of ‘target retirement income’ can mislead people into thinking that the OECD recommends the creation of a single retirement income target level. Rather, the OECD’s view is that targets are useful tools to help policy makers design pension systems in line with their own adequacy objectives. To avoid any such misinterpretations, the proposed message no longer contains a reference to a target retirement income. It instead subsumes this point in the final line, which refers to the monitoring of retirement incomes to ensure policy makers are meeting their adequacy objectives.

Participation and contributions

14. The OECD Roadmap currently includes two policy messages related to participation and contributions (Box 3). Message n°2 covers enrolment, contribution levels and contribution periods, while message n°3 refers to incentives to encourage enrolment and increase contribution levels. The proposed revision aims to reflect all the work undertaken by the WPPP since 2012 on effective approaches to increasing participation in, and contribution levels to, funded pension arrangements. It also splits message n°2 into two, one focusing on enrolment and one focusing on contributions (level and duration).

Box 3. Policy messages on participation and contributions

Existing messages

2. Encourage people to enrol, to contribute and contribute for long periods. Where mandatory enrolment is not considered opportune, mechanisms such as automatic enrolment, with the possibility for individuals to opt out, are particularly useful, together with setting adequate default contribution rates. Making sure people contribute for long periods with sufficiently high contribution rates is the most effective way to improve their chances of obtaining an adequate replacement rate from DC pension plans. This goal needs to be complemented with “work longer” policies.

3. Improve the design of incentives to save for retirement, particularly where participation and contributions to DC pension plans are voluntary. An appropriate structure of tax incentives (including financial subsidies for those who pay low or no income taxes) and/or matching contributions can both be efficient mechanisms to encourage participation and increase contributions.

Revised messages

2. Make DC systems as inclusive as possible. Where mandatory enrolment is not considered opportune, automatic enrolment, covering all employees and possibly the self-employed, can enhance participation while giving individuals the possibility to opt out. Financial incentives are also useful tools to promote savings for retirement. Using default
options and offering a limited number of options for the contribution rate, the investment strategy and the pay-out can simplify decisions when members need to make them and encourage participation. Policy makers should avoid eligibility criteria that may disadvantage specific groups of people, including women. They should also take care when considering design features that may make saving for retirement attractive (e.g. guarantees and early access to funds), but may end up reducing retirement income. Any early access to retirement savings should be a measure of last resort and based on individuals’ specific hardship circumstances.

3. **Ensure total contributions are sufficiently high to achieve retirement income objectives.** Automatic and gradual increases to contribution rates can help members to reach appropriate contribution levels over their career. Employer matching contributions can also promote employee contributions, while technology can help members to contribute more by simplifying the contribution process and providing access to affordable financial planning. Encouraging members to contribute for longer by postponing retirement improves their chances of reaching their desired retirement income, particularly when life expectancy increases.

4. **Design financial incentives to maximise the impact on enrolment and contributions.** Tax rules should not discourage individuals to save for retirement. They should be straightforward, stable and common across retirement saving plans to avoid confusion. The design of financial incentives should reflect the retirement saving needs and capabilities of different population subgroups. Middle-to-high income earners tend to respond to favourable tax treatment, while low-income earners may be more likely to respond to matching contributions and fixed nominal subsidies. The incentives should be updated regularly to maintain the attractiveness of saving for retirement.

15. The current message n°2 does not reflect recent work on policies to improve retirement incomes in the context of behavioural biases and limited financial knowledge, and on automatic enrolment schemes. Indeed, OECD (2018[1]) identifies policies to improve the design of funded pension arrangements while adjusting for observed patterns of behaviours. These policies are discussed in the context of the different decisions that people need to make when planning and saving for retirement, which include participation and contributions. Additionally, OECD (2019[2]) assesses the role of automatic enrolment schemes in enhancing voluntary pension arrangements’ inclusiveness and retirement income adequacy based on the experience in 10 OECD countries. It identifies the key factors explaining the relative success of automatic enrolment mechanisms in reaching high participation levels across countries. To appropriately reflect all this new work, the proposal splits message n°2 into two, one focusing on enrolment and one focusing on contributions.

16. The WPPP recently identified policies to improve the design of funded pension arrangements, taking into account the fact that individuals may have behavioural biases and low levels of financial knowledge (OECD, 2018[1]). In particular, to counter the tendency of many individuals to postpone or avoid joining pension plans, effective approaches to increasing participation include:

- Changing the default enrolment mechanism (active decision, automatic enrolment);
• Simplifying choice by using default options and limiting options to avoid choice overload;

• Encouraging participation via financial incentives or attractive product features (e.g. contribution holidays, early access to funds, investment return guarantees);

• Providing financial education through information and instruction at the workplace.

17. The original and new proposed message shy away from advocating the use of guarantees. Introducing guarantees in the design of retirement savings arrangements is an attractive option. However, its cost needs to be clearly stated and accounted for, and the potential implications on asset allocations fully considered. Investment return guarantees alleviate the impact of market risk on retirement income by setting a floor on the value of accumulated assets at retirement, either in nominal or real terms. They may increase the attractiveness of saving for retirement in DC retirement plans as they overcome people’s fear of losing the nominal value of their contributions. However, investment return guarantees have to be paid for, and this cost reduces the expected value of benefits from DC plans relative to a situation where there are no guarantees (OECD, 2012\textsuperscript{(3)}). The cost of the capital guarantee, that makes sure that people will get back at least their contributions (in nominal terms), is affordable only over sufficiently long holding periods, and as long as people stick to the initial investment choice and cannot change afterwards. Guarantees above the capital guarantee would be much more costly. Annual guarantees, instead of guarantees at the time of retirement, can be prohibitively. In addition, in the current environment of low interest rates, investment return guarantees require higher technical provisions, meaning that the investment opportunities of the pension providers are limited to investment products with lower risk and thereby lower expected returns.

