Pension Markets in Focus

2014

OECD

This annual report reviews trends in the financial performance of pension funds, including investment returns and asset allocation. The underlying data for the tables and graphs plus a statistical annex can be found in Excel format at www.oecd.org/daf/pensions/pensionmarkets.

The data complement the information gathered at the pension fund level through the Survey of Large Pension Funds and Public Pension Reserve Funds. This survey is part of the OECD project on Institutional Investors and Long-term Investment. More information can be found at www.oecd.org/fin/lti.

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FOREWORD

Private pension systems are facing pressing and broad challenges. The economic crisis led to a reduction in government revenues to finance pay-as-you-go public pensions, leaving space for a growing role for private pensions in providing for old-age. However, population ageing and the current economic environment are introducing challenges to the ability of private pensions to deliver adequate retirement income.

Population ageing is leading not only to an increase in the number of people in retirement relative to the size of the working-age population, but also most importantly to an increase in the number of years that people spend in retirement, at least when the retirement age is not increased adequately. This may affect the solvency of defined benefit (DB) pension plans and the adequacy of income derived from defined contribution (DC) pension plans. DB pension funds are exposed to the longevity risk owing to uncertainty about future improvements in mortality and life expectancy. If pension promises are calculated based on a life expectancy which is underestimated, the actual pension payments will be larger than expected and DB pension funds may lack sufficient assets to cover their future liabilities. For DC pension funds, higher life expectancy means that accumulated assets must fund longer retirement periods if people do not adjust their retirement age, potentially rendering the resulting pension amount inadequate to maintain the desired standard of living in retirement.

The current economic environment characterised by low returns on investments, low interest rates and low growth is compounding these problems. These factors may lead to lower resources than expected to finance retirement promises or simply to lower retirement income. Low returns on investments reduce the expected future value of benefits, as assets accumulated will grow at a lower rate than expected. Low interest rates may reduce the amount of pension income that a given amount of accumulated assets may be able to deliver, especially in DC pensions. In DB pensions, low interest rates may increase future liabilities and lead to solvency problems. Additionally, low economic growth may reduce the overall resources (employer and employee contributions) available to finance retirement.

This eleventh issue of Pension Markets in Focus describes how private pensions fared during 2013 against this background.

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HIGHLIGHTS

>> Assets accumulated by the main institutional investors in the OECD grew in 2013

Institutional investors totalled USD 92.6 trillion in 2013, with USD 34.9 trillion coming from investment funds, USD 26.1 trillion from insurance companies, USD 24.7 trillion from pension funds, USD 5.1 trillion from public pension reserve funds and USD 1.8 trillion from other investors. In 2013, pension funds confirmed their growing prominence among institutional investors, with a share of 26.7% in terms of total assets held by institutional investors.

>> Asset-to-GDP ratio increased

The market value of assets accumulated relative to the size of the economy as measured by the GDP is a key indicator of the scale of pension funds' activity. The OECD weighted average asset-to-GDP ratio for pension funds increased from 77.1% of GDP in 2012 to 84.2% of GDP in 2013. The Netherlands reached the highest ratio at 166.3%.

>> Pension funds achieved positive returns in 2013 in almost all countries reviewed notwithstanding uncertainties in the world economy and volatility in financial markets

Pension funds in the OECD experienced on average an annual real rate of investment returns of 4.7%, ranging from 11.7% for the highest performer (the United States) to -4.6% for the lowest performer (Denmark). The strong performance across most equity markets in 2013 bolstered average investment returns in most countries. Most pension funds outside the OECD also earned positive returns in 2013, with an average annual real rate of investment returns slightly above the OECD average (5.6%).

>> Bonds and equities remain dominant asset classes

In most of the OECD and non-OECD countries for which we received data, bonds remain by far the dominant asset class, accounting for around 52% of total assets on average, suggesting an overall conservative stance. Countries like the United States, Australia, Chile and Poland showed significant portfolio allocations to equities, in the range of 40% to 50%. Pension funds tended to reduce the share allocated to equities compared to their pre-crisis level and reallocate part of this share to bills and bonds in a majority of OECD countries. Between 2007 and 2013, twenty-one OECD countries decreased the share invested equities. Among them, seventeen reallocated part of the related amounts to bills and bonds.

Pension Funds in the Broader Context of Institutional Investors and Pension Plan Vehicles

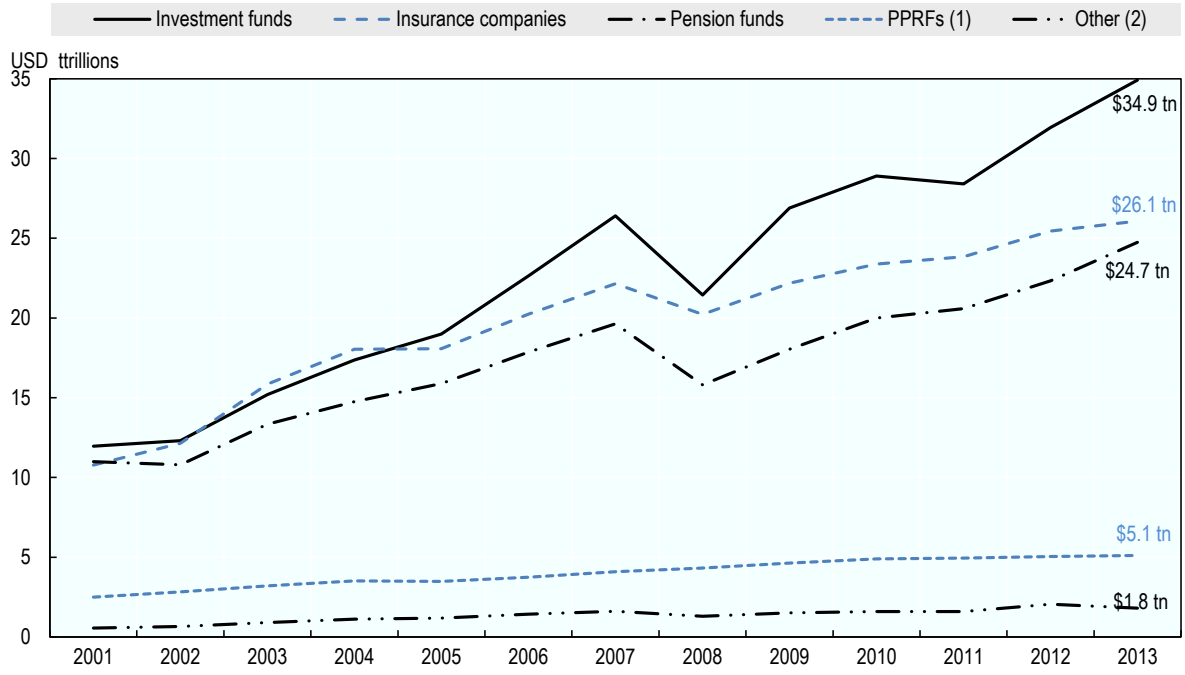
Assets accumulated by the main institutional investors in the OECD, including investment funds, insurance companies and pension funds, grew in 2013.

Institutional investors totalled USD 92.6 trillion in 2013, with USD 34.9 trillion coming from investment funds, USD 26.1 trillion from insurance companies, USD 24.7 trillion from pension funds, USD 5.1 trillion from public pension reserve funds and USD 1.8 trillion from other investors. In 2013, pension funds confirmed their growing prominence among institutional investors, with a share of 26.7% in terms of total assets held by institutional investors.

Pension fund assets exhibited an average annual growth rate of 8.2% over the period 2009-13. This average annual growth rate between 2009 and 2013 outperformed those observed for insurance companies (4.1% over the same period) and investment funds (6.7%) for which assets slightly declined between 2010 and 2011.

Figure 1. Total assets by type of institutional investors in the OECD, 2001-2013

In USD trillion



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics, Global Insurance Statistics and Institutional Investors databases, and OECD staff estimates.

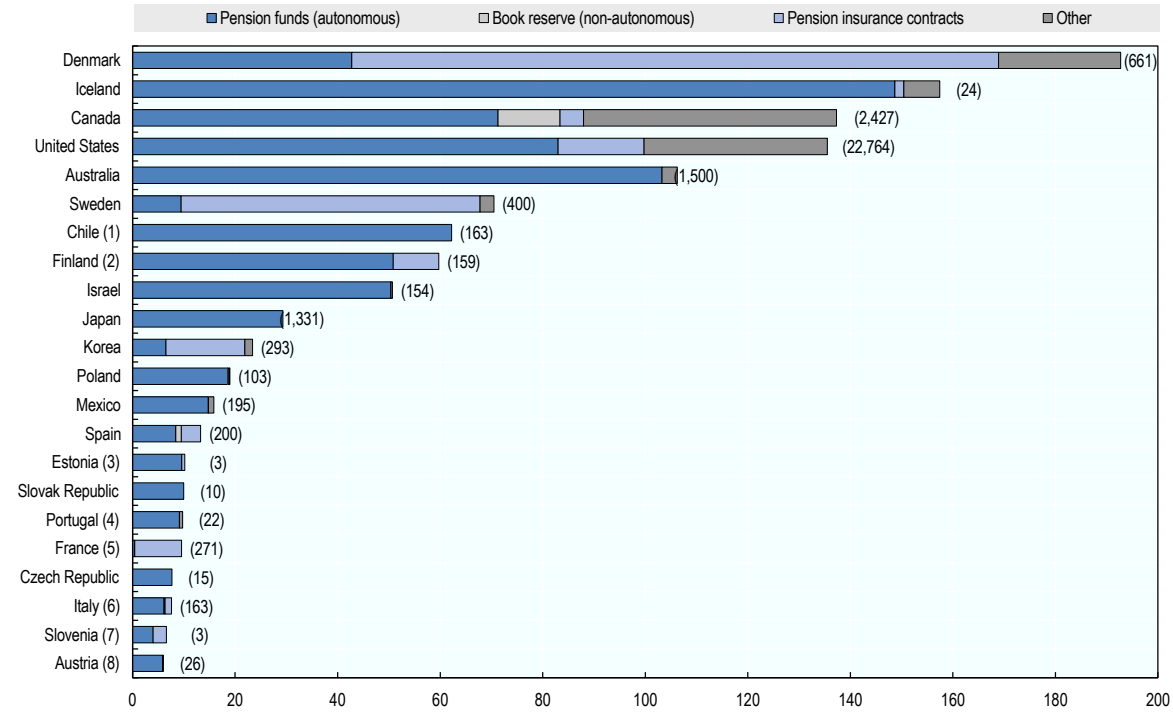
At the end of 2013, all private pension assets, including both occupational (workplace-related) and personal arrangements, were valued at USD 36 trillion.

Pension funds remained the main financing vehicle for private pension plans, with USD 24.7 trillion of assets under management representing 68% of the total private pension assets. Bank or investment companies managed funds or other entities accounted for one fifth of the market with USD 7.1 trillion, followed by insurance companies having USD 4.2 trillion (12% of private pension assets) in the form of pension insurance contracts.

Pension insurance contracts account for the largest shares of aggregate private pension assets in Denmark, France, Korea and Sweden (see Figure 2). Denmark's private pension system was the largest in relation to its economy at 193% of GDP. Private pension assets were larger than the size of their economy in four other countries (Iceland, Canada, the United States and Australia). Pension insurance contracts alone represent 126% of GDP in Denmark. In Sweden, most individual pension savings and occupational pensions are administered by life insurers (more than 80% of total private pension assets in 2013) and not by pension funds. The assets held in pension insurance contracts amounted to USD 330 billion in 2013, representing 58% of GDP.

Figure 2. Private pension assets by type of financing vehicle in selected OECD countries, 2013

As a percentage of GDP and in absolute terms (USD billion)



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

This section looked at institutional investors and pension arrangements in general, as well as the importance of pension funds in this broad context. The rest of the report focuses exclusively on autonomous pension funds because more indicators are available for this specific financing vehicle.

All pension plan types managed by pension funds are included: occupational, personal, defined benefit and defined contribution. Detailed definitions of the different financing vehicles and pension plan types, following the OECD classification, are available in the "Methodological notes" section.

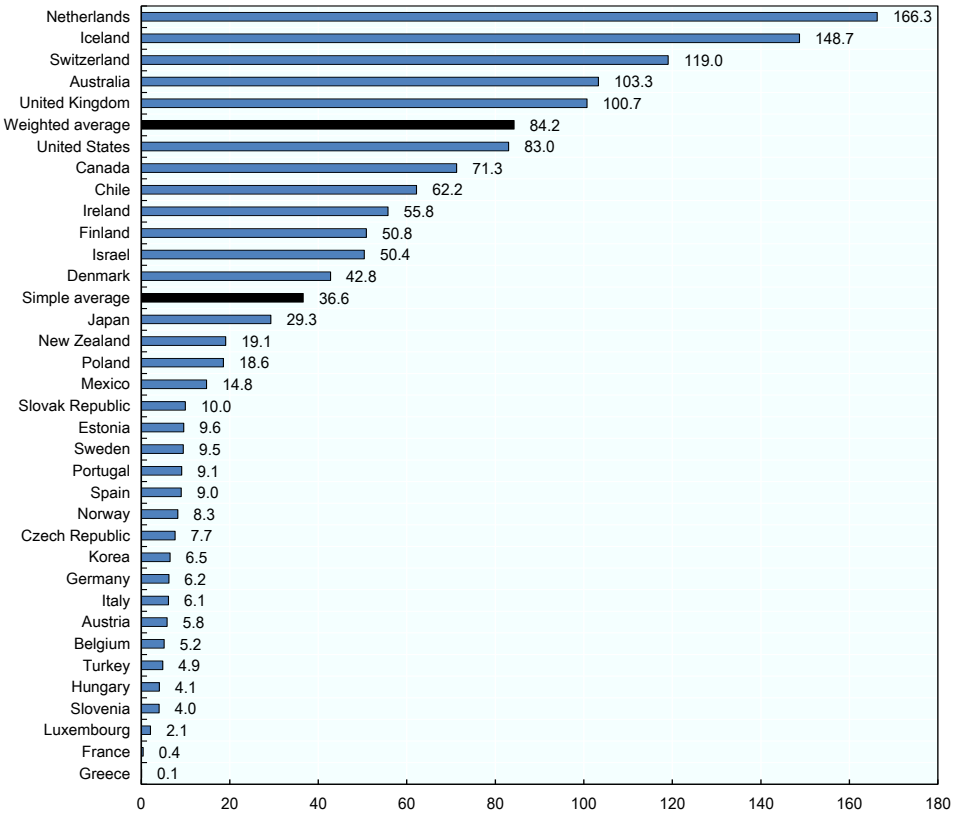
Pension Fund Assets

The OECD weighted average asset-to-GDP ratio for pension funds increased from 77.1% of GDP in 2012 to 84.2% of GDP in 2013, with the Netherlands achieving the highest ratio at 166.3%.

