This Technical Note was prepared by Heinz Rudolph (Lead Financial Sector Specialist, WB) in the context of the Financial Sector Assessment Program (FSAP) in Thailand, and overseen by the Finance, Competitiveness and Innovation Global Practice, World Bank Group, and the Monetary and Capital Markets Department, IMF. It contains technical analysis and detailed information underpinning the FSAP’s findings and recommendations. Further information on the FSAP program can be found at http://www.worldbank.org/fsap.
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## GLOSSARY

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<tr>
<td>AMC</td>
<td>Asset Management Company</td>
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<tr>
<td>CPF</td>
<td>Central Pension Fund</td>
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<td>FC</td>
<td>Fund Committees</td>
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<td>GPF</td>
<td>Government Pension Fund</td>
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<td>LTF</td>
<td>Long Term Equity Funds</td>
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<td>MPF</td>
<td>Mandatory Pension Fund</td>
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<td>NPF</td>
<td>National Pension Fund</td>
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<td>PDMO</td>
<td>Public Debt Management Office</td>
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<td>PVD</td>
<td>Voluntary Provident Fund scheme</td>
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<td>RMF</td>
<td>Retirement Mutual Fund</td>
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<td>SEC</td>
<td>Securities and Exchange Commission</td>
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EXECUTIVE SUMMARY

While Thailand’s pension system is typically described as a multi-pillar pension scheme, its design is highly fragmented and offers adequate coverage only to a small segment of the population, including civil servants and high-income individuals. Pillar zero offers an old age living allowance to elderly Thai people who are eligible for a government pension, but amounts are insufficient in the absence of other support (for example from the family). Pillar zero also includes a traditional government pension (the Old-Age Pension, OAP) for civil servants. The OAP scheme covers approximately one million civil servants and does not have reserves. Pillar 1 includes a Social Security Fund for all formal sector workers and serves approximately 13 million individuals in the mandatory part and 2.7 million in the voluntary part. Currently, Pillar 2 offers only a mandatory funded scheme for government officials, but the government has a draft law that proposes the creation of a mandatory provident fund for private sector workers. Pillar 3 of the pension system includes several components for different segments of the population, including the Voluntary Provident Fund (PVD) scheme that serves approximately 3 million people and manages assets of THB 1.1 trillion (USD 33.8 billion) and the Retirement Mutual Fund (RMF) scheme that serves an undetermined number of individuals and manages approximately THB 258 billion in assets (USD 7.9 billion.) The PVD and RMF schemes operate as collective and individual pension plans, respectively. While not part of the Thai pension system, individuals have access to other voluntary savings mechanisms, including the Long-Term Equity Funds (LTF) scheme, which manages assets of THB 390 billion (USD 12.2 billion.) Benefits of third pillar private schemes are typically paid in the form of lump sums.

As the Thai population ages, the pension system needs to reorient income to individuals in the future. Demographic changes are affecting the way that individuals face retirement and will have an impact on the social contract that has governed the care of the elderly in the past. Traditionally, the family structures have supported the elderly in the context of large families and relatively short life expectancy of the population. As the number of children per family has fallen and individuals have begun to live longer, it is becoming increasingly burdensome for families to take care of the elderly. These trends are projected to continue in the future; for example, the old age dependency ratio (population over 65 as a percentage of the total population) is expected to double between 2015 and 2035.

While a parametric reform of other parts of the Thai pension system is needed – including retirement age and access rules for pensions – it is also important to put in place a strong funded scheme. This report focuses mainly in voluntary funded scheme and provides recommendations for the creation of mandatory funded pension system.

This report highlights that the objectives of the provident fund scheme are not necessarily consistent with those of a pension fund system. According to the legal and regulatory framework of the PVD scheme, its objective is to serve as security for the employees in case of their death, termination of employment, or resignation from the fund. To the extent that the objectives of the
PVD scheme are not defined in terms of generating savings for retirement, it is difficult to optimize investments.

The governance structure of the PVD scheme is a classic “principal-agent” problem and is not conducive to the alignment of interests between the agent and the principal. The structure of incentives of the PVD scheme is such that agents (asset management companies [AMC] and fund committees [FC]) have limited incentives to pursue optimal investment strategies, thus leaving the asset allocation decisions up to the principal (employees), the stakeholder with the lowest capacity to understand the consequences of such decisions. While the authorities and the asset management industry share the diagnostic about the suboptimality of the PVD scheme’s investment portfolios, they have approached the problem through fostering financial education and promoting “employees’ choice.” The emphasis on supporting financial education programs may be overly optimistic, as little has been done in terms of evaluating their impact and effectiveness.

The possibility of obtaining the same tax benefits from an individual pension plan (RMF) or collective plan (PVD) is a disincentive for executives of medium-size companies to create collective PVD schemes. Only approximately 3 percent of the companies and 20 percent of the employees are contributors to PVD plans in Thailand. Yet, international experience suggests that collective voluntary funded schemes are more successful than individual funded schemes in expanding coverage and increasing national savings.

The PVD system is largely designed for paying lump sums during the payout phase. The fact there is a strong preference for lump sums by retirees does not mean that it is optimal. While individuals may prefer lump sums over annuity products at the time they make their decision, if they later fall into poverty they are likely to request social assistance from the government. In addition, the possibility of accessing lump sums in Thailand is inconsistent with the generous tax benefits granted during the accumulation phase.

To the extent that PVD portfolios remain conservative and under-invested in fixed income instruments with longer tenors, it means that AMCs are not fulfilling the objective for optimization of future pensions of individuals. While SEC regulations require high risk-management standards on the AMCs, pension portfolios remain invested in highly conservative instruments. One of the factors inhibiting the development of the high-yield investment market is the restriction on the possibility of maintaining non-investment grade instruments in the PVD portfolios.

Aligning the incentive structure of stakeholders with the long-term objectives of the future pensioners is essential for improving the future pensions of the PVD. The regulation for the PVD scheme should establish that funds can be withdrawn only after retirement age. In addition, it is recommended for the SEC to set guidelines for AMCs in defining default portfolios, which AMCs will have to present to companies when offering PVD plans. In this context, the message to employees should focus on the expected replacement rate, rather than the rates of return on a particular period. In addition, the information to the public about fees should also be presented in a standardized framework.
Fund committees should be accountable for the selection process of the AMC and the portfolio allocation. FCs should provide file documentation about the selection process of the AMC, including an evaluation of at least three AMCs and a comparison of investment alternatives and fees. While the selection of conservative portfolios would still be possible, FCs that decide to move in this direction should have to explain how these conservative strategies help in optimizing the future pensions of participants. However, the regulation should also provide some safe-harbor alternatives (fastline) designed to reduce the level of responsibility of FCs, but at the same time provide adequate protection to employees. To the extent that FCs adopt certain procedures defined in the regulation (for example, minimum contribution rate, lifecycle investment strategies, and automatic enrollment) the level of liability of FCs’ members would be reduced.

Increasing coverage through the collective PVD scheme requires reducing the tax incentives on individual pension schemes (RMF and LTF). By phasing out the LTF program and reducing the tax incentives of the RMF program, individuals participating in these programs – including highly compensated individuals – would have greater incentives to participate in the collective PVD program.

Increasing coverage through a mandatory funded scheme requires important decisions. One important decision is whether the proposed mandatory scheme – the National Pension Fund (NPF) – is aimed at replacing or complementing the current PVD scheme.

While mandatory pension schemes can be designed with different degrees of centralization, proper corporate governance of the central governing agencies is essential for mandatory schemes to be successful. In this context, it is essential to ringfence pension fund managers from government influence. Governance of a central pension fund (CPF) scheme needs to ensure that the arm’s length principle applies. In this context, the appointment of the board members of the CPF should ensure technical capacity and independence from the government’s influence. Since the government’s interests are not always aligned with the long-term interests of the contributors, government involvement in the investment decisions of the fund should be avoided.

The voluntary nature of the PVD scheme is not an argument for allowing unconstrained access to the money accumulated in pension funds after retirement. Consequently, the pension system should provide incentives for individuals to opt for retirement income, such as annuities, and to the extent possible, lump sums should be allowed only in cases of small amounts of pension accumulation. In order to preserve the value of the pensions of individuals, the annuities market should be built with inflation-linked annuities. In addition, since annuities are a long-term business and depend on institutions subject to financial risk, it is essential to offer government guarantees on the value of the annuities. Finally, the government may also consider the possibility of creating disability and survivorship insurance in the funded pension scheme to complement the current scheme of benefits.

1 The arm’s length principle is the condition or the fact that the parties to a transaction are independent and on an equal footing.
The development of the high-yield and long-term fixed-income market may help to improve the portfolio allocation of the pension fund system. In this regard, the elimination of the restriction on investments in non-investment grade instruments can help to increase the responsibility of AMCs in the management of the funds.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Agency</th>
<th>Time</th>
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<tbody>
<tr>
<td>Voluntary Pension System</td>
<td></td>
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<tr>
<td>Set guidelines for AMC in defining default portfolios (¶64)</td>
<td>SEC</td>
<td>I</td>
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<tr>
<td>Standardize information on fees (¶66)</td>
<td>SEC</td>
<td>I</td>
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<tr>
<td>Enact regulation on reporting performance of pension funds (¶67)</td>
<td>SEC</td>
<td>I</td>
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<tr>
<td>Increase accountability of fund committees (¶70)</td>
<td>SEC</td>
<td>I</td>
</tr>
<tr>
<td>Reduce the tax incentives on RMFs and phase out the LTF in order to enhance participation in the PVD scheme (¶76)</td>
<td>MoF</td>
<td>NT</td>
</tr>
<tr>
<td>If mandatory funded scheme (NPF) to be enacted, ensure governance structure limits government involvement in the investment decisions of the fund (¶7)</td>
<td>MoF</td>
<td>I</td>
</tr>
<tr>
<td>Payout phase: Set inflation-linked annuities as default option at retirement and limit the possibility of accessing lump sums (¶85)</td>
<td>MoF, SEC, OIC</td>
<td>NT</td>
</tr>
<tr>
<td>Grant guarantees on the value of the annuities (¶108)</td>
<td>MoF, OIC</td>
<td>NT</td>
</tr>
<tr>
<td>Fixed income market: Lift the restriction for AMCs to invest in high-yield bonds (¶112)</td>
<td>SEC</td>
<td>NT</td>
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Time Frame: I (immediate) = within one year; NT (near term) = 1-3 years.