18. In addition, new work conducted on automatic enrolment schemes gives the opportunity to qualify better the message on how to design such schemes to maximise the impact on participation. The key factors affecting participation levels are the employers’ level of obligation, the gradual implementation of the policy, the size of the target population, the possibility to opt out or cease membership, the automatic re-enrolment process, the financial incentives provided, and the simplicity of the process for individuals (OECD, 2019\textsuperscript{(2)}). In particular, country experiences suggest that higher participation levels can be reached when the target population is broad-based, possibly covering all employees as well as the self-employed, the financial incentives are adapted to the characteristic of that population, and default options simplify decision-making for less engaged participants.

19. Recent work also highlights that retirement savings systems in some countries need to adjust to the situation of workers in non-standard forms of work. OECD (2019\textsuperscript{(4)}) shows that non-standard workers (i.e. part-time, temporary, self-employed and informal workers) have more limited access to, and lower pension income prospects from, funded pension arrangements than full-time permanent employees. Given that women are more likely to be in such forms of work, they are likely to have worse access to retirement savings plans than men. Countries willing to have a more inclusive retirement savings system should aim to prevent exclusion from plan participation for non-standard workers, in particular by limiting the use
of, or even eliminating, eligibility criteria based on salary, working hours, length of employment and type of contract.

20. Finally, the OECD Pensions Outlook 2020 acknowledges that members may be allowed to access their savings before retirement in exceptional individual circumstances (OECD, 2020). The COVID-19 crisis has demonstrated that many individuals lack emergency savings to face hardship situations. Allowing access to retirement savings should be a measure of last resort and based on individuals’ specific and exceptional circumstances. Retirement pots are to finance retirement. Accessing retirement savings could lead to materialising temporary asset values losses, liquidity and investment management problems for pension funds, and, more importantly, to retirement income adequacy shortfalls. Current regulatory frameworks already allow for tapping retirement savings in exceptional circumstances when substantial income losses occur, and may only be expanded further on a temporary and targeted manner, where needed, to address genuine financial hardship.

21. The proposed message focusing on enrolment reflects all this work. The bold part of the message refers to the main purpose of encouraging people to enrol, which is to make DC systems as inclusive as possible. Although compulsory enrolment is the most effective policy, it has limitations and the proposal retains the fact that some countries may not consider it opportune (OECD, 2012). The message specifies that the target population of automatic enrolment schemes needs to be as broad as possible. It then refers to financial incentives, default options and simple choices that all help counter individuals’ behavioural biases. Policy makers are, however, encouraged to limit the use of eligibility criteria that may hinder plan access to specific groups of people, including women. They are also warned against attractive product features that may remove barriers to saving into funded pension arrangements but risk reducing future retirement income. The message then specifies that early access to funds should be a measure of last resort. Finally, although financial education also plays an important role in supporting individuals to plan for retirement and encouraging participation in funded pension arrangements, this aspect is left out of this message, as it is already covered more broadly in message n°10.

22. The current message n°2 refers to the need for plan members to contribute and to contribute for long periods, but fails to offer policy makers concrete solutions to achieve sufficiently high contribution levels and sufficiently long contribution periods. It also mentions “work longer” policies, which are out of the remit of pension policy makers.

23. Recent work identifies approaches to promoting appropriate contribution levels, in the context of behavioural biases and low levels of financial knowledge (OECD, 2018). The appropriate contribution rate that members should pay into DC plans depends on the contributions paid to other components of the pension system, especially PAYG; the role of DC arrangements in overall retirement income adequacy; and the needed level of certainty that this income is actually achievable given the risks involved in saving for retirement. However, behavioural biases and low levels of financial knowledge may prevent members to properly assess their needs in retirement, calculate the corresponding contribution rate given their level of risk aversion, and commit themselves to contribute at that level. Policies helping members to contribute at the appropriate level along their
career include setting default contribution rates at higher levels than current practice, increasing automatically contribution rates in line with pay rises up to a pre-set maximum, providing matching contributions, simplifying the contribution process, and providing information about expected pension benefits.

24. New technologies are particularly useful to provide simplification and information. The work on FinTech has highlighted the importance of new technologies to increase the accessibility of investing in pensions to a broader consumer base and make communication with pension savers more effective (OECD, 2017[7]; OECD, 2017[8]). Due to FinTech, digital applications can facilitate saving and encourage greater engagement, and robo-advice can make financial planning more accessible and affordable. However regulation needs to ensure that consumers are no less protected than with traditional channels to engage with pensions, and to ensure that the algorithms behind these digital services are robust and do not result in discrimination.

25. Finally, OECD (2012[9]) shows that longer contribution periods allow for higher chances to reach a target retirement income for a given contribution rate. Lengthening the contribution period by postponing retirement is an effective approach, as it simultaneously increases the assets accumulated to finance retirement and reduces the retirement period that these assets need to finance.

