The **Financial Inclusion Centre**

Financial markets that work for society

BRIEFING PAPER: PERFORMANCE OF UK AND OECD PENSION FUNDS

Summary

- The investment returns achieved by pension funds are critical. Underperformance affects the retirement incomes of savers, affects the levels of contributions required by employers, employees, the state and other savers, and has other wider externality costs for the real economy. Achieving decent investment returns is particularly important for a nation such as the UK given the importance of private pension schemes in overall pension provision.
- Therefore, FIC wanted to analyse how well UK pension funds perform compared with its international rivals. To do this, we analysed the data available in the OECD's Pension Fund in Focus, No 10, 2013 study[1]. This report uses a standardised methodology for calculating returns across the different OECD member states included in the study.
- Based on analysis of the OECD data we estimate that UK pension funds have produced an annualised net real return of –0.7% per annum over the 10 year period 2002-12[2] (see Table 1, below). That is, the returns have not even kept pace with inflation.
- Looking at the OECD country pension funds for which we have full 10 years data, we estimate the median return was +2.5% per annum (an average of +2.3% per annum). This means that compared with the OECD median country performance, the UK underperformed by over 3% per annum. The UK ranked 21st out of the 22 countries for which we had full 10 years data. Country by country data can be found in Annex I.
- Analysing individual years, we find that UK pension funds underperformed in nine of the 10 years covered. UK pension funds significantly outperformed in 2008. However, even taken this into account, over the 5 years (2008-12), UK pension funds produced an annualised real return of -1.5% per annum compared to the median fund in the sample of -0.2% per annum[3]. Over the five years, the UK ranked 23rd of the 29 countries covered.
- It is difficult to quantify with certainty the welfare loss resulting from this underperformance against benchmarks over 10 years[4]. But, depending on the assumptions used, we estimate that the hypothetical loss to UK pension funds over the 10 years may be in the range of £112bn-£215bn (see below).

[1] OECD Pension Funds in Focus, No 10, 2013 http://www.oecd.org/finance/PensionMarketsInFocus2013.pdf

[2] 2012 is the latest available data

[3] OECD Pension Funds in Focus, No 10, 2013, Table 1. Pension fund nominal and real 5-year (geometric) average annual returns in selected OECD countries over 2008-2012

[4] For example, it may be unfair to UK schemes to directly compare their returns against other OECD countries in the study as they may have different regulatory systems, different objectives etc. This is why we have tried to estimate hypothetical welfare loss using two benchmarks i. the OECD peer group and ii. a modest benchmark return of inflation plus 1% per annum.

Introduction

Pension fund investment performance is important for a number of reasons.

At the most basic level, the level of retirement income available to pension scheme members is a function of the total amount of contributions paid into a scheme and the investment returns produced by the pension fund manager (s) - usually professional asset managers.

Therefore, it is self-evident that the investment returns produced can have a significant effect on the retirement incomes available to people in retirement and the cost of financing pension promises. The level of contributions required by employers, employees and the state (for example, in the form of taxpayer funded pensions tax relief) to meet target retirement incomes are also affected by the returns achieved.

The need for higher contributions to make up for underperformance against targets can also have wider economic externality costs. Diverting cash flows into pension fund contributions to make up pension scheme deficits (which may be caused in part by underperformance) can affect wider corporate performance and potentially reduce resources available for jobs and wages.

Similarly, if individual pension scheme members have to increase contributions to compensate for poor investment returns, this reduces the amount of disposable income available for consumption.

Moreover, sustained underperformance may be a cause and an effect of inefficient allocation of resources to the real economy. Pension fund performance may have wider macro-economic impacts given the sheer scale of the assets involved - of the OECD countries we looked at, the UK has the fourth most important private pension system (after The Netherlands, Iceland and Switzerland- as measured by value of pension funds as a % of GDP (see Annex III).

The performance of UK pension funds

With this in mind, we analysed the relative performance of UK pension funds against pension funds in OECD member states (using data from the OECD Pension Funds in Focus Report 2013) to see how well-served UK pension funds are served by the asset management industry. The OECD uses a standardised methodology to measure the performance of pensions funds in each country included in the study.

Table 1 below summarises the real returns produced by UK pension funds in each of the 10 years from 2003-12 inclusive. This is compared against the median and average returns achieved by the OECD country pension funds covered over the same period. Annex I contains country by country returns for all the OECD member states included in the average and median figures.

