



# Pension Funds in Figures



June 2016

## Pension fund investments down slightly in 2015

Preliminary data for 2015 show that aggregated pension fund investments in the OECD area total USD 24.8 trillion, down slightly on the 2014 total of USD 25.2 trillion in [Pension Markets in Focus](#) (see Table 1).

However, when pension fund investments are expressed in national currency, they grew in all countries in 2015, with the exception of Denmark, Luxembourg, Poland and the United States. The overall decline in the total OECD pension fund investments is largely driven by the decline in the United States, which represented 58% of all pension fund investments in the OECD area. In addition, the growth rate of pension fund investments was below 2% in Japan, the Netherlands and the United Kingdom, representing altogether a further 22% of investments within the OECD area.

**Table 1. Total investment of pension funds and all retirement vehicles, 2015 (preliminary)**

	Pension funds					All retirement vehicles % of GDP	Pension funds					All retirement vehicles % of GDP	
	millions of national currency	millions of USD	% of GDP	% change	% of all retirement vehicles		millions of national currency	millions of USD	% of GDP	% change	% of all retirement vehicles		
Australia	1,894,431	1,454,923	117.7	10.1	97.1	121.2	Albania	930	7	0.1	47.2	100.0	0.1
Austria	19,646	21,389	5.8	3.3	..	..	Armenia	31,540	65	0.6	159.7	100.0	0.6
Belgium	24,117	27,018	5.9	8.5	..	..	Brazil	681,627	174,588	11.5	1.7	61.0	18.9
Canada	1,583,494	1,182,241	79.8	5.2	50.8	157.0	Bulgaria	9,394	5,248	10.9	14.8	100.0	10.9
Chile	109,433,421	154,711	69.6	8.9	100.0	69.6	Colombia	163,672,394	51,968	20.4	7.5	100.0	20.4
Czech Republic	373,069	15,029	8.3	10.0	100.0	8.3	Costa Rica	3,757,905	6,980	13.3	19.2	100.0	13.3
Denmark	888,707	130,118	44.8	-4.7	22.0	203.3	Dominican Republic	336,457	7,369	11.1	19.6	100.0	11.1
Estonia	2,613	2,844	12.8	18.5	88.2	14.5	Egypt	43,035	5,658	1.8	8.5	..	..
Finland	105,258	114,594	50.8	..	..	..	FYR of Macedonia	40,802	724	7.4	21.5	100.0	7.4
France	12,200	13,282	0.6	17.6	5.6	10.0	Ghana	4,454	1,174	3.3	72.5	..	..
Germany	199,197	216,865	6.6	2.4	..	..	Hong Kong, China	891,902	115,077	37.1	4.5	99.9	37.2
Greece	1,135	1,236	0.6	2.8	..	..	India	1,078,020	16,253	0.8	48.5	..	..
Hungary	1,381,292	4,819	4.1	5.7	72.3	5.7	Jamaica	395,127	3,292	24.2	16.8	100.0	24.2
Iceland	3,266,214	25,204	149.2	12.0	94.8	157.3	Kenya	814,100	7,957	13.5	3.3	100.0	13.5
Ireland	105,400	114,749	49.1	..	91.2	53.9	Kosovo	1,180	1,285	20.6	9.5	99.5	20.7
Israel	627,569	160,833	54.5	5.1	..	..	Latvia	331	361	1.4	17.4	12.4	11.0
Italy	114,600	124,765	7.0	6.5	79.5	8.8	Liechtenstein	4,934	4,974	80.4	16.7	100.0	80.4
Japan	159,757,300	1,325,787	32.0	1.6	100.0	32.0	Lithuania	2,182	2,376	5.9	13.7	100.0	5.9
Korea	136,427,700	116,356	8.8	25.6	30.2	29.0	Pakistan	15,294	146	0.1	55.3	..	..
Luxembourg	1,444	1,572	2.8	-2.7	..	..	Peru	124,093	36,386	20.3	8.4	100.0	20.3
Mexico	2,789,870	162,140	15.4	4.2	93.0	16.6	Romania	25,940	6,254	3.7	28.6	100.0	3.7
Netherlands	1,210,321	1,317,676	178.4	1.7	..	..	Russia	4,793,277	65,767	6.0	20.2	100.0	6.0
New Zealand	53,235	36,317	22.2	21.8	100.0	22.2	Serbia	28,874	260	0.7	22.1	100.0	0.7
Norway	283,126	32,137	9.0	8.7	..	..	Thailand	890,200	24,667	6.6	5.8	..	..
Poland	142,810	36,608	8.0	-5.6	94.0	8.5	<b>Selected non-OECD</b>	<b>538,835</b>	<b>17.7</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
Portugal	18,164	19,775	10.1	3.8	..	..							
Slovak Republic	8,037	8,750	10.3	1.2	100.0	10.3							
Slovenia	1,641	1,786	4.3	4.2	61.0	7.0							
Spain	103,862	113,074	9.6	3.7	66.2	14.5							
Sweden	380,000	45,019	9.1	4.4	13.6	67.4							
Switzerland	797,648	804,000	124.7	2.6	..	..							
Turkey	42,959	14,762	2.2	24.0	..	..							
United Kingdom	1,818,507	2,694,846	97.5	1.9	..	..							
United States	14,299,033	14,299,033	79.7	-0.9	59.9	133.1							
<b>OECD</b>	<b>24,794,259</b>	<b>84.5</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>							