26. The proposed message focusing on contributions links contributions to retirement income objectives. The purpose is not necessarily to have high contributions rates in DC pension plans, but ones that are sufficient to achieve certain retirement income objectives. The message focuses on three tools to help plan members reach the appropriate contribution levels for them along their career, which are automatic escalation of contributions, matching contributions and technology. The last part of the message addresses the need to contribute for longer, in particular when life expectancy increases.

27. Finally, the current message n°3 needs to be updated with the main outcomes from the work conducted between 2013 and 2018 on financial incentives and retirement savings. OECD (2018[10]) provides policy guidelines to help countries improve the design of their financial incentives. This work highlights that all countries provide financial incentives to promote savings for retirement. Tax incentives, in particular tax-deductible contributions, encourage enrolment in retirement savings plans for middle-to-high income earners, because individuals respond to the upfront tax relief on contributions that immediately reduces their tax liability. Low-income earners are, however, less sensitive to tax incentives. They are more likely to respond to non-tax financial incentives, i.e. matching contributions and fixed nominal subsidies. The policy guidelines are the following:

1. Financial incentives are useful tools to promote savings for retirement.
2. Tax rules should be straightforward, stable and common to all retirement savings plans in the country.
3. The design of tax and non-tax incentives for retirement savings should at least make all income groups neutral between consuming and saving.
4. Countries with an “EET” tax regime already in place should maintain the structure of deferred taxation.
5. Countries should consider the fiscal space and demographic trends before introducing a new retirement savings system with financial incentives.

6. Identifying the retirement savings needs and capabilities of different population groups could help countries to improve the design of financial incentives.
   - Tax credits, fixed-rate tax deductions or matching contributions may be used when the aim is to provide an equivalent tax advantage across income groups.
   - Non-tax incentives, in particular fixed nominal subsidies, may be used when low-income earners save too little compared to their savings needs.

7. Countries using tax credits may consider making them refundable and converting them into non-tax incentives.

8. Countries where pension benefits and withdrawals are tax exempt may consider restricting the choice of the post-retirement product when granting financial incentives.

9. Countries need to regularly update tax-deductibility ceilings and the value of non-tax incentives to maintain the attractiveness of saving for retirement.

28. The proposed message establishes that the purpose of improving the design of financial incentives is to maximise the impact on enrolment and contributions and selects some of the guidelines only. The message needs to be short and concise and cannot include all of the guidelines. The first guideline about the usefulness of financial incentives is already included in the proposed message on enrolment. The guidelines that may be relevant for some countries only, because they focus on specific situations, have been left out (guidelines 4, 5, 7 and 8). The proposal also identifies which designs of financial incentives may work best for different income groups, as they are likely to react differently to incentives structured in different ways.

**Efficiency and costs**

29. Message n°4 of the current OECD Roadmap relates to efficiency and costs (Box 4). The proposal broadens the scope of the message to be inclusive of products for both the accumulation and the pay-out, provides more examples of potential policy interventions, and highlights the balance to be struck between competition and economies of scale in a direct manner.

<table>
<thead>
<tr>
<th>Box 4. Message on efficiency and costs</th>
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<tr>
<td><strong>Current message</strong></td>
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<tr>
<td><strong>4. Promote low-cost retirement savings instruments.</strong> Policymakers need to ensure that there are incentives in place to improve efficiency and reduce costs in the pensions industry. Disclosure-based initiatives should be promoted, but may need to be complemented with more effective solutions such as appropriate tender mechanisms or default allocation to low-cost providers, especially in compulsory or auto enrolment systems.</td>
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In certain pension’s structures, cost issues can be addressed by establishing large pension schemes, run on a non-profit base.

**Proposed message**

5. **Promote low-cost and cost-efficient retirement arrangements in both the accumulation and pay-out phases.** It is essential to promote initiatives to foster competition and to improve disclosure, comparability, and transparency. They may need to be complemented with appropriately designed pricing regulations and structural solutions that protect members’ interests. Structural solutions should have strong institutional and governance frameworks, and can include tender mechanisms, allocation of individuals to low-cost providers, cost-efficient consolidations, large industry-wide non-profit providers, and independent centralised providers. Measures to promote cost-efficiency should balance the benefits of fair competition and economies of scale with the risks of an oligopolistic outcome. Finally, fees charged to participants should be aligned with the costs providers incur and the value provided to participants.

30. The proposed message broadens the scope to encompass pension products for both the accumulation phase and the pay-out phase, and effectively absorbs much of the existing Message n°8 to promote the supply of annuities and cost-efficient competition in the annuity market. This is because the mechanisms to reduce the cost of pension products should not significantly differ depending on whether they cover the accumulation, pay-out, or both phases.

31. The proposed message emphasises the term ‘cost-efficient’ in addition to ‘low-cost’, to reflect that the goal of the message is not solely to reduce fees to members, but also to align the fees with the costs incurred to offer the products and the value that they provide to participants. This idea was emphasised in Chapter 3 of the *OECD Pensions Outlook 2018* (OECD, 2018[11]) and continues to be the OECD’s key guiding principle when it comes to discussions on cost reduction. This addresses a common criticism that arises in this space – that higher costs are not necessarily bad. Rather, it is important that members receive value for money. However, it must be kept in mind that while costs are usually measurable in an objective way and on an ex-ante basis, value-for-money and qualitative features are much more difficult to be measured in objective terms.

