Pension Notes

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# What has made the most developed voluntary pension systems worldwide successful?

Federación Internacional de Administradoras de Fondos de Pensiones

## Executive summary

In many countries, the total replacement rate (pension vs salary) obtained by workers from pension systems is often insufficient, especially among workers with average or above-average income. In fact, according to the "*OECD Pensions at a Glance 2023*", on average in all OECD countries, workers earning the average wage receive a net pension, after tax, from the mandatory public and private pension systems, of 61.4% of salary. Hence, many workers will require supplementary pensions in addition to those provided by the social security systems. Where will these supplementary pensions come from? They would probably not come from the public systems since demographic pressures (higher life expectancy and lower birth rates) and financial crises are forcing them to reduce benefits and impose more restrictive conditions for accessing them. Furthermore, in the logic of the mandatory savings systems, the way to improve benefits would be to raise retirement ages, increase contribution rates, increase the maximum income limits for mandatory contribution purposes, and make all income taxable. The problem, however, is that these measures are political in nature and can face strong resistance, delaying their application over time.

The Voluntary Pension Savings (VPS) mechanism is therefore an alternative and indispensable means of improving the pensions of all workers. VPS certainly helps high-income workers achieve pensions more in line with their income, while improving the pensions of mid and low-income workers with less savings capacity, who are mostly not taxed on their wages, when state subsidies that encourage savings are in place.

A review of International VPS statistics shows that the 10 countries with the highest ratios of VPS vs GDP (above 20%) are Canada, the USA, the United Kingdom, Ireland, New Zealand, Belgium, Iceland, Japan, Brazil and Portugal. The first three are Canada (the most mature system), the United States (the second most mature) and the United Kingdom (the fourth most mature), with VPS levels of 187%, 170% and 130% of their respective GDPs. The percentage of VPS vs GDP in countries ranking 4th to 10th (Portugal, Brazil, Japan, Iceland, Belgium, New Zealand and Ireland) is between 24% and 38%. The top 7 countries in terms of VPS vs GDP rank in the top 22 places in the 2023 Mercer's Global Pension Index, proving that the most robust pension systems worldwide have highly developed VPS programs. This pension note analyses the VPSs of 6 selected countries (Canada, USA, United Kingdom, New Zealand, Iceland and Brazil), drawing conclusions regarding the factors that influenced their development.

The review of the countries in question shows that:

(i) In general, the lower the replacement rates of mandatory systems (public PAYGO and/or private savings), the higher the VPS/GDP ratio. This is logical, since the lower the replacement rate of the mandatory system, the greater the challenge of the VPS to build pensions that approach a certain predefined sufficiency threshold (for example, 70% of average income over the entire

working life). Hence, to achieve that goal, the VPS alone would have to provide a replacement rate of between 16% (United Kingdom) and 27% (New Zealand).

(ii) Replacement rates in PAYGO systems are expected to drop by 56.5% on average, between 2023 and 2100, due to population aging (in the absence of additional reforms, and in order to maintain a balance between income and expenditure). The mandatory and voluntary individual savings systems will therefore play a more important role in achieving the sufficiency objectives society expects from the pension systems.

(iii) Basically, three types of public policies have been implemented to encourage VPS:

a) **Tax incentives**: A necessary condition for the development of VPS is a tax incentive that helps to "compensate" the illiquidity of this type of savings, improving its attractiveness compared to other types of savings. The most common regimes make VPS contributions non-taxable, and withdrawals taxable (this is known as the EET system: exempt contribution, exempt investment gains, payment of taxable benefits). This system is in place in all the countries analyzed, except in New Zealand, which uses the TTE system (contributions are paid from after-tax income, while profits such as returns on investment are tax-free).

b) **State Subsidies/Credits for Lower-Income Workers**: Since there are some concerns that VPS tax incentives are regressive (mid-income workers in the lower tax brackets receive lower subsidies than those in the higher income and tax brackets), additional tax measures, such as subsidies or direct credits to lower-income workers, are deemed necessary to promote VPS among workers who need them the most. Some measures have been taken in this regard in some of the countries analyzed (e.g., the "Saver's Credit" in the US, or the "Saver's Tax Credit" in New Zealand, the state subsidy of approx. US$ 624 received by new members in their individual KiwiSaver pension savings accounts through 2015). Nonetheless, these incentives need to be boosted to achieve a real increase in voluntary savings in these income brackets.

c) **Non-tax/non-state incentives**: This group basically comprises the following 4 policies:

- **Automatic enrollment in VPS plans**: Based on behavioral economics, leverages worker inertia to get them to save, with relatively low opt-out rates. This public policy has been applied in the UK, USA, New Zealand and Brazil. These policies cover all eligible workers in the UK and New Zealand, and certain groups of workers in the US and Brazil (State automatic enrollment programs in IRA plans in the US, and federal government employees in Brazil).
- **Liquidity/withdrawal for purposes other than retirement**: The logic of this policy is that VPS schemes that provide some early fund withdrawal possibilities are more in demand,

even at the expense of a penalty or "starting price." Part of the accumulated funds can be withdrawn for purposes other than pensions, without any penalty, in Canada, the United Kingdom, the United States, New Zealand and Brazil. Special situations such as first home purchases (in Canada and the United Kingdom), terminal or serious illness (in the United Kingdom, USA and New Zealand), payment of medical expenses (in the USA), financial hardship/unemployment/loans/others (in the USA, New Zealand and Brazil), are given priority. In Brazil, partial early withdrawals are limited to members' contribution amounts and a maximum of 20% of the account balance (after 5 years of employment). In some cases, other than the above, fines ranging from 10% to 25% are levied in the US and the UK, respectively.

- **Matching Contributions by the employer**: The logic behind this policy is to get employers involved in the construction of their workers' pensions, and benefit from herd behavior (if several workers in a company are engaged in VPS, others are more likely to follow suit). Employers match contributions made by workers to their individual VPS accounts in six countries. Employer matching is voluntary in Canada, in US [401k, 403(b) and 457(b) plans], and in Brazil. In the automatic enrollment programs in the United Kingdom and New Zealand, employer's matching must be a minimum of 3%. And in Iceland (voluntary personal pension plans), the minimum employer matching is 2%.
- **Financial Literacy**: The logic behind this policy is that higher levels of financial literacy enable people to better manage their personal finances, thus allowing them to build their savings. In fact, in countries with a higher level of VPS vs GDP (Canada, the USA, and the United Kingdom), more than 55% of adults have some financial knowledge. Countries must therefore make long-term joint public and private sector efforts to improve financial education policies, to enable future generations to acquire skills that will allow them to make sound financial decisions (savings and investment), maximize their well-being and improve their financial resilience to external shocks.

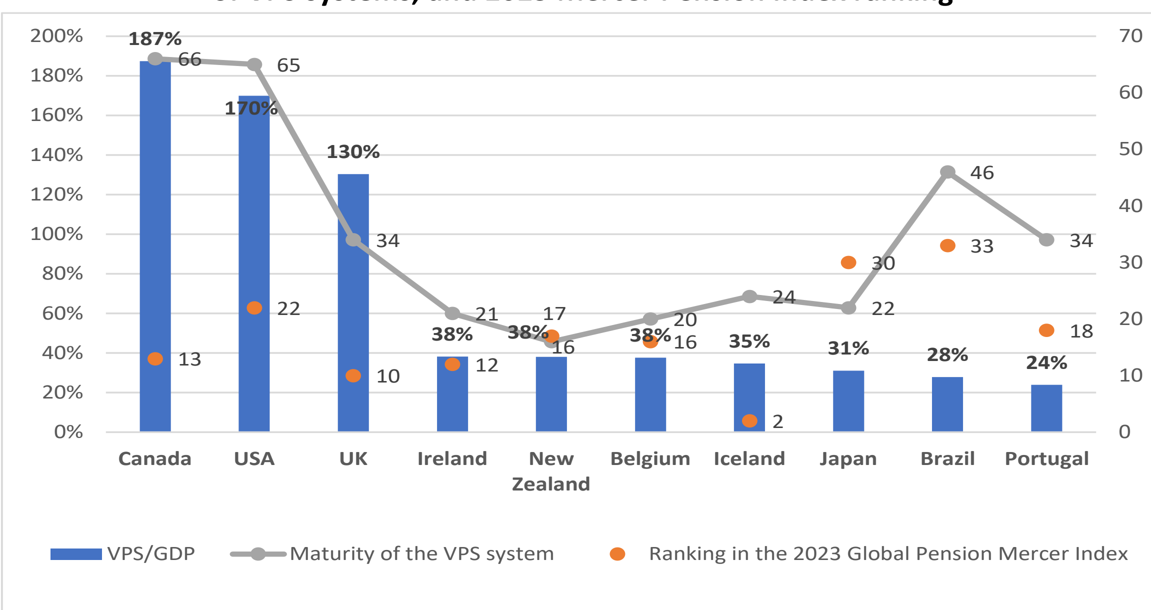
## I. Which countries have the highest levels of voluntary pension savings worldwide?

