OECD

PENSION MARKETS IN FOCUS
Preliminary 2023 data - June 2024

Pension assets grew in 2023, partly offsetting 2022 losses
- Assets earmarked for retirement rose in 2023 thanks to the investment gains that pension plans earned on their bond and equity holdings
- Yet, these investment gains were insufficient to fully offset losses incurred in 2022 in some of the largest pension markets
- The total pension assets in the OECD are still lower than at the end of 2021

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GEOGRAPHICAL COVERAGE

- All 38 OECD countries
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8.6%
Nominal growth rate of pension assets in the OECD since end-2022 (in USD)

-6.9%
Nominal growth rate of pension assets in the OECD since end-2021 (in USD)

Pension Markets in Focus – Preliminary 2023 Data provides a snapshot of asset-backed pension arrangements in OECD countries and in a selection of non-OECD jurisdictions in 2023. The indicators are based on preliminary data for 2023. An Excel file with the underlying data is available at www.oecd.org/en/topics/pensions-and-insurance.html. This snapshot was made possible through close co-operation between the OECD, the International Organisation of Pension Supervisors (IOPS), the World Bank and the various national bodies that provided data and comments.

A more developed analysis will be published in the 2024 edition of the full report Pension Markets in Focus, forthcoming in Q4 2024.

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Pension assets grew again in 2023 but remained below the level reached in 2021

Assets earmarked for retirement rose in 2023. Preliminary data show that assets in pension plans grew by over 8% in the OECD and by over 14% in a group of 33 non-OECD jurisdictions in 2023. Nearly all reporting jurisdictions experienced an increase (Table 1), with assets declining in only 5 out of the 71 reporting jurisdictions, including 3 OECD countries: Luxembourg (due to the liquidation of two funds), Portugal (due to the transfer of the assets of a pension fund to the public pension system) and the United Kingdom (due to a decrease in the value of bond holdings and to defined benefit plans completing full buy-outs and deleveraging by selling assets to pay down liabilities).

Table 1. Assets in asset-backed pension arrangements at end-2023 (preliminary)

OECD countries	% change since: end-2021	% change since: end-2022	in USD million	% of GDP	data coverage
Australia	6.1	8.9	2,168,862	127.6	all available plans
Austria	-5.2	6.9	36,542	6.9	all available plans
Belgium	..	13.4	49,302	7.6	24% of available plans
Canada	-4.8	0.6	1,601,107	75.7	51% of available plans
Chile	14.9	10.1	191,109	59.2	all available plans
Colombia	11.8	15.8	104,600	25.4	all system
Costa Rica	14.5	14.7	35,000	38.9	all system
Czechia	7.5	3.0	27,621	8.4	all system
Denmark	-4.6	4.2	825,625	200.0	all system
Estonia	13.1	23.5	6,436	15.5	all system
Finland	-1.5	5.3	168,466	54.9	91% of available plans
France	-12.1	7.4	269,576	8.7	82% of system
Germany	-8.4	4.7	290,659	6.4	all available plans
Greece	21.3	22.4	2,465	1.0	all available plans
Hungary	16.5	19.7	9,690	4.5	all available plans
Iceland	9.2	9.6	56,673	180.4	all system
Ireland (1)	..	..	129,467	23.2	all available plans
Israel	6.8	10.7	330,231	64.1	all available plans
Italy	4.7	9.0	260,041	11.3	all system
Japan	1.5	2.6	1,206,513	28.9	all available plans
Korea	13.8	8.7	577,043	33.3	all system
Latvia	16.9	23.8	8,711	19.5	all system
Lithuania	21.0	27.0	8,199	10.3	all system
Luxembourg	-30.1	-15.7	1,491	1.7	all available plans
Mexico	13.6	13.8	351,375	18.7	89% of available plans
Netherlands	-14.2	8.9	1,741,575	152.4	all available plans
New Zealand	3.6	10.4	86,651	33.1	all system
Norway	4.1	9.4	46,759	9.3	all available plans
Poland	9.4	32.6	53,083	6.1	76% of system
Portugal	-22.2	-9.3	36,173	12.3	91% of available plans
Slovak Republic	14.7	17.3	19,545	14.4	all system
Slovenia	8.8	11.9	4,908	7.0	all system
Spain	-5.5	4.7	179,355	11.1	all system
Sweden	25.8	17.1	27,236	4.3	4% of available plans
Switzerland	-2.1	5.4	1,329,905	140.5	88% of system
Türkiye	210.5	73.3	25,729	2.8	all available plans
United Kingdom (2)	-29.1	-3.0	2,426,318	74.5	all available plans
United States	-4.4	9.5	38,380,279	140.3	all system
Total (3)	-6.9	8.6	53,074,322	82.4	95% of available plans