Agency: Securities and Exchange Commission (SEC); Ministry of Finance (MoF); Office of Insurance Commission (OIC).
I. INTRODUCTION

1. While Thailand’s pension system is typically described as a multipillar pension scheme, its design is highly fragmented and offers adequate coverage only to a small segment of the population, including civil servants and high-income individuals. In its 2018 Article IV report, the IMF highlighted the need for a broader pension reform, including parametric changes and gender-inclusive policies to improve female labor force participation and attenuate the impact of aging on productivity growth. While these reforms are needed, private pensions can also play a role in improving retirement income for individuals.

2. As agreed with the Thai authorities, this technical note provides an assessment of the private, funded components of the pension system. A key component assessed is the voluntary provident fund scheme (PVD). The PVD scheme is voluntary and operates as a tax-incentivized scheme, which allows both employers and employees to take advantage of generous tax benefits for savings for retirement. This note also addresses the challenges of the private, funded system and proposes policy recommendations for increasing coverage, improving efficiency, and delivering sustainable retirement income in the payout phase.

3. This note is organized as follows. The next section provides a brief description of the current overall pension system, public and private; Section III provides a diagnostic of the main challenges in the private, funded system; and Section IV provides recommendations for optimizing the design of the private, funded pension system. The focus of the note is to improve the incentive structure of the private, funded pension scheme.

II. DESCRIPTION OF THE PENSION SYSTEM IN THAILAND

A. The multipillar scheme

4. A significant part of the Thailand labor force remains in the informal sector or is self-employed. In 2017, according to the National Statistical Office, Thailand had a working population of 37.7 million people, of which 20.8 million are in the informal sector or self-employed. The formal sector includes approximately 2 million civil servants plus approximately 14.9 million private sector workers.

5. Thailand has a four-pillar pension scheme (Figure 1). Pillar zero offers an old-age living allowance to poor individuals that worked either in the formal or informal labor market. Monthly allowances are age-dependent within a range of THB 600 (USD 18.40) and THB 1,000 (USD 31.40). Approximately 8.4 million people (as of 2018) receive this allowance. While the purpose of this allowance is to keep individuals out of poverty, it is insufficient in the absence of other support (for example from the family).

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2 Pension systems rely on three subgroups of parameters: contribution parameters, benefit parameters, and eligibility conditions for receiving pensions. Parametric reforms involve changes in one or more of these three subgroups.
Figure 1. Thailand’s multipillar pension system

<table>
<thead>
<tr>
<th>Basic Welfare provided by Government</th>
<th>Mandatory System provided by Public</th>
<th>Mandatory System</th>
<th>Voluntary System</th>
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<tbody>
<tr>
<td>Pillar 0</td>
<td>Pillar 1</td>
<td>Pillar 2</td>
<td>Pillar 3</td>
</tr>
<tr>
<td>Government Officials</td>
<td>Old-Age Pension Scheme (OAP)</td>
<td>Government Pension Fund (GPF)</td>
<td>RMF</td>
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<tr>
<td>State-owned Enterprise</td>
<td></td>
<td></td>
<td>PVD, RMF</td>
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<tr>
<td>Formal Labor Market</td>
<td>Old-Age Living Allowance</td>
<td>Social Security Fund</td>
<td>National Pension Fund (Tentative)</td>
</tr>
<tr>
<td>Informal Labor Market</td>
<td>Old-Age Living Allowance</td>
<td></td>
<td>National Saving Fund, Social Security Fund (Section 40), RMF</td>
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6. **Pillar 1 includes a Social Security Fund for all formal sector workers and a traditional government pension (the Old-Age Pension, OAP) for civil servants.** The Social Security Fund, which receives mandatory and voluntary contributions, manages assets of THB 1.8 trillion (USD 55.3 billion) and serves approximately 13 million individuals in the mandatory part (Pillar 1) and 2.7 million in the voluntary part (Pillar 3). The Social Security Fund is the largest institutional investor of the country. The OAP scheme covers approximately one million civil servants and is does not have reserves.³

7. **Currently, Pillar 2 offers only a mandatory funded scheme for government officials, but the government has a draft law that proposes the creation of a mandatory provident fund for private sector workers.** The funded pension scheme for civil servants is managed by the Government Pension Fund (GPF) and serves approximately 1.06 million individuals with assets of THB 885 billion (USD 27.2 billion). Pensions for full-career civil servants are calculated to achieve replacement rates of 70 percent of their last salary. The proposal for a mandatory provident fund for private sector workers is aimed at creating savings to achieve consumption smoothing across working and retirement years, as the pensions offered by the Social Security Fund are insufficient to achieve that objective.⁴

8. **Pillar 3 of the pension system includes several components for different segments of the population.** First, there are voluntary contributions to the Social Security Fund (described above). Second, the National Savings Fund, designed for workers in the informal sector, serves approximately 560,000 individuals and manages assets of THB 3.4 billion (USD 104 million). Third, the PVD scheme serves approximately 3 million people and manages assets of THB 1.1 trillion (USD 33.8 billion).

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³ The OAP is a Pillar 1 pay-as-you-go scheme, different than the GPF, which is funded.

⁴ Section 3 discusses the main elements of the proposal for the mandatory National Pension Fund.
THAILAND

billion), and the Retirement Mutual Fund (RMF) scheme serves an undetermined number of individuals and manages approximately THB 258 billion in assets (USD 7.9 billion.) The PVD and RMF schemes operate as collective and individual pension plans, respectively. While not part of the Thai pension system, individuals have access to other voluntary savings mechanisms, including the Long-Term Equity Funds (LTF) scheme, which manages assets of THB 390 billion (USD 12.2 billion). Benefits of Pillar 3 private schemes are typically paid in the form of lump sums.

9. **The Thai pension system offers adequate protection for civil servants and high-income people but falls short in addressing the retirement income needs of the rest of the population.** The design of the system is not able to provide savings vehicles that attract the middle class and blue-collar workers who are employees of companies from the formal sector or workers in the informal sector. The demographic changes facing Thailand (discussed below) will increase the risk of poverty in old age for a significant portion of the population unless some bold policies are adopted to improve the pension system.

10. **As the Thai population ages, the pension system needs to reorient income to individuals in the future.** Demographic changes are affecting the way that individuals face retirement and will have an impact on the social contract that has governed the care of the elderly in the past. Traditionally, the family structures have supported the elderly, in the context of large families and relatively short life expectancy of the population. As the number of children per family has fallen and individuals have begun to live longer, it is becoming increasingly burdensome for families to take care of the elderly. These trends are projected to continue in the future: As shown in Figure 2, the old-age dependency ratio (population over 65 as a percentage of the total population) is expected to double between 2015 and 2035.

11. **While a parametric reform of other parts of the Thai pension system is needed – including retirement age and access rules for pensions – it is also important to put in place a strong funded system.** For example, the Allianz Pension sustainability index places Thailand at the bottom among 54 countries rated. While Thailand is an outlier in terms of the parameters that govern the retirement age and indexation clauses compared to advanced countries in the world, the present technical note does not address these problems (as agreed with the Thai authorities), but instead offers an assessment of the private, funded components, which in any pension reform scenario for Thailand would need to be further developed and reformed.

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5 The mission was unable to obtain this number, but the number of accounts with mutual funds in June 2018 was 3.11 million. The number of accounts with retirement mutual funds is a fraction of that figure.

B. The Voluntary Provident Fund and Retirement Mutual Fund Schemes

12. The regulation in Thailand defines multiple purposes for the PVD scheme. PVD plans in Thailand are established by agreement between the employer and employees to serve as a security for the employees in case of their death, termination of employment, or resignation from the plan. In other words, PVD plans in Thailand are not exclusively designed for supporting retirement income to employees. The Fund Committee (FC) is the PVD’s governing body and consists of employer-appointed and employee-elected representatives. Employers’ representatives may be appointed from outside the company. Employers’ and employees’ contributions range from 2 percent to 15 percent of the salary of individuals. Participants are allowed to resign from the plan before retirement age and are allowed to receive benefits as lump sums, among other alternatives.

13. A company’s PVD is overseen by its FC, which supervises the fund in accordance with the governing rules of the fund. Moreover, the FC owes a fiduciary duty to act in the best interest of members. It has to formulate an investment policy and monitor the performance of the licensed asset management company (AMC) that will invest and manage the assets. AMCs are required to segregate PVD assets from the AMC’s own assets and to keep PVD assets in custody by a custodian approved by the SEC. Regulations regarding conduct of business are largely similar to those of the mutual fund business, including those related to conflicts of interests. However, the FC’s scope of fiduciary duty is largely pro forma.

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7 The governing rules are defined at the company level for each fund.
8 The next section elaborates about the duties and responsibilities of FCs.
14. **PVD plans are subject to generous tax incentives, including tax exemptions to contributions, interest earned, and withdrawals (EEE).** With a membership of more than 5 years, individuals of age 55 and above can withdraw their savings, without being subject to income tax. These sorts of tax exemptions for voluntary savings are rare in the world. The annuities market is underdeveloped, and most of benefits are paid in the form of lump sums. However, some AMCs offer the possibility of phased withdrawals over a fixed period of time such as 10, 15, or 20 years.

