Pension Funds in Figures

May 2015

Pension funds' assets in 2014 top USD 25 trillion in OECD countries

Preliminary data and early estimates for 2014 show that pension funds' assets exceeded USD 25 trillion in OECD countries (Table 1). In all the OECD countries except Poland, pension funds' assets grew between the end of 2013 and the end of 2014. The largest increases are found in Estonia, Korea, Luxembourg and Turkey where pension funds' assets rose by more than 20%, compared to their levels in December 2013. On the contrary, in Poland, pension fund assets decreased by more than 50%, probably due to the reversal of the mandatory funded pension system that led to a transfer of domestic sovereign bonds held by open pension funds into the social security system.

The five biggest countries in the OECD area in terms of pension funds' assets were the United States, the United Kingdom, Australia, Canada and the Netherlands, altogether totalling USD 21.7 trillion or more than 85% of OECD pension funds' assets.

Table 1. Total investment of pension funds in selected OECD and non-OECD countries, 2014 (preliminary)

Country	Total investment			% change (in national currency) since Dec 2013	Change in pp. of GDP since Dec 2013
	millions of national currency	millions of USD	% of GDP		
Australia	1,789,800	1,685,992	113.1	13.8	9.6
Austria	19,011	23,081	5.8	9.4	0.4
Belgium	20,308	24,656	5.0	11.1	0.4
Canada	1,461,819	1,304,264	74.7	9.1	3.9
Chile	100,479,815	165,432	68.3	17.7	6.0
Czech Republic	339,204	14,855	8.0	14.0	0.7
Denmark	932,586	152,348	48.6	17.4	6.5
Estonia	2,204	2,676	11.3	24.5	1.8
Finland	92,738	112,593	45.5	6.2	2.2
France	10,300	12,505	0.5	19.8	0.1
Germany (e)	193,034	234,363	6.6	12.2	0.5
Hungary	1,306,716	5,043	4.1	10.0	0.1
Iceland	2,916,817	22,985	146.3	9.8	5.1
Ireland (e)	108,723	132,000	58.6	18.8	6.3
Israel	597,144	153,547	54.9	12.4	4.2
Italy	106,200	128,937	6.6	10.8	0.6
Korea	108,593,027	98,784	7.3	26.2	1.0
Japan	147,360,700	1,221,491	30.2	5.1	1.3
Luxembourg	1,493	1,813	3.2	55.7	1.1
Mexico	2,373,381	161,257	13.9	15.7	1.2
Netherlands	1,055,934	1,282,009	161.1	5.4	5.2
Norway	274,442	36,937	8.7	10.3	0.6
Poland	150,200	42,826	8.7	-50.2	-9.4
Portugal	17,141	20,811	9.9	13.1	1.0
Slovak Republic	7,870	9,555	10.5	9.3	0.7
Slovenia	1,575	1,912	4.2	11.2	0.3
Spain	100,150	121,592	9.5	8.3	0.7
Sweden	156,676	20,251	4.0	10.6	0.3
Switzerland (e)	814,029	823,000	125.6	13.0	12.3
Turkey	34,645	14,927	2.0	38.2	0.4
United Kingdom	1,720,509	2,685,370	96.0	0.8	-3.6
United States	14,733,958	14,733,958	84.6	5.7	1.5
Other OECD (e)		40,644	19.6	14.2	1.0
OECD (e)		25,492,416	86.0	6.6	2.2

Country	Total investment			% change (in national currency) since Dec 2013	Change in pp. of GDP since Dec 2013
	millions of national currency	millions of USD	% of GDP		
Albania	581	5	0.0	33.2	0.0
Armenia	12,031	25	0.3	↗	0.3
Brazil	665,301	250,528	12.0	3.2	-1.3
Bulgaria	8,185	5,089	10.0	20.0	1.2
Colombia	152,316,974	63,665	19.8	18.4	1.6
Costa Rica	3,153,594	5,846	11.8	15.3	0.8
Dominican Republic	281,266	6,337	10.1	22.3	1.0
Egypt	39,659	5,550	2.0	12.4	0.1
FYR of Macedonia	33,582	664	6.4	23.7	0.7
Hong Kong, China	854,859	110,226	38.1	7.0	0.6
India	726,098	11,465	0.6	72.0	0.2
Jamaica	326,136	2,898	21.7	7.0	0.4
Kenya	750,019	8,559	14.0	7.7	-0.6
Kosovo	1,094	1,328	19.9	18.0	2.5
Latvia	282	342	1.7	19.6	0.2
Liechtenstein	4,900	4,954	79.4	14.5	9.4
Lithuania	6,613	2,330	18.2	18.6	0.7
Malawi	241,273	512	13.3	35.6	3.8
Pakistan	9,845	98	0.0	61.7	0.0
Romania	20,172	5,471	3.0	37.3	0.7
Russia	3,964,269	100,650	5.6	3.4	-0.1
Serbia	23,654	238	0.6	19.8	0.1
Thailand	841,514	25,529	6.9	11.7	0.6
Selected non-OECD		612,311	16.5	8.3	-0.1