Selected other jurisdictions	% change since: end-2021	% change since: end-2022	in USD million	% of GDP	data coverage
Albania	46.9	18.2	72	0.3	all system
Angola	51.6	27.5	1,132	1.5	all available plans
Armenia	65.5	42.2	1,975	8.4	all available plans
Botswana	15.7	17.9	10,360	50.0	all system
Brazil	29.2	14.6	301,459	13.4	54% of system
Bulgaria	17.4	19.4	13,010	12.5	all system
Croatia	15.3	15.6	24,263	28.9	all system
Dominican Republic	26.0	13.9	17,361	15.1	all system
Egypt	22.7	10.0	4,506	1.4	all system
Georgia	122.2	47.6	1,636	5.5	all system
Ghana	81.0	43.5	4,268	6.0	all system
Guyana	21.7	-2.2	518	3.0	all system
Hong Kong (China)	-7.4	2.2	183,202	48.5	all system
India	56.2	27.9	131,365	3.7	28% of available plans
Jamaica	4.5	6.1	4,834	25.5	all system
Kazakhstan	32.3	21.8	39,317	15.0	all system
Kenya	11.5	9.5	11,028	11.4	all system
Kosovo*	14.8	12.1	2,997	28.0	all system
Lesotho	..	21.0	869	37.8	all available plans
Macau (China)	7.5	9.4	5,272	11.2	all system
Malawi	92.2	48.1	1,445	16.0	all available plans
Maldives	24.7	12.1	1,424	21.3	all system
Morocco	15.8	10.3	8,197	5.6	all system
Namibia	11.4	15.3	12,704	103.6	all system
Nigeria	36.7	22.4	20,398	7.8	all system
North Macedonia	27.8	18.7	2,495	16.5	all system
Papua New Guinea	..	11.7	4,828	16.4	all system
Peru	-7.9	16.0	33,110	12.3	all system
Romania	42.1	31.4	29,246	8.3	all system
Serbia	9.5	11.5	508	0.7	all system
Suriname	65.7	-15.7	308	8.2	all available plans
Uruguay	14.0	12.9	22,655	29.5	all system
Zambia	33.1	25.3	643	2.9	all available plans
Total (3)	18.3	14.3	897,406	10.2	62% of available plans

Note: ".." means not available. See the end of this factsheet for methodological notes and details for some jurisdictions.