Graph 1 shows the 10 countries with the highest voluntary pension savings levels (VPS) worldwide (greater than 20% of their GDP), according to the available information published by the OECD. These 10 countries jointly account for total voluntary pension savings of US$44,636 trillion, representing 135% of their combined GDPs. The maturity of the VPS systems of these countries ranges from 20 to 66 years, with an average of 35 (see Appendix 1). As expected, the trend is that the longer the VSP system has been operating, the more developed it is, although there are exceptions such as Brazil and Portugal, which can be explained by other factors that fall outside the scope of this document.

The first three are Canada (the most mature system), the United States (the second most mature) and the United Kingdom (the fourth most mature), with VPS levels of 187%, 170% and 130% of their GDPs respectively. The percentage of VPS vs GDP in countries ranking 4th to 10th (Portugal, Brazil, Japan, Iceland, Belgium, New Zealand and Ireland) is between 24% and 38%. The top 7 countries in terms of VPS vs GDP rank in the top 22 places in the 2023 Mercer's Global Pension Index, proving that the most robust pension systems worldwide have highly developed VPS programs.

**Graph 1**

**Top 10 countries with highest Voluntary Pension Fund Assets as a percentage of GDP, maturity of VPS systems, and 2023 Mercer Pension Index ranking**




Note: The VPS data are for 2020, or the latest available information.

Source: FIAP, based on OECD data (OECD Global Pension Statistics), World Economic Outlook IMF database and 2023 Mercer Pension Index data. See Appendix 1 for detailed information.

## II. How does Voluntary Pension Saving work in the countries in which it is most developed?

The main characteristics of VPS systems in the three countries where they are the most developed worldwide (with VPS levels exceeding 100% of their GDP, Canada, the United States and the United Kingdom) are described below. Furthermore, the countries with less developed but equally relevant VPS systems (between 24% and 38% of their GDP), New Zealand, Iceland and Brazil, are described below.

### Canada[1]

In Canada, one can engage in voluntary pension savings primarily through registered savings accounts (*Registered Retirement Savings Accounts*, RRSP, the best known of which were introduced in 1957), employers' collective pension plans (*Registered Pension Plans*, RPP, introduced in 1966; and *Pooled Registered Pension Plans*, PRPP, introduced in 2012). These accounts and plans offer several incentives to encourage long-term savings, including:

1. **Tax deduction**: Contributions paid into an RRSP account, which annually amount to a maximum of 18% of workers' salaries, are tax deductible.[2] for up to a maximum of CAD 30,780 (approx. US$ 22,674[3])[4]. Returns and earnings within the RRSP account grow tax-free until the funds are withdrawn.

2. **Transfer of Unused Income**: Should individuals fail to use their RRSP contribution limit in a given year, they may transfer the excess unused contribution limit to future years, to their advantage, and reduce their future tax burden.

3. **Matching**: Some employers offer collective pension plans (CPPs) and may match a portion of the contributions made by the worker. This employer matching is an additional savings incentive, as it increases the total accumulated amount.

4. **Withdrawals and Tax Refunds**: Withdrawals from an RRSP account are taxable, but may be exempt under certain circumstances, such as purchasing a first home.[5] (up to CAD 35,000, approx. US$25,783), or to finance education[6] (up to CAD 20,000, approx. US$ 14,733). Money withdrawn for these purposes must be returned to the RRSP within the following 10 or 15 years, respectively,

[1] In 2023
[2] This means that the contribution amount must be deducted from the taxable income, thus reducing the taxable base income, and therefore the individual's tax burden.
[3] The conversions in this section are at the 30.11.2023 exchange rate of: 1 CAD = 0.736 USD.
[4] Workers can contribute to the RRSP until the age of 71, at which time the accumulated funds must be converted into a life annuity or disbursed annually in accordance with a minimum withdrawal schedule.
[5] Home Buyers' Plan (HBP).
[6] Lifelong Learning Plan (LLP).

otherwise it is considered taxable income. Tax refunds resulting from RRSP contributions can also be used to increase savings or reduce debt. As of April 1, 2023, RRSP funds can be transferred to the (*Tax-Free First Home Savings Account, FHSA*[7]) subject to an overall limit of CAD 40,000 (approx. US$ 29,466) and can then be withdrawn tax-free to purchase a first home.

In addition to the RRSP and RPP/PRPP, there is another voluntary savings mechanism in Canada, the so-called **Tax-Free Savings Accounts** (TFSA), implemented in 2009. Senior Canadians can contribute a certain amount of money to these accounts each year, and all returns and withdrawals are completely tax-free. Unlike RRSP accounts, contributions to TFSA accounts are not tax deductible in the year they are made, but the advantage lies in the future tax exemption on returns and withdrawals.

The annual contribution limit of TFSA accounts has varied since its introduction, and the government adjusts the limit in accordance with inflation and other considerations every year. Unused contribution limits in previous years can be accumulated and used in future years, allowing potential savers to make the most of this long-term investment vehicle.

## United States

In this country, VPS is promoted through several programs designed to help people save for retirement, including:

1. **401(k) Plans**: These are retirement savings plans with tax advantages for the saver/worker, offered by many employers since 1978. Workers who enrol in a 401(k) accept that a percentage of their salary will be paid directly into an investment account, being able to choose between several investment options. Many companies also offer to match some or all of the worker's contributions, which encourages saving. There are two basic types of 401(k): (i) Traditional: pre-tax contributions; taxable withdrawals; (ii) Roth: post-tax contributions, tax-free withdrawals.

2. **IRA (*Individual Retirement Account*) Plans**: These are retirement savings accounts offered since 1974, which enable tax-deferred contributions and growth of people's money. There are basically two types of IRAs: (i) Traditional IRA, which offers tax deductions for contributions; and (ii) Roth IRA, which allows tax-free withdrawals in retirement.

3. **403(b)/457(b)Plans**: These plans started being offered in 1958 and 1978, respectively. They are similar to 401(k) s but are designed primarily for nonprofit workers (such as public schools and faith-

[7] Further details at: https://www.scotiabank.com/ca/en/personal/advice-plus/features/posts.how-you-could-use-the-new-tax-free-first-home-savings-account.html

based organizations) and public servants. They allow workers to contribute part of their salary to the retirement plan, with tax benefits and the possibility of *matching* by the company.

4. **SIMPLE IRA and SEP IRA Plans**: These are retirement plans for small businesses and the self-employed. They offer tax advantages and allow contributions from both the employer and the worker. The *Savings Incentive Match Plan for Employees* (SIMPLE) IRA, offered since 1997, is a savings plan for workers established by an employer, where the former can choose to make contributions based on a salary reduction and the employer makes mandatory matching contributions. The Simplified Employee Pension (SEP) IRA, offered since 1978, is a simplified workers' pension plan, established by an employer, who contributes directly to an IRA account created for each worker.

5. **State Automatic Enrolment Programs in IRA Plans:** As of June 2023, 15 states have enacted automatic enrolment in individual savings plans (IRAs), known as Auto IRAS (already operational in California, Connecticut, Illinois, and Oregon). Oregon was the first state to initiate this public policy, in 2007. In automatic enrolment, a tool based on behavioral economics principles, workers are automatically enrolled in an individual pension savings plan, with the possibility of opting out if they actively decide to do so. This policy has been very effective in increasing VPS: in fact, as of November 2023, the number of accounts in the 4 states where the Auto IRA is operational amounted to almost 800,000 (a figure that implies a 1.9-fold increase compared to December 2021), accumulating total savings exceeding USD 1.1 billion [8]. The workers' opt out rate in those states has also been relatively low, ranging from 14% (Connecticut) to 37% (California)[9].

The following are the main driving forces in the country's VPS system:

1. **Long-Term Tax Benefits**: Retirement accounts, such as traditional IRAs and 401(k) s, offer long-term tax benefits, since contributions and investment returns grow tax-deferred until retirement, at which time they are taxed at potentially lower rates.