The market value of assets accumulated relative to the size of the economy as measured by the GDP is a key indicator of the scale of pension funds' activity. As Figure 3 shows, in 2013, only five OECD countries reached asset-to-GDP ratios higher than 100% – the Netherlands (166.3%), Iceland (148.7%), Switzerland (119.0%), Australia (103.3%) and the United Kingdom (100.7%). Pension fund assets were of varying importance relative to GDP in the other countries. Only thirteen out of thirty-four countries had assets-to-GDP ratios above 20%, which is considered the minimum for meeting the OECD's definition of a "mature" pension fund market.

Figure 3. Importance of pension funds relative to the size of the economy in the OECD, 2013

As a percentage of GDP



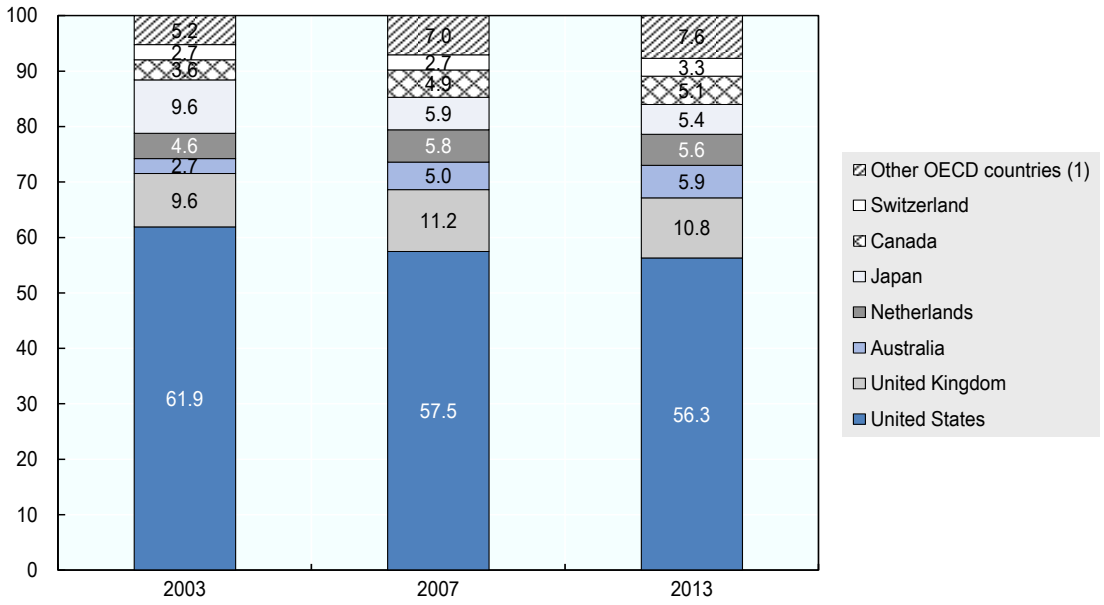
Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

In absolute terms, the United States still owned the majority of assets under management of all the OECD countries, with assets worth USD 13.9 trillion in 2013. In relative terms however, the weight of assets held by pension funds in the United States has been gradually shrinking, from nearly 62% of total pension assets in the OECD in 2003 to 56% in 2013. The United Kingdom takes the second place in 2013 with 10.8% of OECD assets, followed by Australia (5.9%), the Netherlands and Japan (between 5% and 6% of the pension assets in the OECD each), Canada (5.1%) and Switzerland (3.3%). The share of assets held by pension funds in the other OECD countries increased progressively, from 5.2% in 2003 to 7.0% in 2007 and 7.6% in 2013.

Figure 4. Geographical distribution of pension fund assets in the OECD, 2003, 2007 and 2013

As a percentage of total assets



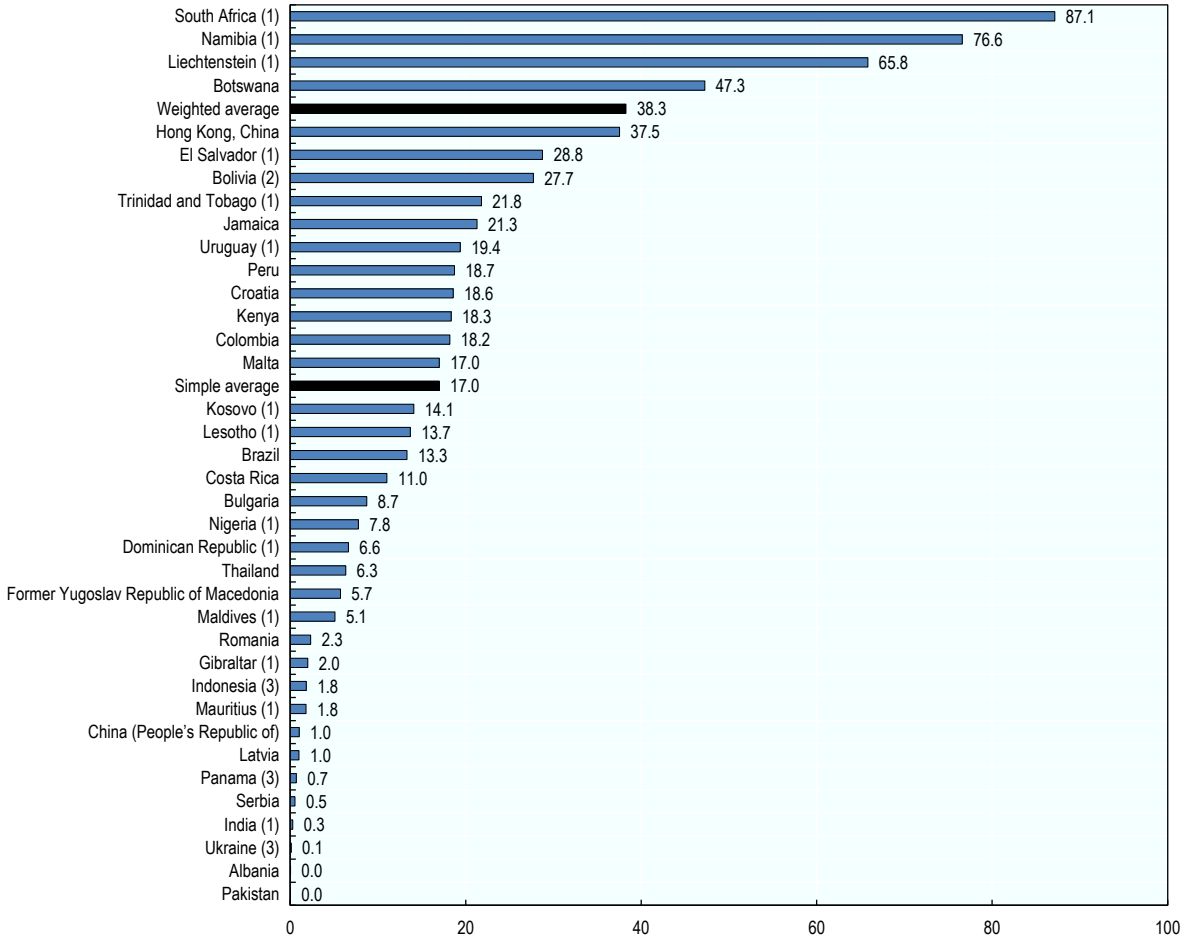
Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Although substantial pension fund asset pools have been accumulated in non-OECD countries, they remain smaller than in the OECD area. For instance, in terms of asset-to-GDP ratio, the weighted average in non-OECD countries was 38.3% in 2013 (see Figure 5), as compared to 84.2% for the OECD area. Only nine non-OECD countries (out of thirty-seven) had ratios above 20%: South Africa with the highest ratio among selected non-OECD countries (87.1% of GDP), Namibia (76.6%), Liechtenstein (65.8%), Botswana (47.3%), Hong Kong (China) (37.5%), El Salvador (28.8%), Bolivia (27.7%), Trinidad and Tobago (21.8%) and Jamaica (21.3%). Pension markets in the other non-OECD economies shown in Figure 5 were smaller relative to the size of their economies.

Figure 5. Importance of pension funds relative to the size of the economy in selected non-OECD countries, 2013

As a percentage of GDP



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

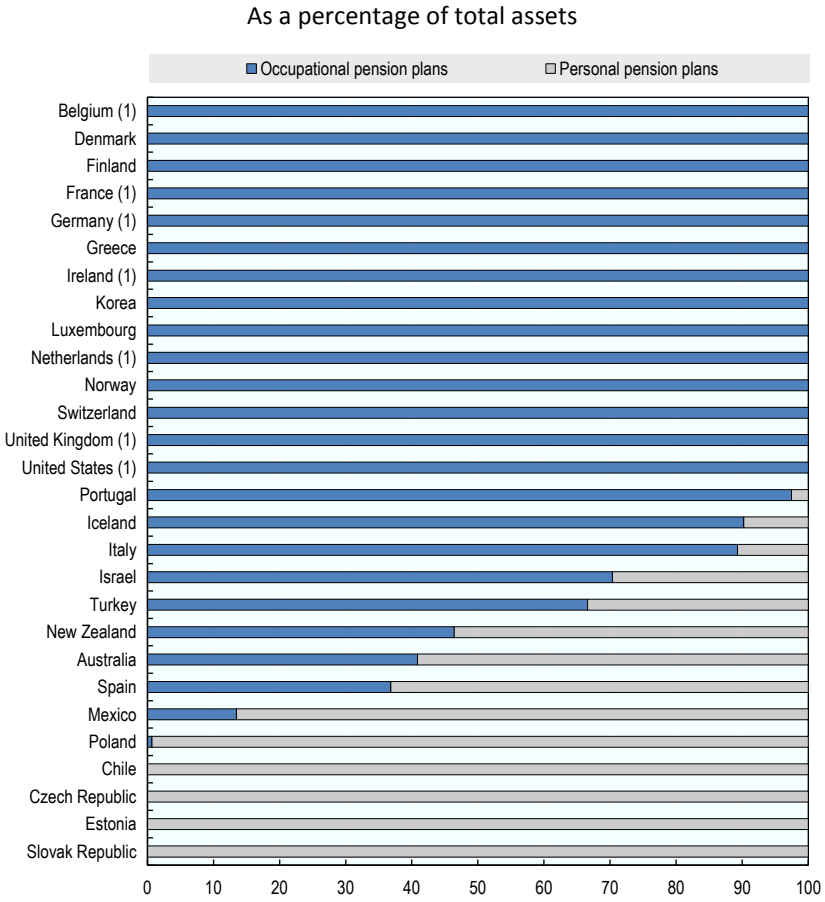
Pension Fund Industry Structure

Assets held in occupational pension plans remained predominant in 2013 in nineteen OECD countries.

Among the twenty-eight countries for which information was available (Figure 6), assets in occupational pension plans offered through autonomous pension funds remained predominant in 2013 in nineteen OECD countries compared to personal pension plans.[1]

[1] It is to be important to highlight that Figure 6 presents data exclusively on pension funds, and therefore, excludes data pertaining to pension insurance contracts and funds managed as part of financial institutions (often banks or investment companies), such as the Individual Retirement Accounts (IRAs) in the United States.

Figure 6. Pension funds' assets by pension plan type in selected OECD countries, 2013



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

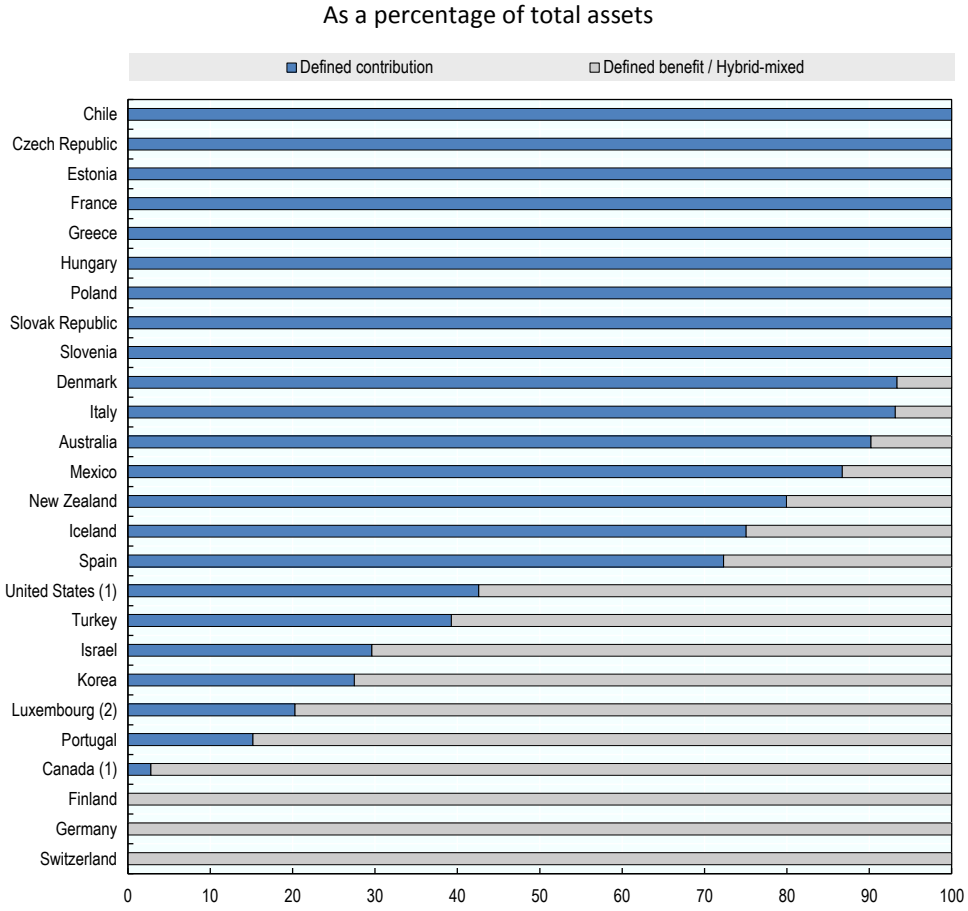
In fourteen countries (Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Korea, Luxembourg, the Netherlands, Norway, Switzerland, the United Kingdom and the United States), plans offered through autonomous pension funds were only occupational. In Israel, occupational pension plans were still holding more assets than personal pension plans, notwithstanding the development of new pension funds offering personal pension plans, and the closure to new members of old pension funds offering occupational plans.

The share of assets held in personal pension plans increased between 2008 and 2013 for seven OECD countries, by a range of 0.1 pp. (in Poland) to 17.7 pp. (in New Zealand). This share decreased between 2008 and 2013 for three OECD countries for which the split of assets between occupational and personal plans was available for the 2 years in question (Australia, Spain and Turkey). It remained stable in the other OECD countries.

Pension funds offered defined contribution plans in more than half of the OECD countries for which the split of investment between defined benefit (DB) and defined contribution (DC) plans is known.