As the table shows, the UK (as measured by the average UK pension fund) underperformed the median and average OECD country performance in nine of the 10 years covered by the study.

We also calculated the annualised return over the 10 years for the average pension fund in each of the countries included in the study. Full 10 year data was available for 22 of the OECD member countries in the study. The median annualised net real return produced was 2.5% per annum, while the average of the annualised returns was 2.3% per annum. The average pension fund in 19 of the 22 countries for which we had full 10 years' worth of data produced returns above inflation.

In contrast, the average UK pension fund produced an annualised return of -0.7% per annum – in other words, not even keeping up with inflation. In terms of annualised performance, the UK ranked 21st out of the 22 countries for which we had full 10 years data.

Table 1: performance of UK pension funds against selected OECD country pension funds, real terms

	United Kingdom	OECD Average	OECD Median	UK Under/ Outperformance
2003	1.2	5.0	5.3	Under
2004	0.6	5.5	7.0	Under
2005	0.2	9.2	9.1	Under
2006	-0.9	5.3	5.6	Under
2007	-0.2	1.0	0.3	Under
2008	-0.9	-11.9	-11.4	Out
2009	-0.9	6.7	7.3	Under
2010	-2.1	3.1	3.1	Under
2011	-2.5	-1.8	-2.3	Under
2012	-1.2	5.1	5.2	Under
Annualised return full 10 yrs[5]	-0.7	2.3	2.5	Under

Source data: OECD Pension Funds in Focus, No 10, 2013 Table A9. Pension funds' real average net annual rate of investment returns in selected OECD and non-OECD countries, 2002-2012, % , details of the methodology for calculating returns can be found in the OECD report

UK pension funds significantly outperformed in 2008. However, even taken this into account, over the 5 years (2008-12), UK pension funds produced an annualised real return of -1.5% per annum compared to the median fund in the sample of -0.2% per annum[6]. Over five years, the UK ranked 23rd of the 29 countries covered.

It is difficult to explain this level of underperformance given the paucity of comparable data. But clearly the asset allocation decisions by pension funds must have played a critical role. At the beginning and middle of the period covered[7], UK pension schemes were significantly underweight in bonds and overweight in shares (see Annex II). But this seems counterintuitive at this stage given the very strong defensive performance of UK pension funds in 2008. Therefore, we cannot draw any definitive conclusions at this stage.

Estimating welfare loss

It is difficult to quantify with certainty the welfare loss resulting from this underperformance over 10 years. To do this, we would need to have access to more detailed data on value and timing of contributions into pension schemes.

But, we have been able to make a top line estimate of the hypothetical loss based on the available data. The OECD estimates that at the beginning of the period analysed the value of UK pension funds included in the study was over £620bn[8]. The cumulative relative underperformance of UK pension funds against the returns achieved by the other OECD member states is just under 35% over the ten

[5] Only those countries for which there is full 10 years data are included in the annualised return calculation
[6] OECD Pension Funds in Focus, No 10, 2013, Table 1. Pension fund nominal and real 5-year (geometric) average annual returns in selected OECD countries over 2008-2012
[7] Comparable 2012 data for the UK wasn't available
[8] Source data: OECD Pension Funds in Focus, No 10, 2013, Table A3. Total investment of pension funds in OECD and selected non-OECD countries, 2001-2012

years. Therefore, the relative underperformance of UK funds equates to a hypothetical loss in the region of £215 bn.

However, it may be unfair to UK schemes to directly compare their returns against other OECD countries in the study as they may have different regulatory systems, and different objectives. Therefore, we have used an additional very modest benchmark based on a return of inflation plus 1% per annum. That is, we have assumed that it would be reasonable to expect UK pension funds to have produced a real net return of 1% per annum over the 10 year period.

On this basis, the hypothetical welfare loss would be £122bn over the 10 years. In other words, if UK pension funds had produced a net real return of just 1% per annum as opposed to a negative return of -0.7% per annum, pension fund assets would be some £122bn greater.

Indeed, both these estimates could be very conservative. We have just used the value of assets at the beginning of the period covered in the analysis. In reality, significant additional contributions have been made into pension funds by employers and employees over the period. So the value of the assets to which this sustained underperformance applies would have been much greater. This would have resulted in a much greater welfare loss.