Source: OECD Global Pension Statistics; National Bank of Belgium; Bank of Japan; EIOPA (for Sweden); Swiss Occupational Pension Supervisory Commission.
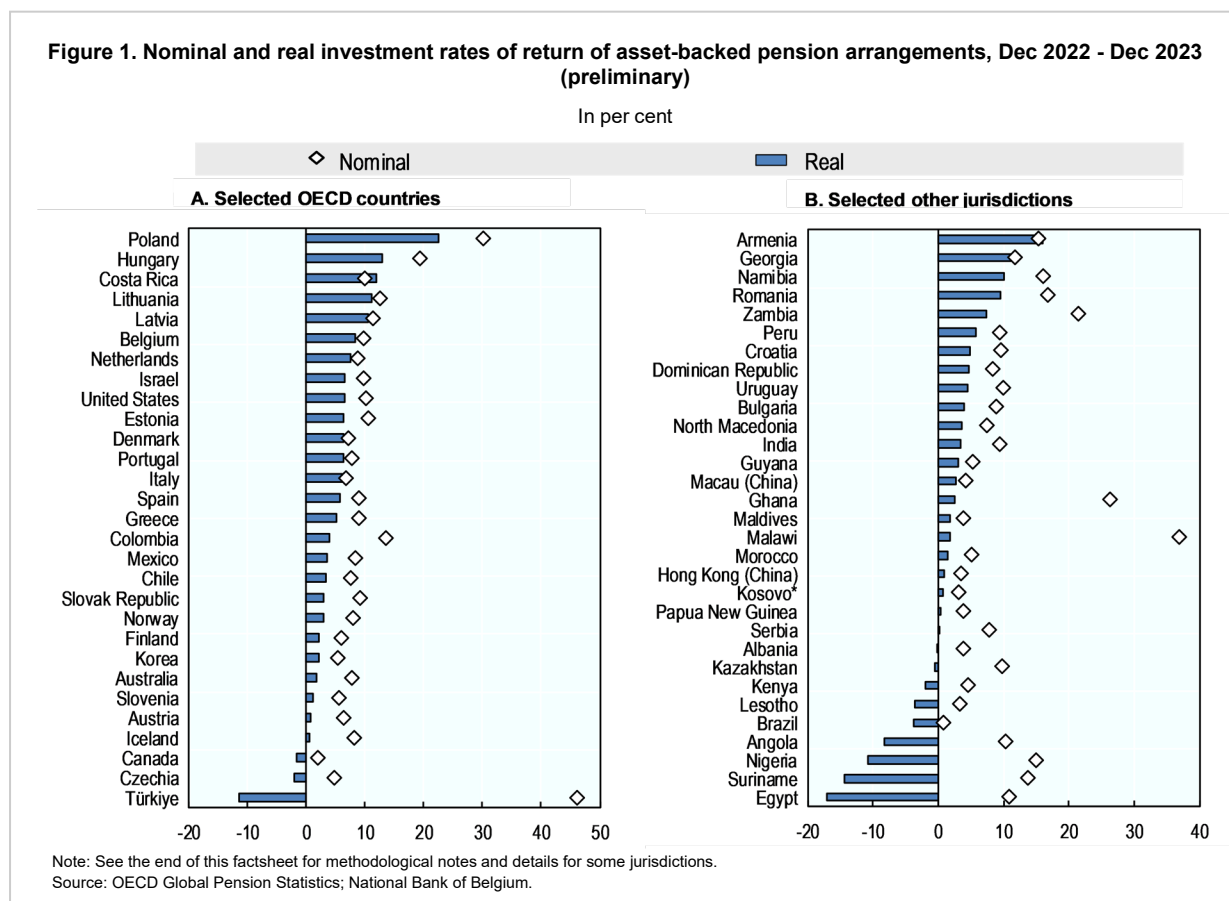
The global growth in pension assets in 2023 was the result of short and longer-term developments. In the short-term, reporting jurisdictions attributed the asset growth to investment gains in 2023. Inflation and wage growth also supported contributions levied on salaries in countries such as the Republic of Türkiye (hereafter Türkiye). Over the longer-term, the asset growth also reflects the maturing of the asset-backed pension system in many countries, with a growing inflow of contributions still exceeding benefit payments, especially in the non-OECD area where asset growth was the strongest. For example, many countries have been seeking to bolster their asset-backed pension system and increase the number of people saving for retirement by mandating participation in a pension plan (e.g. Armenia, Greece, Georgia), introducing automatic enrolment programmes

(e.g. Poland, Slovak Republic, Türkiye) or expanding access to a plan by relaxing some eligibility criteria (e.g. Australia, Norway).

The amount of assets in pension plans in the OECD at the end of 2023 - USD 53.1 trillion or 82% of GDP - **was still 7% lower than at the end of 2021**. Pension plans in a majority of OECD countries (23 out of 38) had higher assets at the end of 2023 when compared with 2021. However, pension plans in the largest pension markets still had less assets. These include the United States (-4.4% below end-2021), the United Kingdom (-29.1%), the Netherlands (-14.2%), Canada (-4.8%) and Switzerland (-2.1%). As a result, the total amount of assets in the OECD at the end of 2023 was still below its level at the end of 2021.

Investment gains in 2023 have only partly offset the losses in 2022

Pension plans recorded widespread investment gains in 2023. Pension plans in all reporting jurisdictions exhibited a positive nominal investment rate of return (Figure 1). This positive performance reflected gains in the bond and equity markets, with prices increasing due to cuts in interest rates (e.g. Chile) or expectations of such cuts (e.g. United States) in the wake of slowing inflation. Some pension plans also benefitted from higher yields in bank deposits (e.g. Australia), and from foreign exchange gains on their assets issued in US dollar as their currency depreciated against the dollar (e.g. Chile, Norway, Zambia).