32. The proposed message takes into account that whilst it is important to ensure pension providers propose retirement instruments which are cost-efficient to individuals, it is also essential to make low-cost options available to members. Value-for-money and cost efficiency may vary over time according to investment performance and conjuncture. Low-cost defined contribution pension plans however should be accessible to individuals on an on-going basis.

33. The proposed message provides examples of measures that can help achieve cost-efficiency in pension provision. Chapter 3 of the OECD Pensions Outlook 2018 examined policy measures implemented in different jurisdictions to help align the charges levied by pension providers on scheme members, sponsors and employers with the cost of the services provided (OECD, 2018[11]). It describes the reasons why market mechanisms may fail in the area of pension provision and found that the most common policy response, improving transparency of charges
and costs, works best when accompanied by additional measures such as pricing regulations or structural solutions. The proposed message retains this message and emphasizes the need to protect members’ interests when implementing structural solutions and to make sure any pricing regulation measure is appropriately designed. It also provides a number of concrete examples (tender mechanisms, default allocation to low-cost providers, large industry-wide non-profit providers, independent centralised providers), while acknowledging that their success is conditional on the existence of a robust institutional and governance framework and significantly depends on the context and way in which they are implemented (OECD, 2018[11]).

34. The proposed message does not endorse any specific type of pricing regulation but rather recognises the need to appropriately design them. Pricing regulations cover the fee structure of retirement savings arrangements, including the type of fees authorised, caps on fees and the use of performance fees. While several OECD countries have introduced caps on fees, such caps may have unintended consequences. In particular, the level of any cap may limit its effectiveness: if set too high, it may lead to an increase in charges up to the cap level, whereas if set too low, it may encourage providers to cut costs by offering lower-quality plans or failing to act in the best interest of members.

35. The proposed message highlights the need to consider the balance between promoting competition and optimising economies of scale, which is the essence of why the establishment of large pension schemes is included in the original message. While promoting competition can encourage new entrants into the market and increase the downward pressure on fees, it can also reduce the individual market share of each player and therefore reduce the economies of scale that they benefit from. In small markets, a large number of providers may therefore not be optimal. In some markets, a centralised provider or large, industry-wide occupational funds could be an option to maximise economies of scale where they are not able to be realised with multiple providers.

36. The proposed message concludes by highlighting the need to align the charges levied by pension providers on scheme members, sponsors and employers with the cost of the services provided (OECD, 2018[11]). While the main message of the message relates to the need for low-cost and cost-efficient instruments, Chapter 3 of the OECD Pensions Outlook 2018 recognises that retirement saving instruments with higher charges may be adequate for some participants if they offer higher value for members, or a higher level of service. It discusses examples of such services (e.g. communication campaigns to encourage members to save) or value-creating options (e.g. diversification of investment strategies into more expensive asset classes) which can lead to increasing pension pots via higher contributions or better risk-adjusted returns.

Investment strategies

37. The OECD Roadmap currently includes two messages related to investment strategies (Box 5). The proposed wording merges both messages into one and links investment strategies and defaults more clearly to the objectives of the DC pension arrangement. It also proposes to explicitly tie investment strategies to the structure of the pay-out phase, and emphasises the importance of risk assessment in establishing appropriate strategies.
Box 5. Messages on investment strategies

**Current message**

5. Establish appropriate default investment strategies, while also providing choice between investment options with different risk profile and investment horizon. As many members may be unwilling or unable to choose investments, default options need to be carefully designed following the lessons learnt from behavioural economics. But if they wish, people should be allowed to choose the investment strategy best suited for them according to their risk profile and their level of risk tolerance, as well as their different overall pension arrangements.

6. Consider establishing default life-cycle investment strategies as a default option to protect people close to retirement against extreme negative outcomes. Life-cycle investment strategies reduce the impact of market risk on the account balance as the member ages. Such a design is consistent with economic rationale and risk attitudes and is therefore well-suited for default strategies.

**Proposed message**

6. Ensure that all individuals have access to appropriate investment strategies and a well-designed default. For people unwilling or unable to choose, a default investment strategy should be established in line with the objectives of the DC pension system and the structure of the pay-out phase. For example, life cycle investment strategies can be well suited to encourage members to take on more investment risk when young, and to mitigate the impact of extreme negative outcomes when close to retirement. For people willing to choose their investment strategy, different investment horizons and risk profiles should be offered. To assess the appropriateness of different investment strategies against a policy objective, risks affecting DC pensions, such as labour, financial, economic, demographic and long-term sustainability risks should be considered.

38. The two messages may need to be reconsidered in order to more clearly mention the need to take into account the structure and ultimately the objectives of different DC pension arrangements when designing investment strategies.

39. All individuals should have access to an investment strategy that is appropriate given their objectives. The default option is by design the investment strategy that is the most appropriate for most people, given the expected role of the DC pension arrangement within the overall pension system. However, individuals may have different objectives for the DC component of their pension mix, and should therefore be able to choose the investment strategy which best suits their needs, and which may be different from the default investment strategy. The proposed message thus merges the two messages and encompasses investment strategies in general, as well as defaults as both aspects serve the same purpose, i.e. to ensure that all individuals have access to an appropriate investment strategy in line with their objectives.
40. Members should be provided with a choice of investment strategies with different investment horizons and risk profiles. While the default option is necessary for those unable or unwilling to make a choice, members should be able to tailor their investment strategy to their personal circumstances and preferences. Members of a DC pension arrangement may have different personal objectives for their retirement savings, depending on their expected overall sources of pension income, or on their risk tolerance level for instance. They may also have a longer (shorter) investment horizon than what the default assumptions for their age group would indicate, based on their own personal circumstances. Risk assessment should be as comprehensive as possible and provide members with information on the different types of risk carried by different investment strategies, with different investment horizons.

