A second year into COVID-19, pension fund assets continued to grow in almost all reporting jurisdictions

- Assets in pension funds rose by over 8% in the OECD area and nearly 2% in other reporting jurisdictions in 2021
- Pension funds achieved positive investment returns in real terms in 18 out of 27 reporting OECD countries, and in 11 out of the 26 other reporting jurisdictions, yet inflation at the end of 2021 already had a negative effect
- Bonds accounted for 48.1% of pension fund investments and equities for 26.1% at end-2021 on average
Assets in pension funds rose by over 8% in the OECD area and nearly 2% in other reporting jurisdictions in 2021

A second year into COVID-19, pension fund assets continued to grow in almost all reporting jurisdictions. Preliminary data for 2021 show that the asset growth in national currency was the strongest in Turkey (41.2%) and Lithuania (31.5%) among OECD countries (Table 1). Sixteen other OECD countries recorded a double-digit growth rate of assets in national currency in 2021, such as the United States (11.6%). The asset growth was also strong in some non-OECD jurisdictions, such as Armenia and Georgia that introduced mandatory pension plans recently. By contrast, pension funds recorded a decline in assets in national currency in 4 out of the 68 reporting jurisdictions, including Chile (-4.5%) and Peru (-19.1%) where early withdrawals from individual accounts were allowed in 2021 to support people during COVID-19, and Estonia (-15.5%) following a reform of the (formerly mandatory) second pension pillar. Overall, in the total OECD area, pension fund assets rose by 8.2% in USD terms, while they rose by 1.7% in the 30 other non-OECD reporting jurisdictions.

<table>
<thead>
<tr>
<th>OECD countries</th>
<th>Selected other jurisdictions</th>
<th>OECD Total (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All vehicles</td>
<td>% change (1)</td>
<td>% of GDP</td>
</tr>
<tr>
<td>OECD countries</td>
<td>in USD million, % of GDP</td>
<td>% of GDP</td>
</tr>
<tr>
<td>Australia</td>
<td>18.0  2,727,767  146.2</td>
<td>148.8</td>
</tr>
<tr>
<td>Austria</td>
<td>8.0   30,553        6.7</td>
<td>..</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.0   52,644        9.2</td>
<td>36.6</td>
</tr>
<tr>
<td>Canada</td>
<td>-     1,712,806     90.1</td>
<td>167.2</td>
</tr>
<tr>
<td>Chile</td>
<td>-4.5  167,556       60.3</td>
<td>..</td>
</tr>
<tr>
<td>Colombia</td>
<td>8.3   86,828        29.5</td>
<td>29.5</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>20.1  24,874        40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>6.0   26,173        9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>-8.0  190,403       50.0</td>
<td>210.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>-15.5 5,076         14.6</td>
<td>16.8</td>
</tr>
<tr>
<td>Finland</td>
<td>15.3  173,962       60.7</td>
<td>..</td>
</tr>
<tr>
<td>France</td>
<td>16.6  77,247        2.7</td>
<td>11.1</td>
</tr>
<tr>
<td>Germany</td>
<td>0.4   313,807       7.8</td>
<td>..</td>
</tr>
<tr>
<td>Greece</td>
<td>11.9  2,083         1.0</td>
<td>..</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.6   6,166         3.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>17.9  168,883       28.4</td>
<td>219.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>15.1  164,227       34.4</td>
<td>..</td>
</tr>
<tr>
<td>Israel</td>
<td>16.1  360,569       72.1</td>
<td>..</td>
</tr>
<tr>
<td>Italy</td>
<td>6.4   194,592       9.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Japan</td>
<td>2.3   1,483,416     31.3</td>
<td>..</td>
</tr>
<tr>
<td>Korea</td>
<td>15.3  249,115       14.4</td>
<td>32.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>19.7  827           2.2</td>
<td>20.5</td>
</tr>
<tr>
<td>Lithuania</td>
<td>31.5  6,944         11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>5.0   2,193         0.6</td>
<td>..</td>
</tr>
<tr>
<td>Mexico</td>
<td>11.2  254,373       20.0</td>
<td>..</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7.4   2,042,637     209.5</td>
<td>..</td>
</tr>
<tr>
<td>New Zealand</td>
<td>19.0  90,144        37.3</td>
<td>37.3</td>
</tr>
<tr>
<td>Norway</td>
<td>7.0   51,109        10.9</td>
<td>..</td>
</tr>
<tr>
<td>Poland</td>
<td>26.2  46,485        7.2</td>
<td>..</td>
</tr>
<tr>
<td>Portugal</td>
<td>4.7   27,324        11.4</td>
<td>..</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>16.9  17,469        15.9</td>
<td>15.9</td>
</tr>
<tr>
<td>Slovenia</td>
<td>20.6  4,211         7.1</td>
<td>7.8</td>
</tr>
<tr>
<td>Spain</td>
<td>7.5   142,940       10.5</td>
<td>14.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>..    23,777        4.0</td>
<td>101.8</td>
</tr>
<tr>
<td>Switzerland</td>
<td>..    1,164,503     143.1</td>
<td>..</td>
</tr>
<tr>
<td>Turkey</td>
<td>41.2  18,430        3.3</td>
<td>..</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4.3   3,572,623     117.0</td>
<td>..</td>
</tr>
<tr>
<td>United States</td>
<td>11.6  22,599,191    98.3</td>
<td>170.0</td>
</tr>
<tr>
<td>OECD Total (2)</td>
<td>8.2   37,711,728    66.9</td>
<td>..</td>
</tr>
</tbody>
</table>

