4. Ensuring the Sustainability of Vietnam's Public Pension Fund through Asset Diversification[101]

1. **Vietnam's rapidly aging population has resulted in concerns about the long-term sustainability of the country's public pension fund.** Vietnam is projected to become an aged society by 2036, heightening worries about the swift rise in social insurance spending and the potential depletion of the social insurance fund (SIF)[102] managed by Vietnam Social Security (VSS). To safeguard the long-term sustainability of the fund, the Vietnamese government has amended the social insurance law, which will come into effect on July 1, 2025. Key changes comprise including voluntary social contribution system from informal workers,[103] broadening the definition of eligible participants in compulsory schemes[104], and introducing new payout schemes[105] commensurate with the duration of social insurance contributions. These measures aim to extend social security coverage and ease pressure on fund outflows. Additionally, for the first time, the new law permits the social insurance fund to diversify its investment portfolio by expanding into foreign government bonds[106]. Despite the passage of the new law, the implementation remains uncertain as the subordinate regulations are still being drafted. This selected issue evaluates the net income of the SIF in two scenarios: baseline scenario in which current contribution and payment schemes remain unchanged, and alternative scenario incorporating the social security reform. It also explores the diversification of public SIF investment portfolios in other countries as potential policy options for VSS.

Long-term Sustainability of VSS's SIF

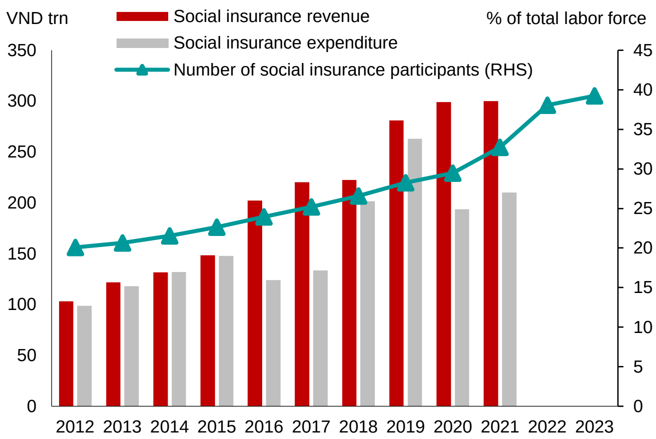
2. **The income-expenditure balance of the VSS remains in surplus, thanks to social security reforms and a population structure dominated by young citizens.** The Vietnamese government announced the reforms in 2018 with the goals of expanding social insurance coverage (Table A4.1), and enhancing the capacity, effectiveness, and efficiency of public social insurance management. As part of the reform, the retirement age was increased to 65 for men and 62 for women. The replacement rate was also reduced from 75 percent of the reference salary to 45 percent for the first 15 years of contributions. However, the accrual rate for contributions beyond 15 years was set at 3 percent per year for women and 2 percent

[101] Prepared by Wanwisa May Vorranikulkij, Senior Economist.
[102] According to Vietnam's 2024 Social Insurance Law, the social insurance system includes two schemes: a compulsory scheme and a voluntary scheme, with the latter expanded benefits in the law. The compulsory social insurance scheme covers benefits including sickness, maternity, occupational diseases, work-related accidents, retirement, and death. On the other hand, the voluntary social insurance scheme offers benefits for sickness, a one-time maternity allowance, work-related accidents, retirement, and death, —an expansion from the previous 2014 law, which only covered retirement and survivorship allowances.
[103] According to (International Labour Organization, 2015), informal employment is defined as "all remunerative work (i.e. both self-employment and wage employment) that is not registered, regulated or protected by existing legal or regulatory frameworks, as well as non-remunerative work undertaken in an income-producing enterprise. Informal workers do not have secure employment contracts, workers' benefits, social protection or workers' representation."
[104] The 2024 law broadens the definition of employees subject to compulsory social insurance to include the following groups:
1) Workers under indefinite-term or fixed-term employment contracts with a duration of one month or more. This includes cases where the employee and employer agree in writing to use a different title for the contract (as opposed to just "labor contract" under the 2014 law) that still involves paid employment, salary, and the management, administration, and supervision of one party;
2) Vietnamese citizens, including enterprise managers, supervisors, representatives of state capital or enterprise capital, members of the Board of Directors, General Directors, Directors, Supervisory Board members, or supervisors who do not receive salaries, as well as part-time employees whose monthly earnings are equal to or higher than the minimum salary used as the basis for compulsory social insurance contributions; and
3) Employees in their first month of employment or returning to work after a sick leave of 14 or more days.