As shown in Figure 7, in sixteen of the twenty-six OECD countries for which the split of investments between DB and DC in 2013 could be measured, investments in DC plans outweighed those in DB plans. In nine countries, namely Chile, the Czech Republic, Estonia, France, Greece, Hungary, Poland, the Slovak Republic and Slovenia, pension funds only offered DC plans. In Denmark, DB plans constitute a small part (6.6%) of the Danish pension fund market. A shift from DB plans to DC plans is evidenced in some countries by the closing of DB pension funds to new members, for example in Italy since 1993 and in Australia, or by the opening of mainly DC plans as in New Zealand. DB plans, however, still play an important role largely due to their historical prominence as the favoured arrangement for occupational arrangements in many countries. They dominate the pension fund market in Canada, Finland, Germany and Switzerland, as well as in the United States, Turkey, Israel, Korea, Luxembourg and Portugal.

Figure 7. Relative shares of DB and DC pension fund assets in selected OECD countries, 2013



Note: For methodological notes see page 32 onwards.

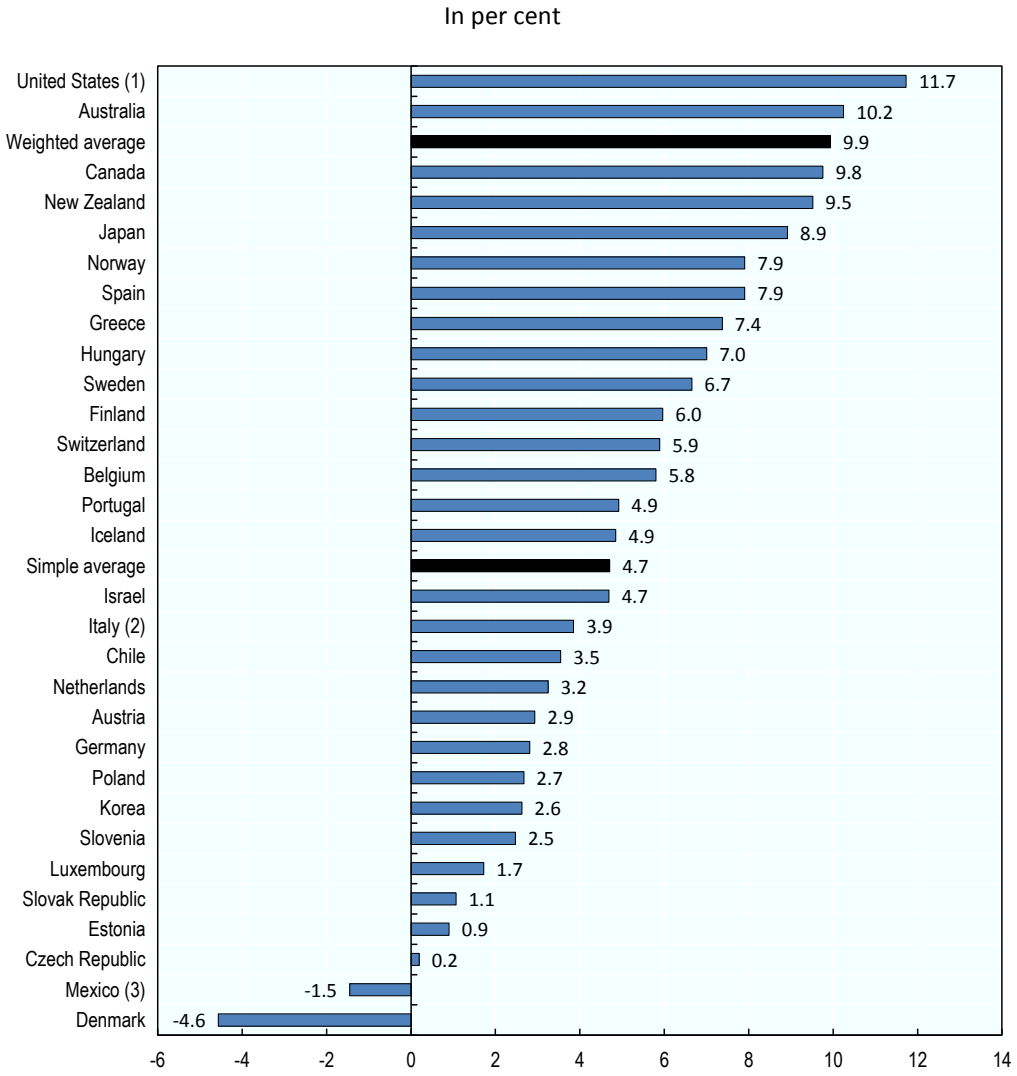
Source: OECD Global Pension Statistics.

Performance of Pension Funds

Despite uncertainties in the world economy and volatility in financial markets, pension funds achieved positive returns in 2013 in almost all OECD countries, with a real return greater than 4.5% in 16 OECD countries.

As shown in Figure 8, the net investment rate of return varies considerably across national markets. On the basis of the simple average across OECD countries, for the countries for which information is available, pension funds experienced on average an annual, real rate of investment returns (in local currency and after investment management expenses) of 4.7%, ranging from 11.7% for the highest performer (the United States) to -4.6% for the lowest performer (Denmark). The strong performance across most equity markets in 2013 bolstered average investment returns in most countries.

Figure 8. Pension funds' real net investment rate of return in selected OECD countries, Dec 2012 - Dec 2013



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

After the United States, the highest returns in 2013 were in Australia (10.2%), Canada (9.8%), New Zealand (9.5%) and Japan (8.9%). As the real net investment return deducts inflation from the nominal performance of pension funds, a low figure can be accounted for by either low gains and income or high inflation. Pension funds in Denmark had a negative real return in 2013, due to negative contributions from hedging instruments.

The performance of pension funds measured over the last five years remains positive. Over the period December 2008 to December 2013, twenty-four OECD countries had a real annual rate of return higher than 2%, while twenty-two OECD countries had a nominal average annual rate of return higher than 4% (see Table 1). The Netherlands and Canada exhibited the best results in nominal terms, with a return equal to 9.6% and 9.1% respectively and remained the two countries which performed the best over the period after taking into account inflation, with a real return equal to 7.4%. Eleven countries had a real annual rate of return above 4%. By contrast, the Slovak Republic and Greece had the lowest 5-year average real returns.

Table 1. Pension fund nominal and real 5-year geometric average annual returns in selected OECD countries

In per cent

Country	5-year average annual return	
	Nominal	Real
Netherlands	9.6	7.4
Canada	9.1	7.4
Mexico (1)	8.7	4.6
Chile	8.4	6.5
Israel	8.2	5.6
Iceland	8.1	3.3
United States	7.9	5.7
Norway	7.5	5.8
Belgium	7.6	5.5
Denmark	6.1	4.1
Estonia	5.3	2.8
New Zealand (2)	5.2	2.8
Switzerland	5.2	5.3
Poland	5.0	2.1
Luxembourg	4.9	2.5
Austria	4.9	2.6
Spain	4.6	2.7
Australia (3)	4.4	2.1
Germany	4.4	2.9
Italy	4.2	2.3
Slovenia	4.1	2.2
Portugal	3.9	2.2
Korea	3.7	1.1
Japan	3.6	3.8
Czech Republic	2.1	0.2
Slovak Republic	1.7	-0.3
Greece	1.5	-0.3

Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Box 1. OECD-CALCULATED AVERAGE RATE OF INVESTMENT RETURNS

Methods for calculating the average investment returns (IRR) of pension funds vary greatly from country to country, hindering international comparability of these statistics. With a view to increasing data comparability across countries, the OECD therefore decided that it would be worth applying the same calculation method for IRR across countries, which would be calculated by the OECD, using variables already collected as part of the Global Pension Statistics' framework. In order to reach a consensus on the most appropriate formula for the IRR calculation, an electronic discussion group was created, composed of selected country experts.

Drawing on preliminary consultations, the OECD Secretariat proposed five formulas to the electronic discussion group for comments. A consensus has been reached within the group and subsequently endorsed by the OECD Task Force on Pension Statistics on the following formula for the average IRR, in each year N:

$$Calculated\ average\ IRR_N = \frac{Net\ Investment\ Income_N}{(Total\ Investment_{N-1} + Total\ Investment_N)/2} \times 100$$

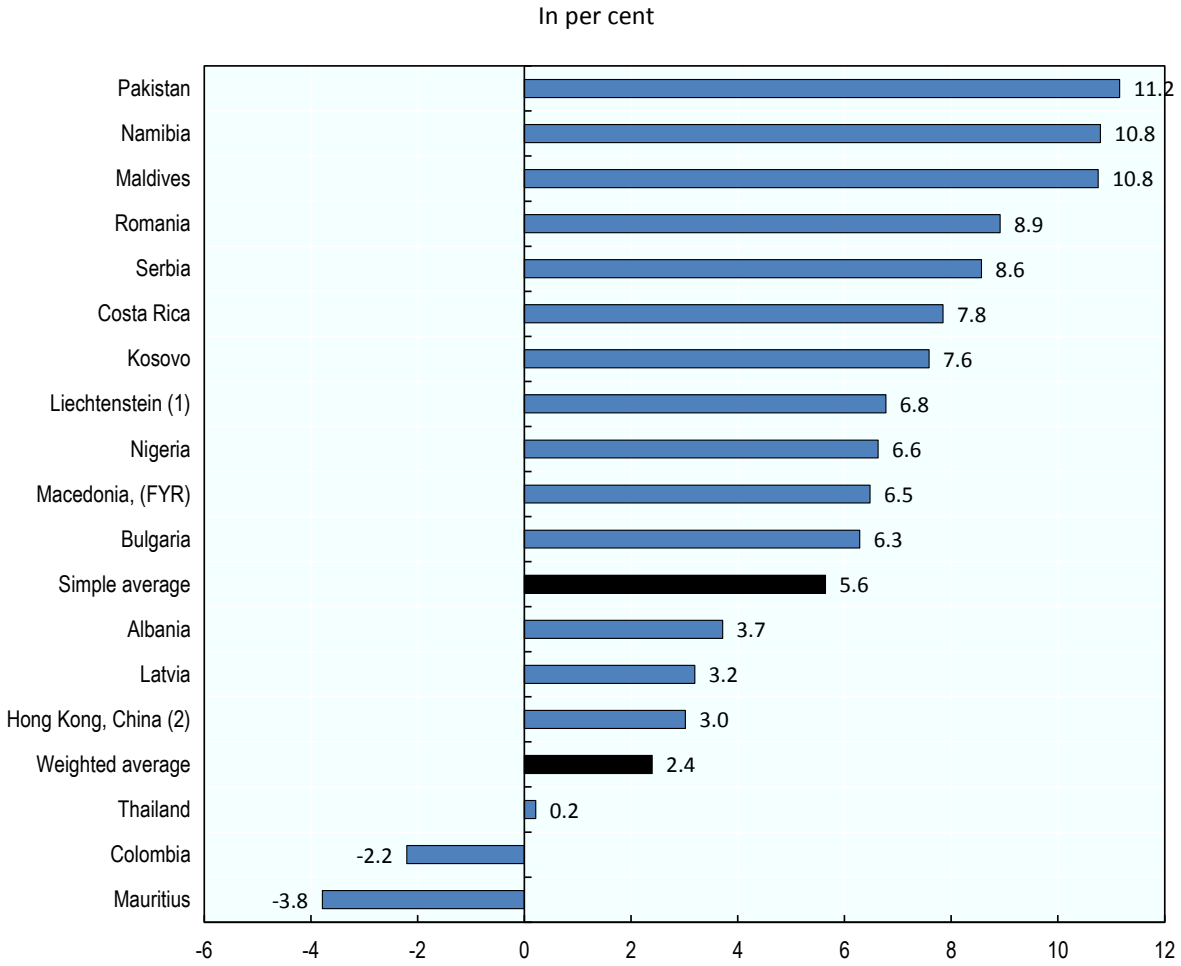
Net investment income comprises income from investments, value re-adjustments on investments and income from realised and unrealised capital gains and losses. It includes rents receivable, interest income, dividends and realised and unrealised capital gains, before tax and after investment expenses.

Because countries may use a different calculation method for the average IRR, it should be noted that there may be discrepancies between the OECD-calculated average IRRs and the ones published by these countries.

It is to be taken into consideration that IRRs may be given before administration costs. Pension funds tend to charge members a fee to cover all their administrative costs. However, different pension systems charge fees in different ways. The magnitude of the fees varies across countries and depends mainly on the concentration in the market (the level of competition between pension funds).

Most pension funds outside the OECD also earned positive returns in 2013 (see Figure 9). Pension funds in selected non-OECD countries experienced on average an annual, real rate of investment returns of 5.6%, slightly above the OECD average (4.7%). It ranges from 11.2% for Pakistan to -3.8% for Mauritius. On top of Pakistan, pension funds in two other countries reached real returns above 10%: Namibia and Maldives (both 10.8%). At the other extreme, pension funds in Colombia and Mauritius had a negative performance in 2013.

Figure 9. Pension funds' real net investment rate of return in selected non-OECD countries, Dec 2012 - Dec 2013



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Over the last five years, all non-OECD countries with available information had a positive nominal average investment rate of return, with Pakistan experiencing the higher performance at 14.0% (see Table 2). In real terms, only Nigeria experienced negative average returns (-3.5%).

Table 2. Pension fund nominal and real 5-year geometric average annual returns in selected non-OECD countries

In per cent

Country	5-year average	
	Nominal	Real
Pakistan	14.0	3.2
Colombia	13.3	10.4
Romania	11.0	6.2
Serbia	9.9	2.1
Costa Rica	9.5	4.7
Hong Kong, China (1)	7.9	4.1
Former Yugoslav Republic of Macedonia	7.7	5.5
Nigeria	7.1	-3.5
Albania	6.7	4.0
Bulgaria	5.0	2.8
Thailand	4.2	1.1
Liechtenstein	3.1	..

Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

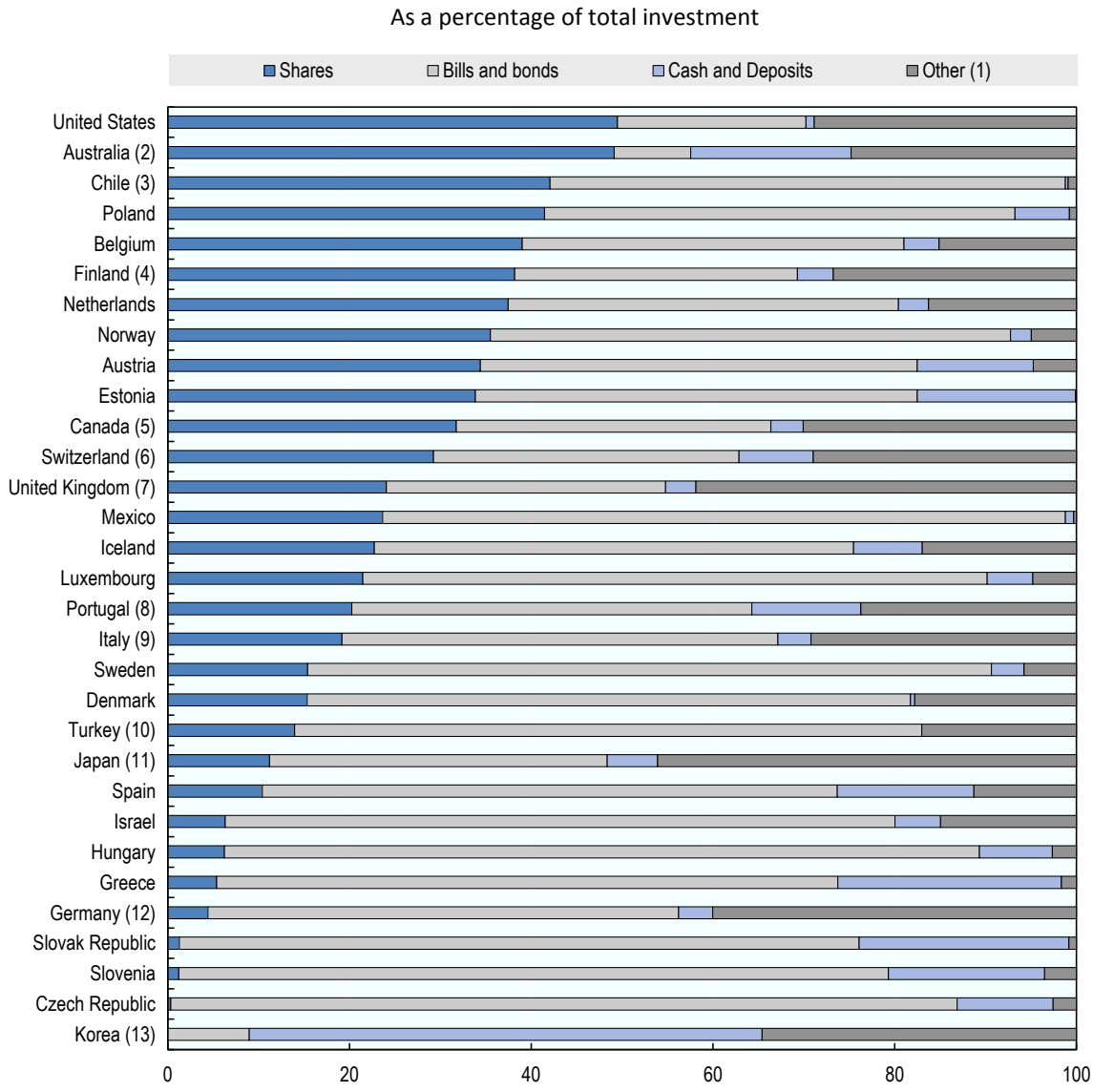
Pension Fund Investments

In most OECD countries for which 2013 asset allocation figures were available, bonds and equities remained the two most important asset classes in which pension funds were investing in 2013.

Twenty-one OECD countries invested more than 70% of their portfolio into these two asset classes at the end of 2013 (see Figure 10). The United States was the country where pension funds allocated the biggest share of their portfolios in shares in 2013, followed by Australia, Chile and Poland. In these four countries, pension funds' equity allocations were above the OECD weighted average of 40.3% of total investments.

In half of the OECD countries, pension funds invested more than 50% of their assets in bills and bonds in 2013. The proportion of bills and bonds in pension fund portfolios was over 80% in two countries, namely the Czech Republic (86.5%) and Hungary (83.1%). Bills and bonds were more than 50% of the portfolio in 2013 in a further fifteen OECD countries: Chile, Denmark, Germany, Greece, Iceland, Israel, Luxembourg, Mexico, Norway, Poland, Slovak Republic, Slovenia, Spain, Sweden and Turkey.

Figure 10. Pension fund asset allocation for selected investment categories in selected OECD countries, 2013

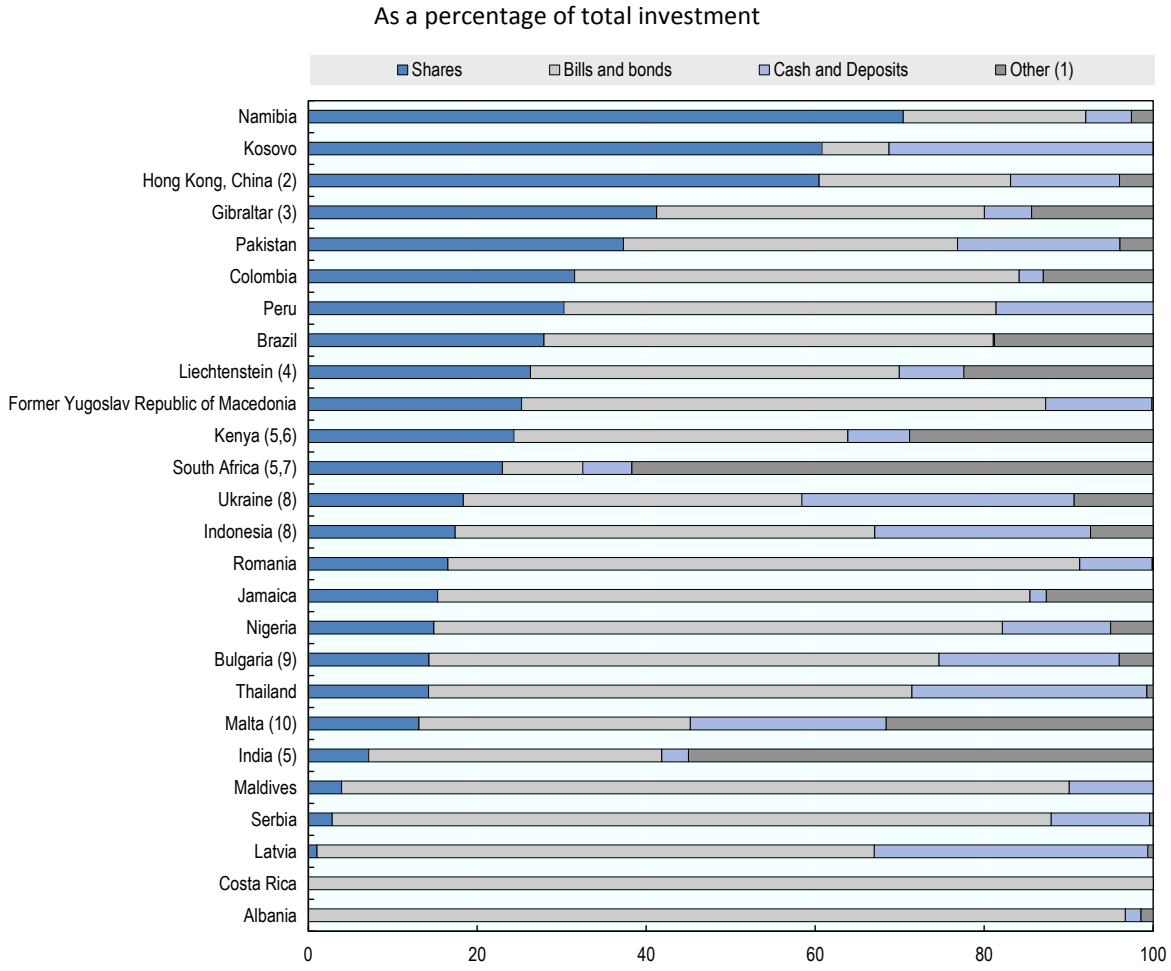


Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

As in OECD countries, bills, bonds and equities were also the main asset classes in which pension funds in non-OECD economies invested. Bills and bonds represented more than 50% of the asset allocation of pension funds in 2013 in fourteen non-OECD countries (see Figure 11). Pension funds in Costa Rica invested all their assets in bills and bonds, due to a broad range of products and good yields. Equities were predominant in pension funds' portfolios in three countries, accounting for more than 50% of total investments: Namibia, Kosovo and Hong Kong (China).

Figure 11. Pension fund asset allocation for selected investment categories in selected non-OECD countries, 2013



Note: For methodological notes see page 32 onwards.

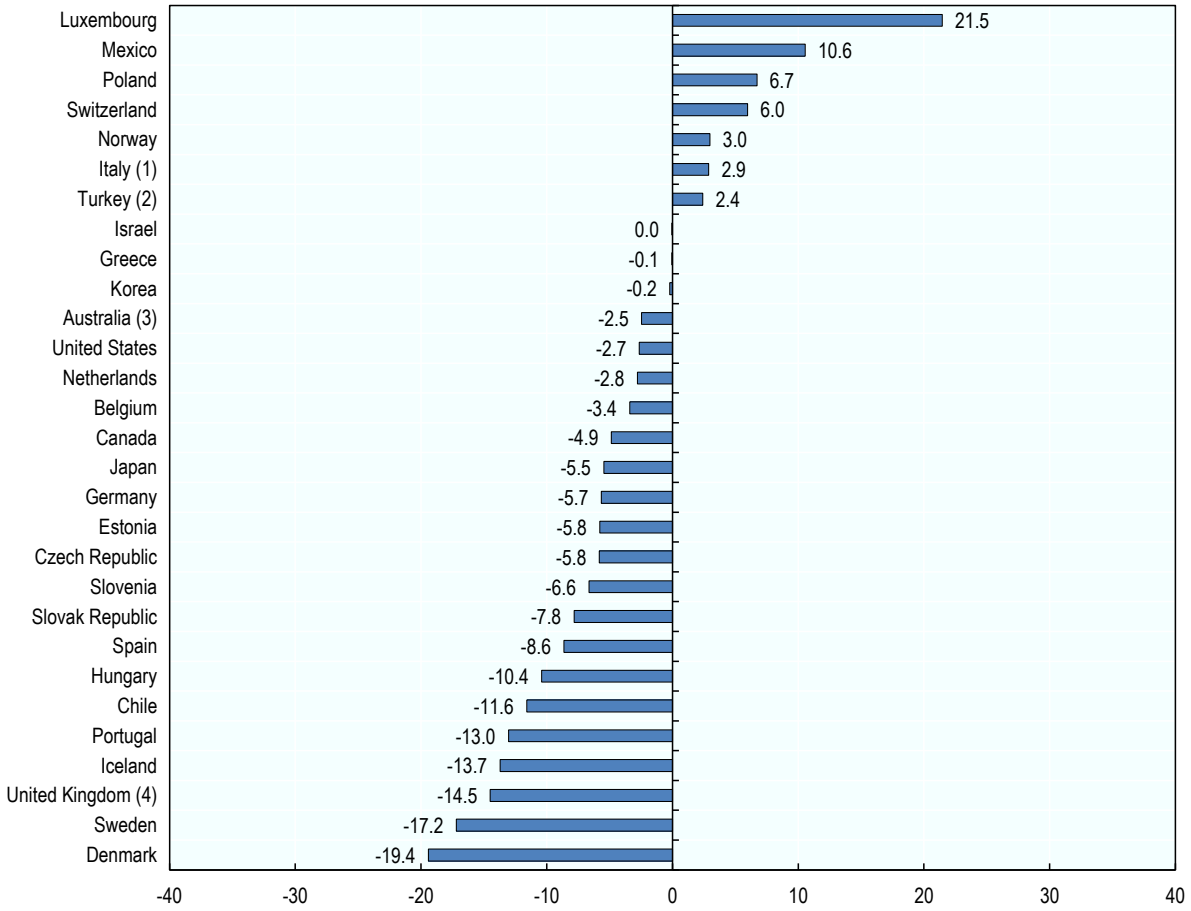
Source: OECD Global Pension Statistics.

Figures 12 and 13 give the variations between 2007 and 2013 in shares and bills and bonds allocations respectively in OECD countries. Pension funds tended to reduce the share allocated to equities compared to their pre-crisis level and reallocate part of this share to bills and bonds in a majority of OECD countries. Between 2007 and 2013, twenty-two OECD countries decreased the share invested equities. Among them, eighteen reallocated part of the related amounts to bills and bonds.

In some OECD countries, the inverse trend was observed between 2007 and 2013. Pension funds in Luxembourg, Mexico, Poland and Switzerland reduced their allocations to bills and bonds and reallocated part of it to equities, the biggest reallocation to equities being observed in Luxembourg.

Figure 12. Variations in shares allocations between 2007 and 2013 in selected OECD countries

In percentage points

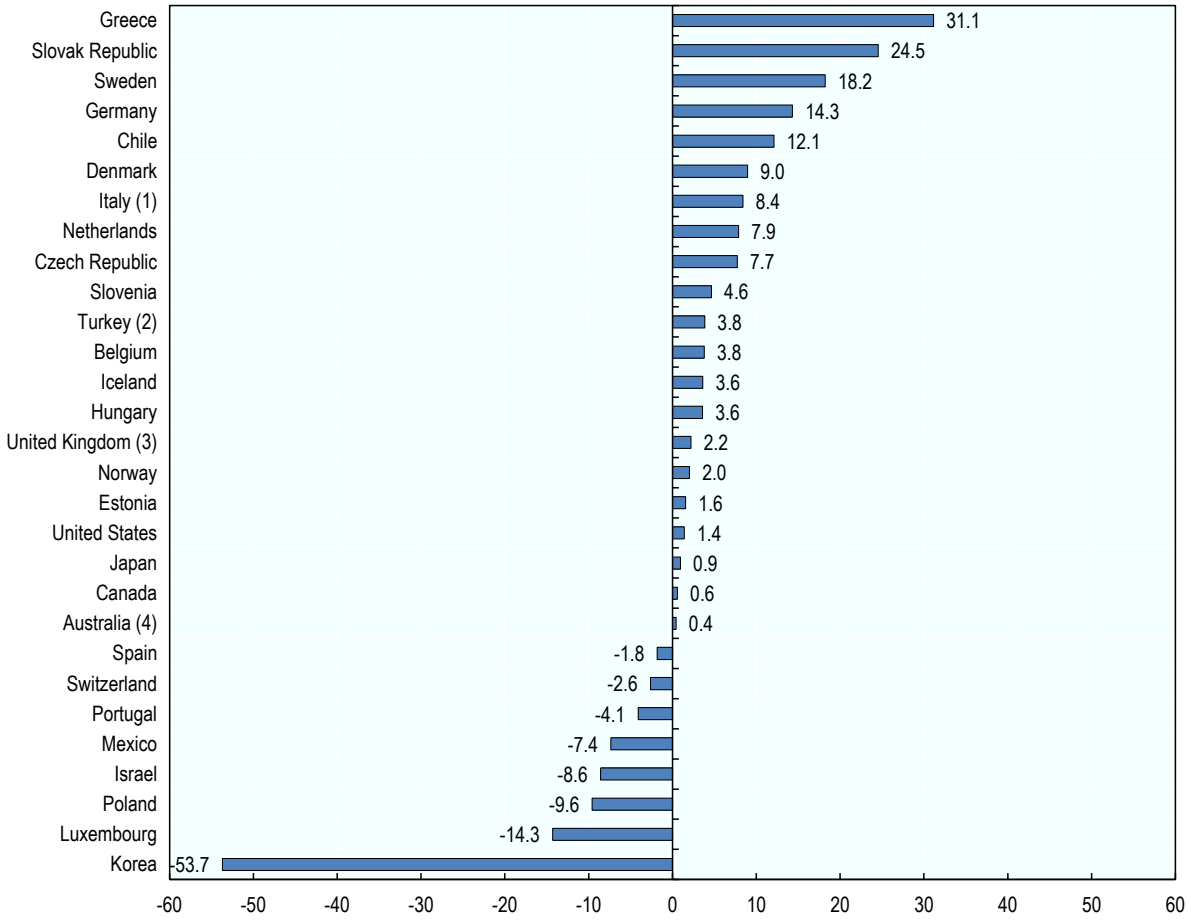


Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Figure 13. Variations in bills and bonds allocations between 2007 and 2013 in selected OECD countries