"pp." means percentage points; "e" estimate; "↗" large increase.

Note: For methodological notes, see the end of this factsheet.

Source: OECD Global Pension Statistics; European Central Bank, Insurance Corporations & Pension Funds Statistics (Belgium); the French Asset Management Association; Towers Watson, *Global Pension Assets Study 2015* (Ireland, Switzerland); Bank of Japan.

This first issue of **Pension Funds in Figures** provides a short preview of how autonomous pension funds fared in 2014 based on preliminary data and early estimates. More developed analysis based on the final data collected for 2014 will be published in the 12th issue of **Pension Markets in Focus**, scheduled for release in September 2015. An Excel file of the underlying data can be found at www.oecd.org/daf/pensions/pensionmarkets.

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The OECD weighted average asset-to-GDP ratio reached 86.0%. Five OECD countries achieved asset-to-GDP ratios above this average: the Netherlands (161%), Iceland (146%), Switzerland (126%), Australia (113%) and the United Kingdom (96%). In 16 OECD countries, the market value of assets accumulated in pension funds relative to the size of their economies was below 10%. In most OECD countries, pension funds' assets have increased at a higher pace than GDP since December 2013.

Among the 23 selected non-OECD countries in Table 1, the same upward trend of pension funds' assets can be observed between 2013 and 2014. Albania, India, Malawi, Pakistan and Romania experienced an increase of more than 30% since December 2013. The funded pension system is also expanding in Armenia with the introduction of mandatory contribution to pension funds at the beginning of 2014

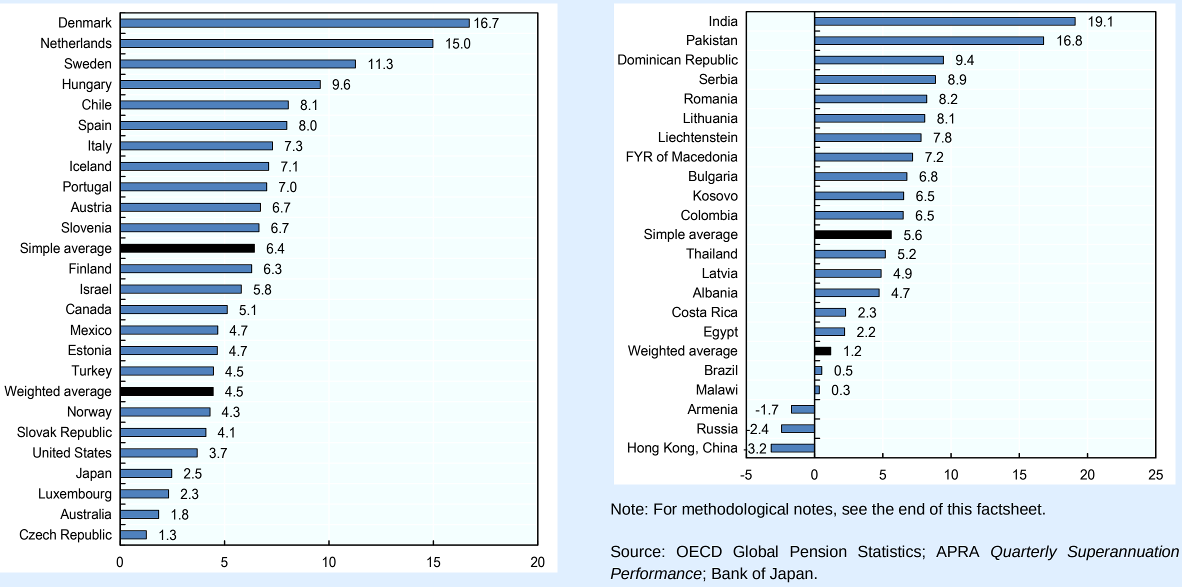
Positive real investment returns account for the increase in pension funds' assets