41. Depending on the pension system size, structure and development stage, different objectives for the default may exist, which may lead to different default investment strategies being appropriate. If the objective of the default is to encourage younger members to take on some investment risk and to protect people close to retirement against extreme negative outcomes, then a life-cycle strategy may be an appropriate default. If the objective is to maximise pension assets at retirement time, then strategies involving a high exposure to higher risk assets may be more appropriate, even when approaching retirement age. Objectives, and therefore defaults, may also differ by socio-economic groups. This could be the case for instance in countries where the replacement rate from public PAYG and solidarity net sources is deemed adequate for lower income individuals, and the DC component is not seen as a major component of the retirement mix hence should be invested in riskier assets.

42. The investment strategy may also need to vary whether the member needs to buy an annuity at retirement or remains invested during retirement by using programmed withdrawals.

43. The message therefore does not endorse any specific type of investment strategy for the default in general. It rather refers to the objectives of the pension system and to the structure of the pay-out phase to recommend life-cycle strategies when the objective is to encourage younger members to take on some investment risk and to protect people from retirement against extreme negative outcomes.

44. The message emphasises the importance of assessing the appropriateness of different investment strategies in light of the various risks affecting retirement income and the policy objectives. This message comes from several streams of work that have been carried out.

45. The OECD Secretariat, consistently with the request of the WPPP, has developed a stochastic model that makes it possible to simulate the retirement income from DC arrangements in a world of uncertainty. The stochastic model derives uncertainty about labour, financial and demographic risks by assuming random-generating processes for each of the variables (or risks) in question. The model produces Monte Carlo simulations for savings accumulated at retirement and/or for the income received during the pay-out phase, depending on the need of the analysis, based on stochastic simulations of investment returns in different asset classes, inflation, wage profiles, unemployment spells and life expectancy. The model also assumes correlations between the different variables when necessary. Each Monte Carlo simulation represents one possible realisation of the world.
Antolin and Payet (2011) and Antolin, Payet and Yermo (2010) describe the stochastic model and the methodology to introduce uncertainty in several parameters. The papers show that labour market, financial and demographic risks significantly affect retirement income prospects from DC arrangements. The message therefore calls for a framework incorporating all these risks.

46. Recent work illustrates how this model can be used to assess the risk profile of investment strategies over the long term. For instance, the OECD Pensions Outlook 2020 shows how a stochastic model can be used to assess investment strategies with respect to the objective of maximising retirement income (OECD, 2020). This approach could be used by retirement savings plan providers to demonstrate that their investment strategies are consistent with certain objectives. In this context, regulators define the framework within which the parameters of the model can be determined, to make sure providers will use comparable and consistent assumptions for all the parameters. Generalising to other settings, the message advocates the use by regulators of a framework to assess the risk profile of investment strategies.

47. The message also includes long-term sustainability risk to the examples of risks provided, as this risk is increasingly considered by regulators and supervisors as potentially financially material to retirement savings.

**Design of the pay-out phase**

48. Message n°7 of the current OECD Roadmap relates to the design of the pay-out phase, and in particular how to mitigate the longevity risk for pensioners (Box 6). The proposed revision broadens the focus of the existing message from annuity products to include all design options that can protect individuals from longevity risk, and recognises the value of flexibility with respect to pay-out options.

**Box 6. Policy message on the design of the pay-out phase**

**Existing Message**

7. For the payout phase, encourage annuitization as a protection against longevity risk. A certain level of annuitization of balances accumulated in DC pension plans should be set as the default mechanism for the payout phase, unless pay-as-you-go public pensions or the old-age safety net already provide for sufficient regular pension payments. A combination of programmed withdrawals with a deferred life annuity (e.g. starting payments at the age of 85) that offers protection against inflation could be seen as an appropriate default. The demand for annuities could be also promoted by financial education initiatives stressing that they are insurance products designed to protect people from outliving their resources. Lump-sum payments may have to be discouraged as a form of benefit pay-out, except for small DC account balances.

**Revised Message**

7. Ensure protection against longevity risk in retirement. DC pension plans should provide some level of lifetime income as a default for the pay-out phase, unless other pension arrangements already provide for sufficient lifetime pension payments. Lifetime income can be provided by annuities with guaranteed payments for life or by collective arrangements where longevity risk is pooled among participants. The choice of the type of
arrangement will depend on the desired balance between the cost of guarantees and the stability of retirement income. Flexibility could be provided by allowing for partial, deferred or delayed lifetime income combined with programmed withdrawals. Full lump-sums should be discouraged in general, except for low account balances or extreme circumstances.