Conclusions

Based on the available OECD data, UK pension funds do seem have substantially underperformed their counterparts in OECD member states over five and 10 years to 2012. For now, we cannot explain this substantial and sustained underperformance given the lack of more detailed data to allow us to undertake comprehensive performance attribution. For example, the underperformance could be attributed to asset allocation decisions, poor stock selection, regulatory requirements, or poor advice from advisers.

However, this study – along with other similar studies – does give real cause for concern about the performance and value provided by the pension fund industry.

We hope this briefing paper encourages more debate about the need to ensure this critical industry is held to account.

Financial Inclusion Centre
December 2014

ANNEX I: OECD COUNTRY BY COUNTRY ANNUAL REAL RETURNS

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Count	Annualised return full 10 yrs	Average return full 10 yrs
Australia (1)	-2.0	8.6	10.1	8.9	12.9	-11.5	-10.2	5.6	5.2	-0.6	10	2.4	2.7
Austria	5.7	3.6	9.0	3.8	-1.8	-14.4	7.3	3.7	-6.0	5.5	10	1.4	1.6
Belgium	6.0	6.0	10.3	10.3	7.7	-22.3	13.4	4.4	-4.6	9.3	10	3.5	4.1
Canada	11.3	9.0	10.7	10.8	1.0	-16.9	10.3	7.9	1.8	4.7	10	4.7	5.1
Chile	10.1	8.1	5.0	14.4	4.4	-24.1	23.5	8.3	-6.0	5.1	10	4.1	4.9
Czech Republic	2.2	0.7	2.7	1.3	-2.1	-1.5	-0.6	0.7	0.5	0.2	10	0.4	0.4
Denmark	6.3	11.5	14.8	1.3	-3.3	5.1	1.2	7.1	12.1	5.4	10	6.0	6.2
Estonia	2.9	3.7	7.2	2.2	-5.4	-32.4	14.8	2.1	-8.0	5.2	10	-1.6	-0.8
Finland	0.4	7.4	12.1	6.2	2.4	-19.7	14.0	7.1	-5.2	6.6	10	2.7	3.1
Germany	3.5	2.6	3.6	3.3	1.1	0.5	3.9	3.4	1.0	3.3	10	2.6	2.6
Greece						2.3	0.3	-7.8	-5.6	5.0	5		
Hungary	-2.6	9.5	7.6	1.2	-3.9	-21.7	12.8	4.2	-0.5	6.8	10	0.9	1.3
Iceland	10.4	9.6	11.8	8.8	0.4	-23.1	0.9	1.3	2.3	7.1	10	2.4	2.9
Ireland					-7.4	-35.7					2		
Israel								7.6	-3.6	8.6	3		
Italy	2.5	3.7	6.1	2.1	0.3	-5.3	5.3	1.2	-2.8	4.0	10	1.7	1.7
Japan (2)	11.1	-7.5	9.1	-7.6	-4.1	-13.2	13.2	-5.0	-3.5	7.4	10	-0.4	0.0
Korea	1.8	1.2	0.6	6.0	0.6	-2.7	-2.2	2.1	0.0	3.3	10	1.0	1.1
Luxembourg			29.0	4.9	-2.5	-11.3	6.5	0.7	-2.3	6.0	8		
Mexico (3)			4.8	5.6	-0.1	-7.8	7.5	6.6	1.2	9.7	8		
Netherlands	8.7	8.4	10.9	6.8	0.6	-17.3	11.5	8.8	4.3	13.5	10	5.3	5.6
New Zealand (1)	-2.9	7.8	4.2	8.1	5.6	-6.1	-8.5	11.0	2.3	2.2	10	2.2	2.4
Norway	11.4	7.5	9.2	7.4	3.1	-10.6	9.8	5.5	-0.1	1.0	10	4.2	4.4
Poland (4)	8.8	8.6	12.9	13.4	1.5	-17.3	8.9	7.2	-9.1	1.6	10	3.2	3.6
Portugal	7.3	6.6	7.0	7.2	5.5	-13.2	11.6	-3.0	-7.3	5.8	10	2.5	2.8
Slovak Republic					-0.1	-8.9	1.0	0.0	-3.8	0.4	6		
Slovenia					-1.0	-5.4	4.2	1.8	-1.8	4.5	6		
Spain						-9.9	6.9	-2.2	-2.3	3.6	5		
Sweden									-1.0	7.9	2		
Switzerland	4.9	2.8	9.2	5.3	0.2	-13.8	9.9	2.8	0.6	7.5	10	2.7	2.9
Turkey (3)			22.1	1.4	13.2	0.9	17.6	1.9	-10.8	9.6	8		
United Kingdom	1.2	0.6	0.2	-0.9	-0.2	-0.9	-0.9	-2.1	-2.5	-1.2	10	-0.7	-0.7
Average	5.0	5.5	9.2	5.3	1.0	-11.9	6.7	3.1	-1.8	5.1		2.3	
Median	5.3	7.0	9.1	5.6	0.3	-11.4	7.3	3.1	-2.3	5.2		2.5	
UK Under/Outperformance	**UNDER**	**UNDER**	**UNDER**	**UNDER**	**UNDER**	**OUT**	**UNDER**	**UNDER**	**UNDER**	**UNDER**		**UNDER**	