Figure 1. Nominal and real investment rates of return of asset-backed pension arrangements, Dec 2022 - Dec 2023 (preliminary)
In per cent

Note: See the end of this factsheet for methodological notes and details for some jurisdictions.
Source: OECD Global Pension Statistics; National Bank of Belgium.

The investment rates of return exceeded the inflation rate in most jurisdictions. Pension plans achieved a positive real investment rate of return in 26 out of 29 reporting OECD countries, and in 22 out of 31 non-OECD reporting jurisdictions. The negative real investment rate of return was due to lower nominal investment rate of return (e.g. Brazil, Canada, Czech Republic (hereafter Czechia)) or higher inflation (e.g. Angola, Egypt, Nigeria, Suriname, Türkiye) than elsewhere.

Investment gains in 2023 were insufficient to fully offset the losses in 2022 in some of the largest pension markets. While investment gains in 2023 contrasted with the negative investment performance that drove down the amount of assets for retirement in many jurisdictions in 2022, these gains were not as high as the losses in 2022 in some of the largest pension markets, such as Denmark, the Netherlands and the United States (Table 2). Pension plans in these countries had negative investment rates of return below -10% in 2022 (-14.2% in Denmark, -21.1% in the Netherlands and -12.8% in the United States) but positive returns at or below 10% in 2023. Poland was the only jurisdiction where pension plans had an investment rate of return below -10% in 2022 but with gains in 2023 larger than the losses in 2022. By contrast, pension plans in jurisdictions with lower losses managed to recoup these investment losses more swiftly in 2023.

Table 2. Nominal investment rates of return of asset-backed pension arrangements, Dec 2021 - Dec 2022 and Dec 2022 - Dec 2023 (preliminary)