15. **RMF schemes also offer generous tax incentives for contributors and liberal withdrawal options at retirement age.** In the case of RMF schemes, individuals can deduct contributions of up to 15 percent of their income or THB 500,000 per year (whichever is lower) from current-year taxable income. In case the individual also has a PVD, the total annual maximum tax deduction of their contributions for both PVD and RMF plans together is THB 500,000. Individuals can withdraw from their RMF accounts free of tax after age 55 if they held these accounts for 5 years or more. To qualify for tax benefits, the individual must contribute at least every other year for a minimum of 5 years. The minimum contribution is 3 percent of taxable compensation or THB 5,000 (whichever is lower). However, in case of failure to meet the requirements, withdrawal of funds prior to reaching age 55, or failure to meet the 5-year investment period, the individual is subject to the payment of any tax deduction received along with penalty fees.

16. **The PVD scheme has significant challenges in terms of coverage.** As shown in Figure 3, assets under management by the PVD scheme have grown consistently in the last decade and reached THB 1.1 trillion (USD 33.8 billion) in June 2018. While the number of employees participating in the PVD scheme has been also growing (see Figure 4) and reached 3 million, the total converge is still only a small fraction (approximately 20 percent) of the 14.9 million employees participating in the labor force.

17. **Most large companies are already participating in the PVD scheme, and a growing number of smaller companies are offering PVD plans to their employees.** Nonetheless, only 2.56 percent of companies in Thailand offer PVD plans to their employees. While there has been some progress in engaging new companies (1,439 new companies began participating between December 2016 and June 2018), the rate of growth is insufficient to ensure that a significant portion of employees have access to PVD plans in the medium-term. In the cases of the United Kingdom, the United States, and New Zealand, voluntary funded schemes reach levels of close to two thirds of employees. The current level of participation, even considering reasonable projections for the future, would leave a significant portion of the formal labor market unprotected at retirement age.

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9 E = exempt and T = taxed for, respectively, contributions, interest earned, and withdrawals. E.g., EEE is a tax scheme in which all three are tax exempt; EET is a tax scheme in which contributions and interest earned are tax exempt while withdrawals are taxed. Pension schemes with tax deferrals (EET) are the most common tax incentive. It has the advantage of not creating distortions in the consumption / savings preferences and at the same time generating tax income for the government. The TEE alternative offers similar incentives but generate tax revenues at present. EEE does not generate tax income.
18. **The assets of both PVD and RMF schemes are managed by AMCs.** Thailand has 16 AMCs that manage 379 funds (as of September 2018). Six of these companies manage 73 percent of the assets of the PVD system. Large employers have bargaining power with the AMCs in setting fees, and they are able to achieve lower fees compared with the rest of the industry. Thus, contrary to other markets with similar systems, the profitability of the asset management business is not directly related to assets under management. In the case of the RMF scheme, there are 20 AMCs offering these plans, but only four of them manage 75 percent of the total assets. Financial groups with wider distribution capacity through their banking networks have comparative advantages in the provision of RMF investment and management services and consequently have greater market share.
19. **The asset portfolios of PVD and RMF schemes differ significantly.** As shown in Figure 5, while PVD funds invest only 16.8 percent of the assets in equity, RMF funds have more than twice that figure and invest an additional 27 percent in mixed funds and 4 percent in alternative assets.

**Figure 5. Asset portfolios of PVD and RMF schemes 2013-2018**

![PVD asset portfolios](image1)

![RMF asset portfolios](image2)

Source: SEC
20. **The asset allocation of RMF schemes is consistent with the basic design of a lifecycle pension system.** Based on aggregated figures, and using cohort disaggregation, RMF portfolios of younger individuals have greater proportions of equity compared with individuals that are closer to retirement age, as shown in Figure 6.

**Figure 6. RMF: asset allocation by cohorts**

![Graph showing asset allocation by cohorts for RMF schemes.](image)

Source: SEC

21. **While it is not strictly considered a retirement savings vehicle in the regulation, LTF plans offer attractive investment alternatives for individuals with savings capacity (effectively, LTFs and RMFs are substitutes).** Individuals contributing to LTF plans can deduct contributions of up to 15 percent of their annual compensation or THB 500,000 (whichever is lower) from current-year taxable income. This is in addition to any contribution made to PVD or RMF plans. There is no requirement to make ongoing contributions to maintain tax benefits like in the case of RMF plans. LTF contributions and earnings can be withdrawn—tax free—after seven calendar years. If the individual withdraws before the holding period, any tax deductions received are required to be paid back to the government along with penalty fees.

22. **LTF schemes require a high proportion of investments into domestic equities.** LTF schemes are subject to similar investment regulations as mutual funds, but the investment policy must ensure that at the end of the fiscal year, at least 65 percent of the fund is invested in ordinary shares (or derivatives) of companies listed at the SET. As shown in Figure 7, LTF plans as of September 2018 manage assets for THB 390 billion (USD 12 billion). According to the regulation, the LTF scheme is scheduled to cease in 2019.
III. ASSESSMENT

23. This section discusses key factors that contribute to the lack of development of the private, funded pension system in Thailand, with a focus on the PVD scheme.

A. Nature of the PVD scheme

24. The objectives of the PVD scheme are not necessarily consistent with those of a pension fund system. According to the legal and regulatory framework of the PVD scheme, its objective is to serve as security for the employees in case of their death, termination of employment, or resignation from the fund. Hence, the PVD scheme is designed as a sort of savings vehicle for dealing with severance payments, disability, and survivorship or mobility packages, which coincidentally can also be used for the purposes of pensions. The PVD is a basically a single instrument with multiple objectives that are not necessarily mutually consistent.

25. To the extent that the objectives of the PVD scheme are not defined in terms of generating savings for retirement, it is difficult to optimize investments. The multiple objectives of the PVD scheme do not offer adequate guidance for asset portfolio management. E.g., the asset allocation of a fund that manages unemployment insurance is fundamentally different from a fund that manages pension funds. In the context of a high rotation of employment, the emphasis of the former is on liquidity and stability, and consequently, a low proportion of equity in their portfolios is expected. By contrast, a fund with long-term objectives, such a pension fund, may have a greater proportion of equity and long-term fixed income in its portfolios, depending on the individual’s stage in his/her lifecycle.
26. **The multiple objectives of PVD schemes contributes to poor asset allocation.** If the provident fund is to serve only the purpose of paying future pensions, the objective of the fund would need to be defined as such; otherwise, it becomes difficult to measure the performance of the asset management functions. Consequently, defining a long-term objective for the PVD scheme, such as optimizing retirement income for individuals, is essential for evaluating its performance.

B. **Principal-agent problem**

27. **The governance structure of the PVD scheme is not conducive to the alignment of interests between the agent and the principal.** The agent—represented by a combination of the AMC and FC—does not have incentives to act on behalf of the principal (employees) in order to reach the long-term objective of optimizing retirement income. As shown in Figure 5 above, the PVD’s asset portfolios are invested in a conservative fashion, highly dominated by fixed income, which are insufficient for providing adequate pensions in the future. With a nominal yield for 3-year government bonds in the range of 2.1 percent, and a significant part of the portfolio invested in high-grade corporate securities, expected pensions are expected to be relatively low.

28. **To the extent that FCs and AMCs do not act on behalf of the contributors to optimize their future pensions, their fiduciary responsibility is not meaningful.** As discussed below, the structure of incentives of the PVD scheme is such that agents (AMC and FC) have limited incentives to pursue optimal investment strategies for the pension fund system, thus leaving the asset allocation decisions up to the principal (employees), the stakeholder with the lowest capacity to understand the consequences of such decisions.

   a. The current incentive structure of the regulator (SEC) is to empower employees to select portfolios. In the absence of adequate financial literacy, the selection typically defaults to the lowest risk strategy proposed in the regulation.

   b. The incentive structure of the AMC is to maximize market share and obtain renewal of its contract. Most asset managers have the capacity to offer a wide range of investment options. However, more equity-intensive portfolios can bring volatility into the value of the fund, so AMCs tend to promote more conservative options to companies and employees. By investing in conservative options and consequently avoiding short-term falls in the asset value, AMCs are more likely to get their contract renewed.

   c. The incentive structure of FCs is to make sure that employees are comfortable with the FC’s decisions. FCs include parity representation of the employer and employees. As part

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10 The principal-agent problem occurs when one person or entity (the “agent”) is able to make decisions or take actions on behalf of another person or entity (the “principal”). The problem occurs when an agent’s incentives don’t align with those of the principal.

11 As of October 31, 2018, 3-year government bond yields were quoted at 2.12 percent.

12 According to the current regulations by the Securities Commission (SEC), the employee is responsible for the selection of the pension portfolio. The fund manager is expected to invest according to the investment policy assigned by the employee. In cases where no investment policy has been assigned by the employee, the previous investment policy applies. In cases where no previous investment policy has been assigned, the investment policy specified in the fund’s article applies. In cases where the fund’s articles do not specify such an investment policy, the investment policy associated with minimal risks applies.
of a defined contribution scheme, employers see their responsibilities limited to making their part of their contribution on time and making sure that the financial infrastructure is safe, including the selection of a reputable AMC and a safe investment platform. Employers do not see the optimization of future pensions of employees as part of their responsibility, especially if it involves a potential conflict with their employees. While representatives of the FC are ad honorem, elected representatives (by employees) for the FC see these positions as an opportunity for leadership. In most cases, the financial literacy of these participants is insufficient for having asset portfolios different from highly conservative strategies. The reputation of the FC is typically measured by their ability to avoid volatility in the value of the fund.