Source Data: OECD Pension Funds in Focus, No 10, 2013 Table A9. Pension funds' real average net annual rate of investment returns in selected OECD and non-OECD countries, 2002-2012, %

ANNEX II: ASSET ALLOCATION OF OECD PENSION FUNDS

Pension fund asset allocation for selected investment categories in selected OECD countries, 2001, % of total investment

	Cash and Deposits	Bills and bonds	Bills and bonds issued by public administration	Bonds issued by the private sector	Loans	Shares	Land and Buildings	Mutual funds (CIS)	Unallocated insurance contracts	Private investment funds	Other investments
Australia (1)	7.7	11.6	4.9	6.6	3.6	41.9	5.8	0.0	0.0	0.0	29.4
Austria	2.0	78.0	78.0	0.0	0.5	16.3	0.5	0.0	0.0	0.0	2.7
Belgium	3.8	15.5	13.9	1.6	0.1	17.7	1.2	55.1	2.8	0.0	3.9
Canada	4.7	26.5	20.3	6.2	0.8	30.5	3.3	33.0	0.0	0.0	1.2
Czech Republic	4.0	83.9	49.8	34.1	0.0	7.3	0.7	0.0	0.0	0.0	4.1
Denmark (2)	0.3	47.1	10.3	36.8	0.1	39.7	2.7	10.0	0.0	0.0	0.0
Estonia	32.6	46.5	4.7	41.8	0.0	17.6	0.0	3.2	0.0	0.0	0.0
Finland	0.0	51.6			8.5	28.0	11.8	0.0	0.0	0.0	0.0
Germany (3)	1.6	31.3	9.6	21.7	20.4	39.1	4.7	0.0	0.0	0.0	2.9
Iceland (4)	1.7	53.1	37.6	15.5	13.8	29.7	0.2	0.0	0.0	0.0	1.5
Ireland (5)	2.8	21.7			0.0	65.0	8.8	0.0	0.0	0.0	1.7
Israel	1.8	92.5	91.7	0.8	0.3	1.3	0.0	0.0	0.0	0.0	4.0
Italy	9.8	36.5			0.0	7.5	13.8	6.4	22.7	0.0	3.4
Japan (6)	4.6	39.3			2.6	27.2	0.0	0.0	0.0	0.0	26.4
Mexico	0.2	99.8	89.7	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	0.0	36.2	25.4	10.9	8.1	47.8	4.8	0.0	0.0	0.0	3.1
Norway	5.8	56.8	25.1	31.8	4.4	25.9	4.4	0.0	0.0	0.0	2.7
Poland	3.5	68.0	66.7	1.4	0.0	28.4	0.0	0.0	0.0	0.0	0.0
Portugal	10.2	49.8	27.1	22.7	0.0	19.9	5.9	13.0	0.0	0.0	1.2
Spain (7)	4.7	58.1	37.2	20.9	0.0	19.6	0.2	4.3	0.0	0.0	13.0
Sweden	1.2	46.0	46.0	0.0	0.0	35.5	4.6	0.0	0.0	0.0	12.7
Switzerland	8.5	28.0			11.2	23.6	11.4	16.3	0.0	0.0	1.1
United Kingdom (8)	2.6	19.2	14.5	4.7	0.5	53.8	4.3	11.4	6.2	0.0	2.0
United States	1.2	17.9	9.6	8.4	1.1	45.9	1.2	15.9	3.8	0.0	12.9
average	4.8	46.4	34.8	14.5	3.2	27.9	3.8	7.0	1.5	0.0	5.4
median	3.1	46.2	25.4	10.2	0.4	27.6	3.0	0.0	0.0	0.0	2.7

