

# Reserve Fund Monitor

## **Social Security Reserve Fund Monitor**

2012-13

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International Social Security Association Geneva

## **Preface**

Reserve funds are important for social security systems. While the aims of reserve funds vary, they often provide a financial buffer against future demographic changes, allow the smoothing of cash flows and support the sustainability of systems. In a number of countries the assets held by reserve funds represent a significant percentage of GDP and are attracting increasing scrutiny regarding how they are managed, the assets in which they invest, and the investment returns they achieve. Best practice in governance is thus essential. The ISSA Reserve Fund Monitor project highlights the importance of these funds and encourages the exchange of experiences on the issue of the investment of assets to assist ISSA member organizations in the management of their funds.

This second *Social Security Reserve Fund Monitor* report covers the years 2012 and 2013 and its findings highlight the importance of the effective management of assets for the sustainability of social security systems. Over recent years, greater focus has been placed on performance and the risks inherent in management. Although the external environment remains challenging – as a result of factors including low interest rates, reduced financing from different sources and exchange rate volatility – an improvement in governance processes has resulted in a more effective investment management process.

This report summarizes the performance of funds and asset allocation choices and seeks to highlight what has influenced results and the changes observed. It shows how reserve funds continue to transform their strategies and investment management practices in response to internal constraints and the increasingly challenging external environment. The report also develops further some of the themes introduced in the inaugural report that covered the years 2009–2011. Developed in particular are considerations of how asset allocation has changed over time and why and how the nature of scheme liabilities impact on investment choices.

The ISSA Reserve Fund Monitor project contributes to the investment-related activities undertaken by the ISSA. The *ISSA Guidelines on Investment of Social Security Funds* supports the work of social security organizations in developing governance structures in the area of investment management. The guidelines are supported by relevant reference sources and by other ISSA Centre for Excellence activities, such as the ISSA Academy workshops and the ISSA Academy diploma programme.

## Summary

This *Social Security Reserve Fund Monitor:* 2012–13 report covers the performance of reserve funds from 25 social security organizations from all four ISSA regions who supplied information on their returns, asset allocation, use of external managers, and other aspects of their operation.

The report focuses on the 2-year period up to 31 December 2013, but also considers the longer-term performance of those reserve funds that also participated in the inaugural *Social Security Reserve Fund Monitor* survey covering the years 2009–2011. The report specifically details investment performance and asset allocation, analysed according to fund size, and also looks at policies and constraints which impact asset allocation choices.

## Five key findings

- Social security reserve funds recorded positive real returns in 2012 and 2013.
- Nominal and real returns achieved by the smaller reserve funds that responded to the survey outperformed returns achieved by the larger funds.
- Over the 2-year period there has been an increase in the proportion of total assets invested in equities.
- Reserve funds with a greater proportion of assets in equities seem to have achieved better returns.
- Net cash flows (contributions less benefit payments and expenses) have in general fallen over the period, resulting in less new money for investment and further constraints on asset choices.

#### Return on assets

The average nominal returns on assets in 2012 and 2013 were 8.83 per cent and 7.80 per cent respectively, with average real returns of 6.42 per cent in 2012 and 5.32 per cent in 2013. Participating reserve funds were asked to provide details of investment returns net of fees. All return figures cited in this report are calculated on this basis.

The median nominal returns on assets in 2012 and 2013 were 8.74 per cent and 8.16 per cent, respectively. The median real returns of 5.73 per cent in 2012 and 4.95 per cent in 2013 show more variance, perhaps reflecting the move from real to absolute benchmarking undertaken by some reserve funds. While maxima and minima varied, the distribution of returns of half of the reserve funds (between upper and lower quartiles) remained relatively constant in both years.

Eleven of the 25 social security institutions that provided data for this report also provided data for the inaugural *Social Security Reserve Fund Monitor* 2009–2011 report. Of these 11, ten provided rate of return figures for the years 2012–13. The average annualized nominal and real returns for these reserve funds over the 5-year period (from 1 January 2009 to 31 December 2013) amounted to 7.52 per cent and 5.07 per cent, respectively. Notably, leaving aside the year 2011, the average real returns achieved across 2009–2010 and 2012–13 lie between 6.35 per cent and 8.41 per cent for these ten reserve funds.

The report thus provides performance data for the 2012–13 and 2009–2013 periods, with the analysis undertaken according to fund size, asset class and other factors to assess the extent to which these variables impact returns.

#### Asset allocation

The analysis shows that over the 2-year period assessed there was a reduction in the share of assets in fixed income investment and an increase in equity investment. Among large funds (>USD 20 billion under management), medium-sized funds (between USD 1 billion and USD 20 billion) and small funds (<USD 1 billion), the medium-sized funds recorded the largest increase in assets placed in equities, with an average 5 per cent increase in allocation. For all the reserve funds that participated in the survey, the average percentage of assets placed in fixed income reduced from 52.6 per cent to 50.5 per cent over the period studied, while the share in equities increased from 19.7 per cent to 23.3 per cent. However these average changes hide larger individual variations which, in turn, appear to vary depending on size of the fund: relatively larger pension funds have less fixed income and cash investments, with correspondingly greater proportionate amounts in equity.

Specifically, for large funds equities make up a proportionally higher percentage (an average of 33 per cent) of total assets at 31 December 2013, a figure that drops to 23 per cent for medium sized funds and 14 per cent for smaller funds. The report offers details concerning asset allocation, changes in asset allocation over the 2012–13 and 2009–2013 periods, and analysis of asset allocation according to fund size.