Note: ".." means not available. For methodological notes, see the end of this factsheet.

Source: OECD Global Pension Statistics; the French Asset Management Association; Bank of Korea; Bank of Japan; Bank of Mexico; Reserve Bank of New Zealand; Willis Towers Watson, *Global Pension Assets Study 2016* (Switzerland).

This second issue of **Pension Funds in Figures** provides a short preview of the characteristics of funded pension systems, especially pension funds, in a selection of OECD and non-OECD economies in 2015. Indicators in this note are based on preliminary data and early estimates. A more developed analysis based on the final data collected for 2015 will be published in the 2016 edition of **Pension Markets in Focus**, scheduled for release in November 2016. An Excel file of the underlying data can be found at [www.oecd.org/daf/pensions/pensionmarkets](http://www.oecd.org/daf/pensions/pensionmarkets).

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In some countries investments are channelled through vehicles other than pension funds. In Denmark, most of the occupational pension plans were managed by specialised life insurance companies. The overall size of investments in the funded pension system in Denmark exceeded two times its GDP. In Canada, pension funds accounted for half of the investments in the funded pension system. The size of investments in the Canadian whole funded pension system was assessed to be 157% of Canada’s GDP in 2015.

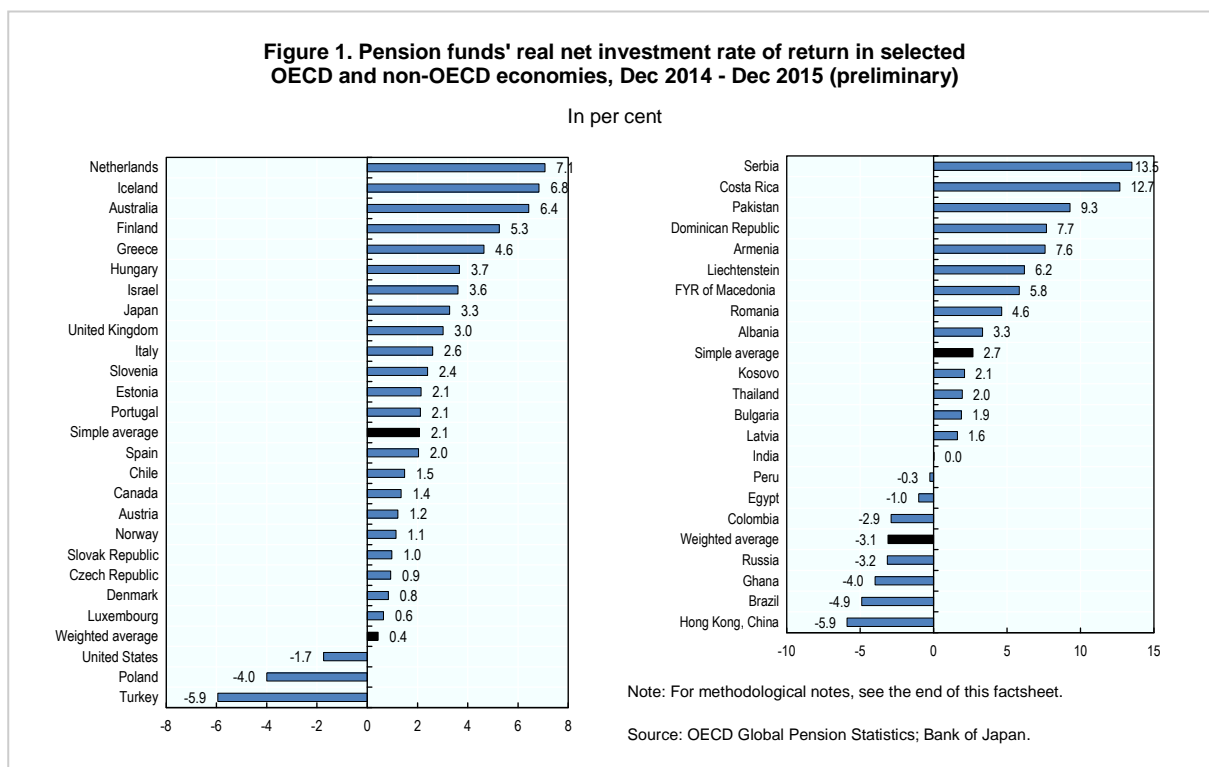
Outside the OECD area, pension fund investments increased in nominal terms between 2014 and 2015 in all 24 non-OECD economies showing in Table 1. Albania, Armenia, Ghana, India and Pakistan experienced an increase by more than 30% of pension fund investments since December 2014. These investments still represented less than 5% of their GDP of these five economies, as their funded pension systems are not mature yet. The number of plan members grew in these economies, leading to a higher amount of contributions to pension plans and therefore more investments.