Notes: * "means not available. (1) The column "% change" shows the nominal change of pension fund assets in national currency compared to the amount in December 2020, except for Australia (June 2020). (2) The total % change is calculated as the change of total assets in the considered area in USD dollar between end-2020 and end-2021. Total pension fund assets as a % of GDP are calculated as the ratio between the sum of all pension fund assets and the sum of all the GDPs (in US dollar) of the reporting jurisdictions in the area considered. See the accompanying Excel file for jurisdiction-specific details. Source: OECD Global Pension Statistics; Bank of Japan; Korean Ministry of Employment and Labour.

Overall, pension fund assets amounted to USD 38.5 trillion in a total of 68 reporting jurisdictions at end-2021. Most of these assets were held by pension funds in the OECD area, totalling USD 37.7 trillion. The United States recorded the largest amount of assets in pension funds (USD 22.6 trillion), followed by the United Kingdom (USD 3.6 trillion), Australia (USD 2.3 trillion), the Netherlands (USD 2.0 trillion), Canada (USD 1.7 trillion), Japan (USD 1.5 trillion) and Switzerland (USD 1.2 trillion). These seven countries altogether held 92.4% of pension fund assets in the OECD area.
Pension fund assets show large variations across jurisdictions. Assets in pension funds ranged from 0.1% of GDP in Pakistan to 209.5% of GDP in the Netherlands at end-2021. They also exceeded twice the GDP in Iceland (208.4%), and between one and two times GDP in Australia (146.2%), Switzerland (143.1%), the United Kingdom (117.0%) and Namibia (103.0%). Overall, pension fund assets in the OECD area amounted to 66.9% of the GDP of all OECD countries at end-2021, higher than the 64.3% recorded at end-2020. This shows that retirement savings in pension funds grew faster than GDP in the OECD area in 2021. Pension fund assets were not as high in the group of 30 non-OECD reporting jurisdictions as in the OECD area, accounting for 8.3% of the GDP of all these jurisdictions combined.