29. **In the current structure of regulation, the added value from the “agent” is questionable.** If agent decisions are designed to please the current or short-term uninformed desires of the principal, there is something wrong in the overall design, especially if in the long-term the principal will regret his/her past decisions.

30. **Ex-ante portfolio decisions of the principal might be inconsistent with his/her ex-post evaluation.** While the short-term incentive structure of employees is capital preservation, employees may complain at retirement about the adequacy of their pensions. As individuals with limited financial literacy, most employees seem comfortable with investing in strategies that avoid short-term losses of the value of their pension funds. The same employees at retirement age are likely to feel unsatisfied with the value of their pensions.

31. **Overall, under current incentives, the investment strategy converges to conservative asset allocation.** Investment portfolios are under-diversified and pension funds maintain a large proportion of government securities. These types of investments are suboptimal from the perspective of reaching the objective of offering adequate pensions to individuals.

C. **Reliance on financial education**

32. **The market failure associated with an uninformed demand inhibits the proper development of the pension fund management services market.** For the market of pension fund management services to work, individuals should be able to answer the question of optimal composition of the investment portfolio at each moment in time. In other words, at each moment in time individuals should be able to select the portfolio that maximizes the expected value of the future pension. Unfortunately, the average individual is far from being able to answer this question; in fact, this question can only be properly answered by practitioners and individuals with advanced studies in finance.

33. **While the authorities and the asset management industry share the diagnostic about the suboptimality of the PVD scheme’s investment portfolios, they have approached the problem through fostering financial education and promoting “employees’ choice.”**\(^{13}\) The emphasis on supporting financial education programs is carried with some level of optimism. While

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\(^{13}\) Employees’ choice is a mechanism that allows asset managers to contact employees directly and offer a set of investment options approved by the SEC.
there is an expectation that these programs can bring some positive results, little has been done in terms of evaluating their impact and effectiveness.

34. Although international experience shows significant impact of financial education programs in promoting savings among participants, the impact of these programs on the selection of investment portfolios is less conclusive. Financial education programs can indeed affect individuals’ interest in saving for retirement, but these findings cannot be extended to individual decisions about optimal selection of asset portfolios. This market failure needs to be addressed with a broader set of tools than those of financial education.

35. “Employees’ choice” imposes another set of challenges. Since AMCs, as any other financial business, have the objective of maximizing profits for their shareholders, they have incentives to offer employees alternatives that can optimize the asset management profits, including costly investment alternatives for the participants. While all the investment options need to be authorized by the SEC, in voluntary schemes such as the PVD the SEC faces challenges to establish criteria for limiting the wide range of investment options and associated fees.

36. By pushing further into the direction of employees’ choice, PVD schemes would effectively migrate from collective to individual schemes, thus requiring greater consumer protection. As shown in Figure 8, there has been a significant growth in the number of companies adopting employees’ choice. In 2017, 47 percent of the employers offered employees’ choice. Individual pension schemes require greater levels of consumer protection, including against excessive fees and portfolio misallocation, as the level of asymmetric information is even higher compared with collective schemes. Employees’ choice is detrimental to the role of FCs and the possibility of achieving the low costs associated with group plans. To the extent that pension plans target individuals, management costs tend to be higher for participants. Recent examples of manipulation include the experience of Chile with pseudo-advisors. These groups operated through social media and guided individuals towards inefficient portfolio decisions.

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14 Important to notice that this is measured as a percentage of employers. Given the significant differences in size of companies, this figure might not be a good indicator of the number of employees participating in employee’s choice programs.
37. **Even considering “employees’ choice” the PVD system’s asset portfolios are still within reasonable risk levels.** However, there is no time for complacency, and to the extent that the collective nature of the PVD scheme moves closer to the one of an individual scheme, it would be essential to raise the bar in the area of consumer protection. The issue of excessive fees and tied sales by AMCs may arise in the future if they haven’t arisen already.

D. **Limited incentives for increasing coverage**

38. **Coverage of PVD schemes is low.** The low coverage of the PVD system is a significant problem in its ability to provide pensions to a significant portion of the population. Only approximately 3 percent of companies and 20 percent of formal sector employees are contributors to PVD plans.

39. **International experience suggests that collective voluntary funded schemes are more successful than individual funded schemes in expanding coverage and increasing national savings.** As shown in Figure 9, individual voluntary pension plans such as the ones in Chile and Poland have not been able to reach more than 5 to 10 percent of the labor force, while the voluntary collective plans (group solutions) in the United States, the United Kingdom, and New Zealand are in the range of two thirds of the labor force. Since individual pension plans rely excessively on savings substitution, they are detrimental for the tax revenue base.
40. Group solutions tend to create a greater savings capacity among middle- and low-income employees, compared with individual solutions that tend to focus on higher-income persons only. As shown in Figure 10, the large majority of participants in group solutions\textsuperscript{15} in the United States come from low- and middle-income families. This situation contrasts with voluntary individual pension plans in Chile in which participants were largely from families from the highest-income quintile.

\textbf{Figure 10. Participants’ collective pension plans in the United States by income level}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure10}
\caption{Participants’ collective pension plans in the United States by income level}
\end{figure}

Source. Principal Financial Group

\textsuperscript{15} Group solutions in the United States include 401[k], 403[b], and 457[b] plans.
The possibility of obtaining the same tax benefits from an individual pension plan (RMF) or collective plan (PVD) is a disincentive for executives of medium-size companies to create collective schemes. The experience of the United States, where approximately two thirds of the labor force participates in collective pension plans, is insightful in this regard. While the tax code in the US allows participants in collective plans (e.g., 401[k] plans) to deduct up to $17,500 per year in pension fund contributions from their taxable income, the limit is only $7,500 for participants that contribute to individual plans (e.g., an individual retirement account or IRA). As highly compensated employees have incentives to obtain more tax benefits, they have incentives to present to the board of directors of the company a proposal to offer a collective pension scheme, which typically involves a matching contribution from the employer. In addition, for the collective plan to qualify, the law requires a minimum proportion of non-highly compensated employees in the pension fund scheme. The combination of these two factors typically results in significant participation of non-highly compensated workers in collective plans in the US.

To the extent that the individual plans offer the same tax benefits as collective plans, as in Thailand, the incentives for the creation of collective plans are limited. The benefits for highly compensated individuals for creating collective plans are more limited. From the perspective of the AMCs, targeting exclusively high-income individuals can be a profit-maximizing strategy, especially from the perspective of the possibility of offering them other financial services. Thus, the presence of similar tax advantages in individual plans (RMF and LTF) might be eroding the possibility of expanding coverage in collective plans (PVD) in Thailand.

Payout phase

The PVD system is largely designed for paying lump sums. The incentive structure for the contributors is such that the most attractive option for them is often to take lump sums at retirement age. While individuals see the upside to the benefits of receiving a pot of money and their ability to use these resources at their discretion, they tend to underestimate the downside, which is the possibility of overspending the money before death and/or taking risky decisions with these resources. Unfortunately, lump sums do not protect individuals against investment risk (as individuals can invest the pension money in risky businesses), against inflation risk (as investment returns could be lower than inflation), and especially against longevity risk (as individuals can overspend the money in a short period of time and increase the risk of falling into poverty during retirement).

The fact there is a strong preference for lump sums by retirees does not mean that it is optimal from the perspective of the design of the pension system. While in general individuals may prefer lump sums over annuity products, if they fall into poverty they are likely to request social assistance from the government. In 2016, in the midst of an election, the Peruvian Congress approved a law that allowed individuals in the contributory funded scheme to withdraw up to 95.5 percent of their pension fund at retirement age in the form of a lump sum. While until that moment lump sums were restricted to accounts with small funds, the amendment of the legislation triggered

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16 See Rudolph (2016).
17 Mainly the employers’ matching contribution
a dramatic turn in the development of the annuities market. Since then, less than 5 percent of retirees are taking any form of annuity. While the timeframe is too short to provide an assessment about the degree of overspending the lump sums by retirees, anecdotic evidence suggests that some individuals are taking inefficient investment alternatives with their money, including deposits in checking accounts and annuities with high fees.

45. **The possibility of accessing lump sums in Thailand is inconsistent with the generous tax benefits granted during the accumulation phase.** The generous tax incentives are based on a system where contributions, interest earned, and withdrawals are tax exempted, a scheme that in the literature is known as Exempt, Exempt, Exempt (EEE). EEE allows individuals to spend their retirement income as they chose, even if it leads to drastic changes in consumption capacity after retirement. Most countries apply either tax deferred schemes\(^{18}\) (EET) or upfront taxes\(^{19}\) (TEE). EEE schemes are onerous from the fiscal budget perspective. The contradiction in the case of Thailand is that it allows individuals to use this retirement money for immediate consumption, and at a high fiscal cost, without protecting the consumption smoothing objective.

46. **Since demographic changes are affecting the capacity for families to provide support to their elderly, it is essential to build retirement income from the voluntary pension scheme.** While in the traditional social contract families take care of the elderly, changes in fertility are a major challenge to this tacit contract. Moving from fertility rates of 6 births by women in 1960 to 1.48 in 2016 will impose a heavier burden on families for supporting their elderly. In some cases, families may have difficulty in affording these expenses. In this context, it becomes essential for the retired individuals to have sources of retirement income to complement the resources that families can provide and consequently to avoid falling into poverty at old age.

47. **The liberal menu of options offered in the PVD will become expensive for the government.** First, the argument "it is their money and they can do whatever they want" is a weak one, as PVD savings are supported by generous tax incentives. In addition, the purpose of the creation of complementary savings pension systems is precisely to allow consumption smoothing, and consequently to the extent that this objective is not achieved, implies flaws in policy design. In addition, policy designs that converge into lump sums and not retirement income might turn out to be expensive for the government, as they will have to provide social assistance to this segment of the population.