49. The language of the existing message limits its scope to traditional annuity products as the solution to protect individuals from the longevity risk of outliving their savings in retirement. Recent work on risk-sharing options in pension arrangements has shown that annuities providing a guaranteed income are not necessarily the best option for insuring pensioners against longevity risk (OECD, 2020[15]). Options that either allow all risks to be shared collectively among participants or shared between participants and the provider may be able to provide a higher expected pension income due to the lower levels of guarantees provided. This is particularly true in the current low interest rate environment, where securing the guarantees comes at a significant opportunity cost in terms of investment returns. The policy message should therefore not limit itself to the purchase of annuities, but rather include also risk-sharing and collective arrangements that allow some of the investment and/or systemic longevity risk to be borne by the participants.

50. The need for additional protection against longevity risk should take into account all sources of pension income, not only that coming from the PAYG system or the old age safety net. However, the existing message only recognises public sources of pension income as offering protection against longevity risk. Many jurisdictions have large occupational pension schemes that provide a substantial level of pension income in retirement. In jurisdictions where DC pensions serve more to top-up the level of pensions, there will be less of a need to convert the assets into a lifetime income.

51. The appropriate design for a default option in pay-out will depend largely on the design of the pension system as a whole and the options that are feasible to offer in a given jurisdiction. While individuals should be protected from inflation risk, linking pension income from the DC pension to inflation may not be necessary when other sources of pension income protect individuals to a large extent from a loss of purchasing power. In addition, providing indexation to inflation can be extremely costly and is likely not possible in jurisdictions where financial instruments to hedge inflation risk do not exist (OECD, 2016[16]). Increasing the pension payment by a fixed percentage can be a more cost effective way to partially mitigate the risk of a loss of purchasing power.

52. Similarly, the combination of a programmed withdrawal and a deferred annuity may not be appropriate in all cases. For a similar level of risk, this option will provide a lower level of expected income than a standard immediate annuity, which would be a more appropriate option for individuals having a lower risk-taking capacity. The main argument for the combination of a programmed withdrawal and deferred annuity is that it offers longevity protection for a relatively small proportion of the accumulated capital, which should help to increase demand for these products, while offering flexibility during the deferral period. Nevertheless, the benefits of such a design have typically not been realised where it exists as a pay-out option, because the designs implemented focus more on allowing large withdrawals of capital or inheritance instead of flexibility with adequate protection. The shorter
deferral periods that are more commonly offered (e.g. Chile, Latvia, Peru (OECD, 2018[17]), (OECD, 2019[18]) serve more to accelerate the withdrawal of capital in the years immediately following retirement and to reduce the level of guaranteed pension that provides longevity protection. Finally, annuities deferred to begin payments at advanced ages are not commonly available. One main reason for this seems to be a reluctance by providers to offer such products due to the relatively higher levels of risk exposure they present as compare to immediate annuities. The risk of adverse longevity deviations for these types of products can be very costly relative to the premium paid, and this cost is explicitly recognised in jurisdictions having risk based capital requirements.

53. Financial education should not be in the scope of this message, as there are already separate policy message that addresses the need for financial education and communication more broadly. Those messages should be inclusive of products for the pay-out phase.

54. The proposed policy message broadens the scope from only annuity products to other types of arrangements that can provide protection against longevity risk. In doing so, it also highlights the trade-offs in the desired pay-out design, which was also discussed extensively in the work on annuity products and more recently in the work on risk-sharing (OECD, 2016[16]) (OECD, 2020[15]). The extent to which the arrangement providing a lifetime pension income offers guarantees will depend on the desired balance between cost and benefit stability. High guarantees imply higher cost and higher stability. Lower guarantees imply lower cost and higher volatility of benefits. The choice will largely depend on the levels of risk aversion of the participants versus the cost of providing the guarantee. Delegates have welcomed the broadening of the scope of this recommendation.

55. The proposed message continues to recognise that the need for protection from longevity risk from a DC pension will depend also on whether other sources of pension income provide this protection. This point has been stressed by several delegates. However, it now recognises that this protection could come from other private pension sources in addition to public sources.

56. The proposed message more explicitly highlights the value of flexibility and recognises that different combinations of annuity types and programmed withdrawals could be beneficial depending on the circumstances. This could involve, for example, delaying annuitisation five to ten years after retirement, when the additional returns from pooling longevity are still not expected to be significant, annuitizing only a portion of the accumulated assets, or purchasing a deferred annuity that begins payments at a later age. Delegates have agreed that flexibility is important, and have emphasised that the recommendation should not imply that the purchase of an annuity be mandatory. Nevertheless, the recommendation retains the message that full lump-sums should be discouraged, while recognising that there are exceptions where alternative forms of withdrawal may be desirable, such as for low account balances or other extreme circumstances.

Cost-efficient annuity products

57. Policy message n°8 of the current OECD Roadmap relates to promoting competition and supply for annuity products (Box 7). The proposed revision recognises that the scope of such a message should be broadened beyond
annuity products only and should encompass all pension products. As such, it suggests incorporating this message with the other relevant messages, namely that on promoting cost-efficient products in the accumulation phase, but also the messages on improving participation and on communication.

Box 7. Policy message on cost efficient pension products

**Existing message**

8. Promote the supply of annuities and cost-efficient competition in the annuity market. Different providers, such as public schemes, non-profit occupational plans, and insurance undertakings may provide different arrangements of risk-sharing in the payout phase that may help strengthen benefit adequacy and diversify risks in retirement income. Competition among different providers in the market for individual and group annuities should be promoted to ensure cost-efficient provision for plan members and to help develop the annuity sector as a whole.