The aggregated amount of investments of pension funds in the sample of 24 non-OECD economies, including Brazil, India and Russia, remained low compared to the OECD and was worth USD 0.5 trillion in 2015 (Table 1). Pension funds were prominent in the funded pension systems of this selection of non-OECD economies.

### Average returns on pension fund investments are low

The relative fall of pension fund investments may be explained by low real net investment returns in 2015, coupled with the strengthening of the US dollar vis-à-vis other major currencies.

Real net investment returns were low in 2015, with a weighted OECD average at 0.4% (Figure 1). These low real net returns help explaining the relative fall in OECD pension fund investments. Preliminary real investment rates of return ranged from positive values, peaking at 7.1% in the Netherlands, to negative values, down to -5.9% for Turkey’s personal plans. Twenty-two countries witnessed positive investment rates of return, but lower than 2% for eight of them. Three OECD countries had negative returns in 2015: Poland, Turkey and the United States which dragged the OECD weighted average close to zero.



Outside the OECD area, performance of pension fund investments also varied across economies, from -5.9% in Hong Kong, China to 13.5% in Serbia. The weighted average real investment rate of return in 2015 was lower than in the OECD area. This average was equal to -3.1%, resulting mainly from a performance around or below -3% in jurisdictions with the highest amount of pension fund investments (e.g. Brazil; Colombia; Hong Kong, China; and Russia). The highest returns among OECD and non-OECD economies of this analysis were observed in three non-OECD economies: Serbia (13.5%), Costa Rica (12.7%) and Pakistan (9.3%).

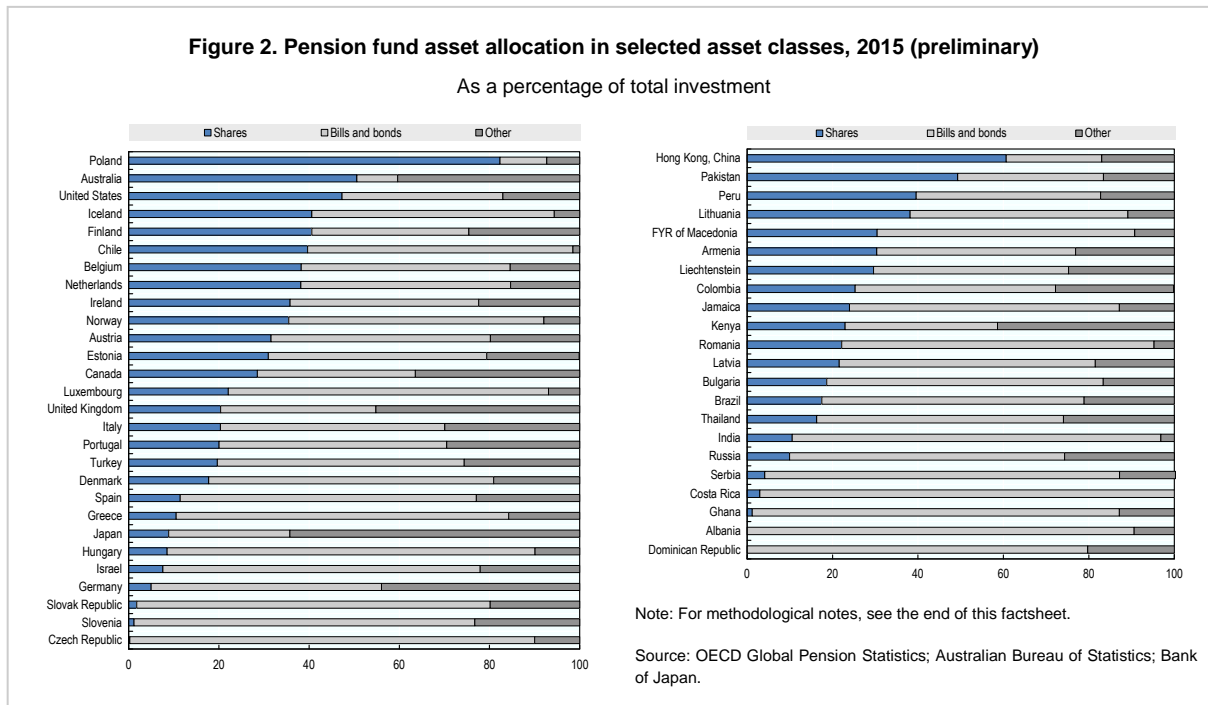
The strengthening of the US dollar vis-à-vis other currencies could also help explain the decrease of the overall pension fund investments expressed in US dollar terms. For example, the US dollar appreciated vis-à-vis the euro and the pound between end-2014 and end-2015.