48. **The idea that the greater adoption of annuities can be solved by broad policies of financial education might be overly optimistic.** The incentive structure is biased towards the direction of lump sums, and the availability of alternative retirement products offered in the Thai market is still narrow. In the case of the United Kingdom, after decades of mandatory annuities, in 2015 the government liberalized the possibility of cashing part of these annuities. Considering the

\(^{18}\) Tax deferred schemes imply that contributions and interest earned are exempted, but withdrawals are taxed, for example the 401(k) plans in the United States.

\(^{19}\) Upfront cases imply that contributions are taxed, but interest earned and withdrawals are exempt, for example the Roth 401(k) plans in the United States.
undesired consequences on retirement income for individuals, the government reversed the decision the following year.

49. **The retirement income vehicles offered in Thailand do not hedge against longevity risk.** The retirement products offered in the Thai market are basically asset deaccumulation instruments, which allow phased withdrawals of the fund until depletion. Some of these are offered for a 20-year period, and others with more flexibility. However, there are no guarantees that the resources will be available until the death of the individual. The phased withdrawals that offer payments of installments within a 20-year period are not even aligned with the life expectancy of the individuals. Since in 2015 life expectancy at age 60 (for two genders combined) was approximately 21.65 years, a 20-year phased withdrawal is inefficient from the actuarial point of view.

50. **Despite the sophistication of the domestic capital market, the life insurance sector has not developed products that can hedge the longevity risk.** In order to be able to diversify the longevity risk, annuity products would need a critical mass of participants.

F. **Development of the fixed income market**

51. **Thailand has a sizable fixed-income market, which includes both government and corporate bonds.** Market capitalization of government and corporate bond markets is USD 265 billion and USD 96 billion, respectively. The housing and infrastructure bond market has not developed. The stock market compares well with other markets in the region. The capitalization of the Stock Exchange of Thailand (SET) is similar to Malaysia’s Bursa, approximately 1.1 times the Indonesia Stock Exchange, and approximately two thirds of the capitalization of the Singapore Exchange.

52. **Sovereign debt is issued by both the Bank of Thailand (BoT) and the government.** While BoT is a regular issuer in tenors of up to 3 years, the government, through the Public Debt Management Office (PDMO) issues debt with longer tenors. The average tenor of government bonds is 11.13 years. In 2018, approximately one third of the bonds issued had a maturity of 5 years, and approximately 20 percent a maturity of 10 years. The rest of government bonds had longer tenors.

53. **While a thorough analysis of the government debt market was beyond the scope of this technical note, several issues arose in the interviews that may require further analysis.** Since the government bond market is essential for the development of the fixed-income market, it is important to conduct a detailed diagnostic of the role of the government bond market in fostering the development of the domestic fixed-income market. The development of the government bond market would be necessary to further develop the fixed-income market. The mission noticed significant differences in the perception of liquidity and predictability of government bond issuance between the PDMO and AMCs. While market participants see a lack of liquidity as one of the main impediments for investing more in debt issued by the PDMO, the issuers do not see it as a pressing issue. Although most asset managers valued the predictability of BoT in the issuance of debt, the issue was less clear for the debt issued by the PDMO. In addition, the justification for having both
institutions, the PDMO and BoT, issuing public debt may need further consideration. Issuance by a central bank with tenors above 90 days is rare among developed economies.

54. **The corporate bond market is highly dependent on institutional investors, and its tenors compete directly with the banking sector.** In the third quarter of 2018, approximately three quarters of the corporate debt issued have maturities of five years or less and have a credit rating of Single “A” and above (Figure 11). As shown in Figure 12, institutional investors are the largest investors in the corporate bond market. The maturities of the corporate bond market replicate those of lending structures of the banking sector. The corporate bond market is similar in size to the bank lending market, as shown in Figure 13. Companies that can issue bonds tend to do it, but those that have more difficulty in accessing the bond market or need extra lending get financing via banking lending.

**Figure 11. Corporate debt bond market: Tenor and rating (third quarter 2018)**

![Corporate debt bond market: Tenor and rating (third quarter 2018)](image_url)

Source Thai BMA
**Figure 12. Structure of the demand for corporate bonds**

Source: Thai BMA

**Figure 13. Corporate Bond and Corporate Loan Markets (THB Billion)**

Source: Thai BMA, Bank of Thailand

55. **SEC regulations require high risk management standards on the AMCs.** AMCs are required to have both investment committees and investment risk committees. Regulations follow good practices, such as requiring investment risk committees to report directly to the board of directors of the AMCs. During the mission, the team noticed a high level of qualification from the
executives of the AMCs, in particular regarding the understanding of the regulation and responsibilities of the different members of the institution. The question remains whether such good practices can be used to give AMCs more flexibility in the management of resources.

56. **SEC follows a risk-based supervision model.** Supervision cycles of AMCs depend on the risk assessment of the companies. They are evaluated in terms of prudential risk, portfolio management risk, customer relationship risk, and operational risk. Cycles vary from one to three years. The overall PVD system is supervised by three departments inside the SEC (Portfolio Advice and PVD Supervision, Investment Management Policy, and Investment Management Supervision departments) and have 11 staff allocated exclusively to the PVD scheme.

57. **To the extent that PVD portfolios remain conservative and under-invested in fixed-income instruments with longer tenors, it means that AMCs are not fulfilling the objective to optimize future pensions of individuals.** PVD asset portfolios are still under-diversified, and large proportions of instruments remain invested in high-grade fixed income investments. The current structure of demand for fixed-income instruments could be insufficient to ensure adequate pensions in the future. Greater diversification toward longer tenors and higher yield are needed in order to reduce reinvestment risks and to get additional yield on the investments.

58. **One of the factors inhibiting the development of the high-yield investment market is the restriction on the possibility of maintaining non-investment grade instruments in the PVD portfolios.** PVDs are allowed to invest up to 15 percent of the assets under management in non-investment grade securities, and 5 percent by specific investment. If the limit is exceeded, asset managers are required to liquidate those investments over the limit. Depending on the circumstances, the period for liquidating the asset can be relatively short or more medium-term.

59. **In the presence of advanced risk-management controls, most AMCs reduce the probability of reaching that limit, simply by not investing in instruments rated BBB or lower.** However, there is a significant spread differential between BBB and A. As of October 2018, differentials in spreads were 1.3 and 1.5 percent for 5- and 10-year maturities, respectively, as shown in Table 2. Passing the risk management responsibility to AMCs could open room for greater investments in the BBB segment.

**Table 2. Rating and Corporate Spreads**

<table>
<thead>
<tr>
<th>Corporate bonds</th>
<th>5 years</th>
<th>Spread</th>
<th>10 years</th>
<th>Spread</th>
</tr>
</thead>
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<tr>
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<td>2.85</td>
<td>0.53</td>
<td>3.49</td>
<td>0.68</td>
</tr>
<tr>
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<td>3.01</td>
<td>0.69</td>
<td>3.67</td>
<td>0.86</td>
</tr>
<tr>
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<td>0.80</td>
<td>3.82</td>
<td>1.01</td>
</tr>
<tr>
<td>BBB</td>
<td>4.64</td>
<td>2.32</td>
<td>5.39</td>
<td>2.58</td>
</tr>
</tbody>
</table>

1 As of September 30, 2018
Source: Thai BMA
IV. RECOMMENDATIONS

A. Transitioning from provident funds to pension funds

60. **Narrowing the uses of the PVD system to pension purposes is essential to developing the pension system and ensuring that the asset allocation is consistent with the long-term objectives of participants.** Multiple objectives for the same fund create disincentives for an effective asset allocation. While pension funds require long-term investments, unemployment insurance requires short-term liquid securities. Maintaining a high proportion of equity in the portfolio could be detrimental if the objective is to provide unemployment insurance, as countries tend to have a positive correlation between equity prices, economic growth, and strength of the labor market.

61. **Regulation for the PVD scheme should establish that funds can be withdrawn only after retirement age.** As the dynamic of the labor market increases and individuals start to switch jobs regularly, it is essential for them to preserve the funds until retirement. Exemption should include only cases of hardship or terminal illness.

62. **The attractiveness of the pension system might be increased by offering participants some liquidity during their working life.** Considering that individuals are reluctant to participate in a pension system that does not offer liquidity benefits in cases of emergency, it is possible to offer some options to mitigate such fear. Individuals could be allowed to take a standardized loan collateralized by the pension fund. These loans should be highly standardized and should be defined in terms of a maximum between a fraction of the assets in the fund and a predefined amount of money.

B. Aligning the incentive structure

63. **In the absence of an informed demand, the concept of reliance on employees’ preferences for the selection of the asset portfolio is fundamentally flawed.** As discussed in the previous section, the current regulation does not provide incentives for AMCs to offer pension portfolios that maximize the future pensions of individuals. While individuals should be free to choose, the regulation could nudge default portfolios toward welfare-improving decisions. In this context, the new regulatory structure should create incentives for AMCs to behave as if participants had a long-term pension objective, and consequently behave as asset and liability managers instead of pure asset managers. The regulation should aim at revealing the preferences that a financially literate individual should have. These preferences should be expressed through a default portfolio.

64. **In order to achieve the long-term pension objective, the SEC should enact regulations on the design of the default portfolios.** The new regulation should state the need for AMCs to offer default portfolios that are consistent with the long-term pension objectives of employees. Given an expected pension in the future, for example 20 percent of the last salary, the asset portfolio should be able to reach that objective. These default portfolios should be aimed at optimizing the expected pension at retirement age. This concept departs from current practices where de facto default portfolios offered by AMCs are focused on minimizing the short-term volatility of the fund. The SEC will need to oversee that the portfolios managed by the pension funds follow the asset
allocation (and risks) defined ex-ante. Asset portfolios would need to rebalance periodically in order to maintain the level of risks for which they were created.\textsuperscript{20}

65. **Aligned with the regulation, each AMC would design its own default portfolio.** These default portfolios would need to be registered and approved by the SEC, according to general criteria defined in the regulation. Once approved, portfolios would be presented in the form of standardized factsheets to users, with information about objectives, expected asset allocation, and risks.\textsuperscript{21} While companies would be free to choose investment portfolios other than the default one, AMCs would need to present the default portfolios to potential clients as the default option.