2. **Saver's Credit**: Introduced in 2002, as part of the *Economic Growth and Tax Relief Reconciliation Act* of 2001. This tax credit is intended to encourage mid- and low-income individuals to save for retirement by offering a tax incentive for contributions made to qualified retirement savings plans, such as IRAs, 401(k) plans, 403(b) plans, and others. It enables qualifying taxpayers to claim a tax credit that can reduce their tax burden or increase their tax refund, providing an additional stimulus to save for retirement. The credit is designed to help people with lower incomes overcome economic barriers to long-term savings. Individuals and families who meet certain income criteria and who contribute to

[8] See: https://www.massenaassociates.com/blog/state-auto-ira-program-metrics

[9] For further details, please see Pensions Note No. 72 "Automatic enrolment worldwide: international experience and lessons for Latin America".

eligible retirement plans may be selected for this credit. The credit is 50%, 20% or 10% of contributions, up to a maximum of USD 2,000, depending on the person's gross income.

It is important to note that in December 2022, the country's president signed the Secure 2.0 law, incorporating the automatic enrollment of workers and the automatic scaling of contributions to occupational plans nationwide, for those working for employers who offer new pension plans as of 2025. I.e.: automatic enrollment will be mandatory for employers as of that date. The default contribution is 3% of salary and will increase 1 percentage point of salary per year, up to a minimum of 10% and a maximum of 15%.

### United Kingdom

In the UK's Individual Voluntary Savings Pillar[10] there is a wide range of products that enjoy tax advantages. These include:

**1. Lifetime Individual Savings Accounts (*or Lifetime ISAs*)**

These are not exclusively Pension Savings Instruments since they also pursue other purposes (housing and personal emergencies). These were introduced in 2016. These are individual savings accounts that can be opened between the ages of 18 and 40. Savings can only be accumulated between the ages of 18 and 50 (provided the first deposit is made before the age of 40), with an annual contribution ceiling of GBP 4,000 (approx. $4,790). The Government grants a tax benefit of 25% of contributions, with an annual cap. After the age of 50, no further contributions can be made and tax breaks cease; nonetheless, the account continues to be invested.

Fund withdrawals from these accounts are limited to three situations: (i) purchase of the first home (with certain caps in terms of value); (ii) terminal illness (less than 12 months of life); and (iii) having turned 60. Optionally, the money can be withdrawn in different situations, but paying 25% in tax bonuses.

[10] The UK's voluntary savings pillar allows contributions above the mandatory minimum in individual accounts, in the defined contribution systems. The employer may or may not match such contribution in what is called "Additional Voluntary Contributions." These may be additional contributions over and above the worker's occupational pension and their concretion depends on the underlying system into which they are incorporated. In this sense, if it is a defined contribution fund, the contributions are added to an additional individual savings fund. What is usually allowed in the defined benefit systems is that the worker "buys" years of contributions to the system, which, according to the rules of the scheme, would improve the pension. They can also be held separately to the occupational scheme, in which case they are called "Free Standing Additional Voluntary Contributions," and act like an individual pension savings fund.

**2. Personal Pensions**

These consist of pension schemes contracted by a person who seeks to create an individual defined contribution, complementary to the occupational pension that workers or independent individuals may have. Tax benefits apply to these and additional contributions. There are mainly three types of Personal Pensions:

a. "Personal Pensions": Pension investment vehicles offered by private individuals since 1988, granting a tax benefit dependent on the rate applicable to income. Funds can generally be accessed from age 55 (although the government recently announced that it plans to gradually increase the age from 55 to 57, as of 2028).

b. "Stakeholder Pensions": Offered since 2001 by an institution or, in some cases, organized by a group of workers in a company, which enable contributing to an individual account, with a defined contribution, with an individually funded logic, and which, unlike the previous one, benefits from having lower costs (management fees with a cap), and being able to contribute lower amounts (approx. US$ 25 at least). Funds can only the accessed after turning 55.

c. "Self-invested personal pensions": Offered since 1989, sharing the characteristics mentioned above, but fundamentally different in terms of greater control and, therefore, responsibility, on the part of the saver regarding the purpose of the investment.

One must bear in mind that private pension savings in the United Kingdom pay taxes in accordance with an EET model. This means that:

- Pension contributions paid in by individuals and their employers are tax exempt. The savers and any contributing employers receive tax benefits, up to certain set limits.
- Returns on investments are tax exempt.
- When savings are withdrawn as pension payments, they are taxed as other income. Individuals can access up to 25% of their pension savings as a lump sum, tax free.[11].

**3. Automatic enrollment in occupational plans**

In addition to the aforementioned savings plans (*Lifetime ISA* and Personal Pensions), the United Kingdom has a lever for boosting voluntary savings, namely automatic enrolment in occupational pension plans. As of 2012, employers must give all eligible workers access to a pension (from 22-65

[11] More precisely, in defined contribution plans, this withdrawal can be up to 25% of the "lifetime allowance" (which is the maximum amount of legally stipulated total accumulated funds, on which individuals can obtain tax benefits). The "lifetime allowance" for the 2023/2024 tax period is set at GBP 1,073,100 (approx. USD 1.36 million), so the 25% tax-free withdrawal would amount to about USD 340,000.

years of age, with annual incomes above GBP 10,000, approx. US$12,297[12]). Employers must automatically enroll their workers, and assuming that the latter do not opt out, they jointly contribute at least 8% of workers' salaries. A tax-free lump sum withdrawal of up to 25% of the funds can be made at the official retirement age. The rest can be withdrawn as a lump sum, used to purchase a life annuity or a flexible scheduled withdrawal option (paying taxes in all cases).

For employers and workers who do not have their own occupational pension schemes, the National Employment Savings Trust (NEST), a public corporation, provides this type of service by default: Hence, NEST is a public pension scheme that seeks to increase the coverage of occupational plans, but outsources fund management to private companies. Fifteen years after its creation, following a transitional period of application, 12 million people are enrolled in NEST, with more than 1.1 million companies, managing total savings of GBP 29.6 billion (approx. US$ 37 billion[13]), and with only about 8% of members who decided to voluntary opt out of the system by default.

As a result of automatic enrollment, the percentage of employees enrolled in private pension programs between 2012 and 2021 increased from 46.5% to 79.4% and total savings in occupational schemes rose from approx. US$110,208 million to US$154,589 million[14]. Furthermore, the system opt-out rates have been low, at between 8% and 14%, according to different estimates.

### New Zealand

New Zealand's voluntary pension savings system is mainly based on the "KiwiSaver" occupational pension savings scheme, which has been operating since July 2007, with a central automatic enrolment feature (mandatory for employers and voluntary for workers, because they can opt out if they wish). The figures show that the New Zealand scheme has been successful: by 2022 some 3.2 million workers had saved through these plans, accumulating funds of about USD 57 billion, with relatively low opt-out figures of approximately 18%.

The fundamental characteristics of the "KiwiSaver" scheme are:

- Enrollment: Workers between the ages of 18 and 65 entering the labor market are automatically enrolled in an occupational plan, with voluntary opt-out between the second and eighth week after employment. All those who are not automatically enrolled can voluntarily opt-in via the employer or a pension provider.

- Contributions: The default contribution rate is 6%, but can be changed to 3%, 4%, 8%, or 10%. It includes employer contributions of 3% and State contributions of NZD 0.5 for each NZD

[12] Income thresholds are subject to annual government review.
[13] At the exchange rate of 1 GBP = USD 1.23509 on 03.31.2023
[14] Measured in real terms, at an exchange rate of 1 GBP = USD 1.34894 on 31.12.2021.

contributed.

- Financial incentives: These include a state subsidy (until 2015, new enrollees received an initial state contribution of NZD 1,000 [approx. US$ 624] in their individual accounts), as well as tax incentives (possibility to withdraw funds tax-free once certain requirements are met, such as retirement. Contributions and returns on investments are taxed).

- Access to Funds: While KiwiSaver's primary purpose is to save for retirement, at least a portion of the funds may be accessed early in situations of financial hardship, serious illness, or for the purchase of a first home, under certain conditions. At retirement age (65), one can either fully withdraw the balance of the fund or opt for a programmed withdrawal of the funds.

### Iceland

Iceland has a VPS system that allows its citizens and residents to save for retirement and supplement the pensions provided by the social security system. As part of the 1997 comprehensive pension reform, legislation governing tax incentives for voluntary personal pension savings came into effect in 1999. The reform made it possible for workers to deduct a contribution to authorized personal pension plans from their taxable income.