### Why are average returns low?

Pension fund investment returns in Figure 1 are adjusted for inflation. In non-OECD economies such as Brazil and Russia, high inflation may account for the low real investment rates of return.

**Developments in stock markets:** The negative preliminary estimates measuring the real rate of return of pension fund investments could be partially explained by negative equity returns in some quarters of 2015 (e.g. in the United States and Hong Kong, China). The S&P 500 and FTSE 100 exhibited lower levels at the end of 2015 compared to 2014. The MSCI Pacific Index slightly increased by 0.4% in end-2015 compared to end-2014. These developments may be behind the weak performance of pension funds in 2015.

**Allocation to shares:** The weak performance of stock markets may have led to lower investment returns in 2015, especially in Hong Kong, China; Poland and the United States where pension funds respectively invested 61%, 82% and 47% of their portfolios in shares (Figure 2).



### METHODOLOGICAL NOTES TO BE TAKEN INTO CONSIDERATION WHEN INTERPRETING THE DATA

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#### **General notes:**

**Within the framework of the OECD Global Pension Statistics (GPS) 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.13.**

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

In this factsheet: data for Austria only refer to "Pensionskassen"; data about pension funds in Estonia only refer to the mandatory funded system; data for Finland only cover the main mandatory earnings-related pension schemes (TyEL and MEL); German figures only include data of "Pensionskassen" and "Pensionsfonds" supervised by BaFin; Norway's data do not fully cover all Norwegian pension funds; data about pension funds in Slovenia only cover mutual pension funds; 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 2015 refer to the end of 2015, except for: Australia and Egypt where data refer to end of June 2015; New Zealand where data refer to end of March 2015; Belgium, Canada, and IRAs in the United States.

#### **Table 1:**

The change in pension funds' investments, expressed in national currency, was calculated between June 2014 and June 2015 for Australia and Egypt, and between March 2014 and March 2015 for New Zealand. The share of pension funds' investments in the whole funded pension system refers to 2014 for Brazil, Canada, France, Korea, Mexico and Spain. The share of pension funds' investment within the whole funded pension systems is underestimated for Estonia and Slovenia. Pension funds' investments as a % of GDP refer to 2014 for Liechtenstein. Data for Switzerland are OECD estimates based on Willis Towers Watson's report *Global Pension Assets Study 2016*, and are not official data from the Swiss Statistical Office. Data for Hong Kong, China include MPF schemes and ORSO registered schemes.

#### **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 economies, except for Austria; Finland; Israel; Italy; Poland; Slovak Republic; the United States; Brazil; and Hong Kong, China for which values have been provided by the economies 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 2014 and June 2015 for Australia and Egypt, between December 2014 and September 2015 for Canada, and between December 2014 and December 2015 for all the other economies. The result only refers to: new pension funds for Israel; MPF schemes for Hong Kong, China. The result for Kosovo and Liechtenstein is nominal. The value of net investment income of non-state pension funds used for the calculation of the investment rate of return of pension funds in Russia refers to September 2015.

#### **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 of Collective Investment Schemes' investments 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. Data for Ireland only refer to DB plans. Data for Hong Kong, China include MPF schemes and 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.