Pension funds in all the reporting OECD countries recorded positive real returns between December 2013 and December 2014, ranging from 1.3% in the Czech Republic to 16.7% in Denmark, with an OECD weighted average at 4.5%. The simple average is higher, at 6.4%. More than one third of OECD countries experienced real returns higher than 5%. The positive preliminary estimates for the real rate of return of pension funds' assets could be partially explained by: i) the good performance in stock markets (the MSCI World Index reports an increase of 5.5% in 2014); ii) the falling interest rates, which increase the market value of pension funds' fixed-income assets. The low-yield environment may however also increase the actuarial value of the liabilities of the defined benefit pension plans (see the analysis in the forthcoming OECD *Business and Finance Outlook 2015*).

Outside the OECD area, pension funds in most of the reporting countries also performed positively, but with returns lower than for the OECD area on average. India experienced the highest performance at 19.1%. Three jurisdictions experienced negative returns: Armenia, Hong-Kong (China) and the Russian Federation. High inflation during 2014 in Armenia (4.6%) and the Russian Federation (6.3%) could account for the negative real performance of pension funds in these two countries. The negative real return of mandatory provident fund schemes in Hong-Kong, China is linked to the combined effect of a high inflation rate (4.8%) and weak performance of some Asian equity markets over the December 2013 – December 2014 period.

Figure 1. Pension funds' real net investment rate of return in selected OECD and non-OECD countries, Dec 2013 - Dec 2014 (preliminary)

In per cent



Note: For methodological notes, see the end of this factsheet.

Source: OECD Global Pension Statistics; APRA *Quarterly Superannuation Performance*; Bank of Japan.

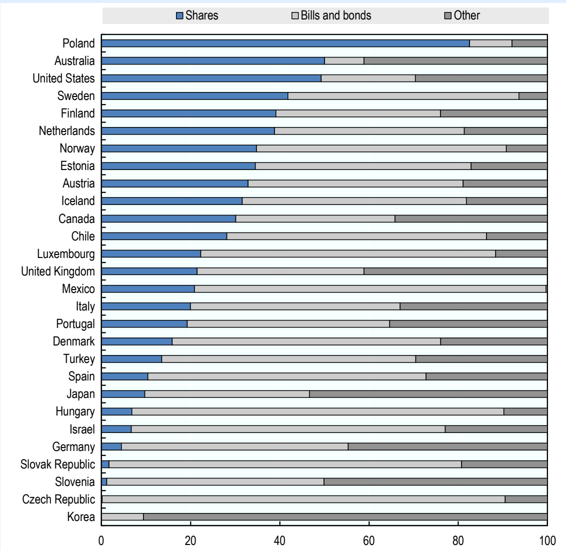
Shares and bonds dominate pension funds' portfolios in almost all countries

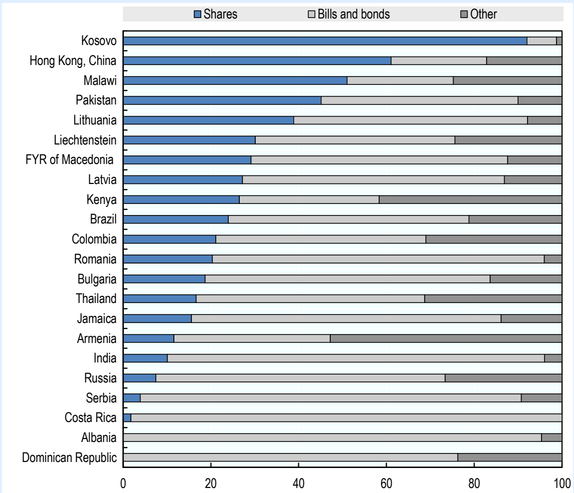
In almost all the reporting countries, shares and bonds remained the main instruments for investment. Pension funds in Australia and Poland, and Kosovo, Hong-Kong (China) and Malawi, had more than half of their portfolio invested in shares. Pension funds in the United States also invested a high proportion of their portfolio in shares (49.3%). In six European countries, mostly in Central and Eastern Europe (Albania, Czech Republic, Hungary, Romania, Serbia, and Slovak Republic), three Latin American countries (Costa Rica, Dominican Republic and Mexico) and India, pension funds favoured bills and bonds, with more than 75% of their portfolios invested in this asset class.