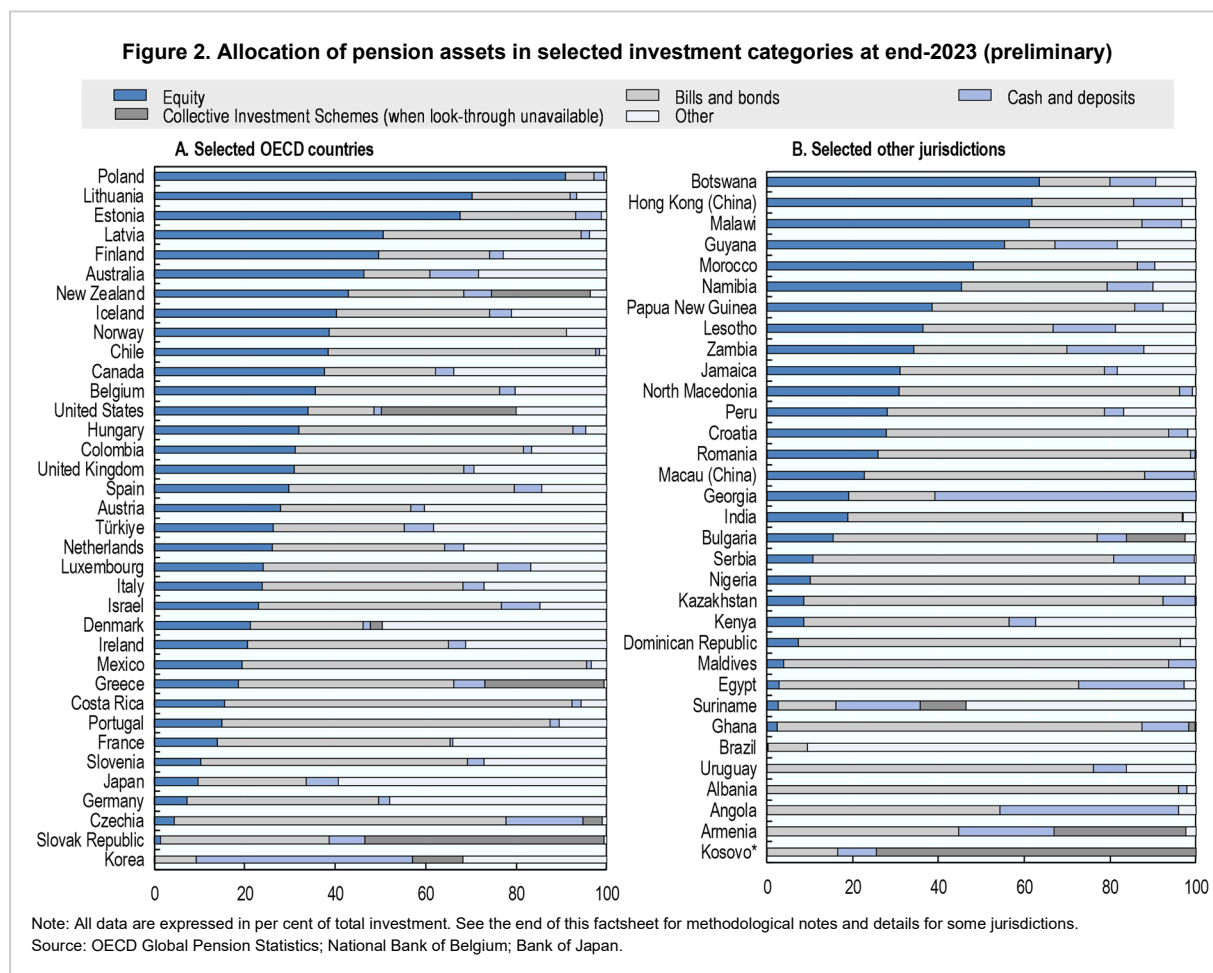| Selected OECD countries	2022	2023	Selected other jurisdictions	2022	2023
Australia	-1.9	7.8	Albania	3.8	3.8
Austria	-10.2	6.4	Angola	9.0	10.2
Belgium	-14.8	9.8	Armenia	-7.9	15.3
Chile	3.0	7.5	Brazil	0.4	0.7
Colombia	-4.2	13.6	Bulgaria	-10.3	8.9
Costa Rica	-3.4	10.0	Croatia	-5.2	9.6
Czechia	0.4	4.7	Dominican Republic	5.4	8.4
Denmark	-14.2	7.0	Egypt	11.3	10.9
Estonia	-9.2	10.6	Georgia	7.4	11.7
Finland	-5.1	5.9	Ghana	17.7	26.2
Greece	-8.8	8.8	Guyana	19.3	5.1
Hungary	-7.1	19.2	Hong Kong (China)	-15.4	3.4
Iceland	-3.3	8.2	India	3.6	9.3
Israel	-3.8	9.7	Kazakhstan	6.3	9.6
Italy	-7.3	6.7	Kenya	2.6	4.6
Korea	0.2	5.3	Kosovo*	-5.4	3.1
Latvia	-15.0	11.3	Lesotho	11.8	3.2
Lithuania	-14.7	12.6	Macau (China)	-8.2	4.2
Mexico	-4.1	8.3	Malawi	19.6	36.8
Netherlands	-21.1	8.8	Maldives	4.3	3.8
Norway	-5.7	7.9	Morocco	1.5	5.0
Poland	-16.1	30.2	Namibia	-0.9	16.0
Portugal	-10.5	7.8	Nigeria	8.2	15.0
Slovak Republic	-10.6	9.1	North Macedonia	-2.4	7.3
Slovenia	-7.3	5.5	Papua New Guinea	2.7	3.8
Spain	-9.0	9.0	Peru	-8.2	9.3
Türkiye	49.6	46.0	Romania	-3.1	16.8
United States	-12.8	10.0	Serbia	-1.2	7.7
			Suriname	19.7	13.6
			Zambia	12.7	21.4

Note: See the end of this factsheet for methodological notes and details for some jurisdictions.
Source: OECD Global Pension Statistics and Pension Markets in Focus 2023.

Previous episodes of losses in financial markets showed that pension plans eventually recouped these losses fully and saw the amount of assets reaching new highs. However, the time to recoup losses differed between episodes. For example, when assets declined in Q1 2020 following the fall in equity valuations when economies closed due to the COVID-19 outbreak, pension assets recovered within the year. By contrast, it took over two years after the 2008 global financial crisis for OECD pension assets to return to the pre-crisis level.