**Revised message**

This message could be absorbed into other messages. The message on cost-efficient savings instruments could be broadened into cost-efficient pension products, with the message to promote low-cost and cost-efficient retirement instruments being applicable for both accumulation and pay-out. The message on participation could be broadened to promote inclusiveness and ensure that a limited number of simple options are available. Finally, the message on communication can stress the importance of comparability and the simplification of choice.

58. The existing message focuses only on promoting supply and competition in the annuity market, whereas any updated message should more broadly encourage the supply of cost-effective pension products.

59. The revised policy message n°5 to promote the supply of low-cost and cost-efficient pension products addresses issues related to competition. The solutions for the pay-out phase could be similar to those to promote cost-efficient pension products in the accumulation phase, so it seems sensible to broaden the latter message to be inclusive of all pension products covering both accumulation of savings and pay-out. Delegates have largely agreed with this approach. The balance to be found between increased competition among a large number of providers and optimising benefits from economies of scale is an issue that has emerged in several of the Pension Reviews that the Secretariat has carried out, and is incorporated into the proposed policy message n°5.

60. The benefit of risk-sharing in the existing message has now been incorporated into the proposed message n°7 to ensure adequate protection against longevity risk. That recommendation has also highlighted the trade-off between the cost of security and benefit stability.

61. There is a need for adequate disclosure and communication which allows individuals to easily compare their options in terms of the amount of income they can expect to receive and the underlying risk (OECD, 2016[16]). This is included in the revised message n°9 on communication.
62. Finally, a limited number of available options can simplify individuals’ decision-making (OECD, 2018[1]). Keeping options simple should also help to reduce cost, as complexity of products also tends to increase the cost of providing them. Simplicity is addressed in the policy message n°2 to make DC pensions more inclusive as a way to facilitate members’ participation and engagement with their retirement savings plan.

**Longevity risk management for pension providers**

63. Policy message n°9 of the current OECD Roadmap relates to the effective management of longevity risk by pension providers (Box 8). The proposed revision focuses the scope of the recommendation on using appropriate mortality assumptions that incorporate improvements, making population mortality data available, and allowing for the possibility to account for the differences in life expectancy for different sub-populations.

**Box 8. Policy message on the management of longevity risk by pension providers**

**Existing Message**

9. **Develop appropriate information and risk-hedging instruments to facilitate dealing with longevity risk.** The market for annuities would benefit from certain actions aimed to making the management of longevity risk easier. Firstly, reliable life tables should be made available by public statistical agencies; they should be regularly updated and incorporate stochastic forecasts of future improvements in mortality and life expectancy. Secondly, capital market solutions to longevity risk management could be promoted by producing standardised, publicly and readily available longevity indices. While there has been no successful example of longevity bonds thus far, governments could additionally consider in certain contexts issuing longevity indexed bonds and issuing very long-term bonds in enough quantities.

**Revised Message**

8. **Facilitate the regular monitoring and management of longevity risk.** Providers of lifetime pension income should use appropriate and regularly updated mortality assumptions that account for future improvements in life expectancy. Public authorities should make regularly updated population mortality data available to provide a reference for setting mortality assumptions. This data should be as granular as possible to facilitate setting appropriate assumptions and the development of sustainable retirement solutions for specific populations, for example to provide better value to low socioeconomic groups or those in poor health. Standardised, publicly and readily available data can promote effective risk management and facilitate the creation of standardised longevity indices that can be used to price the transfer of longevity risk to a third party.

64. The existing message does not fully reflect the policy messages developed in the work on mortality assumptions, longevity risk, and the differences in life expectancies across socioeconomic groups. Indeed, one of the key messages from the work carried out on mortality assumptions is that pension providers should use appropriate mortality tables accounting for future improvements in life expectancy and to update them regularly (OECD, 2014[19]). Recent work carried out assessing the implications of differences in life expectancy across socioeconomic
groups has also highlighted the need for granular data to monitor differences in mortality across populations and to facilitate understanding the impact that these differences have on pension outcomes (OECD, 2018[20]). The availability of granular data will also facilitate the development of pension solutions targeted at low socioeconomic groups, such as enhanced annuities that can offer higher levels of income to those with lower life expectancies. The development of such solutions to reduce the differences in pension outcomes across socioeconomic groups has been a key recommendation coming out of recent work on the topic (OECD, 2018[20], (OECD, 2016[21]).

65. There are many methods to project future mortality, both deterministically and stochastically, and the appropriate model will depend on the purpose of the projection. The existing message is too prescriptive as to how to establish mortality improvement assumptions. Stochastic projections are not necessarily needed for setting best estimate mortality assumptions, but can be useful for assessing the longevity risk exposure of the provider (OECD, 2014[19]). While statistical agencies could certainly provide forecasts as a reference, it should not be seen as a requirement because as long as the historical mortality data is provided, any stakeholder would be able to use it to calibrate any model for their specific purpose. Indeed, where such projections are provided by statistical agencies, there is a risk that they will be used blindly as-is in all situations rather than tailored for specific objectives and adapted to recent research and trends.

66. The existing message is also overly restrictive as to how longevity benchmarks should be produced and used. It should not matter who develops such indices or benchmarks, and indeed such benchmarks have been developed by the private sector using publicly available data (e.g. the Life and Longevity Markets Association). Tailored benchmarks have also been developed for specific longevity swap transactions (OECD, 2014[19]). As long as data is available, such benchmarks can easily be established according to the specific objective.