[105] The 2024 law reduces the required contribution period for compulsory social insurance from 20 years to 15 years. For individuals contributing for 15 years, the monthly pension will be 40 percent of their average salary used as the base salary for social insurance payment, compared to 45 percent for those contributing for 20 years. Each additional year of contribution beyond 15 years will increase the pension replacement rate by 1 percent. Furthermore, the lump-sum payment has been reduced to 50 percent of the total contributions, down from the full amount previously provided.
[106] Article 122 of the 2024 Social Insurance Law permits the Vietnam Social Security (VSS) to invest in overseas assets. However, the VSS cannot proceed with such investments until subordinate regulations, that would outlining eligible investment schemes and risk management practices and have not been drafted, come into effect.

per year for men. Since the implementation of the 2018 reforms, the VSS has actively encouraged Vietnamese workers to participate in the pension fund. By 2023, the number of social insurance participants had reached 18.3 million, equivalent to 39.3 percent of the labor force, up from 25.2 percent in 2017 (Vietnam Social Security, 2023) (Figure A4.1). While the number of pension contributors has increased, boosting VSS's revenue, the amount of pension payments remains low, as the number of monthly pension and social insurance beneficiaries was about 3.3 million people, equivalent to 12.6 percent of the senior population older than retirement ages.

Figure A4.1. Financial Balance of VSS's Social Insurance



Source: VSS; Haver Analytics; AMRO staff calculations

Table A4.1. Pension-related Goals of the Social Insurance Reform

Milestone	Targeted Share of Labor Force Participating in SI [% of Total Labor Force]	Targeted Share of Farmers and Informal Sector Participating in Voluntary SI [% of Total Labor Force]	Targeted Share of Retirees Receiving Pension Benefits [% of Population Older Than Retirement Ages]
2021	35%	1.0%	45%
2025	45%	2.5%	55%
2030	60%	5.0%	60%

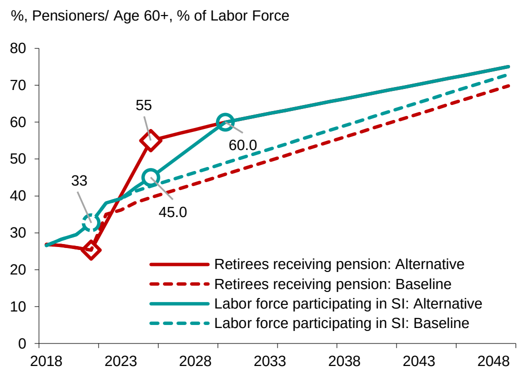
Source: The Central Committee of the Communist Party of Vietnam (Resolution No.28-NQ/TW, May 23, 2018)

3. **We conducted a simulation exercise to assess the impact of social security reform on the VSS's net income flows.** Ideally, evaluating the long-term sustainability of a pension fund should include not only net revenue but also interim fund flows and investment earnings. However, due to the lack of data on VSS's investment activities, the simulation focuses solely on pension contributions and payments (Box A3. Simulation Exercise on VSS' Financial Balance). This exercise, previously conducted in 2018, aims to re-estimate the net revenue of VSS's SIF of two scenarios: baseline scenario assuming status quo, and alternative scenario incorporating the social security reform. The net income is projected up to 2049, based on publicly available data from 2012 to 2021 and the United Nations' population projections for 2022. The simulation includes two scenarios (Figure A4.2).

- **Baseline scenario:** regarding pension contributions, the number of social insurance participants is assumed to grow at the same pace as it did before 2018, that is without the social security reform. The contribution per worker increases at the rate of the GDP deflator. On the pension payment side, the number of beneficiaries is assumed to rise in line with the growing senior population and the number of pension participants. Payments per pensioner would also increase at the rate of the GDP deflator.

- **Alternative scenario:** the number of social insurance participants and pension beneficiaries is assumed to grow at a higher pace in line with the broader coverage set by the social security reform. SI contributions are projected to grow at the same rate as the GDP deflator, with an additional annual increase from 2024 onwards, reflecting the expanding coverage of SI schemes. Meanwhile, benefit payments are expected to gradually decrease, reflecting a decline in the number of beneficiaries eligible for the 75 percent replacement rate. [107] With the replacement rate reduced from 75 percent to 45 percent, the total payment will progressively decrease to reflect the growing proportion of pensioners entitled to the smaller replacement rate.