66. **The information provided to the public about fees should also be presented in a standardized framework.** The SEC should prepare a comparative fee structure for different funds, with the objective of facilitating comparison of portfolios offered by asset managers. The SEC would prepare comparison tables of fees associated with the risks specific to each type of fund. Two factors typically affect the fee structure: asset class and investment style. In terms of the asset class, fixed-income portfolios are typically less costly than equity funds. In terms of investment styles, active funds are more expensive than passive or indexed funds. Creating comparison tables for different segments of the market, according to asset allocation, might enable AMCs to explain to clients the investment style as a differentiator from other funds. For comparison purposes, the SEC should be able to include “all-in” fees, which include indirect fees paid with resources from the fund to brokers and asset managers, in case that part of the portfolio is outsourced.\textsuperscript{22} At the time of presenting investment alternatives, AMCs would need to present the SEC tables to potential clients, including a direct comparison of the fund being offered with others available in the market. Figure 14 shows the information for the case of Chile with the mandatory funded schemes.

67. **As part of a communication strategy, it is essential to focus the message in terms of the expected replacement rate, and consequently to downplay the role of rates of return.** Since rates of return are a difficult concept to understand for most of the population, it is essential to guide the discussion around something more understandable. The expected pension of the individual at retirement age should be the pivot of the information presented to clients. Defining upfront expected pensions would help to align expectations and to realize that conservative investment strategies might not serve the purpose of the desired objective. Individuals that have ambitious expected pensions with low contribution rates would need to agree ex-ante that they may have to deal with volatility in the value of the asset portfolio during their working life. Focusing the communication strategy in terms of the expected pensions and would create a sound environment for creating credibility of the funded pension scheme.

\textsuperscript{20} The SEC would also inform the procedures for changing the asset allocation of each portfolio, in case it is needed.


\textsuperscript{22} It is a common practice for some AMCs to invest part of the PVD funds through investments in shares of other funds managed by the AMC. The comparison should take advantage of these fees paid, as well as the indirect fees paid by the outsourced funds to other funds or brokers.
68. Information sent to contributors basically should explain—in a simple framework—whether the current path of investment is or is not on target for achieving the expected pension. Instead of reporting return of the current asset portfolio, the objective should be measured in terms of pension risk, or the probability of achieving a certain pension objective in the long-term. The calculations should be based on stochastic simulations, using historic performance of the assets, or other methodologies approved by the SEC. The parameters used for these calculations should be reported to the SEC on a regular basis. Although rates of return should also be reported, they could be included in a secondary part of the informational document, together with other financial information of the PVD plan. The main messages in the reports should aim at providing alternatives to individuals who are not on target, including increasing contributions, switching portfolio allocation, or moving to a fund with lower fees.23

69. One of the challenges will be to build a transition within the current system, based on short-term risk, to a system that focuses on long-term objectives, based on pension risk. This transition period would allow market participants to adjust to the new conditions, especially because greater volatility in asset portfolios should be expected. The transition period should be considered in a period between 5 to 10 years.

C. Accountability of Fund Committees

70. Fund committees should be accountable for the selection process of the AMC and the portfolio allocation. In order to achieve this objective, FCs would need to provide file documentation about the selection process of the AMC, including an evaluation of at least three

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23 Conservative portfolios are typically conducive to high pension risk.
AMCs and a comparison of investment alternatives and fees. This report would be delivered to the SEC and the tax authority. These files should explain, in a standardized framework, in what sense the selected AMC and proposed asset allocation are aligned with the long-term objectives of contributors. The arguments should be based on fees, asset management capacity, and proposed investment strategy.

71. **Filing a report at the SEC and the tax authority would increase FCs’ responsibility.** FCs would be more careful in the selection of asset portfolios. While the selection of conservative portfolios would still be possible, FCs that decide to move in this direction would have to explain how these conservative strategies help in optimizing the future pensions of participants. Justifications might include cases where pensions expectations for employees of the company are low or where contribution rates are high. In addition to filing these reports, this information should also be disclosed to the company’s employees. In addition to personal responsibility to the FC’s members, failure to submit this information to the SEC and tax authority would result in the pension plan being treated as an individual plan (RMF), including lower contribution limits (as discussed below) and contributions of the employers not being considered tax deductible for the company.

72. **FCs should also be required to monitor investment alternatives over time and assess whether there are material changes in different asset classes that may justify changes in the investment portfolios offered to employees.** Changes in investment alternatives should be justified, explained to participants, and filed at the SEC, explaining the reasons for changes, including the justification for the new asset allocation.

73. **The regular procedure for filing reports might be burdensome for FCs.** While the process might be cumbersome for FCs, and the SEC can have comments about the selected portfolio allocations, these procedures contribute to increase the accountability of FCs and improve their financial literacy. FCs would have incentives to influence the rest of the employees in terms of suggesting better portfolio allocations.

74. **However, the regulation should also provide some safe-harbor alternatives (fastline), designed to reduce the level of responsibility of FCs, but at the same time provide adequate protection to employees.** To the extent that FCs adopt certain procedures defined in the regulation, the level of liability of FCs’ members would be reduced. These requirements should include the adoption of lifecycle portfolios (according to criteria defined by the SEC), automatic enrollment, maximum vesting period of the contributions of the employer (for example, no vesting period), and minimum contribution rates by employers and employees. Adoption of these safe harbor requirements would immediately qualify these pension plans.

D. **Increasing coverage (voluntary)**

75. As discussed in the previous section, the presence of generous tax incentives for individual plans (RMF and LTF) is a disincentive for the creation of collective plans (PVD). Since the FSAP team was unable to access data on the typology of individuals that participate in RMF schemes, in comparison with individuals that participate in PVD schemes, it assumed limited overlap between participants in individual pension schemes (RMF and LTF), and those that participate in
collective ones (PVD). In this framework, highly compensated individuals find limited interest in participating in PVD schemes if they can benefit from the same tax benefits from RMF and LTF plans.

76. **The proposed framework would offer higher contribution limits for collective pension plans versus individual ones.** By phasing out the LTF program and reducing the benefits of the RMF program, individuals participating in these programs – including highly compensated individuals – would have greater incentives to participate in the collective program (PVD). In the event of having to pay a greater amount of taxes under individual programs, highly compensated employees (typically the management of companies) will promote the creation of collective funds. The differential in contribution limits between PVD and RMF plans needs to be substantial to motivate highly compensated individuals to create PVDs. Collective pension schemes in the United States offer a successful example. If applied to Thailand, the recommendation would be to scale down the maximum deductible amounts ($17,500 and $7,500 for collective and individual plans respectively). The contribution limit on individual plans would need to be low enough for highly compensated individuals to look for collective plans.

77. **The regulation should ensure broad participation of employees within each company.** Since the objective of collective plans is to broaden the coverage among employees, it would be an undesirable outcome if highly compensated individuals are the only participants in collective schemes. To prevent this situation, the regulation should require a minimum participation of non-highly compensated employees in the fund for the pension plan to qualify. In the regulation of the United States, this participation is achieved through a nondiscrimination test. Through this mechanism, collective plans ensure broad coverage among employees. Since non-highly compensated employees in many cases are subject to low income tax rates, tax deductions are not a strong incentive for participating in the fund. Aware of these restrictions, incentives are given to highly compensated workers to work with employers on the need of providing some employer’s matching contributions. This virtuous cycle where the interests of highly compensated individuals are aligned with the non-highly compensated creates greater incentives for broad participation of employees in the program.

78. **Safe harbor alternatives may alleviate the cost of passing a nondiscrimination test.** Since passing a nondiscrimination test might be cumbersome, the possibility of safe harbor alternatives through accomplishment of certain requirements might avoid passing such a test. In particular, funds with automatic enrollment, lifecycle strategies, a certain ratio of matching contributions from the employer, and zero vesting period may qualify for the safe harbor, and consequently the company would not have to pass the nondiscrimination test.

79. **The evidence suggests that automatic enrollment is the strongest incentive for individuals to participate in a funded scheme.** Automatic enrollment implies that by default, all

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24 Rudolph (2016) explains the plausibility of this assumption, which is the basis for the high degree of participation of voluntary collective schemes in the United States.

25 The LTF program is scheduled to be phased out in 2019.

26 For a simple explanation of the nondiscrimination test in the case of 401(k) plans in the United States, see https://www.forusall.com/401k-blog/401k-nondiscrimination-testing/

employees are registered in the pension plan, but they have the alternative of opting out. While employees may voluntarily leave the pension plan, they need to explicitly communicate their intention. Due to behavioral aspects of individuals, a greater majority of individuals would participate in the funded pension schemes.28

80. Lifecycle strategies ensure that contributions are placed on investment paths that are consistent with long-term portfolio optimization.29 By moving from equity-intensive portfolios to fixed-income-intensive portfolios as individuals age, individuals may take advantage of the equity premium. In addition, as individuals get closer to their retirement age, asset portfolios move to less volatile instruments. Since the value of their financial assets has time to recover in cases of crises, younger employees have capacity to cope with market volatility and consequently can invest more in equity instruments. By contrast, the asset portfolios of those who are about to retire and have limited flexibility to work longer have greater proportions of fixed income instruments. Rather than focusing on short-term returns, the focus of lifecycle strategies is primarily on the value of future pensions. As shown in Figure 15, the volatility of equity-intensive pension funds (blue line), where the majority of younger individuals are invested, is much higher than fixed-income intensive portfolios (light blue line), where the majority of older employees are invested. Through this lifecycle design, pensions of those who are closer to retirement age remain relatively stable in the event of equity price fluctuations.