Pension plans with the largest equity holdings recorded the largest investment gains

Pension plans with the highest proportion of assets in equities exhibited some of the highest investment returns. Pension funds in Poland, which have the largest proportion of assets in equities (Figure 2) due to the investment regulations, benefitted from the rise in equity valuation in the Warsaw Stock Exchange (+36.5%, one

of the largest increases for a market index in 2023) and had one of the strongest nominal investment rates of return in 2023 (30.2%). Pension funds in Lithuania and Malawi also had a large equity exposure (over 60%) and strong nominal investment returns (12.6% and 36.8% respectively). While pension plans usually benefitted from positive developments in global stock markets, some markets underperformed (such as Hong Kong (China))[1] leading to a relatively lower investment performance of pension plans despite a high allocation in equities.

Figure 2. Allocation of pension assets in selected investment categories at end-2023 (preliminary)

Note: All data are expressed in per cent of total investment. See the end of this factsheet for methodological notes and details for some jurisdictions.
Source: OECD Global Pension Statistics; National Bank of Belgium; Bank of Japan.

By contrast, some of the plans with the lowest nominal investment performance had a high proportion of assets in bonds and cash. For example, pension plans in Czechia achieved one of the lowest nominal investment rates of return in 2023 (4.7%) and had most of their assets in bonds (73%) and bank deposits (17%).

While many jurisdictions saw pension plans shifting their asset allocation from government bonds towards higher yielding instruments during the years of low and falling interest rates,[2] several jurisdictions noted a renewed interest in government bonds following the rise in interest rates (e.g. Bulgaria, Slovenia). Pension plans in the United States also slightly increased their bond holdings in 2023 (+0.4 percentage point (pp)) while reducing their cash and other investments (-1 pp).

The full version of the 2024 edition of Pension Markets in Focus will further explore the changes in asset allocation of pension plans in 2023.

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[1] RS-paper-74.pdf (sfc.hk)
[2] See Pension Markets in Focus 2022

METHODOLOGICAL NOTES

General: Data are collected from pension supervisory authorities or other bodies within the framework of the OECD Global Pension Statistics (GPS) project. This exercise covers all asset-backed pension arrangements where assets are accumulated to back future benefit payments, except reserves of public (pay-as-you-go) pension arrangements. Asset-backed pension plans may be financed through different vehicles (such as pension funds, pension insurance contracts, bank or investment company managed funds), publicly or privately administered, mandatory or voluntary, occupational or personal, defined benefit (DB) or defined contribution (DC), for public or private-sector workers. Employers' book reserves are also in the scope. The classification of pension plans and the related definitions are available in *Private Pensions: OECD Classification and Glossar*y, accessible at www.oecd.org/daf/pensions. Data are preliminary and may be revised in the 2024 edition of the full report *Pension Markets in Focus* (forthcoming).

Data on stock variables refer to the end of 2023, except for: Australia where data refer to the end of June 2023; Canada, the United Kingdom and the United States (individual retirement accounts) where data refer to end Q3-2023. Data on flow variables cover the whole year 2023, except Australia (June 2022-June 2023) and Canada (Jan-Sept 2023).

Unless stated otherwise, data cover all asset-backed pension arrangements in all vehicles, excluding reserves of public pension arrangements, in all jurisdictions except: Australia (all schemes but Exempt Public Sector Superannuation Schemes that do not report data to the Australian Prudential Regulation Authority); Austria (pension funds and some pension insurance contracts); Belgium (pension funds); Canada (employer-sponsored registered pension plans); Chile (plans managed by AFPs); Finland (pension funds); France (pension funds); Germany (Pensionskassen and Pensionsfonds); Greece (1st pillar fund TEKA and occupational pension funds); Hungary (all but IORP); Ireland (occupational pension schemes and personal retirement savings accounts); Israel (pension funds); Japan (pension funds); Luxembourg (pension funds under the supervision of the CAA and CSSF); Mexico (plans in AFOREs); Netherlands (pension funds and premium pension institutions); Norway (pension funds); Poland (pension funds); Portugal (pension funds and retirement saving schemes established as insurance contracts); Sweden (IORPs); Switzerland (pension funds); Türkiye (personal plans); United Kingdom (pension funds) among OECD countries; and Angola (pension funds), Armenia (mandatory pension funds); Brazil (open pension entities); India (National Pension System and the Atal Pension Yojana scheme); Lesotho (occupational pension funds); Suriname (pension funds); Malawi (mandatory occupational private pension funds) and Zambia (private occupational pension schemes) among other jurisdictions.