Figure A4.2. Social Insurance Participants and Pension Beneficiaries



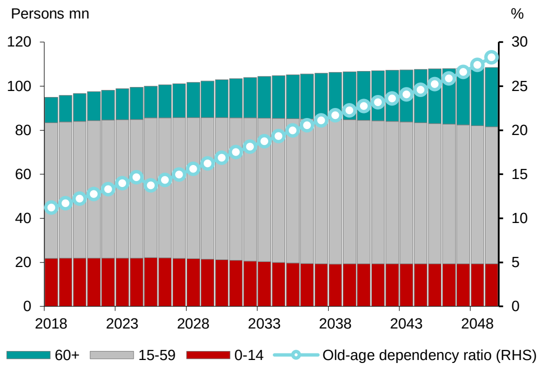
Source: VSS; Haver Analytics; AMRO staff calculations

4. **Despite the social security reforms, a rapidly aging population could undermine the sustainability of the social insurance fund in the next decade.** Baseline scenario results show that the income-expenditure balance of the social insurance account could fall into deficit by 2032. This is due to the aging population (Figure A4.3) and generous pension payouts driving social insurance expenditures to grow much faster than contributions. The alternative scenario suggests that even the expansion of social insurance coverage and reduction in pension payments would not be sufficient to offset the impacts of an aging population in the long run. The reforms could only delay the deficit until 2035, one year before Vietnam becomes an aged society (Figure A4.4). Additionally, due to data limitations, this exercise cannot account for the impacts of ongoing lump-sum withdrawals before the Amended Law on Social Insurance takes effect in 2025. These withdrawals could further reduce the net revenue estimated by this simulation.

5. **The new social insurance law could alleviate the pressures on the SIF's sustainability.** The new law aims to ensure adequate post-retirement incomes for Vietnamese workers and the sustainability of the VSS. Major amendments include broadening the coverage of compulsory social insurance to self-employed workers, contract workers, and workers in the informal sectors; introducing basic social benefits for seniors aged 80 and above who have not received any pension or monthly social insurance benefits; shortening the contribution period for pension entitlement to allow more middle-aged workers to qualify for pensions; and prohibiting the lump-sum payout for new contributors (Nguyen, Khuat, & Pham, 2023). Expanding the pool of contributors could increase inflows to the SIF, while tightening regulations on lump-sum withdrawals could reduce the risk of sudden fund depletion. However, demographic changes in the next decade will still pose challenges to the fund's sustainability.

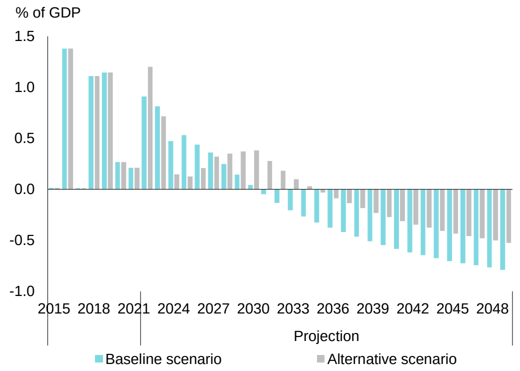
[107] Beneficiaries who were already receiving 75 percent of the reference salary after meeting the minimum contribution years are grandfathered under the previous system. Subsequent cohorts will receive 45 percent of the reference salary for the first 15 years of contributions. To promote retirement savings, the accrual rate for contributions beyond 15 years was set at 3 percent per year for women and 2 percent per year for men, until the replacement rate reaches 75 percent.

Figure A4.3. Demographic Structure



Source: VSS; Haver Analytics

Figure A4.4. Net Annual Contribution of VSS's Social Insurance



Source: VSS; Haver Analytics; AMRO staff calculations

Box A4. Simulation Exercise on VSS's Financial Balance

Vietnam commenced its social security reform in May 2018. It represented a comprehensive revamp of social policy, including pension. Considering rapid population ageing and the policy reform, AMRO conducted a simulation exercise to assess the implications of the changes in pension schemes on the long-term sustainability of Vietnam's SIF (ASEAN+3 Macroeconomic Research Office, 2019).