Individuals who decide to initiate voluntary personal pension savings must pay a minimum contribution of 2% of salary. The employer then matches this contribution with another 2% of salary. Individual contributions to personal pension funds are deductible from taxable income up to 4% of salary (hence, if the worker chooses to contribute 4%, the total contribution can be up to 6%). Excess contributions above the 4% threshold are taxed at the marginal income tax rate. The equivalent employer’s contribution is tax exempt.

Pension savings are available in the form of a lump sum or via scheduled withdrawal from the age of 60 (previously in cases of disability) and are fully inheritable.

Pension funds are tax exempt, so investment income is not taxable. Pension payments are taxed as ordinary income. Since pension contributions are deductible from the taxable base income, for both workers and employers, the tax model can be described as a EET system (exempt contributions; exempt investment income and capital gains of the pension institution; taxed benefits).

**Brazil(*)**

Brazil's voluntary private pension scheme comprises pension plans that are offered individually (personal or open) or by employers (related to employment, or also called "closed"). The first law regulating both plans dates back to 1977. However, open plans did not ‘s start being offered until the 1980s[15].

Open plans are managed by banks and insurance companies and purchased directly by individuals, while closed plans are managed by Closed Supplementary Pension Agencies (EFPC). Some employers have created or established their own pension funds, such as Petros (a pension fund founded by Petrobras in 1970), but today, this fund, to name only one, manages pension plans on behalf of other employers (commonly known as a multi-sponsorship EFPC). Trade unions or professional associations may rely on the services of multi-sponsored EFPCs.

Open pension plans are not necessarily linked to employment, as open pension institutions (insurance companies and other financial institutions) offer their services to companies, dependent workers, self-employed professionals and even to the unemployed. This retirement savings approach, known as PGBL plans (*Plano Gerador de Benefício Livre)*, is preferably chosen by small and medium-sized businesses. Open pension institutions also offer VGBL agreements (*Vida Gerador de Beneficio Livre*), which resemble life insurance contracts.

Historically, the closed pension plan industry grew from labor connections in state-owned enterprises, mixed-economy companies, and large multinationals, but then private companies also began offering benefit plans to their workers.

Open and closed plans cover private sector workers. Public servants are enrolled in special PAYGO regimes (up to a set income cap) and, more recently, in closed pension plans operated by EFPC or open agencies. Federal government public servants (FUNPRESP) are covered by an individually funded plan based on automatic enrollment (explained below)[16].

In closed plans, the EFPCs manage Defined Benefit (DB), Defined Contribution (CD) or Variable Contribution (VC) schemes. The latter are mixed agreements, i.e., DC schemes with some DB

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(*) We appreciate the comments and observations made to this section by Flavia Silva, independent researcher and consultant, and editor and journalist of the Closed Complementary Pensions magazine of the Brazilian Association of Pension Funds (ABRAPP).

[15] Closed pension plans started operating effectively earlier than open ones because the Brazilian government at the time needed funds to finance infrastructure and other areas, so it ordered partially government-owned companies to start offering funded pension plans to their workers. Open plans, on the other hand, date back to the 1980s, when banks and insurers felt there was sufficient demand for them.

[16] In the public sector, employees have special pension schemes if they earn less than the social security caps (PAYGO schemes called RPPS). Federal government workers have pensions supplemented by FUNPRESP, and more recently, states and municipalities have also implemented individually funded plans to supplement retirement income above the state limit.

characteristics. Accumulated individual savings are transferable under certain conditions and withdrawals are allowed on retirement and termination of employment. In the instituted plans[17] and self-funded partial withdrawals are also allowed.

As of December 2022, according to PREVIC, there were 277 EFPCs covering 7.1 million people (active members, retirees, and beneficiaries) in 312 DB plans, 515 DC schemes, and 347 CV schemes in the country. Closed pension institutions represent 12.7% of GDP, with assets under management totaling BRL 1.17 trillion (approx. US$ 212,238 million). Thus, most closed pension plans are now DC, although DB plans still have more assets.

There are no general legal provisions governing contribution levels. The contribution rate for DC plans is about 4% to 6% of the worker's salary and varies between DB plans.[18].

***Tax treatment***

The tax treatment of open (only PGBL) and closed pension plans allows individuals to deduct their contributions for up to 12% of their annual income, and employers to deduct their contributions for up to 20% of payroll as operating expenses. Return on investment is not taxed. Taxation of benefits depends on how they are paid.[19]. When opting for the progressive method, the tax rate ranges from 0% to 27.5% (the rate goes up with the worker's income level)[20]. Under the regressive method, the tax rate starts at 35%, with a 5% deduction for every two additional years, down to 10% after 10 years (the rate goes down according to the years of enrollment in the pension plan). Hence, PGBL can be classified as a EET regime (exempt contributions, exempt fund income, taxed profits).

Although operationally similar to PGBL plans, VGBL plans are technically life insurance plans with survivor coverage. Contributions are not tax deductible, so they can be classified as TEE schemes

[17] "Instituted pension plans" - or Planos Instituidos in Portuguese - are distinguished from traditional sponsored plans by being typically self-funded and established by trade unions, cooperatives, and professional associations for workers in a specific sector or sphere of activity.

[18] It is worth mentioning that this is true, although there are variations in state and municipal plans, some of which have contribution rates of 0.5% of the monthly salary.

[19] On January 11, 2024, a new law came into effect (Law No. 14,803) that authorizes participants and beneficiaries of supplementary pension plans to opt for the tax regime (progressive or regressive) when obtaining benefits or redeeming accumulated amounts. This new regulation was supported in the National Congress by the Brazilian Association of Pension Funds (ABRAPP). Prior to the enactment of this law, Law No. 11,053 (of December 29, 2004) was in place, in which participants had to opt for the tax regime (progressive or regressive) when enrolling in the plan i.e., at the beginning of the accumulation phase). If participants did not actively decide, they were included in the progressive regime by default. If members opted for the regressive regime, the decision was irreversible (they could not change their minds later). This is why many members did not opt for the regressive regime and were therefore automatically included in the progressive regime. However, at the beginning of the accumulation phase, participants have not determined their tax situation in relation to the pension plan, so it is better for them to opt for the tax regime at the beginning of the de-accumulation phase (at this stage their situation will be better defined, so the option to choose the tax regime becomes clearer and simpler).

[20] Due to fierce competition with open pension plans, which enjoy more favorable tax treatment compared to closed pension plans, the Brazilian Association of Pension Funds (ABRAPP) and other stakeholders have argued that another tax bracket should be added to the progressive regime: 0% when assets remain invested in the closed pension plan for more than 15 years.

(taxed contributions, exempt fund income, exempt benefits). However, unlike many other TEE regimes, Brazilian income tax is levied on income on retirement. Thus, VGBL plans are a particular form of TEE because they exempt withdrawals and benefits from payment of taxes only on premiums paid in the accumulation phase, taxing part of the income. They are designed to serve policyholders who are not covered by mandatory social security, those who always file a simplified tax return or those who already contribute to a PGBL but want to save more than 12% of their taxable income. Due to those advantages, most of the total annual funding through contributions or premiums in open plans is done in VGBL plans.

***Supplementary pensions for public servants***

The creation of the Supplementary Pensions Agency for Federal Public Servants (FUNPRESP) in 2012 was considered a crucial step towards the sustainability of the public pension system. As of 2013, old-age pensions for new federal public servants were limited to the Social Security cap applicable to private sector workers. So now, if federal workers want to receive a higher pension, they must contribute to a DC-funded plan Managed by FUNPRESP (they automatically enroll with very low opt out rates so far). The employer (government agency) provides matching contributions of up to 8.5% of the worker's monthly salary. On retirement, workers receive a life annuity based on their account balance.

Brazilian states and municipalities have currently been offering supplementary pension plans to officials whose income exceeds the Social Security cap. As of March 31, 2023, 1,907 of 2,144 states and municipalities had already passed laws to implement privately funded and privately managed pension plans. Of this total, 643 had obtained the pension supervisor's approval to effectively elect a pension agency and start operating the pension plan. From an economic standpoint, and according to the supervisory body, PREVIC, the establishment of supplementary pension plans by states and municipalities will definitely lead to an increase in the volume of available resources in the coming years, enabling the expansion of Brazil's productive capacity.

## III. Comparative analysis of the voluntary pension savings systems analyzed

The following is a comparative analysis of the different countries analyzed in section II, based on a set of factors that influence the development of voluntary pension savings plans.