Table 1: The table shows the amount of assets in all pension arrangements for which 2023 data are already available. Investments are used as a proxy of assets. The column "% change" shows the nominal change of assets in these arrangements in national currency compared to December 2021 and December 2022 respectively, except for Australia (June 2021 and June 2022). The column "in USD million" is based on exchange rates coming from the IMF International Financial Statistics database or official national sources (Malawi, Nigeria and Papua New Guinea). The column "% of GDP" is based on GDP values coming from OECD Data Explorer and the IMF World Economic Outlook. As data are preliminary, they may not cover the overall asset-backed pension system or the whole set of plans covered in the OECD Global Pension Statistics (GPS) exercise. Therefore, the column "data coverage" provides the proportion of assets that available data represent in the overall asset-backed pension system ("system") or among all plans collected in the OECD GPS exercise ("available plans"), based on 2022 data (2020 for Belgium and 2021 for India). (1) Data exclude the assets of IORPs in the process of winding-up. The reporting requirement of pension schemes is due nine months after the year end date, which prevents calculating a reliable trend (i.e. % change) at the time of the drafting of this note. (2) Data do not include net derivatives balance, property and 'any other assets not included elsewhere'. (3) The total % change is calculated as the change of total assets in the considered area (in US dollar) between end-2021 and end-2023, and between end-2022 and end-2023. The indicator "Total pension assets as a % of GDP" is calculated as the ratio between the sum of all pension assets and the sum of all the GDPs (in US dollar) of the reporting jurisdictions in the area considered. The total data coverage is the ratio of assets in 2022 in plans with available data in 2023 (in USD) over the assets in all plans in 2022 (in USD).

Figure 1: Data have been calculated using a common formula for the average nominal net investment rate of return (ratio between the net investment income at the end of the period and the average level of assets over the period) for all jurisdictions, except for Austria, Belgium, Finland, Israel, Italy, Lithuania, Netherlands, Slovak Republic and the United States among OECD countries and for Armenia, Croatia, Hong Kong (China) and Uruguay where values come from the own calculations of national authorities or from other official sources. Average real net investment rates of return have been calculated using the nominal investment rates of return (as described above) and the variation of the end-of-period consumer price index (extracted from OECD Data Explorer, the IMF's online database or the IMF's World Economic Outlook published in April 2024) for the same period over which the nominal returns are calculated, i.e. between June 2022 and June 2023 for Australia, between December 2022 and September 2023 for Canada, and between December 2022 and December 2023 for the other jurisdictions. These results may deviate from the own calculations of national authorities. The investment rate of return is net of tax and investment expenses for Australia. The investment rate of return is calculated only for pension funds in Austria, pension funds and pension insurance contracts in Denmark, the second pension pillar in Estonia, pension funds in Hungary, all pension providers except foreign providers of pension insurance contracts in Iceland, new pension funds in Israel, contractual pension funds in Italy, occupational retirement pension plans in Korea, pension funds in Portugal, pension funds and book reserves in Spain, pension funds in the United States, Mandatory Provident Fund (MPF) schemes in Hong Kong (China) and pension funds in Namibia.

Table 2: Data for Georgia refer to the second pillar only in 2022.

Figure 2: The GPS database gathers information on investments in Collective Investment Schemes (CIS) and the look-through of these investments in equities, bills and bonds, cash and deposits and other. Data on asset allocation in the figure include both direct investment in equities, bills and bonds, cash and deposits and indirect investment through CIS when the look-through of CIS investments is available. Otherwise, investments in CIS are shown in a separate category. Negative values have been excluded from the calculations of the asset allocation. Data for Australia do not cover small APRA funds and Single-Member Funds. Data for Denmark refer to pension funds and pension insurance contracts. Data for Estonia refer to the second pension pillar. Data for France, Hungary, Italy, Poland, Spain and Namibia refer to pension funds. Data for Germany are estimates; the breakdown of investments through CIS has not been approved by external auditors yet and is not available for Pensionsfonds. Data for Iceland refer to all pension providers except foreign providers of pension insurance contracts. Data for Ireland refer to DB plans only. The high value for the "Other" category in Japan is mainly driven by outward investments in securities. Data for Korea refer to occupational retirement pension plans. Data for Hong Kong (China) cover MPF schemes and MPF-exempted ORSO registered schemes only.

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* All references to Kosovo are without prejudice to positions on status, and are in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.