The simulation exercise estimates the potential impact of several policy options on the income-expenditure balance of the VSS's SIF. Net annual SI revenue (NR_t) is calculated based on the difference between total SI revenue (TR_t) and total SI expenditure (TE_t). We decompose revenue and expenditure into unit price and quantity terms:

$$NR_t = TR_t - TE_t$$

$$= (contr_t * insurer_t) + (ben_t * pensioner_t)$$

where total revenue is separated into the SI contribution per SI insurer $(contr_t)$ and the number of SI insurers $(insurer_t)$. Total expenditure is factored into benefit payout per each beneficiary (ben_t) and the number of SI beneficiaries, representing pensioners, $(pensioner_t)$.

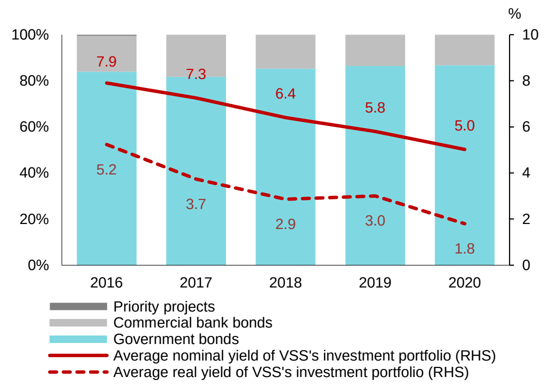
Caveats and data limitations

- Ideally, the assessment of long-term sustainability of a pension fund is meant to focus on not only net revenue but also interim fund flows and investment earnings. However, due to lack of data on VSS's investment activities, the simulation focuses on social insurance contribution and payments only.
- Vietnam's social insurance fund covers benefits for retirement, survivorship, sickness, maternity, as well as occupational accident and disease. As there is no segregated data on revenue and expenditure pertaining to specific benefits, this exercise uses total SI revenue and expenditure as a proxy for pension contributions and payments.
- Due to data limitations, the simulation does not include lump-sum withdrawals from the social insurance fund.

Increasing Investment Income as an Alternative Policy Option

6. Declining investment returns have suppressed the net revenue of the VSS too. Generally, there are four major policy options to strengthen the pension reserve fund and its financial sustainability: increasing contributions, broadening coverage, reducing benefit payments and/or replacement rates, and increasing investment returns. Although the average yield on the VSS's investment portfolio has declined over time in a low-interest-rate environment, the portfolio investments, under the current regulations[108], remain mostly unchanged (Figure A4.5). The current regulations governing investment activities of public social insurance, health insurance, and unemployment insurance funds (Decree No. 30/2016/ND-CP) have been in place since 2016. The VSS can invest the funds only in: (i) Vietnamese government bonds; (ii) lending to the State budget; (iii) deposits, bonds, promissory notes, bills, and certificates of deposit issued by commercial banks with a good credit rating from the State Bank of Vietnam; (iv) government-guaranteed bonds issued by the Vietnam Development Bank and the Bank for Social Policies; and (v) investments in important projects as decided by the Prime Minister. In response to declining investment returns, the new social insurance law permits the VSS to invest its SIF in foreign government bonds, either through self-managed investments or through entrusted fund managers. More detailed investment guidelines will be outlined in forthcoming regulations.