A few countries invested significantly in classes other than bills and bonds, and shares, e.g. Australia (7% in land and building and 14% in net equity of life office reserves), Korea (51% in cash and deposits), and Germany (usually around 20% in loans). Korean pension funds chose to invest mainly in deposits and guaranteed interest contracts. This may be due to several factors such as: the search for sufficient returns to cover promises; the limits imposed by regulation. Korean occupational pension plans cannot hold more than 30% of their assets in listed equity for DB plans; and, cannot hold equity at all for DC plans. More information concerning the investment regulation of pension funds can be found in the OECD *Annual Survey of Investment Regulation of Pension Funds*.

Figure 2. Pension fund asset allocation in selected asset classes in selected OECD and non-OECD countries, 2014 (preliminary)

As a percentage of total investment





Note: For methodological notes, see the end of this factsheet.

Source: OECD Global Pension Statistics; Australian Bureau of Statistics; Bank of Japan.

METHODOLOGICAL NOTES TO BE TAKEN INTO CONSIDERATION WHEN INTERPRETING THE DATA

Within the framework of the OECD Global Pension Statistics' project the data sources are national pension authorities. Data provided in this note are preliminary and may be revised in the newsletter *Pension Markets in Focus*, No.12.

Data only cover autonomous 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.

General notes:

In this factsheet: data for Estonia only refer to the mandatory funded system; data for Finland only cover the five largest private pension insurers, which provide pension insurance in the main mandatory occupational pension scheme (TyEL); German figures only include data of "Pensionskassen" and "Pensionsfonds" supervised by BaFin; data for Mexico only cover personal pension plans; data for Slovenia only cover mutual pension funds; data for Sweden only cover 11 occupational pension institutes; data for Turkey only refer to personal pension plans; data for India only cover National Pension System (NPS) schemes; data for Pakistan only cover private pension funds under the supervision of the Securities and Exchange Commission. Data for Hong-Kong, China cover Mandatory Provident Fund (MPF) schemes and Occupational Retirement Schemes (ORSO schemes) managed by pension funds and insurance companies.

Table 1:

Pension funds' assets in Greece and New Zealand, for which no value was available for 2014, have been estimated by using an ARMA model with a transfer function based on the GDP of these countries.

Data refer to the end of December 2014, except for Australia (end of Q2) and Canada (end of Q3) among OECD countries, and Albania (end of Q3), Egypt (end of Q2), Jamaica (end of Q3), Kenya (end of Q2) and the Russian Federation (end of Q3) among selected non-OECD countries.

GDP's 2014 values or forecasts are extracted from the OECD Main Economic Indicators database, the IMF International Financial Statistics database and the IMF *World Economic Outlook, April 2015*. The Liechtenstein's 2014 GDP is a forecast coming from the 2014 report of Liechtenstein's economic research centre.

The change in the values of assets is given for June 2013 - June 2014 for Australia, New Zealand and Egypt.

Under "OECD" and "Selected non-OECD" are reported the total amount of assets held in 2014 in millions of USD, the weighted average of assets as a percentage of GDP, and the weighted average of the change - in the value in national currency, and in percentage points of GDP - since December 2013 in these two geographical areas. The change of assets since December 2013 in Armenia, which is very large because of the introduction of mandatory contribution to pension funds in 2014, is not taken into account in the weighted average for the selected non-OECD countries.

Figure 1:

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) for all the countries, except for Australia, Austria, Finland, Iceland, Israel, Italy, Luxembourg, Slovak Republic, Armenia, Hong-Kong (China) and Lithuania for which values have been provided by the countries or come from national official publications.

Average real net investment returns have been calculated using the nominal investment rate of return (as described above) and the variation of the end-of-period consumer price index for the same period over which the nominal return is calculated, i.e. between June 2013 and June 2014 for Egypt, between December 2013 and June 2014 for Australia, between December 2013 and September 2014 for Canada, Albania and the Russian Federation, and between December 2013 and December 2014 for all the other countries.

The result only refers to: new pension funds for Israel; contractual pension funds for Italy; pension funds under the supervision of the Insurance Commission for Luxembourg; MPF schemes for Hong-Kong (China). The result for Liechtenstein is nominal.

Figure 2:

The "Other" category includes cash and deposits, loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in bills and bonds, or shares) and other investments. 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 these figures include both direct investment in shares, bills and bonds and indirect investment through Collective Investment Schemes, except for Colombia and Slovenia where all mutual funds' investments are included in "Other". Data for Hong-Kong, China do not include non-MPF exempted ORSO registered schemes. The high value for the "Other" category in Japan is mainly driven by outward investments in securities and accounts payable and receivable.