67. The scope of the risk mitigating solutions in the existing message is also too limited. Longevity bonds, for example, should be considered only in specific situations and should not be viewed as a general recommendation to facilitate the management of longevity risk. The benefit of issuing a longevity bond will very much depend on the population for which the risk needs to be hedged and the design of the targeted pension solution (OECD, 2014[19]). While governments could consider issuing long-term bonds, the objective of this would be to manage investment risk, not longevity risk, and such an issuance would also need to be considered in the context of the current low-interest rate environment, without suggesting that public authorities necessarily create these benchmarks.

68. The proposed message retains the importance for policy makers to facilitate the management of longevity risk for pension providers, but focuses their role on the provision of data rather than more broadly developing risk-hedging instruments. As such, it also broadens the provision of life tables to ensuring that the underlying population mortality data be made available, and specifies that this should be done at a granular level for sub-populations, in particular for different socioeconomic groups, in order to provide a reference for setting assumptions for different pensioner populations. The message emphasises that this data serves as a reference for mortality assumptions, and as such does not require its use. The mortality assumptions developed for any given pension pay-out arrangement should
appropriately reflect the mortality of the participants. Where desired, granular data can be helpful to provide alternative pay-out solutions targeted at more disadvantaged groups.

69. The proposed message highlights that the provision of regularly updated and easily available population mortality data will also facilitate the development of benchmarks and more broadly a reference price of longevity risk transfer, regardless of how the risk is transferred.

**Communication and financial education**

70. The proposal for a revised Message n°10 (now Messages n°9 and n°10) provides additional messages around communication with plan members, promoting public awareness about pensions, and financial education strategies. The current message jointly addresses two related themes: the first is communication with members (at an individualised level) and the second refers to raising awareness. The proposal below is now to split the message into these two themes. The revised messages reflect the main conclusions from the OECD work around communication of pension benefits to DC members as well as policy measures relating to financial advice for retirement, work produced since the publication of the Roadmap.

**Box 9. Message on communication and financial education**

**Current message**

10. Ensure effective communication and address financial illiteracy and lack of awareness. Effective communication includes providing regular individualised benefit statements. In addition, clear benefit projections under prudent assumptions, informing members about the possible impact of higher contributions or later retirement on their benefits could also be made available. Plan members should also have free and ready access to comparative information about costs and performance of different providers, and the language used in disclosed materials should be readily understood by them.

**Proposed messages**

9. Ensure effective, personalised, regular, consistent and unbiased communication to members. Communication with members should be clear and simple, with minimum jargon, especially when explaining potential options. Personalised information, ideally combining all pension sources, can nudge people to take action to boost their pension adequacy, and can be provided through online platforms or pension statements. Projection tools should focus on potential retirement income levels, account for the likelihoods of different outcomes, and convey risks to plan members. Comparison tools should provide standardised information to allow users to compare performance, costs, investment allocation, and other plan features. Policy makers should ensure that information provided by financial advisors and digital advisory services is accessible, accurate and unbiased.
10. **Promote awareness and develop financial literacy programmes to support decision making about retirement and pensions.** Countries should have national financial education strategies, potentially in collaboration with key stakeholders that provide general information about retirement options but also increase awareness of the importance of saving for retirement. Financial education should be a continuous process with focused messages that evolve along with savings objectives at different life stages. Public authorities should improve people’s understanding of how the pension system works and explain pension reforms, as well as their economic rationale, through communication campaigns. National communication campaigns should be driven by and evaluated against clear, realistic and well-targeted objectives.

71. The current message refers to effective communication, and the revised message aims to provide greater detail on how communication can be effective. Important principles of effective communication include that communication should be simple, effective, and personalised. The new message aims to highlight these important principles. Chapter 5 of the *OECD Pensions Outlook 2014* (OECD, 2014[22]) analysed member statements. It determined that they remain essential but, as a sole means of communicating personalised benefit information, are inflexible and limited. Overall, the internet offers a more flexible delivery format that avoids information overload. Web-based tools such as dashboards allow members to find a lot of relevant information in one place. Web calculators are also important pension planning tools which allow members to actively compare possible pension outcomes under different assumptions. The proposed message aims to recommend these tools. The roadmap document does not currently refer to the quality of financial advice, but this point is now part of the proposed message as it important and fits well with Message n°10. It also reflects recent work on robo-advice and Chapter 3 of the *OECD Pensions Outlook 2016* looked at policy measures to improve the quality of financial advice for retirement (OECD, 2016[23]).

72. Since the roadmap was published, the OECD has undertaken work on how to improve financial education with a particular focus on financial literacy of pension products and financial planning for retirement. The new message draws on the recently revised OECD Recommendation of the Council on Financial Literacy[3]. The OECD has also provided policy guidelines for financial education initiatives for retirement planning (OECD, 2016[24]). Additional recent work has recommended that governments and public authorities should have national financial education strategies and should expand financial literacy training for retirement planning. Messages about financial education should reflect that messages about savings needs evolve with individuals’ life stages. Chapter 5 of the *OECD Pensions Outlook 2014* also discussed how National Pension Communication Campaigns play an important role in communicating about policies or reforms in a simple and timely way, consistent with broader outreach strategies. They should be driven by clear, realistic, and well-targeted objectives that produce outcomes that can be measured, evaluated and monitored against their goals and processes. The proposed message aims to summarise the key findings from this recent work.

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References