In percentage points



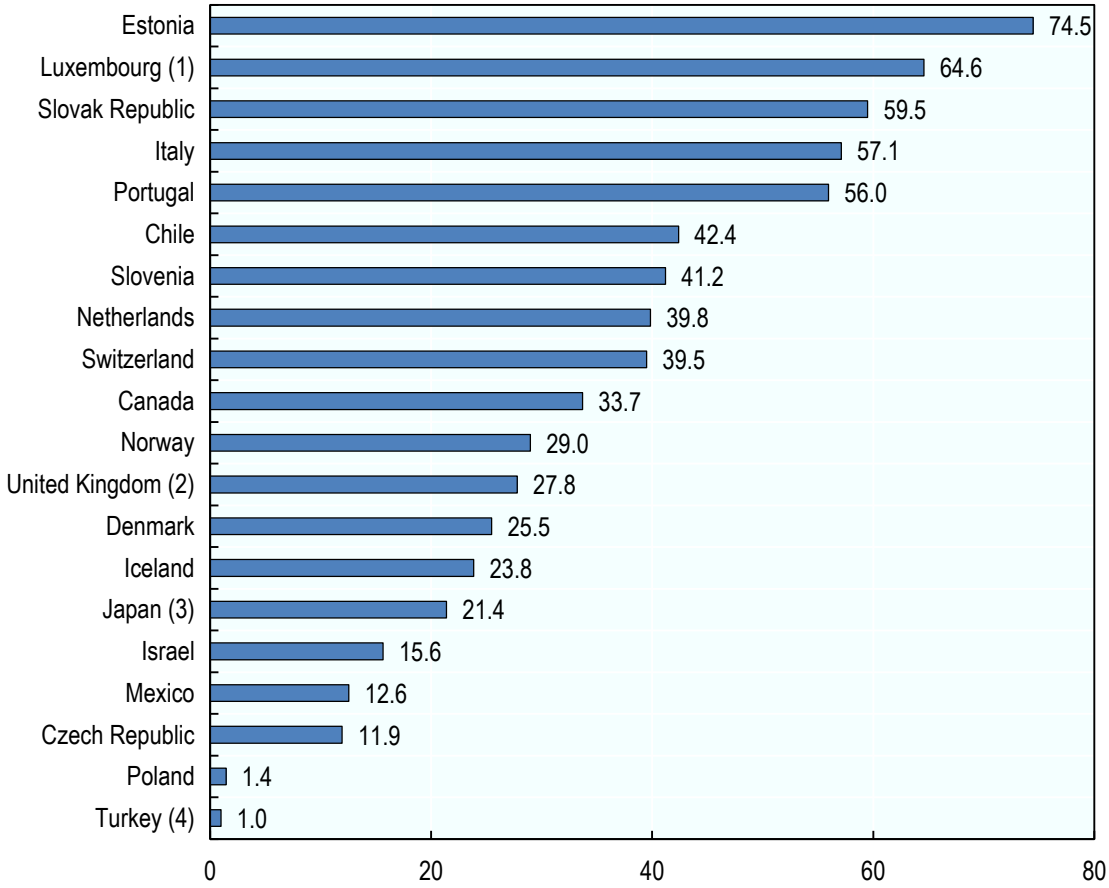
Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

In the OECD, foreign investment in entities located abroad (including investment in local currencies) tends to be greater in countries that belong to the Euro area. As shown in Figure 14, Estonia had the most internationally diversified portfolio in 2013, with 74.5% of assets issued by entities located abroad, mostly in the Euro area (Luxembourg, Ireland, Finland and France). Other countries with high investments in foreign-based entities in 2013 include Luxembourg, the Slovak Republic and Portugal. By contrast, five out of the nineteen OECD countries for which such information was available invested less than 20% of their assets abroad: Israel, Mexico, Czech Republic, Poland and Turkey. In the case of Mexico, this can be explained by the regulation in place, which forbids pension funds from investing more than 20% of their portfolio in foreign assets.

Figure 14. Foreign investment of pension funds in selected OECD countries, 2013

As a percentage of total investment



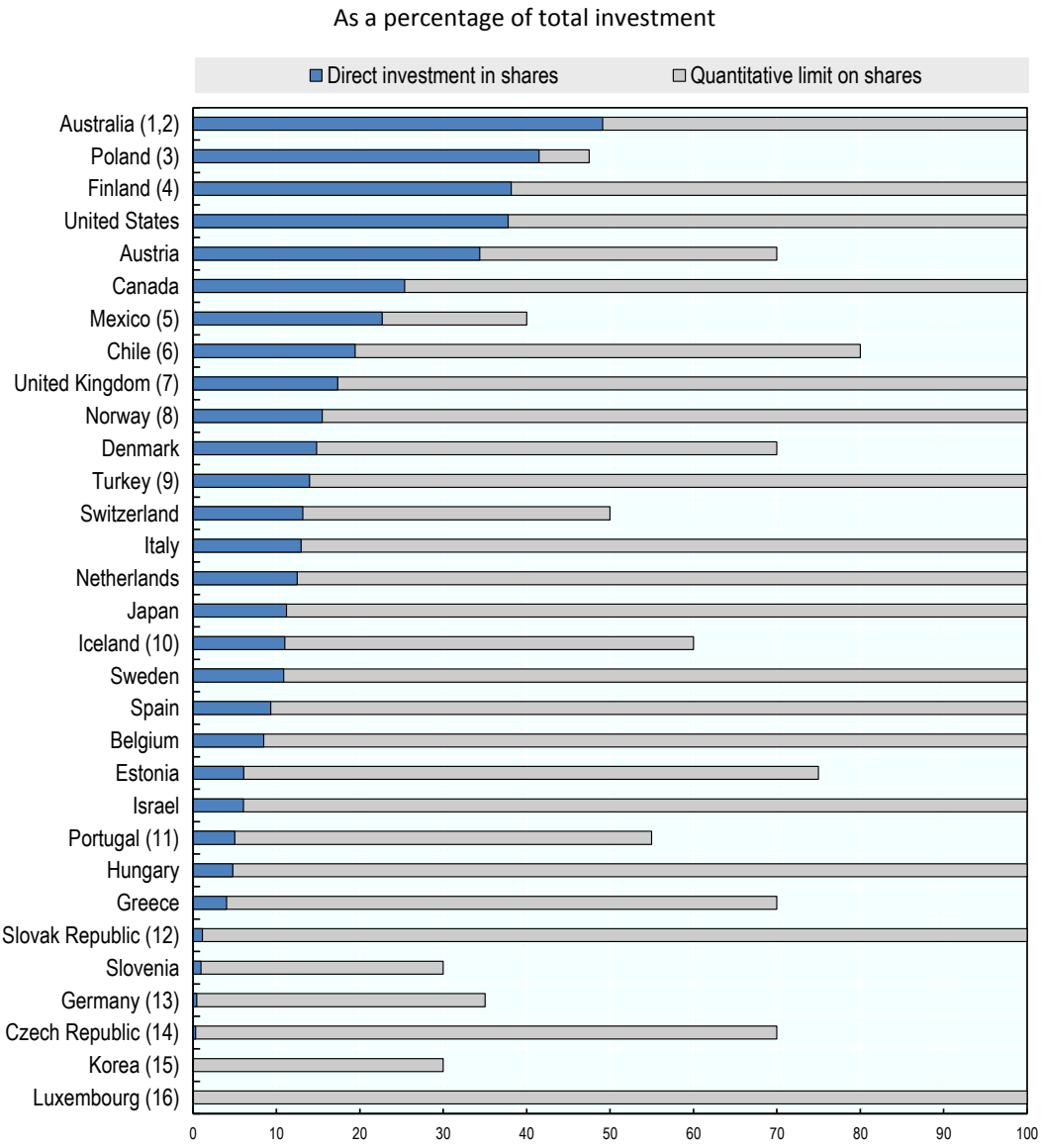
Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Pension fund investments are generally regulated by comprehensive investment limit structure that determines the types of instruments in which pension funds can invest and their respective thresholds. In a large number of OECD countries, pension funds were not constrained in their allocation in shares, bills and bonds (see Figures 15 and 16). In 2013, restrictions in the allocation to shares can be found in fourteen OECD countries, while four OECD countries have restrictions in investments in bills and bonds.[2]

[2] For more detailed information on quantitative investment regulations applied to pension funds in OECD and IOPS countries, readers can download the 2014 edition of the OECD Annual Survey of Investment Regulation of Pension Funds (http://www.oecd.org/finance/private-pensions/annualsurveyofinvestmentregulationofpensionfunds.htm).

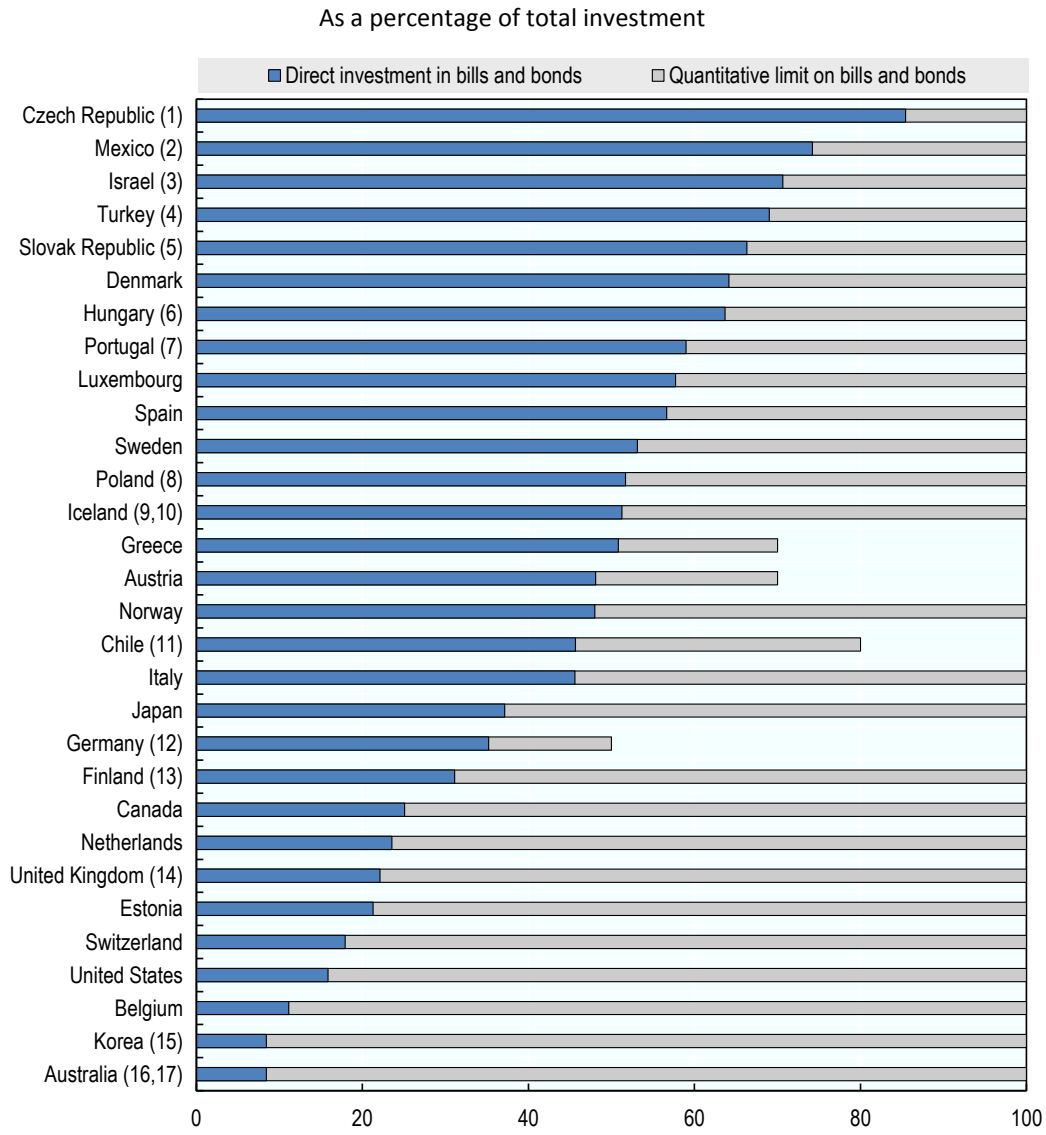
Figure 15. Portfolio limits on pension fund investment in shares in selected OECD countries, 2013



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics and OECD Annual Survey of Investment Regulation of Pension Funds.

Figure 16. Portfolio limits on pension fund investment in bills and bonds in selected OECD countries, 2013



Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics and OECD Annual Survey of Investment Regulation of Pension Funds.