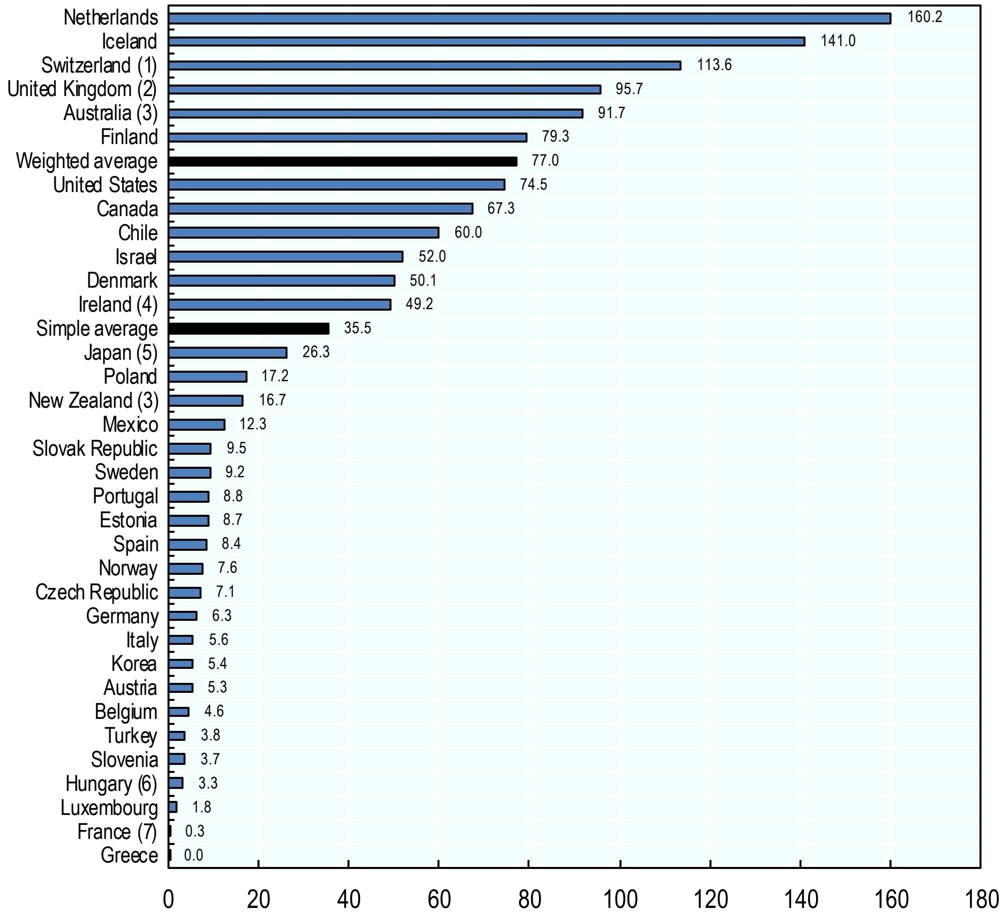
Source: OECD Pension Funds in Focus, No 10, 2013, Table A6: Pension fund asset allocation for selected investment categories in selected OECD and non-OECD countries, 2001, % of total investment

Pension fund asset allocation for selected investment categories in selected OECD countries, 2007, % of total investment