Figure 15. Chile Average Rate of Return Mandatory Pension System (November 15-November 18)

Source: Chile Superintendence of Pensions

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28 Rudolph (2016, 2019) analyzes the experiences of several countries in the implementation of automatic enrollment schemes.
29 See Campbell and Viceira (2002) and Viceira (2010)
81. **In the medium-term, the proposed structure of incentives should be able to bring default portfolios offered by AMCs into lifecycle strategies.** To the extent that FCs engage in safe harbors, the demand for lifecycle strategies will increase and AMCs will feel comfortable in having these portfolios as their default strategies. This combination will be welfare-improving for employees.

**E. Increasing coverage (mandatory)**

82. **Mandatory funded pension schemes are effective in increasing coverage across the formal sector of the economy.** For the Thai economy, the target group would be the almost 15 million workers from the formal private sector. Countries find it more difficult to engage the self-employed.

83. **It is important to define whether the proposed mandatory scheme – the National Pension Fund (NPF) – is aimed at replacing or complementing the current PVD scheme.** In case the decision is to complement the current scheme, the design of the NPF system may use the current institutional capacity and expand it. In a strict sense (not necessarily suggested in this note), the new law creating the NPF could make the current PVD scheme mandatory. Alternatively, the new law could say that independently of the PVD scheme, companies will have to offer a pension plan with certain characteristics.\(^{30}\)

84. **Mandatory pension schemes can be designed with different degrees of centralization.** The current PVD model is an example of a decentralized system, where each company chooses its AMC and selects the asset portfolio. By contrast, the model of the GPF (see Figure 1) is a centralized one, where a single agency runs the pension system for all participants. Hybrid alternatives include cases where portfolio allocation decisions are centralized, but companies are allowed to select the AMC to manage these portfolios; or cases where the strategic asset allocation is defined centrally, and the asset management of each asset class is also defined by a central agency. There are also alternatives of centralizing the account administration and decentralizing the fund management. These hybrid alternatives open room for active participation from the private sector in the asset management. Although centralized and decentralized schemes are viable alternatives, the best design needs to take into consideration idiosyncratic elements of each country.

85. **Proper corporate governance of the central agencies is essential for mandatory schemes to be successful.** Emerging economies face significant development objectives and multiple projects that need financing including infrastructure, housing, education, etc. While centralized funded schemes may play an important role in supporting those developmental programs, it is essential for pension fund investments in them pass a market test. Otherwise, the pension fund could become a source of funding for government programs and future

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\(^{30}\) After the mission, the authorities confirmed that under the revised proposal, the NPF is aimed at complementing the current PVD scheme. Employees not contributing to the PVD scheme will be required to contribute to the NPF.
administrations may take no responsibility for past decisions.\textsuperscript{31} In this context, it is essential to ringfence pension fund managers from government influence.

86. **Governance of a central pension fund (CPF) scheme needs to ensure that the arm’s length principle applies.**\textsuperscript{32} The concept of an arm’s length transaction ensures that both parties in the deal are acting in their own self-interest and are not subject to any pressure or duress from the other party. It also assures third parties that there is no collusion between the buyer and seller. This principle should apply to the relationship between the board of a CPF administration and the government. This principle is essential to be able to create trust in the new pension system, to engage other market participants in the transaction, and to mitigate the risks of misuse of the fund. Independence of the pension fund administration from the government would increase accountability.

87. **In this context, the appointment of the board members of the CPF should ensure technical capacity and independence from the government’s influence.** While the CPF will have the capacity to finance some government sponsored projects, it needs to decide independently from the government interest. The CPF should not rely exclusively on the government’s assessments for participating in government-sponsored transactions. The CPF needs to have a long-term and comprehensive perspective of its investments, taking into account not only short-term impact, but also the developmental impact of these investments on other sectors of the economy. Since a potential CPF is likely to become the largest asset manager in the country, it needs to look at investment not only from the perspective of private but also from social returns. The developmental analysis of the investments carried by the CPF is a significant difference between the CPF and a decentralized mandatory funded pension system.

88. **Minority participation of the CPF in domestic equity investments might need further consideration.** While asset managers in decentralized schemes typically take minority participations in companies and build their portfolios based on the idea of diversifying the assets of the fund, this concept might become difficult or inefficient in the presence of a large investor such as the CPF. The volume of assets managed by the CPF would likely outgrow the capacity of the market to create new instruments. Thus, it could become difficult for the CPF to sell assets without affecting market prices, making the fund vulnerable to market events or actions from other stakeholders. CPF would become unable to respond to market conditions (for example by selling instruments) without hurting the value of the pension fund. In addition, in the case of equity investments, to the extent that they do not control these companies, they have limited capacity to influence in the management of the company. For example, CPF would know that if they sell assets, prices will fall and consequently, the value of the fund will be affected.\textsuperscript{33}

\textsuperscript{31} A scenario of future governments blaming past administrations for poor administration of pension resources becomes likely.

\textsuperscript{32} The arm’s length principle is the condition or the fact that the parties to a transaction are independent and on an equal footing.

\textsuperscript{33} The idea of gradual liquidation of the asset position might not be always successful, as it might take a long time, and the probability that the rest of the market figures out the intentions of the fund increases over time, given the high level of transparency that these transactions are expected to have.
89. **The CPF might, therefore, need to be allowed to take control of companies where it makes investments.** As the CPF takes control of companies, it should develop expertise in ensuring proper management of companies, including designation of board members. The concept of investing strategically in domestic companies involves careful consideration of other strategic investors and the contribution of the CPF to the future of the company. The potential involvement of the government in these investment decisions can create significant distortions in the decision process.

90. **Since its interests are not always aligned with the long-term interests of the contributors, government involvement in the investment decisions of the fund should be avoided.**

   a. The government would have little tolerance for volatility compared with private investors. Even if the government has the intention of designing optimal portfolios with some proportion of assets invested in market instruments, it faces the risk of taking responsibility if there is any asset price correction or negative returns. The government might be forced to reverse these decisions at a high cost to the contributors, for example, by moving the portfolio toward less risky assets, and making the losses at the worst point in time.

   b. Investments in safe assets would typically imply investments in government securities. In this regard, the government faces a conflict of interest at the time of deciding on the appropriateness of these investments. While low cost of funding helps the government to reduce its interest payments, it implies low returns for the pension fund. If the government uses the CPF as a source of low-cost funding, its involvement in investment decisions of the fund may damage the future prospects of pensions in the future. While some analysts believe that disclosing such a conflict of interest helps to mitigate the problem, such disclosure does little to ensure that future pensions for individuals will be adequate.

   c. Governments may find it difficult to decide about investment opportunities abroad. Since the common view among the population is that the resources of the pension funds should be used for investing in the local economy, governments might find it difficult to diversify investments abroad, although these investments might be necessary. As the size of the fund outgrows the capacity of the domestic market to generate new projects, lack of ability to diversify portfolios to external sources may create price bubbles and misalignment of investments that end up affecting future pensions of individuals.

91. **An alternative is to centralize the strategic asset allocation decisions, but to decentralize the investment decisions and tactical asset allocations.** There are basically two alternatives within this framework. In the first, contributions would be collected by the CPF and invested through private AMCs in different asset classes and with different investment styles (active, passive, index). Thus, the value of the fund would be basically a collection of the several investments that have been outsourced by the CPF. Under the second alternative, the CPF would define a set of portfolio benchmarks for the pension funds (for example lifecycle funds), which private AMCs are
expected to track when offering asset management services to companies. In this second alternative, the same approach existent on the PVD scheme applies, but the AMCs are required to invest according to the portfolio benchmark provided by the CPF. The independence of the central administration of the CPF would become essential in both alternatives.

a. In the first alternative, the CPF would hire several AMCs, and each of them would manage different asset classes (i.e., domestic fixed income, money management, international equity, etc.) and have different investment styles (index, passive, aggressive, etc.). The model might offer several degrees of freedom to companies in terms of portfolio selection, from one model where a single investment scheme (lifecycle) is being offered to one where companies can choose the type of investment style that they want.

b. In the second alternative, companies would hire AMCs, as in the PVD scheme. AMCs would differentiate themselves from the benchmarks, by adopting different investment styles. While all funds will track the same set of portfolio benchmarks—target date funds would require different benchmarks for each cohort—they might be able to differentiate themselves by investment style (index, passive, aggressive) and to charge different fees according to their asset management effort. The presence of multiple AMCs would give more flexibility to investments and may foster greater financial innovation compared with a pure centralized scheme.

92. **In the presence of a pension fund scheme with a common portfolio benchmark, it is worth analyzing the appropriateness of the default allocation of assets managers.** Since selection of the AMC is a costly process that translates into higher fees, it is worth analyzing the possibility of random allocation of AMCs among companies, while allowing companies to choose a different AMC according to certain rules. Random allocation would help to keep costs low and to provide incentives for AMCs to focus exclusively on the core part of the business, instead of costly marketing campaigns on financial products whose differentiation attends to technical factors.

93. **The design of the mandatory system could also be based on the PVD scheme.** It would work in the same way as the PVD scheme, but it would be mandatory for companies to offer a pension plan (and for employees to accept it). This is certainly a viable alternative, but it is essential to consider the alignment of interests of the agents (AMCs and FCs) with the principal (contributors) discussed in the previous section.