Additional Tables and Methodological Notes

Table 3. Total investment of pension funds in OECD and selected non-OECD countries, 2003-2013

In millions of national currency

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
OECD countries											
Australia	537 781	602 742	720 624	874 383	1 152 641	1 097 855	1 040 770	1 162 314	1 304 524	1 357 550	1 573 128
Austria	9 339	10 370	11 726	12 743	13 150	12 546	14 063	15 217	14 764	16 306	18 253
Belgium	10 756	11 554	13 316	13 365	14 792	11 407	13 799	13 308	15 631	17 245	19 732
Canada	625 896	695 962	799 649	916 310	954 620	824 563	920 352	1 048 446	1 094 569	1 193 445	1 340 807
Chile	29 505 951	33 889 085	38 312 676	47 186 675	55 173 152	46 750 887	59 785 337	69 523 453	70 377 419	77 543 241	85 366 585
Czech Republic	80 223	99 803	123 417	145 948	167 197	191 705	215 871	232 422	247 509	273 198	297 428
Denmark	398 872	451 032	521 852	532 312	548 978	824 240	718 055	867 884	887 898	913 143	794 041
Estonia	71	172	298	480	709	735	952	1 071	1 134	1 481	1 771
Finland (1)	78 600	94 213	107 951	119 149	127 000	112 737	133 071	148 056	83 419	90 648	98 362
France	..	..	329	761	1 402	1 859	3 000	4 000	5 000	6 700	8 600
Germany (2)	78 679	83 835	90 590	97 843	112 763	117 884	126 361	134 846	149 094	167 585	170 744
Greece	..	..	..	..	25	34	45	53	73	86	98
Hungary (3)	986 276	1 415 969	1 863 200	2 309 891	2 766 268	2 567 247	3 412 000	3 964 528	1 060 484	1 111 079	1 187 403
Iceland	826 837	989 939	1 227 134	1 514 852	1 713 955	1 670 875	1 786 263	1 907 395	2 097 852	2 394 923	2 656 035
Ireland	55 451	62 334	77 933	87 744	86 602	63 519	72 200	75 500	72 300	80 500	91 500
Israel	139 043	148 069	188 424	201 125	223 454	306 418	356 459	397 740	429 721	483 765	529 948
Italy	32 562	35 544	39 845	44 594	50 140	53 691	62 509	70 810	76 853	87 643	95 837
Japan	137 006 300	125 571 300	136 705 300	132 529 200	131 531 200	115 852 600	125 736 100	122 079 000	118 590 300	125 252 700	140 178 600
Korea	11 771 111	13 188 395	15 007 017	25 341 376	27 684 625	30 593 454	37 779 083	46 386 464	55 080 899	68 134 772	86 072 668
Luxembourg (4)	..	93	320	354	374	390	844	799	832	902	959
Mexico (5)	401 536	481 897	832 071	1 051 817	1 125 979	1 229 261	1 407 867	1 665 112	1 852 060	2 193 025	2 370 177
Netherlands	482 623	531 077	619 550	671 880	772 452	670 244	679 856	760 115	815 868	931 525	1 002 031
New Zealand	15 673	16 836	17 683	20 231	19 781	19 388	22 008	27 158	31 374	34 756	40 426
Norway	103 086	114 161	130 541	146 739	160 435	153 541	175 191	194 170	201 427	219 759	248 723
Poland	44 952	62 576	85 745	117 803	141 348	139 609	181 354	223 013	229 022	274 204	302 897
Portugal (6)	16 284	15 186	18 982	21 185	22 356	20 282	21 918	19 725	13 237	14 471	15 158
Slovak Republic (7)	7	..	240	1 323	2 286	3 174	3 966	4 882	5 798	6 817	7 198
Slovenia	117	244	363	491	628	712	911	1 085	1 198	1 309	1 417
Spain	48 487	55 654	65 618	73 744	86 479	78 130	85 074	83 988	83 659	86 576	92 435
Sweden	189 494	193 737	248 169	268 355	266 606	232 922	255 868	316 205	321 753	373 398	345 391
Switzerland	450 281	484 044	542 629	583 267	605 459	538 524	598 930	621 234	625 295	672 785	718 069
Turkey	..	2 195	4 349	5 670	10 296	14 200	21 682	25 845	53 555	53 813	75 927
United Kingdom	719 638	800 692	970 275	1 087 902	1 092 671	927 723	1 124 262	1 289 071	1 444 019	1 603 292	1 625 058
United States	8 258 961	9 006 661	9 754 696	10 678 594	11 290 529	8 763 720	10 094 878	11 164 773	11 143 894	12 069 197	13 941 616
Selected non-OECD countries											
Albania (8)	..	..	..	..	45	93	154	203	155	284	436
Argentina (9)	46 885	54 168	67 483	88 838	93 540	0	0	0	0	0	0
Bolivia	11 692	13 815	16 558	18 343	22 177	27 275	32 477	38 219	..	..	..
Botswana	..	..	..	..	..	..	..	..	..	..	58 700
Brazil	..	..	..	423 775	436 565	412 506	485 678	539 093	573 018	645 527	644 860
Bulgaria	513	794	1 117	1 522	2 328	2 303	3 173	3 996	4 598	5 709	6 821
China (People's Republic of)	..	49 300	68 000	91 000	152 000	191 100	253 300	280 900	357 000	482 100	603 500
Colombia	20 341 995	26 447 502	38 872 137	43 338 555	64 867 218	69 025 803	67 015 269	87 911 524	104 916 828	120 856 919	128 639 830
Costa Rica	432 175	379 625	551 293	774 952	842 379	1 120 971	1 339 188	1 453 484	1 795 276	2 213 151	2 734 179
Croatia	5 282	8 770	11 668	16 377	21 814	23 539	30 628	38 088	43 036	53 563	60 940
Dominican Republic	1 257	6 035	13 013	21 615	32 852	48 962	68 366	90 935	118 120	153 637	..
Egypt	..	..	..	..	..	21 847	..	..	..	..	..
El Salvador	13 758	18 799	25 214	30 361	35 472	39 683	44 862	49 772	54 088	60 054	..
Former Yugoslav Republic of Macedonia	..	..	..	..	3 125	5 037	8 751	12 494	16 141	21 336	27 137
Gibraltar (10)	..	..	..	..	..	..	..	..	22	25	6
Hong Kong, China	226 474	297 655	342 604	409 693	502 445	467 535	522 448	606 941	617 087	700 104	797 614
India	..	..	..	..	..	..	..	150 000	151 696	298 540	..
Indonesia	47 410 000	55 370 000	60 900 000	74 960 000	87 904 869	..	..	..	136 543 778	..	..
Jamaica	..	98 533	..	131 916	173 912	196 410	222 402	259 067	282 981	290 388	304 712
Kenya	121 423	141 768	171 176	224 007	..	272 284	305 814	431 727	460 988	548 700	696 680
Kosovo	..	..	..	..	..	..	..	..	..	713	914
Latvia	45	74	119	179	..	..	92	109	113	139	166
Lesotho	..	..	..	..	..	..	..	..	2 216	2 617	..
Liechtenstein	..	..	..	..	2 235	2 266	2 728	3 472	3 527	3 597	3 953
Maldives	..	..	..	..	..	..	..	..	817	1 656	2 543
Malta (11)	..	..	..	..	..	..	..	..	35	575	1 227
Mauritius	..	..	..	..	..	..	..	..	..	6 924	7 975
Namibia	..	..	..	..	..	..	..	60 648	66 231	82 209	95 774
Nigeria	..	..	..	..	858 580	1 098 980	1 382 500	2 031 001	2 442 840	3 150 100	4 004 000
Pakistan (12)	..	..	..	..	648	735	1 008	1 375	1 842	3 232	6 089
Panama	..	..	53	77	103	123	146	178	218	..	..
Peru	22 097	26 032	32 676	46 148	61 280	50 740	70 279	87 974	81 881	96 853	102 382
Romania (13)	..	..	..	..	14	934	2 473	4 663	6 857	10 242	14 689
Serbia	..	..	..	226	3 057	4 662	7 222	9 912	12 493	16 366	19 747
South Africa	909 099	1 091 807	1 283 921	1 620 900	1 938 600	1 972 346	1 874 100	2 198 384	2 429 800	2 749 145	..
Suriname	368	590	641	721	..	..	..	..	..	..	..
Thailand	287 329	305 462	345 896	390 928	441 710	465 297	516 651	577 865	619 007	699 850	753 580
Trinidad and Tobago	..	..	..	21 164	23 400	25 843	30 291	34 521	28 572	32 561	..
Ukraine	..	..	..	..	..	612	..	1 144	1 387	..	..
Uruguay	36 100	44 222	51 889	63 096	72 757	69 941	100 183	134 505	154 517	196 813	..
Zambia	1 177	1 060	1 209	..	..	..	..	..	..	..	..

Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Table 4. Total investment of pension funds in OECD and selected non-OECD countries, 2003-2013

In millions of USD

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
OECD countries											
Australia	358 915	415 229	550 340	649 929	978 246	1 056 795	844 481	990 640	1 400 928	1 383 479	1 458 132
Austria	11 795	14 125	13 833	16 783	19 359	17 460	20 259	20 333	19 103	21 514	25 173
Belgium	13 585	15 737	15 708	17 601	21 775	15 875	19 879	17 783	20 225	22 753	27 213
Canada	484 290	578 234	686 689	786 329	966 116	673 333	879 373	1 047 504	1 072 056	1 199 201	1 260 157
Chile	49 224	60 535	74 508	88 293	111 277	74 313	118 053	148 437	134 962	162 021	162 988
Czech Republic	3 127	4 462	5 019	6 991	9 249	9 909	11 753	12 395	12 413	14 337	14 951
Denmark	66 952	82 492	82 518	94 025	108 167	155 961	138 351	154 612	154 535	161 358	146 700
Estonia	90	234	351	632	1 043	1 023	1 372	1 431	1 467	1 953	2 443
Finland (1)	99 272	128 328	127 350	156 919	186 957	156 896	191 702	197 832	107 936	119 601	135 651
France	..	..	388	1 002	2 064	2 587	4 322	5 345	6 470	8 840	11 860
Germany (2)	99 371	114 191	106 869	128 859	165 998	164 059	182 035	180 182	192 912	221 112	235 474
Greece	..	..	..	..	36	47	65	71	95	113	136
Hungary (3)	4 744	7 854	8 724	12 055	16 026	13 662	18 142	19 001	4 406	5 029	5 506
Iceland	11 647	16 218	19 485	21 139	27 711	13 857	14 302	16 579	17 096	18 567	22 986
Ireland	70 035	84 905	91 937	115 559	127 487	88 399	104 011	100 883	93 549	106 212	126 188
Israel	31 752	34 371	40 935	47 603	58 100	80 594	94 426	112 071	112 463	129 591	152 679
Italy	41 126	48 414	47 005	58 730	73 812	74 722	90 050	94 617	99 441	115 637	132 168
Japan	1 279 237	1 206 025	1 158 814	1 114 159	1 153 782	1 276 613	1 365 806	1 498 821	1 525 866	1 447 172	1 331 231
Korea	9 870	12 741	14 835	27 255	29 574	24 290	32 442	40 876	47 822	63 642	81 555
Luxembourg (4)	..	127	378	467	550	542	1 215	1 067	1 076	1 190	1 323
Mexico (5)	35 737	42 779	77 203	96 665	103 622	90 799	107 811	134 749	132 381	168 563	181 255
Netherlands	609 553	723 380	730 883	884 866	1 137 127	932 779	979 401	1 015 666	1 055 652	1 229 054	1 381 901
New Zealand	8 641	11 053	12 532	12 406	14 100	15 384	12 371	19 275	23 929	28 406	33 831
Norway	15 432	18 901	19 282	23 441	29 655	21 934	30 310	33 135	33 627	39 454	40 908
Poland	12 017	20 926	26 292	40 475	58 048	47 137	63 626	75 238	67 017	88 464	100 563
Portugal (6)	20 566	20 685	22 393	27 901	32 910	28 226	31 575	26 356	17 127	19 093	20 904
Slovak Republic (7)	8	..	283	1 743	3 366	4 417	5 713	6 523	7 503	8 994	9 926
Slovenia	148	333	429	647	924	991	1 313	1 450	1 550	1 727	1 954
Spain	61 239	75 806	77 410	97 121	127 306	108 734	122 558	112 225	108 247	114 228	127 478
Sweden	26 358	29 289	31 183	39 094	41 569	29 821	35 954	47 127	46 714	57 406	53 767
Switzerland	364 040	427 752	412 865	477 970	537 946	506 274	581 203	661 168	664 571	734 001	805 462
Turkey	..	1 639	3 233	4 024	8 794	9 309	14 543	16 769	28 284	30 200	35 543
United Kingdom	1 284 338	1 546 457	1 670 717	2 135 552	2 189 057	1 352 435	1 820 742	2 018 041	2 232 598	2 529 995	2 676 146
United States	8 258 961	9 006 661	9 754 696	10 678 594	11 290 529	8 763 720	10 094 878	11 164 773	11 143 894	12 069 197	13 941 616
Selected non-OECD countries											
Albania (8)	..	..	..	..	1	1	2	2	1	3	4
Argentina (9)	16 139	18 306	22 405	29 204	29 895	0	0	0	0	0	0
Bolivia	1 493	1 716	2 060	2 299	2 910	3 885	4 626	5 468	..	..	..
Botswana	..	..	..	..	..	..	..	..	..	..	6 731
Brazil	..	..	..	198 285	246 577	176 571	279 061	319 785	308 273	315 153	275 346
Bulgaria	331	553	674	1 025	1 749	1 660	2 326	2 714	3 042	3 848	4 807
China (People's Republic of)	..	5 957	8 426	11 654	20 809	27 961	37 096	42 413	56 659	76 650	98 896
Colombia	7 315	10 965	17 018	19 474	32 633	31 403	32 783	44 179	54 006	68 221	66 911
Costa Rica	1 033	828	1 110	1 496	1 691	2 018	2 369	2 833	3 507	4 355	5 453
Croatia	863	1 556	1 872	2 936	4 375	4 566	6 018	6 840	7 395	9 353	10 982
Dominican Republic	34	194	373	645	964	1 368	1 879	2 398	3 045	3 806	..
Egypt	..	..	..	..	..	3 969	..	..	..	..	..
El Salvador	1 572	2 148	2 882	3 470	4 054	4 535	5 127	5 688	6 181	6 863	..
Former Yugoslav Republic of Macedonia	..	..	..	..	75	116	205	270	340	457	608
Gibraltar (10)	..	..	..	..	..	..	..	..	35	39	10
Hong Kong, China	29 174	38 291	44 193	52 697	64 404	60 323	67 365	78 068	79 465	90 330	102 871
India	..	..	..	..	..	..	..	3 347	2 848	5 450	..
Indonesia	5 601	5 960	6 195	8 310	9 333	..	..	..	15 058	..	..
Jamaica	..	1 603	..	1 968	2 470	2 448	2 490	3 026	3 276	3 137	2 873
Kenya	1 595	1 833	2 365	3 228	..	3 504	4 033	5 346	5 419	6 380	8 072
Kosovo	..	..	..	..	..	..	..	..	..	940	1 260
Latvia	84	143	200	333	..	..	188	204	208	262	322
Lesotho	..	..	..	..	..	..	..	..	272	308	..
Liechtenstein	..	..	..	..	1 986	2 131	2 647	3 696	3 748	3 925	4 434
Maldives	..	..	..	..	..	..	..	..	53	108	165
Malta (11)	..	..	..	..	..	..	..	..	45	759	1 692
Mauritius	..	..	..	..	..	..	..	..	..	227	265
Namibia	..	..	..	..	..	..	..	9 145	8 134	9 670	9 130
Nigeria	..	..	..	..	7 278	8 290	9 242	13 481	15 435	20 288	25 799
Pakistan (12)	..	..	..	..	11	9	12	16	20	33	58
Panama	..	..	53	77	103	123	146	178	218	..	..
Peru	6 381	7 933	9 526	14 442	20 454	16 162	24 322	31 324	30 371	37 982	36 630
Romania (13)	..	..	..	..	6	330	842	1 455	2 053	3 051	4 513
Serbia	..	..	..	4	57	74	108	125	154	190	238
South Africa	136 913	193 927	202 991	232 554	284 670	211 966	253 943	331 501	298 395	323 385	..
Suriname	140	217	234	263	..	..	..	..	..	..	..
Thailand	7 257	7 820	8 430	10 845	13 100	13 333	15 506	19 165	19 532	22 847	22 965
Trinidad and Tobago	..	..	..	3 353	3 690	4 103	4 753	5 374	4 454	5 062	..
Ukraine	..	..	..	..	..	80	..	144	174	..	..
Uruguay	1 232	1 678	2 153	2 586	3 384	2 872	5 104	6 694	7 765	10 146	..
Zambia	253	222	344	..	..	..	..	..	..	..	..
Regional indicators											
Total OECD	13 332 070	14 749 880	15 885 086	17 864 829	19 632 284	15 812 898	18 034 037	19 992 973	20 587 912	22 322 103	24 745 764
Total selected non-OECD	217 410	301 850	333 505	601 147	756 677	583 802	762 196	944 881	939 583	1 033 229	691 034
Total G20 (14)	12 010 498	13 196 520	14 310 806	16 161 105	17 552 879	13 905 159	16 006 584	17 889 363	18 563 883	19 957 675	21 719 376
Euro area (15)	1 026 789	1 226 264	1 235 217	1 508 829	1 900 713	1 596 757	1 755 470	1 781 762	1 732 397	1 992 778	2 241 483
BRICS (16)	136 913	199 883	211 418	442 492	552 056	416 498	570 100	697 047	666 175	720 638	374 241
Latin America	120 300	148 902	209 524	462 520	563 725	410 601	588 524	710 134	688 441	785 309	731 456
Asia	1 362 891	1 312 803	1 285 062	1 276 548	1 357 907	1 492 432	1 627 197	1 811 548	1 888 071	1 866 023	1 825 962
Total World	13 549 480	15 051 731	16 218 592	18 465 976	20 388 961	16 396 699	18 796 233	20 937 853	21 527 495	23 355 332	25 436 798

Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

Table 5. Total investment of pension funds in OECD and selected non-OECD countries, 2003-2013

As a percentage of GDP

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
OECD countries											
Australia	67.1	69.8	78.1	87.5	106.1	93.1	82.5	89.5	92.7	91.4	103.3
Austria	4.2	4.4	4.8	4.9	4.8	4.4	5.1	5.3	4.9	5.3	5.8
Belgium	3.9	4.0	4.4	4.2	4.4	3.3	4.1	3.7	4.2	4.6	5.2
Canada	50.3	52.5	56.7	61.6	61.0	50.1	58.7	63.1	62.2	65.6	71.3
Chile	56.0	56.0	55.6	57.5	61.0	49.8	62.0	62.6	58.0	59.8	62.2
Czech Republic	3.0	3.4	4.0	4.4	4.6	5.0	5.7	6.1	6.5	7.1	7.7
Denmark	28.5	30.8	33.8	32.6	32.4	47.0	43.1	49.3	49.6	50.0	42.8
Estonia	0.8	1.8	2.7	3.6	4.4	4.5	6.8	7.5	7.0	8.5	9.6
Finland (1)	54.0	61.9	68.6	71.9	70.6	60.7	77.2	82.8	44.2	47.1	50.8
France	..	..	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.4
Germany (2)	3.7	3.8	4.1	4.2	4.6	4.8	5.3	5.4	5.7	6.3	6.2
Greece	..	..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Hungary (3)	5.3	6.9	8.5	9.8	11.1	9.7	13.3	15.0	3.8	4.0	4.1
Iceland	98.3	106.4	119.6	129.6	131.0	112.9	119.2	124.2	128.8	140.9	148.7
Ireland	39.4	41.5	47.8	49.4	45.7	35.2	44.5	47.8	44.5	49.1	55.8
Israel	24.8	25.1	30.2	29.9	31.1	40.1	44.0	45.9	46.5	48.7	50.4
Italy	2.4	2.5	2.8	3.0	3.2	3.4	4.1	4.6	4.9	5.6	6.1
Japan	27.5	24.9	27.1	26.2	25.6	23.1	26.7	25.3	25.2	26.4	29.3
Korea	1.5	1.6	1.7	2.8	2.8	3.0	3.5	4.0	4.5	5.4	6.5
Luxembourg (4)	..	0.3	1.1	1.0	1.0	1.0	2.4	2.0	2.0	2.1	2.1
Mexico (5)	5.2	5.5	8.8	10.0	9.9	10.0	11.7	12.6	12.8	14.1	14.8
Netherlands	101.2	108.1	120.7	124.4	135.1	112.7	118.6	129.5	136.2	155.4	166.3
New Zealand	11.7	11.8	11.5	12.5	11.6	10.5	11.9	14.3	15.8	16.8	19.1
Norway	6.5	6.5	6.7	6.7	7.0	6.0	7.4	7.6	7.3	7.6	8.3
Poland	5.3	6.8	8.7	11.1	12.0	10.9	13.5	15.7	15.0	17.2	18.6
Portugal (6)	11.3	10.2	12.3	13.2	13.2	11.8	13.0	11.4	7.7	8.8	9.1
Slovak Republic (7)	0.0	..	0.5	2.4	3.7	4.7	6.3	7.4	8.4	9.6	10.0
Slovenia	0.5	0.9	1.3	1.6	1.8	1.9	2.6	3.1	3.3	3.7	4.0
Spain	6.2	6.6	7.2	7.5	8.2	7.2	8.1	8.0	8.0	8.4	9.0
Sweden	7.4	7.3	9.0	9.1	8.5	7.3	8.2	9.5	9.2	10.5	9.5
Switzerland	99.9	104.0	113.3	114.8	112.0	94.8	108.0	108.5	106.9	113.7	119.0
Turkey	..	0.4	0.7	0.7	1.2	1.5	2.3	2.4	4.1	3.8	4.9
United Kingdom	62.7	66.0	76.0	80.6	76.5	63.5	79.3	86.8	94.0	102.9	100.7
United States	71.7	73.4	74.5	77.1	78.0	59.5	70.0	74.6	71.7	74.3	83.0
Selected non-OECD countries											
Albania (8)	..	..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Argentina (9)	12.5	12.1	12.7	13.6	11.5	0.0	0.0	0.0	0.0	0.0	0.0
Bolivia	18.9	19.8	21.5	20.0	21.5	22.6	26.7	27.7	..	..	..
Botswana	..	..	..	..	..	..	..	..	..	..	47.3
Brazil	..	..	..	17.9	16.4	13.6	15.0	14.3	13.8	14.7	13.3
Bulgaria	1.4	2.0	2.5	2.9	3.9	3.3	4.6	5.7	6.1	7.3	8.7
China (People's Republic of)	..	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.8	0.9	1.0
Colombia	7.5	8.6	11.4	11.3	15.0	14.4	13.3	16.1	16.9	18.2	18.2
Costa Rica	6.2	4.7	5.8	6.7	6.2	7.1	8.0	7.6	8.7	9.8	11.0
Croatia	2.3	3.5	4.4	5.6	6.9	6.9	9.3	11.8	13.1	16.3	18.6
Dominican Republic	0.2	0.7	1.3	1.8	2.4	3.1	4.1	4.8	5.6	6.6	..
Egypt	..	..	..	..	..	2.4	..	..	..	..	..
El Salvador	10.5	13.6	16.9	18.7	20.2	21.2	24.8	26.6	26.7	28.8	..
Former Yugoslav Republic of Macedonia	..	..	..	..	0.9	1.2	2.1	2.9	3.5	4.7	5.7
Gibraltar (10)	..	..	..	..	..	..	..	..	2.0	2.0	..
Hong Kong, China	18.0	22.6	24.3	27.3	30.4	27.4	31.5	34.2	31.9	34.4	37.5
India	..	..	..	..	..	..	..	0.2	0.2	0.3	..
Indonesia	2.4	2.4	2.2	2.2	2.2	..	..	..	1.8	..	..
Jamaica	..	15.8	..	16.8	19.6	19.7	20.9	22.4	22.8	22.1	21.3
Kenya	10.7	11.1	12.1	13.8	..	12.9	12.9	16.9	15.2	16.1	18.3
Kosovo	..	..	..	..	..	..	..	..	..	14.1	..
Latvia	0.7	1.0	1.3	1.6	..	..	0.7	0.9	0.8	0.9	1.0
Lesotho	..	..	..	..	..	..	..	..	12.3	13.7	..
Liechtenstein	..	..	..	..	40.5	41.2	55.6	65.2	65.3	65.8	..
Maldives	..	..	..	..	..	..	..	..	2.6	5.1	..
Malta (11)	..	..	..	..	..	..	..	..	0.5	8.4	17.0
Mauritius	..	..	..	..	..	..	..	..	..	2.0	..
Namibia	..	..	..	..	..	..	..	74.9	72.3	76.6	..
Nigeria	..	..	..	..	4.2	4.5	5.6	6.0	6.5	7.8	..
Pakistan (12)	..	..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Panama	..	..	0.3	0.5	0.5	0.5	0.6	0.7	0.7	..	..
Peru	10.4	10.9	12.5	15.3	18.3	13.6	18.4	20.2	16.8	18.4	18.7
Romania (13)	..	..	..	..	0.0	0.2	0.5	0.9	1.2	1.7	2.3
Serbia	..	..	..	0.0	0.1	0.2	0.3	0.3	0.4	0.5	0.5
South Africa	72.1	78.2	81.7	91.7	96.2	86.7	78.2	82.5	82.0	87.1	..
Suriname	11.1	14.5	13.1	10.0	..	..	..	..	..	..	..
Thailand	4.8	4.7	4.9	5.0	5.2	5.1	5.7	5.7	5.9	6.2	6.3
Trinidad and Tobago	..	..	..	18.3	17.1	14.7	25.0	26.3	18.9	21.8	..
Ukraine	..	..	..	..	..	0.1	..	0.1	0.1	..	..
Uruguay	10.6	11.3	12.2	13.4	13.2	11.0	14.6	17.2	16.9	19.4	..
Zambia	5.9	3.8	3.6	..	..	..	..	..	..	..	..

Note: For methodological notes see page 32 onwards.

Source: OECD Global Pension Statistics.

The primary source material for this report is provided by national pension authorities as part of the OECD Global Pension Statistics' framework (GPS). Within this project, the data are sourced from official national administrative sources and revised on an on-going basis so as to reflect better the most recent figures for every past year. Given possible divergences in national reporting standards and different methods for compiling certain data for the Global Pension Statistics exercise, some cautious needs to be exercised in interpreting some statistics. For this reason, countries are regularly requested to provide methodological information relevant for developing a thorough understanding of their submission under the GPS framework. The general and specific methodological notes below provide some explanations in this respect.

General notes

- Data include pension funds as per the OECD classification (Private Pensions: OECD Classification and Glossary, available at www.oecd.org/daf/pensions). All types of plans are included (occupational and personal, mandatory and voluntary) covering both public and private sector workers.

- Exchanges rates used are end-of-period exchanges rates for all variables valued at the end of the year, and period-average for variables representing a flow during the year. They come from the IMF International Financial Statistics database.

- Conventional signs: "n.d.", "..": not available; "n.a.": not applicable.

- Data for Australia refer to the end of June of each year.

- Data for pension funds in Estonia only refer to the mandatory funded pension system.

- Data for Germany only refer to Pensionsfonds and Pensionskassen.

- Data for 2013 for Greece are preliminary and do not include all the pension schemes.

- Data for Ireland come from the IAPF Pension Investment Survey.

- 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.

- Data for Japan come from the Bank of Japan.

- Data for occupational pension plans in Mexico in 2013 are preliminary.

- Data for the Netherlands are preliminary.

- Pension funds' assets in New Zealand represent an aggregate of assets in KiwiSaver plans (at the end of March of each year) and in employer superannuation schemes (at the end of March of each year for most of them).

- Data for pension funds in Slovenia only refer to the Slovenian mutual pension funds.

- Data for Switzerland refer to the first trend calculations for the year 2013.

- The figure for total assets of pension funds in the United Kingdom at the end of 2013 is an early estimate based on the 2012 level of assets and the flow of transactions in 2013. It does not take into account value changes. A 2013 final estimate will be available in January 2015.

- Data from Argentina, Bolivia, the Dominican Republic, El Salvador, Panama and Uruguay come from the International Association of Pension Funds Supervision (AIOS).

- Data for China come from the Ministry of Human Resources and Social Security (MOHRSS).

- Data for Croatia come from the Croatian Financial Services Supervisory Agency (HANFA).

Specific notes

Figure 1:
Book reserves are not included in this chart. Pension funds and insurance companies' assets include assets invested in mutual funds, which may be also counted in investment funds. In addition, insurance companies' assets include unit-linked assets. As 2013 annual data for investment funds, insurance companies and other institutional investors are not yet available, 2013 Q4 data have been used instead when available.
1. Data include Australia's Future Fund, Belgium's Zilverfonds (2008-2013), Canada Pension Plan Investment Board, Chile's Pension Reserve Fund (2010-2013), Japan's Government Pension Investment Fund, Korea's National Pension Service, New Zealand Superannuation Fund, Government Pension Fund - Norway, Poland's Demographic Reserve Fund, Portugal's Social Security Financial Stabilisation Fund, Spain's Social Security Reserve Fund, Sweden's AP1-AP4 and AP6, United States' Social Security Trust Fund.
2. Other forms of institutional savings include foundations and endowment funds, non-pension fund money managed by banks, private investment partnership and other forms of institutional investors.

Figure 2:
1. Data only refer to autonomous pension funds, and do not reflect the other types of vehicles for which data are not available.
2. Public buffer funds are excluded. Data for book reserves are not available. In addition, only the funded part of mandatory private pensions is included.
3. Data for the III pillar (including voluntary pension insurance contracts, but also voluntary pension funds) are classified under pension insurance contracts.
4. Data for pension insurance contracts are not available.
5. Data about book reserves are not available.
6. Technical provisions are considered as a proxy for the total assets of book reserve schemes.
7. All the companies managed by the Slovenian Insurance Supervision Agency are classified under pension insurance contracts.
8. Data only refer to Pensionskassen and occupational pension plans provided by insurance companies.

Figure 4:
1. For 2003, data for Turkey refer to 2004, data for France and Luxembourg refer to 2005 and data for Greece refer to 2007.

Figure 5:
1. Data refer to 2012.
2. Data refer to 2010.
3. Data refer to 2011.

Figure 6:
1. There are some personal plans in the country, but these plans are managed by other entities that are not considered as pension funds (e.g. insurance companies or investment companies managed funds).

Figure 7:
1. Data refer to occupational pension plans only.
2. Data refer to pension funds under the supervision of the CSSF only.

Figure 8:
Data have been calculated using a common formula for the average nominal net investment return (ratio between the net investment income at the end of the year and the average level of assets during the year).
Average real net investment returns have been calculated using the nominal net investment return (as described in Box 1) and the variation of the end-of-period consumer price index between 2012 and 2013 for all countries, except for Korea and Sweden, for which values have been provided by the countries.
The 2012-Q2 and 2013-Q2 consumer price index per year have been used for Australia, while 2012-Q1 and 2013-Q1 index have been used for New Zealand.

1. The revaluation of assets is taken as a proxy for net investment income. Only equity and mutual fund holdings have revaluations for the state and local and federal plans while the private plans revaluations also include gains on real estate and unallocated insurance contracts. There is no correction in the data for interest or dividend income, or capital gains on bonds or other securities.
2. Investment return net of taxes.
3. Data refer to personal pension plans only.

Table 1:
1. Data refer to personal plans only.
2. The average annual returns have been calculated over the period March 2007-March 2013.
3. The average annual returns have been calculated over the period June 2007-June 2013.