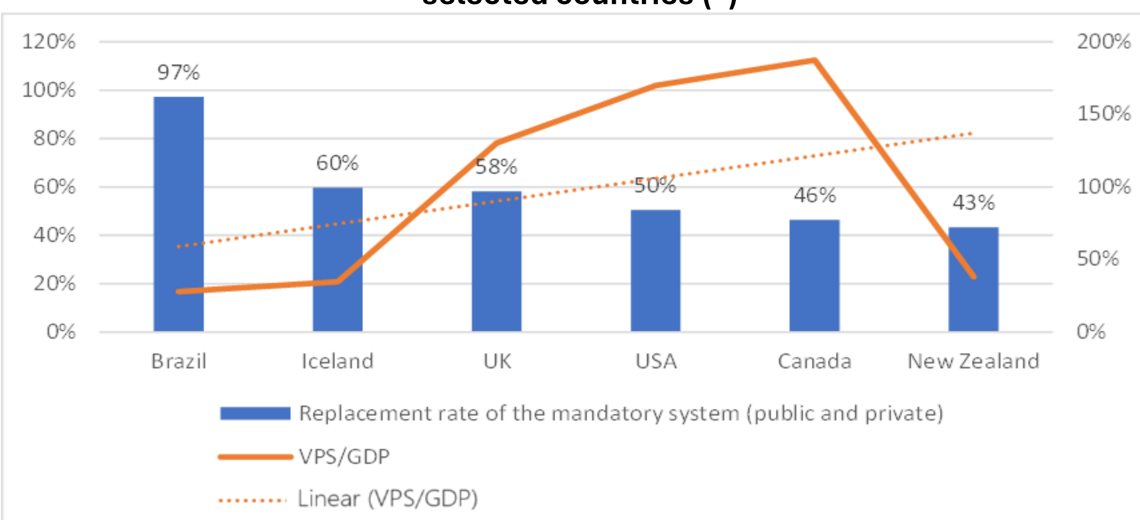
➢ **Generosity of the mandatory pension system**

It is logical to think that the lower the replacement rate offered by the mandatory pension system (public PAYGO and/or private savings), the greater the responsibility of voluntary savings to build pensions that approach a certain predefined sufficiency objective (for example, 70% of the average salary of the entire working life, the generally accepted international standard).

Graph 2 shows the projected net (after-tax) replacement rates offered by the mandatory systems of the countries analyzed, for a worker earning the average wage, according to the most recent OECD estimates. One can see that they range from 43% in New Zealand to 97% in Brazil. It is evident that, in general, the lower the replacement rates of mandatory systems, the higher the VPS/GDP ratio Furthermore, apart from the case of Brazil, whose public PAYGO pension system is the most generous in the sample, one can see that to achieve a target replacement rate of 70%, the VPS system alone would have to provide a replacement rate that fluctuates between 16% (United Kingdom) and 27% (New Zealand). In Canada, the country with the highest VPS/GDP ratio in the sample, the VPS replacement rate would have to be 26% to meet that target.

**Graph 2**

**Net replacement rates of mandatory pension systems vs VPS/GDP, selected countries (*)**




(*) Refers to the projected net (after-tax) replacement rate of the system, for a worker earning the average wage. Note: The replacement rate in this case is calculated as a percentage of the average lifetime salary. It is assumed that the worker enters the labor market at age 22 in 2022 and retires at the official retirement age of the respective country. Source: FIAP, based on "OECD Pensions at a Glance 2023". Information available at: https://stat.link/files/678055dd-en/t27sw1.xlsx. See Appendix 2 for detailed information.

Going forward, the replacement rates offered by mandatory systems, particularly public PAYGO systems, will need to make major adjustments to the replacement rates they offer due to aging (in the absence of parametric reforms such as increases in the retirement age or increases in the contribution rate). Considering the changes in the future dependency rate (people of 25-64 vs the number of people of 65 or older), which occur due to the increase in life expectancy at retirement and the drop in fertility rates, the PAYGO systems' replacement rates between 2023 and 2100 in the countries analyzed above will have to drop by 56.5% on average (see Table 1)[21], in order to maintain zero financial deficit (balance). Due to the above, mandatory and voluntary individual savings systems will certainly play a more important role in achieving the levels of sufficiency required of pension systems in the long term, and therefore the percentage of the replacement rate they generate will be constantly increasing.

**Table 1**
**Dependency rates (people aged 25-64/people aged 65 and over) in old age by country – 2023-2100**

| | 2023 | 2050 | 2100 | Drop in the replacement rate between 2023 and 2100 due to demographic factors and in the absence of parametric reforms, assuming a standard balanced PAYGO system. |
|---|---|---|---|---|
| Brazil | 5.4 | 2.4 | 1.3 | -75.3% |
| Iceland | 3.4 | 2.0 | 1.3 | -62.4% |
| United Kingdom | 2.7 | 1.9 | 1.4 | -48.4% |
| United States | 2.9 | 2.1 | 1.5 | -48.9% |
| Canada | 2.7 | 2.0 | 1.5 | -46.7% |
| New Zealand | 3.1 | 2.0 | 1.3 | -57.1% |

Source: FIAP, with United Nations data and estimates. The estimate of the mean fertility variant is considered, assuming that it will converge to its replacement level at a rate that is estimated using past data from the respective region. The "*Annual potential support ratio [25-64/65+]*" variable is used. File with basic information available here.

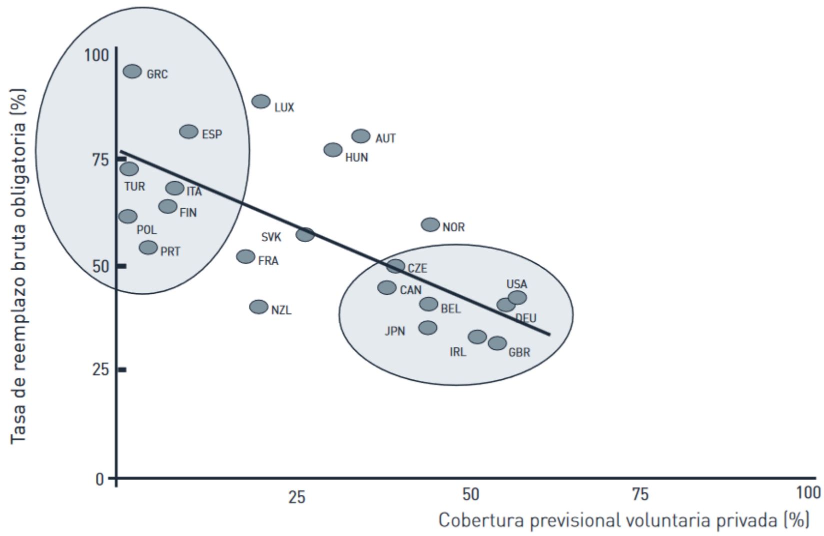
In this regard, it is worth mentioning that an OECD study from 2007[22] already pointed out that when comparing the percentage of voluntary pension coverage with income replacement rates for an average worker in the mandatory public system, it was found that there is a negative and relatively strong relationship (see Graph 3). Due to the consequences of population aging, mandatory pension systems (mainly PAYGO systems) will provide decreasing pension amounts, which will drive an increase in VPS[23]. Brazil will see an increase in VPS over time, precisely for this reason.

[21] In the PAYGO systems, the drop in the number of people of working age for each person at retirement age (dependency ratio, DR) represents a proportional drop in the funds available to pay pensions. Hence, in this case, the percentage drop in the replacement rate (or pension amount) is estimated as the percentage drop in the DT.

[22] "Pensions at a Glance 2007: Public Policies across OECD Countries". Pages 81-82. Available at: https://www.oecd-ilibrary.org/finance-and-investment/oecd-pensions-at-a-glance-2007_pension_glance-2007-en

[23] See Richard Hinz, "Voluntary Retirement Savings: Motivations, Incentives, and Design," in The Future of Pensions: Developing Individually Funded Programs, ed. FIAP (Santiago: FIAP, 2009).

**Graph 3**
**Generosity of public pensions and coverage of voluntary pensions**




Source: Pensions at a Glance 2007: Public Policies across OECD Countries.

- **Tax incentives for voluntary saving**

Almost all governments in developed countries subsidize voluntary pension savings to persuade workers, who normally prefer present consumption to future consumption, to defer a portion of their income until later on in life. Traditionally, such subsidies have taken the form of preferential tax treatment. Typically, contributions to voluntary pension plans can, up to certain limits, be paid from pre-tax income, investment earnings accrue tax-free, and benefits are taxed during retirement when income (and therefore marginal tax rates), are presumably lower: a type of tax treatment known as "EET" ("exempt contribution, exempt investment earnings, payment of taxable benefits")[24].