	Cash and Deposits	Bills and bonds	Bills and bonds issued by public administration	Bonds issued by the private sector	Loans	Shares	Land and Buildings	Mutual funds (CIS)	Unallocated insurance contracts	Private investment funds	Other investments
Australia (1)	12.2	9.5	3.2	6.3	0.8	50.2	5.2	0.0	0.0	0.0	22.2
Austria	10.5	44.4	29.4	15.0	1.2	35.1	2.0	0.0	0.0	0.0	6.7
Belgium	2.5	7.6	4.2	3.4	0.1	9.3	0.8	75.5	1.8	0.0	2.4
Canada	3.0	23.6	16.2	7.3	0.3	28.9	5.0	36.0	0.0	0.0	3.2
Chile	0.1	41.7	7.8	33.9	3.6	15.3	0.0	36.5	0.0	0.0	2.7
Czech Republic	9.6	75.2	62.0	13.2	0.0	5.9	0.7	4.5	0.0	0.0	4.1
Denmark (2)	0.3	50.8	24.1	26.7	0.0	30.7	1.8	11.6	0.0	0.0	4.7
Estonia	12.7	26.1			0.0	9.7	0.2	0.0	0.0	50.8	0.3
Finland	0.6	39.9			3.1	46.8	9.2	0.0	0.0	0.0	0.4
Germany	2.3	25.8	1.5	24.3	28.0	0.1	2.4	38.5	0.0	0.8	2.1
Greece	51.9	37.2			0.0	5.4	0.0	0.0	0.0	0.0	5.4
Hungary	1.2	66.8	60.6	6.2	0.0	14.0	0.2	16.0	0.0	0.0	1.8
Iceland (3)	3.3	46.2			8.4	34.3	0.1	5.9	0.0	0.0	1.8
Ireland	3.8	18.5			0.0	66.3	9.1	0.0	0.0	2.3	0.0
Israel	4.1	81.5	63.8	17.7	1.1	6.3	0.7	1.0	0.0	0.9	4.5
Italy	7.4	37.2	30.4	6.8	0.0	10.1	5.2	8.9	22.9	2.0	6.3
Japan (4)	6.4	35.4			2.0	16.4	0.0	0.0	0.0	0.0	39.8
Korea	16.8	58.5	50.4	8.1	1.8	0.2	0.0	6.7	3.8	0.0	12.2
Luxembourg	2.2	21.6			0.0	0.0	0.0	74.0	0.0	0.0	2.2
Mexico	0.0	82.5	64.3	18.2	0.0	13.1	0.0	0.0	0.0	0.6	3.8
Netherlands	3.9	35.0	14.9	20.1	2.9	40.3	2.5	0.0	0.0	0.0	15.4
Norway	3.2	55.2			1.2	32.5	5.2	0.0	0.0	0.0	2.7
Poland	3.4	61.0	59.3	1.7	0.0	34.6	0.0	0.5	0.0	0.0	0.5
Portugal	5.0	36.6	17.0	19.6	0.0	25.3	7.1	24.0	0.0	0.0	2.0
Slovak Republic	34.1	49.0	18.6	30.4	0.0	8.9	0.0	2.6	0.0	0.0	5.5
Slovenia	16.1	67.0	29.0	38.0	0.0	7.2	0.0	8.8	0.0	0.0	1.0
Spain (5)	5.6	59.6	25.8	33.8	0.0	17.4	0.1	8.5	8.5	0.0	0.3
Sweden	1.9	51.6			0.0	29.5	3.4	9.5	0.0	0.0	4.1
Switzerland	8.1	24.4			4.6	15.7	9.4	32.6	0.0	4.5	0.7
United Kingdom (6)	2.9	21.9	12.6	9.3	1.2	29.6	2.8	23.3	9.5	0.0	8.8
United States	0.9	16.1	9.5	6.6	0.6	45.2	1.2	22.0	3.9	0.0	10.1
average	8.2	43.9	32.7	17.2	2.3	21.2	2.5	11.8	2.0	2.6	5.5
median	3.8	38.6	27.4	18.0	0.0	16.0	0.5	6.3	0.0	0.0	2.5

Source: OECD Pension Funds in Focus, No 10, 2013, Table A7: Pension fund asset allocation for selected investment categories in selected OECD and non-OECD countries, 2007, % of total investment

ANNEX III – IMPORTANCE OF PENSION FUNDS RELATIVE TO SIZE OF GDP



Source: OECD Pension Funds in Focus, No 10, 2013 Figure 3. Importance of pension funds relative to the size of the economy in selected OECD countries, 2012, % of GDP

1. Data refer to the first trend calculations for the year 2012.
2. The figure for total assets at the end of 2012 is an early estimate based on the 2011 level of assets and the flow of transactions in 2012. It does not take in to account value changes. A 2012 final estimate was due to be available January 2014.

3. Data refer to the end of June 2012.

4. Source: IAPF Pension Investment Survey.

5. Source: Bank of Japan.

6. Data only include the assets of voluntary pension funds.

7. Data refer to PERCO plans as of June 2012 (source: AFG).

Source: OECD Global Pension Statistics.