In some jurisdictions, retirement savings also accumulated in vehicles other than pension funds. Examples include provisions in employers’ books (e.g. Austria, Germany, Sweden); pension insurance contracts (e.g. Belgium, Denmark, France, Sweden); and vehicles offered and managed by banks, investment companies or other entities (e.g. Belgium, Denmark, the United States). For example, more assets were accumulated in these other vehicles than in pension funds in Belgium, Denmark, France, Latvia and Sweden. Iceland had the largest amount of pension assets relative to GDP at end-2021 when taking all types of retirement savings vehicles into account (219.1% of GDP), followed by Denmark (210.8%). The 2022 edition of the full report Pension Markets in Focus, coming out in October, will focus more closely on these other vehicles.

Pension funds achieved positive investment returns in real terms in 2021 in 29 out of 53 reporting jurisdictions, yet by end-2021 the negative effect of inflation was already showing.

The nominal growth in pension fund assets partly came from the investment income that pension funds managed to earn in 2021. Pension funds recorded positive investment rates of return (net of investment expenses) in all reporting jurisdictions but one in 2021 in nominal terms (Figure 1). The nominal returns exceeded 10% in 17 out of 53 reporting jurisdictions, and were even above 20% in Lithuania (20.7%), Poland (25.2%) and Turkey (22.9%).

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**Figure 1. Nominal and real investment rates of return of pension funds, Dec 2020 - Dec 2021 (preliminary)**

Notes: See the accompanying Excel file for explanations of the calculation method and jurisdiction-specific details.

Source: OECD Global Pension Statistics.
Pension funds benefitted from buoyant stock markets in 2021, continuing their recovery after the sudden drop in early 2020. Major stock markets recorded gains in 2021, ending at higher levels at the end of the year than at the beginning: +6% for Nikkei 225, +14% for FTSE 100, +16% for DAX, and +27% for S&P 500 for example, according to the Market Data Center of the Wall Street Journal. Financial markets benefitted from supportive measures that some governments continued to implement for the economy and from the global economic recovery after lockdowns in 2020. In the United States, energy and real estate were the best performing sectors in the S&P 500 in 2021, with the tech sector also continuing to record strong gains (CNBC). By contrast, pension funds may have seen the value of some of their bond holdings decline by end-2021, as the value of some bond indices shows a decline in 2021 (e.g., S&P Global Developed Sovereign Bond Index declined by 6.8% between end-2020 and end-2021).

The investment gains of pension funds were sufficient to offset rising inflation in more than half of the reporting jurisdictions (29 out of 53). Inflation hit a 30-year high by December 2021, reaching 6.6% in the OECD area (OECD News release). Yet, pension funds still recorded positive investment rates of return in real terms in 18 out of 27 reporting OECD countries. Pension funds even managed to record double-digit returns in real terms in four OECD countries in 2021: Poland (15.2%), Finland (12.3%), Australia (11.1%) and Costa Rica (10.0%). The strong performance in these four countries may be due to lower inflation (between 3.3% and 3.8% for Australia, Costa Rica and Finland) or a higher proportion of assets invested in equities than elsewhere (see following section). In contrast, pension funds recorded a positive investment rate of return in only 11 out of 26 other non-OECD reporting jurisdictions. The lowest investment rates of return in real terms were reported in Zimbabwe (-31.8%), Suriname (-26.5%), Ghana (-9.8%), where inflation was also among the highest for all reporting jurisdictions (60.7% in Zimbabwe and Suriname, and 12.6% in Ghana). In the OECD area, pension funds recorded the lowest real investment rate of return in Turkey (-9.7%), where inflation reached 36.1%.

Bonds accounted for 48.1% of pension fund investments, equities for 26.1% at end-2021 on average

Pension funds were mostly invested in bonds and equities, accounting for nearly 75% of their assets at end-2021. Pension funds held 48.1% of their portfolios in bonds and 26.1% in equities on average among all reporting OECD and non-OECD jurisdictions. Figure 2 shows however that the asset mix varied widely across jurisdictions.