Figure 9:
Data have been calculated using a common formula for the average nominal net investment return (ratio between the net investment income at the end of the year and the average level of assets during the year).
Average real net investment returns have been calculated using the nominal net investment return (as described in Box 1) and the variation of the end-of-period consumer price index between 2012 and 2013 for all countries, except for:
- Romania, Hong Kong, China, Malta and Russia, for which values have been provided by the countries;
- Bolivia, El Salvador, Peru, the Dominican Republic and Uruguay where the source is AIOS.

1. The rate of return is nominal, not adjusted for the variation of consumer price index.
2. Data only refer to the MPF system.

Table 2:
1. Data only refer to the MPF system.

Figure 10:
The GPS database provides information about investments in Collective Investment Schemes and the look-through Collective Investment Schemes in cash and deposits, bills and bonds, shares and other. When the look-through was not provided by the countries, estimates were made assuming that mutual funds' investment allocation in cash and deposits, bills and bonds, shares and other was the same as pension funds' direct investments in these categories. Therefore, asset allocation data in this Figure include both direct investment in shares, bills and bonds and indirect investment through Collective Investment Schemes.
1. The "Other" category includes loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in cash, bills and bonds, or shares) and other investments.
2. Source: Australian Bureau of Statistics (ABS). Data refer to the end of June 2013. The high value for the "Other" category is driven mainly by net equity of pension funds in life office reserves (14% of total investment).
3. Market or fair values of derivatives held are negative in 2013 and are excluded from the asset allocation.
4. The high value for the "Other" category is driven mainly by land and buildings (13% of total investment).
5. The high value for the "Other" category is driven mainly by other investments of collective investment schemes (17% of total investment).
6. The high value for the "Other" category is driven mainly by land and buildings (direct and indirect investment in this category accounts for 17% of total investment).
7. Data refer to 2012.
8. The high value for the "Other" category is driven mainly by land and buildings (direct and indirect investment in this category accounts for 18% of total investment).
9. The high value for the "Other" category is driven mainly by unallocated insurance contracts (22% of total investment).
10. Data refer to personal pension plans only.
11. The high value for the "Other" category is driven mainly by outward investments in securities (21% of total investment) and accounts payable and receivable (19% of total investment).
12. The high value for the "Other" category is driven mainly by loans (16% of total investment) and other investments of collective investment schemes (16% of total investment).
13. The high value for the "Other" category is driven mainly by unallocated insurance contracts (32% of total investment).

Figure 11:
The GPS database provides information about investments in Collective Investment Schemes and the look-through Collective Investment Schemes in cash and deposits, bills and bonds, shares and other. When the look-through was not provided by the countries, estimates were made assuming that mutual funds' investment allocation in cash and deposits, bills and bonds, shares and other was the same as pension funds' direct investments in these categories. Therefore, asset

allocation data in this Figure include both direct investment in shares, bills and bonds and indirect investment through Collective Investment Schemes.
1. The "Other" category includes loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in cash, bills and bonds, or shares) and other investments.
2. Data only refer to mandatory provident fund (MPF) schemes and MPF-exempted occupational retirement schemes (ORSO schemes).
3. Only one pension scheme is covered in 2013.
4. The high value for the "Other" category is driven mainly by land and buildings (12% of total investment).
5. Data refer to 2012.
6. The high value for the "Other" category is driven mainly by land and buildings (19% of total investment) and unallocated insurance contracts (9% of total investment).
7. Data only refer to the funds supervised by the Pension Funds Act. The high value for the "Other" category is driven mainly by unallocated insurance contracts (50% of total investment).
8. Data refer to 2011.
9. Other investments include short-term receivables.
10. The high value for the "Other" category is driven mainly by unallocated insurance contracts (18% of total investment).

Figure 12:
1. Data refer to direct holding of shares only.
2. Data refer to personal pension plans only.
3. Source: Australian Bureau of Statistics (ABS). Data refer to the period June 2007-June 2013.
4. The variation has been calculated over the period 2007-2012.

Figure 13:
1. Data refer to direct holding of bills and bonds only.
2. Data refer to personal pension plans only.
3. The variation has been calculated over the period 2007-2012.
4. Source: Australian Bureau of Statistics (ABS). Data refer to the period June 2007-June 2013.

Figure 14:
1. Data refer to pension funds under the supervision of the CSSF only, in 2011.
2. Data refer to 2012.
3. Foreign investments refer to outward investments in securities.
4. Data refer to personal pension plans only.

Figure 15:
1. Source for direct investment in bills and bonds: Australian Bureau of Statistics.
2. Australia does not prescribe specific portfolio limits. However, as diversification of assets is required, trustees must consider diversification in making asset allocations.
3. The value provided for direct investment in shares refers to the investment of pension funds managing personal pension plans. Investment limit refers to the maximum allowed allocation in listed equities set up for open pension funds (OPF) at the end of 2013. Since February 2014, the OPF must invest at least 75% of their portfolio in listed equities.
4. Investment limit refers to the limit set up on listed equity for statutory pension plans.
5. Investment limit refers to Basic Fund 5.
6. Investment limit refers to Fund A.
7. Information refers to 2012.
8. Investment limit refers to shares issued by listed companies in OECD/EU countries.
9. Direct investment in shares refers to the investment of pension funds managing personal pension plans only.
10. Data only refer to occupational pension funds.
11. Data only refer to personal retirement saving funds established as pension funds.
12. Investment limit refers to privately managed mandatory pension system.
13. Investment limit refers to Pensionskassen.
14. Investment limit refers to transformed pension scheme.
15. Investment limit refers to corporate DB plans only.
16. Data only refer to ASSEP and SEPCAV, supervised by the CSSF.

Figure 16:
1. Investment limit refers to transformed pension scheme.

2. The most conservative Basic Fund (SB1) must invest at least 51% of its asset under management in inflation-linked (protected) debt.
3. The new pension funds and the old pension funds must invest 30% in earmarked bonds.
4. Direct investment in bills and bonds refers to the investment of pension funds managing personal pension plans only.
5. Investment limit refers to privately managed mandatory pension system.
6. There is no limit for government bonds, but a 10% limit for Hungarian corporate bonds, a 10% limit for Hungarian municipalities bonds and 25% for mortgage bonds.
7. Data only refer to personal retirement saving funds established as pension funds.
8. The value provided for direct investment in bills and bonds refers to the investment of pension funds managing personal pension plans. Investment limit refers to the maximum allowed allocation in treasury bonds set up for open pension funds (OPF) at the end of 2013. Since February 2014, treasury bonds and state-backed bonds are no longer allowed in OPF's investment portfolio.
9. Data only refer to occupational pension funds.
10. There is no limit on bonds issued by the government.
11. Investment limit refers to Fund E for government bonds.
12. Investment limit refers to Pensionskassen.
13. Investment limit refers to statutory pension plans.
14. Information refers to 2012.
15. Investment limit refers to corporate DB plans only.
16. Source for direct investment in bills and bonds: Australian Bureau of Statistics.
17. Australia does not prescribe specific portfolio limits. However, diversification of assets is required, trustees must consider diversification in making asset allocations.

Tables 3-5:

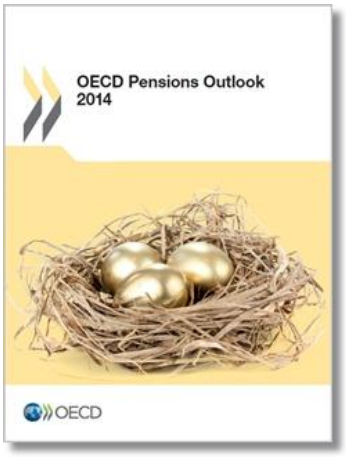
1. The break in series in 2011 is due to the exclusion of public buffer funds which were included before. In addition, only the funded part of mandatory private pensions is included.
2. There is a change in the valuation method of assets in 2011: before 2010, data are expressed at book-value, whereas they are at mark-to-market as of 2011.
3. As a result of a pension reform, the assets of mandatory pension funds decreased in 2011, while voluntary pension fund assets did not change significantly.
4. The break in series in 2005 is due to the inclusion of the pension funds supervised by the CSSF, not included in the previous years.
5. The break in series in 2005 is due to the inclusion of occupational pension plans registered by the National Commission for the Retirement Savings System (CONSAR) since 2005, not included in the previous years.
6. In 2011, the assets of the pension funds under the ISP supervision decreased by about 33%, reflecting the transfer of bank pension funds (i.e. pension funds sponsored by banks, which have as beneficiaries the employees of their banks) to the Public Retirement System.
7. The break in series in 2006 is due to the inclusion of voluntary pension plans, not included in the previous years.
8. The drop in total investment in 2011 is due to three factors: change in legislation, withdrawals and the unavailability of data from one of the three funds, which has been operating under the old framework.
9. The drop in 2008 is due to a pension reform transferring pension funds' assets to the National Social Security Administration.
10. Data cover two pension schemes in 2011 and 2012, while only one pension scheme is covered in 2013.
11. The marked increase in the value of pension funds' investments in 2012 is due to an increase in the number of schemes and a substantial increase in the number of members of the schemes.
12. The increase in value of pension assets in 2012 is due to favourable market conditions (the stock market), positive changes in the tax law (regarding tax credit to individuals who contribute to a pension fund) and increased awareness about private pension funds.
13. The increase of pension funds' assets between 2011 and 2012 is due to the increase of pension funds' members, contributions and positive returns.
14. Excluding Saudi Arabia and the Russian Federation.
15. This includes the list of countries that are members of the Euro Area at the end of 2013.
16. Excluding the Russian Federation.

Table 6. OECD classification of pension plans by financing vehicles

FINANCING TYPES	
Pension funds (autonomous)	The pool of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal personality (such as a trust, foundation, or corporate entity) or a legally separated fund without legal personality managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members.
Book reserves (non-autonomous)	Book reserves are sums entered in the balance sheet of the plan sponsor as reserves or provisions for pension benefits. Some assets may be held in separate accounts for the purpose of financing benefits, but are not legally or contractually pension plan assets.
Pension insurance contracts	An insurance contract that specifies pension plan contributions to an insurance undertaking in exchange for which the pension plan benefits will be paid when the members reach a specified retirement age or on earlier exit of members from the plan.
Other	Other type of financing vehicle not included in the above categories.
PENSION PLAN TYPES	
Occupational pension plans	Access to such plans is linked to an employment or professional relationship between the plan member and the entity that establishes the plan (the plan sponsor). Occupational plans may be established by employers or groups thereof (e.g. industry associations) and labour or professional associations, jointly or separately. The plan may be administered directly by the plan sponsor or by an independent entity (a pension fund or a financial institution acting as pension provider). In the latter case, the plan sponsor may still have oversight responsibilities over the operation of the plan.
Personal pension plans	Access to these plans does not have to be linked to an employment relationship. The plans are established and administered directly by a pension fund or a financial institution acting as pension provider without any intervention of employers. Individuals independently purchase and select material aspects of the arrangements. The employer may nonetheless make contributions to personal pension plans. Some personal plans may have restricted membership.
Defined benefit (traditional)	Occupational plans other than defined contributions plans. • 'Traditional' DB plan: a DB plan where benefits are linked through a formula to the members' wages or salaries, length of employment, or other factors.
Defined benefit (hybrid / mixed)	Occupational plans other than defined contributions plans. • 'Hybrid' DB plan: a DB plan where benefits depend on a rate of return credited to contributions, where this rate of return is either specified in the plan rules, independently of the actual return on any supporting assets (e.g. fixed, indexed to a market benchmark, tied to salary or profit growth, etc), or is calculated with reference to the actual return of any supporting assets and a minimum return guarantee specified in the plan rules. • 'Mixed' DB plan: A DB plan that has two separate DB and DC components but which are treated as part of the same plan.
Defined contribution (protected)	A personal pension plan or occupational defined contribution pension plan other than an unprotected pension plan. The guarantees or promises may be offered by the pension plan/fund itself or the plan provider (e.g. deferred annuity, guaranteed rate of return).
Defined contribution (unprotected)	A personal pension plan or occupational defined contribution pension plan where the pension plan/fund itself or the pension provider does not offer any investment return or benefit guarantees or promises covering the whole plan/fund.

Source: OECD (2005), Private Pensions: OECD Classification and Glossary.

In Brief

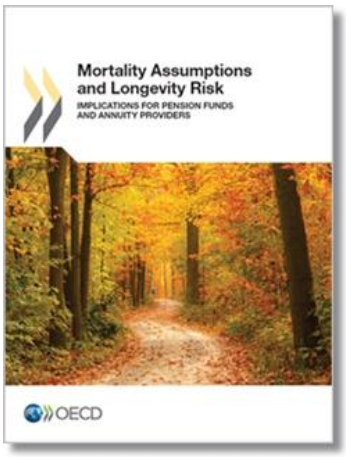


OECD Pensions Outlook 2014

Pension systems are facing crucial and far-reaching challenges. The present economic environment, characterised by low returns on investment, low growth and low interest rates is compounding the problems posed by population ageing by creating sustainability problems for pay-as-you-go financed public pensions, solvency issues for defined benefit plans and adequacy challenges for defined contribution pensions.

This publication scrutinises the impact of the financial crisis on pension reform while highlighting key areas where further change should be considered to strengthen the regulatory framework overall. It looks at recent pension reforms, the role of private pensions in retirement savings, longevity risk and initiatives to increase coverage, with the final chapter setting out the importance of communication campaigns to convey the need for reform and ensure that individuals make optimal choices regarding their retirement savings.

http://oe.cd/pensionsoutlook



Mortality Assumptions and Longevity Risk - Implications for pension funds and annuity providers

Pension funds and annuity providers need to effectively manage the longevity risk they are exposed to. Individuals receiving a lifetime income may live longer than expected or accounted for in the actuarial calculations to provision for these liabilities. Mismanaged longevity risk can deteriorate finances, cause bankruptcy and expose individuals to the risk of losing their retirement income. To safeguard against this risk, pension funds and annuity providers must provision for future improvements in mortality and life expectancy. The regulatory framework can support the effective management of longevity risk.

This publication assesses how pension funds, annuity providers such as life insurance companies, and the regulatory framework account for future improvements in mortality and life expectancy.

The study then examines the mortality tables commonly used by pension funds and annuity providers against several well-known mortality projection models with the purpose of assessing the potential shortfall in provisions. The final part of the publication identifies best practices and discusses the management of longevity risk, putting forward a set of policy options to encourage and facilitate the management of longevity risk.

www.oecd.org/pensions/mortalityandlifeexpectancy-longevityrisk.htm

Pension Markets in Focus 2014

Published annually, Pension Markets in Focus reports on the role and functioning of private pension arrangements. It identifies trends in private pension financial indicators such as asset growth, investment strategies and rates of returns. It provides accurate, comprehensive, comparable and up-to-date statistics to help policy makers, regulators and market participants measure, compare and evaluate programme developments and country experiences globally.

www.oecd.org/daf/pensions/pensionmarkets

OECD