94. **Some other hybrid options, with government participation in the asset management, can be considered.** In the cases of the United Kingdom and Poland, the government created some state providers of pension management services that compete with private asset managers in the provision of pension fund management services. In the case of the United Kingdom, the provider (NEST) needs to accept any company as a client at a competitive fee. The presence of NEST allows smaller companies to find a pension fund provider at a low fee. In the case of Poland, per a recently enacted law, the Polish Development Fund will be a default provider, which will provide pension fund management services to companies that do not contact an AMC. Thailand has two AMCs owned by the government.
95. **The role of a government-sponsored AMC would need to be justified on a market failure.** Having a government-sponsored AMC that competes with the rest in gaining market share but does little in addressing the long-term objective of the contributors (or solving other market failures) is not an efficient use of public resources. The presence of a government-sponsored AMC should be justified on grounds that only it can promote the best practices for portfolio optimization conducive to adequate pensions, best risk management practices, low fees, and access to small companies and the self-employed, while the rest of the AMCs are unable to serve them at a reasonable cost.

**Additional considerations**

96. **Defining the contribution rate of the mandatory pension system requires careful analysis.** Since in the proposed framework, the objectives of the AMCs would be measured in terms of the expected pension at retirement age, it is important to consider not only the financial sector parameters, but also the labor market conditions.

97. **In some other emerging economies, the density of contributions of private sector employees has been severely overestimated.** While an assumption of 100 percent contribution density could be reasonable for civil servants, it is not for non-government workers in most emerging economies. It is not a reasonable assumption for Thailand, given the significant growth in the formalization of the economy. Conducting a study about labor force participation would be necessary. In the case of Latin American countries like Chile, Colombia, and Peru, which also have experienced growth in the formalization of the labor force, the average density of contributions is in the range of 50 percent, meaning that individuals on average contribute 6 months per year. In this context, maintaining expectations aligned with the effective capacity of the pension system and avoiding overpromises would help to make the system sustainable over time. In addition, in some countries, it has become increasingly difficult for individuals to find jobs after a certain age.

98. **Finally, it is essential for a mandatory provident fund to have a proper design not only in the accumulation phase, but also in the payout phase.** The new pension system should be able to offer regular retirement income to participants until they die. In other words, the pension system should provide protection against longevity risk.

F. **The payout phase**

99. **The voluntary nature of the PVD scheme is not an argument for allowing unconstrained access to the money accumulated in pension funds after retirement.** While it is true that the money in the individual accounts belongs to individuals, contributions both from employer and employee are based on generous tax incentives provided by the government. As one of the pillars of the pension system, PVD benefits should be integrated with other retirement sources and be consistent with the objective of consumption smoothing.

100. **Consequently, the pension system should provide incentives for individuals to opt for retirement income, such as annuities, instead of lump sums.** While any policy in this area should be accompanied by educational campaigns about available retirement income alternatives, it is essential to set up default options. Since behavioral literature suggests that the preferences of
individuals are not indifferent to the way that the alternatives are presented, there is role for public policies in defining the default alternative at the time of retirement. For example, retiring individuals that take no action in terms of selecting retirement alternatives should be directed toward the purchase of an annuity. In addition, a regulation should be enacted for defining a standardized annuity, which is expected to be offered to retirees.

101. **To the extent possible, lump sums should be allowed only in cases of small amounts of pension accumulation.** The amounts need to be low enough for an annuity company not to be interested in selling annuities, or if the potential phased withdrawals result in amounts of money that are insignificant. Annuity companies in some emerging markets may feel comfortable in selling annuities for USD 50 and up. In the case of phased withdrawals, making monthly payments of small amounts (e.g., THB 50) creates a headline risk for the pension system.\(^3^4\) Banning the possibility of lump sums might create resistance in the population, but some policy changes, as discussed below, could disincentivize their use. While individuals that are about to retire with small amounts of money in their pension funds should be allowed to take lump sums (even as a default option), in the rest of the cases its use should be discouraged.

102. **The tax system is one way of discouraging the use of lump sums.** While the rest of retirement alternatives may remain tax exempt (EEE), lump sums might be taxed at a rate that reflects the government contribution to the creation of these savings. Taxes on lump sums should be allowed only above certain thresholds of funds. It is important for retirees (and their families) to have access to educational material, including access to advisors.

103. **While annuities should be given as the default option, standardized phased withdrawals should also be allowed.** Phased withdrawals are suboptimal retirement income products compared with annuities, but they might be an alternative for individuals with short life expectancy and high preference for leaving bequests. While phased withdrawals offer regular payments to individuals after retirement, they do not provide protection against outliving the number of payments (for example 20 years). Instead of having phased withdrawals offered as monthly installments for 20 years, the regulation might also consider the possibility of offering variable installments that decrease asymptotically to zero as individuals withdraw from the fund.

104. **The possibility of hedging longevity risk is the main advantage of annuities over phased withdrawals.** By creating a pool of heterogeneous individuals, annuity providers are able to offer stable pensions for individuals until they die. For this market to develop, it is essential to have in place a critical number of participants. Since the essence of the annuity is the pooling of individuals with same life expectancy, but different effective life, annuities do not offer the possibility of bequests.\(^3^5\)

105. **The annuities market should be built with inflation-linked annuities.** Inflation-linked annuities protect individuals against inflation risk, investment risk, and longevity risk. For this purpose, it is essential to enact regulation to ensure that pensions are inflation-linked. Inflation-

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\(^3^4\) Low pensions are a good story for newspapers and social media.

\(^3^5\) Phased withdrawals on the contrary offer lower pensions, but the possibility of bequest in case that the individual dies before the depletion of the fund.
linked annuities should be offered by life insurance companies, and not by AMCs. It is worth analyzing the Chilean model, which creates sound competition among life insurance companies that offer annuity products. In that model, the information of contributors that are about to retire (size of the fund, gender, age, number of dependents) is sent to all insurance companies. They provide firm quotations of the value of the annuities. Based on these quotations, individuals can choose the provider with which they feel more comfortable, which is typically among the highest quotes.36

106. **The development of the inflation-linked annuities market requires the development of inflation-linked government bonds.** For the inflation-linked annuities market to develop it is essential for the government to start issuing long-term inflation-linked bonds. The demand by the life insurance companies for inflation-linked securities might also create incentives for companies to start issuing inflation-linked corporate bonds.37 The absence of these inflation-linked securities can make inflation-linked annuities more expensive because insurance companies would need other instruments for hedging inflation.

107. **An alternative is for individuals at retirement age to purchase simultaneously a term annuity (for example for 20 years) and deferred annuity (for example at year 20).** The term annuity is expected to be competitive among insurance companies, and the deferred annuity might be offered by a single provider. The single provider, which could be a government agency, would charge the best estimate of the value of the deferred annuity at retirement age. Managing the longevity risk at age 85 and above is one of the riskier parts of the longevity risk business. Despite best efforts for estimating the evolution of longevity and offering a fair price for the deferred annuities, this agency might need government support, in cases that their capital results are insufficient to cover the future commitments.38 Although risks are high on the deferred annuity part, the 20-year term annuity can be highly competitive and may help to support the development of the domestic fixed-income market.

108. **Since annuities are a long-term business and depend on institutions subject to financial risk, it is essential to offer government guarantees on the value of the annuities.** Since individuals do not have the capacity to assess the solvency risk of insurance companies on a regular basis and do not have the possibility of exiting the contract, it is essential for the government to provide this (free) guarantee. The proposal is to offer an unfunded guarantee for up to 100 percent of the value of the annuity with a cap (for example twice the minimum wage), and then 90 percent of a second threshold (for example seven times the minimum wage). Since the Office of Insurance Commission conducts regular assessments of the solvency of insurance companies, the government is the stakeholder with the best capacity to offer this guarantee. In the absence of such guarantee, the annuities market is less likely to develop.

109. **The government may also consider the possibility of creating disability and survivorship insurance in the funded pension scheme.** This insurance product would complement

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36 See Rocha, Vittas and Rudolph (2011)
37 In the case of Chile, practically all long-term corporate bonds are inflation-linked.
38 Some analysts have promoted this model of annuities in two phases in several countries, it has not been adopted until now.
the one offered by the Social Security scheme. The disability and survivorship insurance would top up the pensions savings of the individual and allow disabled individuals or survivors to receive a retirement income that is aligned with the salary of the beneficiary at the time of the insurance event (death or accident). As a reference, the disability and survivorship insurance of Chile and Peru have premia of 1.1 and 1.24 percent of the base income respectively and offer benefits in the range of 70 percent of the base income in the case of death or total disability.

G. Opportunities for developing the fixed-income market

110. It is essential to move in the direction of increasing the maturity of the corporate and government debt market. The proposed reforms (that would align the incentives of the AMCs and facilitate the development of the annuities market) would create demand for long-term products. The government should be ready to cope with that additional demand. To the extent that the reform is accompanied by the creation of the inflation-linked annuity market, the government should also be ready to develop a strategy for issuing these instruments.

111. The introduction of incentives toward managing funds with long-term pension objectives will also create demand for high-yield and alternative instruments. Pension funds will need to diversify if they want to achieve the expected pensions at retirement age. Consequently, the regulation should open the room for the introduction of new securities, including riskier ones. In the presence of good risk-management practices, AMCs should be able to select portfolios that are consistent with the long-term pension objectives. In other words, this movement would imply a move from the concept that that pension funds invest conservatively, to a concept where pension funds invest in line with the final objective of the pension system.

112. In this regard, the elimination of the restriction on investments in non-investment grade instruments can help to increase the responsibility of AMCs in the management of the funds. This move should not be interpreted as a move toward greater exposure to these instruments, but as a signal of greater responsibility of the AMCs in the management of portfolio. This regulatory change is likely to increase investments in bonds rated “BBB” and below. The focus of the regulation should continue to strengthen the role of the AMCs’ risk-management capacity.
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