While bonds usually accounted for a large proportion of pension fund investments, pension funds in 18 out of 67 reporting jurisdictions, including some of the largest pension markets, favoured equity investments instead. Bonds are usually one of the major holdings in the portfolios of pension funds, accounting for more than 50% of investments in 30 reporting jurisdictions, and even more than 90% in Albania (91.5%), the Maldives (93.2%) and Uruguay (93.1%). Yet, pension funds invested a larger proportion of their assets in equities than in bonds in 18 jurisdictions, including Australia, Canada, the Netherlands, Switzerland and the United States. Pension funds even invested more than 50% of their assets in equities in six reporting jurisdictions: Poland (82.1%) where open pension funds (OFE) are not allowed to invest in government bonds, Lithuania (74.6%), Estonia (59.7%) and Iceland (51.7%) among OECD countries, and in Hong Kong (China) (63.3%) and Namibia (51.5%) among other jurisdictions. Around two-thirds of the reporting jurisdictions recorded an increase in the proportion of equities in the portfolios of pension funds in 2021, such as Australia (+4.6 percentage points), following a rise in the value of stocks in the portfolios or a shift towards this instrument to benefit from recovering stock markets.
Cash and deposits are also a traditional instrument in the portfolio of pension funds, accounting for 9% of pension fund holdings on average at end-2021. Georgia was the country with the largest proportion of pension fund assets in this instrument (100%) at end-2021, before the start of the investments in securities for the recently created pension scheme. Cash and deposits are useful to meet liquidity needs and provide a stable return with a low downside risk, but also with a lower upside potential than some other asset classes. Just over half of the reporting jurisdictions observed a decline in the proportion of pension fund assets in cash and deposits in 2021. For example and despite an increase in interest rates, pension funds in the Czech Republic reduced the proportion of assets in bank deposits by 2 percentage points in 2021, in favour of bonds and equities.

Pension funds also invested in other (or “alternative”) instruments than bonds, equities, cash and deposits, to different extent. Such instruments represented over 25% of the portfolios in 13 reporting jurisdictions, including Australia (26.4%), Canada (27.7%), Switzerland (35.2%) and the United Kingdom (28.7%). These alternative investments may be in different products, including real estate, structured products and loans in the case of the United Kingdom for instance. Some national authorities (e.g. Kenya and the United States) reported that alternative investments had been attractive to pension funds, notably due to their diversification effects.
METHODOLOGICAL NOTES TO BE TAKEN INTO consideration WHEN INTERPRETING THE DATA

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 funded pension plans where assets are accumulated in pension funds, through pension insurance contracts or other retirement savings vehicles to back future benefit payments. These plans may be publicly or privately administered, mandatory or voluntary, occupational or personal, 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 Glossary, accessible at www.oecd.org/da/pensions. Data are preliminary and may be revised in the 2022 edition of the full report Pension Markets in Focus (forthcoming).

Data for 2021 refer to the end of 2021, except for: Australia where data refer to the end of June 2021; Canada (pension funds), the United Kingdom and the United States (individual retirement accounts) where data refer to end Q3-2021; Belgium (other retirement savings vehicles than pension funds), Canada (other vehicles than pension funds), Sweden and Switzerland where data refer to end-2020.

Data on pension funds refer to: the whole funded pension system and alternative regime schemes in Costa Rica, 2nd pillar pension funds in Estonia, PERCO/company PER and IORPs in France, Pensionskassen and Pensionsfonds supervised by BaFin in Germany, occupational retirement pension plans in Korea, voluntary plans in Latvia, personal plans in Mexico, open pension funds and employee pension plans in pension funds in Poland, personal plans in Turkey, mandatory pension funds in Armenia, the National Pension System (NPS) and the Atal Pension Yojana (APY) scheme in India, employer pension funds and financial institution pension funds in Indonesia, private pension schemes registered with the Securities and Exchange Commission of Pakistan, defined contribution provident funds in Thailand and workplace pension schemes in Zimbabwe. This note focuses on pension funds (except the last column of Table 1).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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.

Jurisdiction-specific and other methodological notes for Table 1, Figures 1 and 2 are available in the accompanying Excel file at: www.oecd.org/da/pensions/pensionmarkets.