Appendix 3 compares the main existing tax incentives to stimulate VPS in the countries under study. As can be seen, most countries use the typical EET tax treatment, with the exception of New Zealand which uses the "TTE" system (contributions and investment earnings are paid with after-tax income; and payment of tax-exempt profits); and the United States with Roth IRAs in which a "TEE" type treatment is used (contributions are paid with after-tax income, while both earnings and investment profits are tax-free).

[24] See Richard Jackson, "Voluntary Pensions in Emerging Markets: New Strategies for Meeting the Retirement Security Challenge" (pages 20-21).

- **State Subsidies/Credits for Lower Income Workers**

Despite their widespread use, there is considerable debate as to whether tax advantages, which typically take the form of a taxable base income (EET) deduction, are the most efficient and equitable way for governments to subsidize retirement savings. Since the value of these subsidies increases along with marginal income tax rates, higher-income workers in the upper marginal tax brackets receive the highest state subsidies, middle-income workers in the lower tax brackets receive lower subsidies, and lower-income workers, who often do not pay taxes, may receive little or no subsidies at all. I.e., tax incentives are usually regressive. While most pension experts agree that such subsidies increase net retirement savings, most are also concerned that their incentive structure does little to expand coverage and promote voluntary pension savings among workers who need it most[25].

Hence, without any doubt, a pending task in countries is to promote VPS incentives for workers with lower incomes. Some measures have been taken in this regard in some of the countries analyzed (e.g., the "Saver's Credit" in the US, or the "Saver's Tax Credit" in New Zealand, the state subsidy of approx. US$ 624 received by new members in their individual KiwiSaver pension savings accounts through 2015). Nonetheless, these incentives need to be boosted to achieve a real increase in voluntary savings in these income brackets.

- **Non-Tax/Non-State Incentives for Voluntary Savings**

Appendix 4 shows the main non-tax/non-state VPS incentives in place in the countries analyzed: automatic enrollment; liquidity/retirement for purposes other than retirement; and *matching contributions* by the employer. The analysis shows that:

(i) In four countries (United Kingdom, USA, New Zealand and Brazil), the automatic enrollment public policy has been applied to pension plans. These policies cover all eligible workers in the UK and New Zealand, and certain groups of workers in the US and Brazil (State automatic enrollment programs in IRA plans in the US, and federal government employees in Brazil).

(ii) Part of the accumulated funds can be withdrawn for purposes other than pensions, without any penalty, in Canada, the United Kingdom, the United States, New Zealand and Brazil. Special situations such as first home purchases (in Canada and the United Kingdom), terminal or serious illness (in the United Kingdom, USA and New Zealand), payment of medical expenses (in the USA), financial hardship/unemployment/loans/others (in the USA, New Zealand and Brazil), are given

[25] For a review of the evidence, please see Richard Hinz, "Voluntary Retirement Savings: Motivations, Incentives, and Design," in The Future of Pensions: Developing Individual Capitalization Programs, ed. FIAP (Santiago: FIAP, 2009).

priority. In Brazil, partial early withdrawals are limited to members' contribution amounts and a maximum of 20% of the account balance (after 5 years of employment). In some cases, other than the above, fines ranging from 10% to 25% are levied in the US and the UK, respectively.

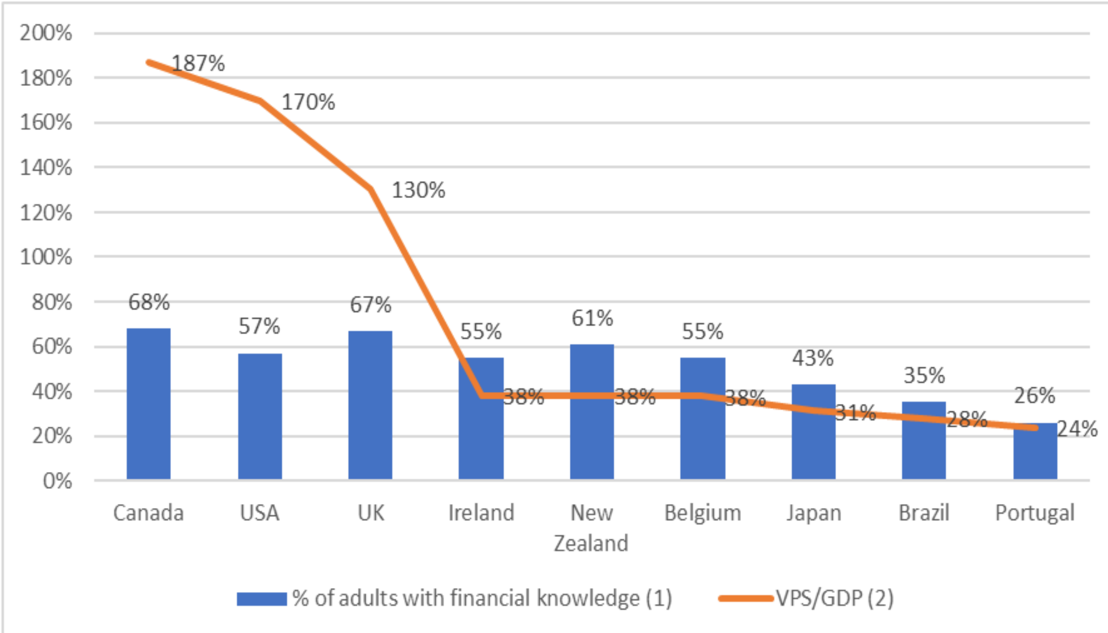
(iii) Employers match contributions made by workers to their individual VPS accounts in six countries. Employer matching is voluntary in Canada, in USA (401k, 403(b) and 457(b) plans), and in Brazil. In the automatic enrollment programs in the United Kingdom and New Zealand, the employer's matching must be a minimum of 3%. And in Iceland (voluntary personal pension plans), the minimum employer matching is 2%.

- **Financial Literacy**

Adequate levels of financial literacy are associated with higher savings[26], which can be explained because a higher degree of financial literacy leads people to better manage their personal finances, thus allowing them to build their savings. Graph 3 shows that, comparatively, in those countries with a higher level of VPS vs GDP (Canada, USA, and the United Kingdom), the percentage of adults who have financial knowledge (a sort of financial literacy index) exceeds 55%. Countries must therefore make long-term joint public and private sector efforts to improve financial education policies, to enable future generations to acquire skills that will allow them to make sound financial decisions (savings and investment), maximize their well-being and improve their financial resilience to external shocks.

[26] Source: Marshall (2015): “Reflections on Financial Education in Chile,” Central Bank, Economic Policy Documents, No. 53.

**Graph 3**
**Financial literacy rate vs GVP/GDP, selected countries**




Source: (1): https://getmoneyrich.com/financial-literacy-data/world-data/ (% financial literacy refers to % of adults who are financially literate); (2) OECD Global Pension Statistics and World Economic Outlook IMF database (October 2022).

## Appendix 1

Top 10 Voluntary Pension Fund Assets worldwide, selected OECD countries (year 2020 or latest available information, in millions of USD) and ranking of the 2023 Mercer Global Pension Index

| | Country | VPS (Millions of USD) (1) | GDP current prices 2020 (millions of USD) (2) | (1)/(2) = (3) | Ranking in the 2023 Mercer Global Pensions Index (4) | VPS System Maturity (5) |
|---|---|---|---|---|---|---|
| 1 | Canada | 3,081,679 | 1,645,423 | 187% | 13 | 66 |
| 2 | United States | 35,491,205 | 20,893,750 | 170% | 22 | 65 |
| 3 | United Kingdom | 3,593,710 | 2,758,870 | 130% | 10 | 34 |
| 4 | Ireland | 162,459 | 425,511 | 38% | 12 | 21 |
| 5 | New Zealand | 80,111 | 210,510 | 38% | 17 | 16 |
| 6 | Belgium | 196,406 | 521,260 | 38% | 16 | 20 |
| 7 | Iceland | 7,526 | 21,695 | 35% | 2 | 24 |
| 8 | Japan | 1,564,587 | 5,031,620 | 31% | 30 | 22 |
| 9 | Brazil | 404,028 | 1,448,550 | 28% | 33 | 46 |
| 10 | Portugal | 54,606 | 228,356 | 24% | 18 | 34 |
| **Total** | | **44,636,318** | **33,185,545** | **135%** | **n.a.** | **35** |