Figure A4.5. VSS' Portfolio Investment and Yield



Source: VSS; GSO; AMRO staff calculation

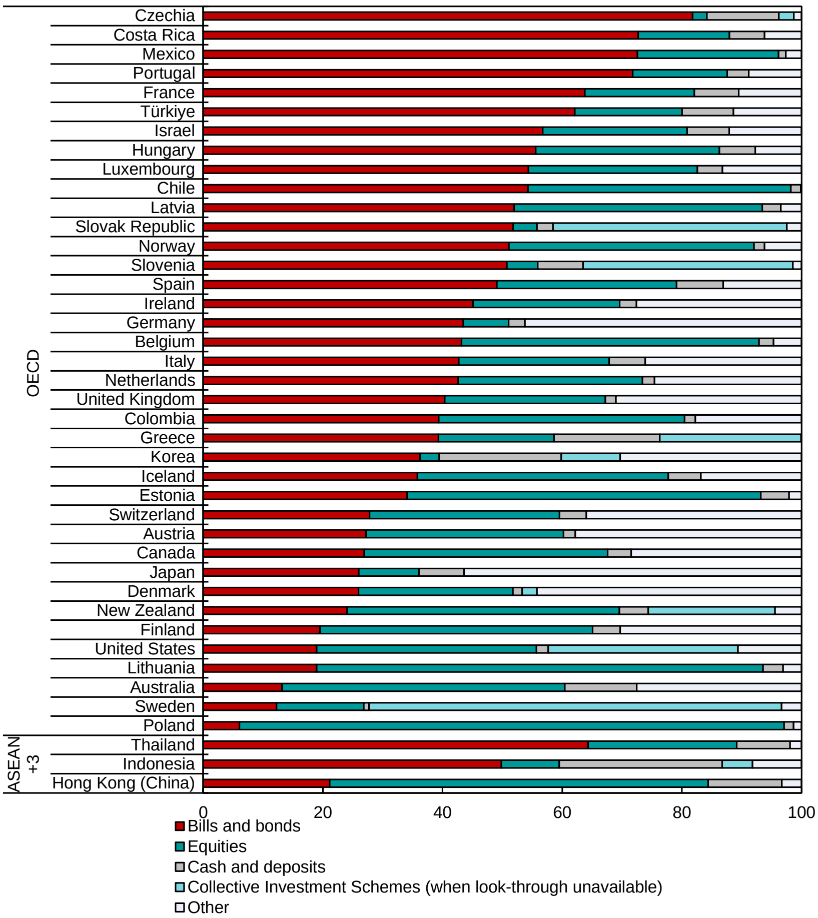
7. Diversifying the asset structure of a pension fund could enhance long-term returns and mitigate risks associated with prolonged investments. Pension funds have traditionally primarily invested in public fixed-income products due to their lower-risk nature. However, given the extended period of low yields and heightened inflation, alongside rapid demographic aging dynamics, fixed income investments may struggle to meet the long-term liabilities of a pension fund. While fixed income investments offer lower risk and less volatile returns, equity investments have the advantage of outperforming long-term inflation-linked bonds (Scott, 1991). A pension fund's assets should also include other investments, such as deposits or alternative investments, to manage risks arising from market fluctuations in equities and fixed income. This diversification can help mitigate the potential for lower returns caused by high negative correlations between traditional stocks and bonds (PWC, 2016). Additionally, pension funds could benefit from international diversification for instance, increasing foreign holdings could potentially boost investment yields for public pension funds in Brazil, Thailand, and Indonesia by 0.22, 0.15, and 0.14 percentage points, respectively (Afanador, Davis, & Pedraza, 2021).

8. Since the Global Financial Crisis in 2008, pension funds in many countries have been increased their allocation to non-fixed income investments. Factors such as an aging population, sluggish economic growth, and persistently low interest rates have compelled public pension funds to diversify their investment portfolios in the pursuit of higher returns. According to a PWC survey on the investment strategies of global pension funds (PWC, 2016), pension funds, especially in advanced economies, have gradually been

[108] Social Insurance Law No. 58/2014/QH13 and Decree No. 30/2016/ND-CP

reallocating their assets towards equities and alternative investments. The share of alternatives such as real estate in all pension fund portfolios increased from 19 percent in 2009 to 26 percent in 2014, while the share of fixed income instruments declined from 38 percent to 28 percent during the same period. By 2021, all public pension funds in OECD countries and some selected ASEAN+3 economies had investments in equities (Figure A4.6), with a growing number of funds turning to alternative asset classes. Although pension funds in Asia tend to be more conservative compared to those in developed markets, they have been gradually increasing their long-term investments in illiquid assets such as private equity, real estate, and infrastructure (Association of the Luxembourg Fund Industry, 2020).

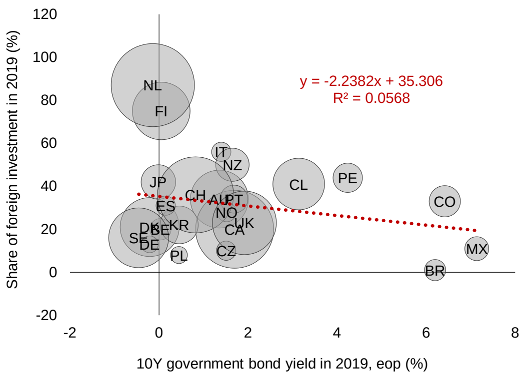
Figure A4.6. Asset Allocation of Pension Funds in 2021



Source: OECD (2023)

9. **In addition to diversifying across asset classes, many public pension funds in both advanced and emerging economies also diversify their investments overseas.** Given the prevalent low-interest-rate environment in many countries, many pension funds are venturing into foreign markets to seek higher returns and mitigate the idiosyncratic risks associated with their home countries. Among OECD members, countries with low government bond yields and larger pension fund sizes tend to allocate a higher portion of their investments globally (A4.7). In the ASEAN+3 region, several countries have relaxed restrictions or raised targets on foreign investment for pension funds since the Global Financial Crisis in 2008. For instance, Korea’s National Pension Service has gradually increased its medium-term target for investments abroad, Malaysia’s Employee Provident Fund removed the 30-percent cap on foreign investment in 2016, and Thailand’s Government Pension Fund raised the foreign investment limit to 60 percent of total assets under management from 40 percent in 2022 (Table A4.2).

Figure A4.7. Government Bond Yield and Pension Funds' Share of Overseas Investment



Source: PwC; Central Banks; CEIC
Note: The size of bubbles represents the size of the pension fund as a percentage of GDP.

Table A4.2. Global Investment Limit of Public Pension Funds in Select ASEAN+3 Economies

Fund [1]	Regulatory limit on Overseas investments	Actual overseas investment in 2022
JPIF	No limit	50%
HKMPF	30% in HKD assets	40% [2]
KNPS[3]	10% for equity and 35% for fixed income	34%
MEPF	No limit	35.8%
TGPF	60%	25.4%

Source: PwC; national pension fund management institutions; AMRO staff compilation
Note: 1/ JPIF = Japan's Government Pension Investment Fund, HKMPF = Hong Kong's Mandatory Pension Fund, KNPS = Korea's National Pension Service, MEPF = Malaysia's Employees Provident Fund, TGPF = Thailand's Government Pension Fund; 2/ as of 2018; 3/ The numbers do not include foreign alternative investments.

Institutional Arrangement and Policy Considerations

10. It is worth exploring alternative investment instruments to pursue higher yields and mitigate risks through diversification. The VSS's current asset allocation[109] is heavily concentrated in domestic public agencies, exposing it to the country's idiosyncratic risks. New authorized investments, permitted by the Law on Social Insurance 2024, still limit investment options to foreign government bonds, which may not significantly increase the VSS's investment return. Diversifying assets into different types of investments and across various countries can help raise the VSS's investment returns over the long term.

11. It is worth considering incorporating the OECD Core Principles of Private Pension Regulation (OECD core principles) into the subordinate regulations governing the SIF's investment policy. The OECD core principles offer governments, financial regulators, and supervisors the high-level guidance on the regulatory framework, design, and operation of private pensions (OECD, 2016). These core principles are also applicable to public pension funds and pension entities (OECD, 2022). One of the OECD core principles emphasizes the investment of pension fund assets, risk management, prudential standards, and the evaluation of fund performance (Table A4.3).

Table A4.3. A Key Elements of Core Principle 4. Investment and Risk Management

Operating Activity	Implementing Guidelines
Retirement income objective and prudential principles	• Aligned with the goal of retirement income, investment management and regulations should be in accordance with the prudential principles of *security, profitability, and liquidity.* • Risk management should take into account *diversification* and *asset-liability matching*.
Prudent person standard	• The governing body of pension funds should be subject to a *'prudent person standard'* and a fiduciary duty towards pension plan members and beneficiaries. • The governing body should establish a *rigorous investment process* including internal control.
Investment policy	• Overall investment policy should be set forth in a *written form*. • The investment policy should be *consistent with retirement income objectives and the characteristics of the liabilities of the pension fund*.

[109] Law on Social Insurance dated November 20, 2014 and Decree No. 30/2016/ND-CP on detailed regulations on investment activities from social insurance, health insurance, unemployment insurance funds.

	• The investment policy and strategy need proper diversification and sound risk management, the maturity of the obligations, the liquidity needs, balancing long-term risks and returns, as well as legal limitations on portfolio allocation. • The governing body should put in place periodic review on the effectiveness of the investment policy.
Portfolio limits and other quantitative requirements	• The ceiling of each investment category should promote and balance the prudential principles of security, profitability, and liquidity. • Portfolio allocation should be provided with a certain degree of flexibility, taking into consideration of risk diversification and asset-liability matching. • Legal provisions should address the use of more complex and less transparent asset classes.
Asset Valuation	• The valuation of pension assets should be done in a proper, transparent, and disclosed basis.
Performance assessment	• The performance of both external and internal fund managers should be monitored regularly. • The performance assessment should be evaluated over a period of years, taking into account the long-term investment horizon, asset-liability management, and risks.

Source: OECD (2016)

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