Source: (1): OECD Global Pension Statistics; (2) World Economic Outlook IMF database (October 2022); (4) 2023 Mercer Pension Index data; https://ww1.issa.int/country-profiles

Note: The maturity of the voluntary savings system corresponds to the difference between the year 2023 and the year of commencement of operations of the VPS system in each country. For Canada, Registered Retirement Savings Accounts (RRSP; introduced in 1957) are considered. For the U.S., 403(b) plans, which started being offered in 1958, are considered. In the case of the United Kingdom, "Self-invested personal pensions", which have been offered since 1989, are considered. In the case of Ireland, Personal Retirement Savings Accounts (PRSAs), which started being offered in 2002, are considered. For New Zealand, the KiwiSaver occupational pension savings scheme, which has been operating since July 2007, is considered. In Belgium, voluntary occupational pension schemes, which started being offered in 2003, are considered. In Iceland, voluntary personal pension savings, which came into effect in 1999, are considered. In Japan, "individual defined contribution funds", which started being offered in 2001, are considered. In Brazil, supplementary pension plans, promulgated by law in 1977, are considered. In Portugal, the "Poupança Reforma (PPR) Plans", which started being offered in 1989, are considered.

## Appendix 2

| Country | Mandatory System Replacement Rate (Public and Private) (*) | VPS/GDP | Replacement rate required of the voluntary savings system, to achieve the 70% target |
|---|---|---|---|
| Brazil | 97% | 28% | 0% |
| Iceland | 52% | 35% | 18% |
| United Kingdom | 54% | 130% | 16% |
| United States | 50% | 170% | 20% |
| Canada | 44% | 187% | 26% |
| New Zealand | 43% | 38% | 27% |

(*) Refers to the projected net (after-tax) replacement rate of the system, for a worker earning the average wage. Note: The replacement rate in this case is calculated as a percentage of the average lifetime salary. It is assumed that the worker enters the labor market at age 22 in 2022 and retires at the official retirement age of the respective country.

Source: OECD Pensions at a Glance 2023. Information available at: https://stat.link/files/ca401ebd-en/scxdj3.xlsx

## Appendix 3
## Tax incentives for voluntary savings – selected countries

| | Canada | United Kingdom | USA |
|---|---|---|---|
| Typical tax treatment in the pension system | EET | EET | EET<br>TEE for Roth IRAs |
| Tax treatment of contributions | Contributions to an RRSP account (18% of salary) are tax deductible up to a cap of CAD 30,780 in 2023 (approx. US$ 22,674). There is a tax of 1% per month for excess contributions [i.e., contributions exceeding CAD 2,000 (approx. US$ 1,473) above the applicable limit]. | Personal and occupational pension plan members may deduct their income tax contributions up to a limit of GBP 60,000 per annum (approx. US$ 76,174) (tax year 2023/2024; this is the nominated "*annual allowance*"). The annual limit of these deductions has been increasing over time (it was GBP 40,000 in 2017). | Participants in private pension plans can deduct their contributions from income tax up to a global limit of US$ 22,500 in 2023 (this does not consider 457(b) plans). The limit is adjusted annually in accordance with the increase in the cost of living. The so-called "*catch-up contributions*," which are additional personal contributions that certain plans allow workers aged 50 or over to make, can increase the limit of tax-deductible contributions (different levels of increase apply depending on the type of pension plan in question) (1). |
| Tax treatment of returns on investment | Returns on investment are not taxed. | Returns on investment are not taxed. | Returns on investment are tax deferred until retirement, except in the case of Roth IRAs. Returns on investment earned from Roth IRAs are tax-free. |
| Tax treatment of accumulated funds | No tax is levied on accumulated funds. | There is a cap (denominated "*lifetime allowance*") for the total fund accumulated in a private pension plan on which the individual can obtain tax relief. For the tax year 2023/2024 it amounts to GBP 1,073,100 (approx. US$ 1.36 million). On this ceiling, withholdings of up to 55% are applied (it is expected that the "*lifetime allowance*" will be definitively eliminated as of April 2024, so that all the savings accumulated during working life can be disbursed without the need to pay taxes). | No tax is levied on accumulated funds. |

Source: FIAP, based on "[Annual survey on financial incentives for retirement savings: OECD country profiles 2023]".

Comments:

(1) USA: More details on the tax treatment of contributions can be seen in "Annual survey on financial incentives for retirement savings: OECD country profiles 2023" (pages 96-100).

(2) United Kingdom: For further details on the tax treatment of contributions, please see https://commonslibrary.parliament.uk/research-briefings/sn05901/

## Tax incentives for voluntary savings – selected countries (continued)

| | Canada | United Kingdom | USA |
|---|---|---|---|
| Pension income tax treatment | Benefits and withdrawals from pension plans are included in income for regular tax purposes and are taxed at the applicable rate. Income tax is generally withheld on such payments and withdrawals.<br>Withdrawals from an RRSP account are taxable, but under certain circumstances may be exempt: to purchase a first home (up to CAD 35,000, approx. US$ 25,783), or to finance education (up to CAD 20,000, approx. US$ 14,733). The funds withdrawn for these purposes must be returned to the RRSP within 10 or 15 years respectively, otherwise they are considered taxable income. Tax refunds resulting from RRSP contributions can also be used to increase savings or reduce debt. As of April 1, 2023, RRSP funds may be transferred to the *Tax-Free First Home Savings Account* (FHSA), subject to an aggregate limit of CAD 40,000 (approx. US$ 29,466) and can then be withdrawn tax-free to purchase a first home. | Life annuities (LAs), scheduled withdrawals, and certain lump sums are taxed as income at the marginal income tax rate.<br>An individual may receive a tax-free lump sum of up to 25% of the total value of the pension funds when receiving a pension. The tax-free lump sum is limited to a maximum of 25% of the *"lifetime allowance"*. DB schemes are considered to be 20 times the annual pension when calculating the tax-free lump sum. Pension savings accessed before the normal minimum retirement age (currently 55) are charged a rate of up to 55%. | Withdrawals (both contributions and investment returns) from traditional pension plan accounts must be included in taxable income (and therefore taxed at the individual's marginal income tax rate), except in the case of Roth IRAs. Individuals are generally required to pay an additional 10% early withdrawal tax if the withdrawal occurs before the person turns 59 ½.<br>Once individuals turn 72, they must withdraw a minimum amount (the so-called Minimum Required Distribution, RMD) from their pension plan each year. It is possible to withdraw more than the RMD. Individuals who do not receive the full amount of an RMD will generally have to pay a 50% excise tax on the amount not withdrawn as required. According to the RMD strategy, the percentage of financial assets that retirees must withdraw each year increases as they age. The SECURE 2.0 Act of 2022 was enacted in late December and changes the RMD age to 73 for individuals turning 72 as of January 1, 2023. This change in law applies to IRAs (including SEP IRAs and SIMPLE IRAs).<br>Roth IRAs do not require withdrawals until after the owner's death. In a Roth IRA, a retiree can withdraw money, including investment income, tax-free if they have had the Roth IRA for more than five years. |
| Employer Perspective | Employer contributions are deductible for income tax purposes. Contributions to social programs do not apply to employer contributions. | Employer contributions to a registered pension plan may be deducted as an expense when calculating the profits of a trade, profession, or investment business, thereby reducing the amount of the employer's taxable profit. There is no set limit on the amount an employer can pay into a registered pension plan, subject to the limits imposed on individuals. | Although employers generally cannot deduct amounts provided to workers from taxes until the year in which those amounts are included in workers' income, employers may deduct amounts contributed to qualified pension plans in the year in which they are paid into to the pension plan.<br>The income tax deferral provided by pension plans is a particularly desirable benefit for high-income workers (including small business owners and larger business executives). Anti-discrimination rules prohibit employers from offering significantly higher pension plan benefits to high-income workers than to lower-income workers. |

**Tax incentives for voluntary savings – selected countries (continued**

| | **New Zealand** | **Iceland** | **Brazil** |
|---|---|---|---|
| Typical tax treatment in the pension system | TTE | EET | EET |
| Tax treatment of contributions | Workers' contributions are taxed at the marginal income tax rate.<br>Employer contributions are also taxable. In such cases, there are two ways to calculate and withhold employer contribution tax:<br>(i) If agreed by the employer and the worker, the employer's contribution may be treated as part of the worker's salary, and in such a case the marginal income tax rate must be withheld.<br>(i) In all other cases, the employer's contribution tax must be withheld, applying a tax rate that positively depends on the level of the worker's annual salary in the previous tax year (the rate fluctuates between 10.5% for annual salary up to NZD 16,800 [approx. USD 10,543]), and up to 39% for an annual salary above NZD 216,001 [approx. US$135,550]). | Members can deduct their income tax contributions for up to 4% of their gross monthly income. If individuals decide to start saving in a plan, the minimum contribution rate is 2% of salary. This contribution is matched by another 2% by the employer (individual contributions are exempt from tax for up to 4% of salary, and contributions in excess of that limit are taxed according to the marginal income tax rate). The matched contribution by the employer is exempt from the payment of taxes by the worker. | Open (PGBL only) and closed plan members can deduct their income tax contributions for up to 12% of their gross annual income. |
| Tax treatment of returns on investment | Investment income is taxable. The pension provider deducts this tax directly from the individual pension account. If the plan is a large share retirement fund, investment earnings are taxed at a rate of 28%. The tax rate for investment gains of a Portfolio Investment Entity (PIE) is calculated based on the taxable income of each of the two previous income years (adding investment income) fluctuating between 10.5% and 28%. | Returns on investment are not taxed. | Returns on investment are not taxed. |

**Tax incentives for voluntary savings – selected countries (continued)**

| | New Zealand | Iceland | Brazil |
|---|---|---|---|
| Tax treatment of accumulated funds | No tax is levied on accumulated funds. | No tax is levied on accumulated funds. | If a member opts for early withdraw of the funds, the tax payment depends on the tax method chosen by the participant. In the regressive method, the shorter the term of the investment, the higher the tax rate applied (if the money is withdrawn before 2 years, a 35% tax is paid; if it is withdrawn after 10 years, a 10% tax is paid). If the progressive method is chosen, the tax rate increases with the participant's income [up to BRL 1,903.98, approx. US$ 385, is tax exempt; for salary above BRL 4,664.68, approx. US$ 944, the tax rate is 27.5%]. Note: for the purposes of the progressive method, the amounts redeemed from the pension plan constitute the total income of the investor, and the tax rate is established accordingly. |
| Pension income tax treatment | Payments to beneficiaries from pension funds and KiwiSaver plans, whether in the form of annuity, lump sum or pension, are not taxable. | Pension income is taxed as ordinary income and is subject to the marginal income tax rate. A law passed in June 2014 allows active members to withdraw tax-free funds to pay housing debts, up to ISK 750,000 (approx. $5,348) per year for couples who jointly pay taxes. Non-owners can withdraw up to ISK 500,000 (approx. US$ 3,565) per year and per person to invest in housing (this will apply until December 31, 2024) | According to the regressive method, the tax rate starts at 35%, with a 5% deduction for every two additional years, up to a maximum of 10% after 10 years (the longer the money is held, the lower the applied rate). If the progressive method is used, the tax rate ranges from 0% to 27.5% (the tax rate increases with the participant's income; the pension amount is considered income for the purposes of choosing the applicable income tax bracket). |
| Employer Perspective | Employer contributions are tax-deductible company expenses. | Employer contributions are deductible from income tax without limit. | The employer (in open PGBL and closed plans) may deduct its contributions as operating expenses for up to 20% of payroll. |

**Appendix 4**

**Non-Tax/Non-State Incentives for Voluntary Pension Savings – Selected Countries**

| | Automatic Enrollment | Liquidity/Withdrawal for purposes other than pensions | Matching Contributions |
|---|---|---|---|
| **Canada** | No | Yes, there is the possibility of transferring funds from an RRSP to a special account for the purchase of the first home. | Yes, on a voluntary basis some employers offer part of the contributions made by the worker in the group pension plans. |
| **United Kingdom** | Yes, since 2012. Legislation sets the minimum total contribution percentage, which is currently 8%. Individuals may opt out; however, for those who wish to save, the legislation requires employers to enroll all eligible employees in a pension plan and make a minimum contribution of 3% (the worker makes a minimum contribution of 5%). | Yes, in Lifetime ISAs, withdrawals can be made for the purchase of the first home (with certain caps) and for terminal illness, without a tax penalty (for other purposes, a 25% penalty is paid). | Yes, the automatic enrollment program establishes matching by the employer, at a minimum rate of 3% of the worker's salary. |
| **USA** | Yes, to date nearly twenty states have enacted new pension programs for private and/or public sector workers, most of which are state automatic enrollment programs in IRA plans (known as Auto IRAs). In these plans, 3% (Connecticut) or 5% (California, Illinois and Oregon) of the worker's salary is automatically deducted (workers can opt out of the plan). In Oregon and Illinois, contributions increased by 1 percentage point of salary per year to 10% and in California to 8%. | Withdrawing money from 401(k) funds before the age of 59 ½ can have negative consequences, such as taxes and penalties. There are some exceptions that allow individuals to withdraw money from 401(k) funds without paying the penalty (10%), such as terminal illness, terminating employment after age 55, paying medical expenses that exceed 7.5% of gross income, or applying for a loan against the 401(k) plan. In any case, taxes must be paid on the money withdrawn. With the new law enacted in 2022 (Secure 2.0), workers will be able to receive a "match" from the employer for the payment of university debt. | Yes, in 401k, 403(b), and 457(b) plans many companies voluntarily offer to match some or all of the worker's contributions, which incentivizes savings. In SIMPLE IRA plans, matching is mandatory by the employer (the same amount as what the worker contributes). In Auto IRA plans there is no possibility of matching. |

Source: FIAP, based on "Annual survey on financial incentives for retirement savings: OECD country profiles 2023".

**Non-Tax/Non-State Incentives for Voluntary Pension Savings – Selected Countries (continued)**

| | Automatic Enrollment | Liquidity/Withdrawal for purposes other than pensions | Matching Contributions |
|---|---|---|---|
| **New Zealand** | Yes, since 2007. The government makes an annual contribution to KiwiSaver accounts as long as members contribute and are 18 years of age or older (and meet some additional criteria). The government pays 50 cents per contribution dollar for each member, up to a maximum payment of NZD 521.43. The government contribution does not count as taxable income for the member. Members no longer qualify for government contribution once they are eligible to withdraw their savings (usually on turning 65). | Yes, at least a portion of KiwiSaver funds can be accessed in advance of retirement, in situations of financial hardship, serious illness, or for the purchase of first home, with certain restrictions. | Yes, employee contributions to a KiwiSaver account (minimum 3% of salary) are accompanied by a minimum employer contribution of 3% of the employee's salary. |
| **Iceland** | No | No | Yes, under collective agreements, employers pay contributions equivalent to voluntary personal pension plans. The employer contributes a minimum of 2% of the salary if the employee decides to open° a personal pension savings account. The most common contribution rate (employee and employer) is 6% of the employee's salary, as most employees contribute their maximum tax-free percentage (4%). |
| **Brazil** | Yes, as of 2015, in the case of federal government public servants (FUNPRESP), who are covered by an individually funded plan based on automatic enrollment (these employees may or may not join this supplementary pension plan to receive benefits above the INSS cap). | Yes, although partial withdrawals are limited to the value of members' contributions, including additional and voluntary amounts contributed. For regular amounts, withdrawals are limited to 20% of the account balance, meaning sponsor contributions cannot be accessed prior to termination of employment. There are also time limitations: the member must wait five years before making the first withdrawal, called "*resgate parcial* ". | Yes, *matching contribution* by the employer (in the occupational or closed system) to its worker's individual account, on a voluntary basis, is a fairly common practice.<br><br>In the case of FUNPRESP, the employer (government agency) provides an equivalent contribution of up to 8.5% of the worker's monthly salary. |

Source: FIAP, based on "Annual survey on financial incentives for retirement savings: OECD country profiles 2023".

## References by country

Canada:

- https://ww1.issa.int/node/195546?country=822
- https://www.canada.ca/en/revenue-agency/services/tax/individuals/topics/rrsps-related-plans/contributing-a-rrsp-prpp/contributions-affect-your-rrsp-prpp-deduction-limit.html
- Pensions at a Glance 2021 – Country profiles Canada
- IOPS Country Profile – Canada
- https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/rc4466/tax-free-savings-account-tfsa-guide-individuals.html
- https://macdonaldlaurier.ca/mli-files/pdf/MLICommentarySpeerCross-01-15-webready-V2.pdf

United States

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Queries: International Federation of Pension Fund Administrators (FIAP).
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