#### Cash flow constraints

A key driver of performance and asset allocation choices is the cash flow situation of the social security scheme. Stagnation or falls in employee and employer contributions in many systems and the influence of reducing interest rates means that this issue is increasingly important. For a significant number of funds that participated in the survey (37 per cent of funds in 2012 and 42 per cent of funds in 2013), contribution income was less than benefit and expense outflows, resulting in negative net cash flow which influenced asset choices and, in particular, investment in income-generating assets. In addition, the trend is towards a worsening cash flow position, with over 60 per cent of funds having experienced deterioration in net cash flow balances over the 2-year period.

### Other key findings

The reserve fund monitor collated other information reflecting the environment and regulations impacting investment choices. Some key findings are:

- Two-thirds of participating reserve funds used external investment managers, with 62 per cent of those using three or more.
- Close to 90 per cent of participating reserve funds stated that their investment management was subject to a regulatory framework.
- Two-thirds of the participating reserve funds have a Socially Responsible Investment (SRI) policy. Such SRI policies, however, vary significantly in their scope.

## 1. Introduction

This Social Security Reserve Fund Monitor: 2012–13 report looks at the performance of reserve funds from 25 social security organizations from all four ISSA regions who supplied information on their investment returns, asset allocation, use of external fund management companies, and other aspects of their operation. The reserve funds covered by this report manage over USD 3,000 billion in assets.

The report focuses on a 2-year period, 1 January 2012 to 31 December 2013, but it similarly considers the longer-term performance of those reserve funds that also participated in the inaugural *Social Security Reserve Fund Monitor* survey and report covering the years 2009–2011. In turn, the report specifically details performance and asset allocation by fund size. In this regard, the impact of fund size, cash flow and asset allocation are considered in relation to performance, while the role of fund size and other factors are considered in relation to asset allocation choices.

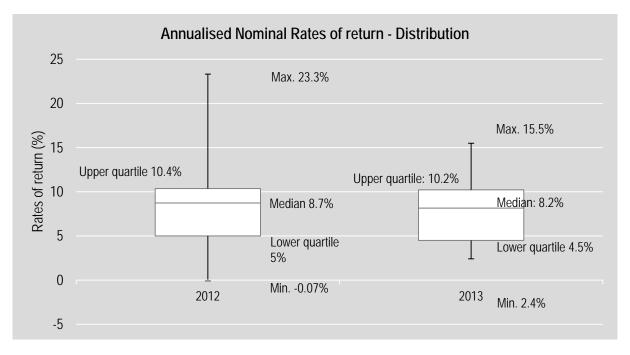
## 2. Results

#### 2.1. Rates of returns

## 2.1.1. Two-year analysis

The median rates of returns reported by the participating reserve funds were similar in 2012 and 2013. However, the distribution of returns in both years displayed greater variation. One fund alone recorded a negative nominal return in any year (-0.07 per cent in 2012) (Figure 2.1), with one other reporting a negative real return in 2012 (Figure 2.2). All other reserve funds achieved positive nominal and real returns in both years.

**Figure 2.1.** Returns in 2012 and 2013 – median nominal, upper and lower quartile nominal



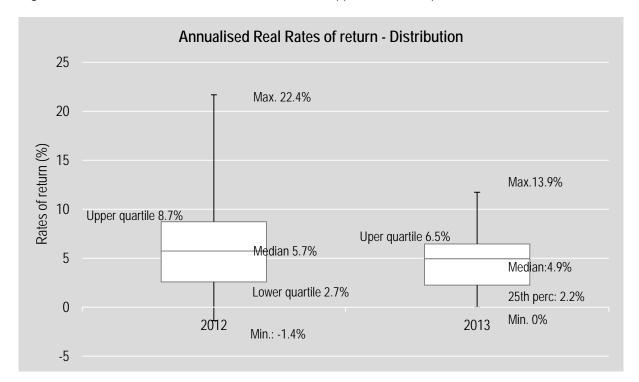


Figure 2.2. Returns in 2012 and 2013 – median real, upper and lower quartile real

By analysing the performance and asset allocation decisions of reserve funds according to fund size, the collated data shows that nominal and real returns for smaller funds outperformed those for larger and medium-sized funds (Table 2.1). However, given that most of the smaller funds are domiciled in emerging economies, with generally higher inherent returns, their observed relative outperformance was largely to be expected.

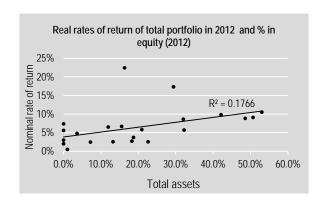
**Table 2.1.** Median returns by fund size in 2012 and 2013 (per cent)

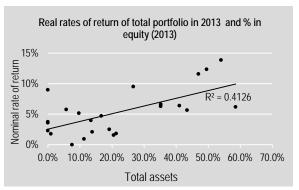
Fund size	Median nominal (real) return in 2012	Median nominal (real) return in 2013
Large	8.74 (6.69)	8.33 (5.68)
Medium	7.95 (3.45)	6.26 (4.63)
Small	10.00 (5.86)	10.46 (5.79)

*Note:* Large funds are defined as those with over USD 20 billion under management; medium-sized funds are defined as those with between USD 1 billion and USD 20 billion; small funds are defined as those with less than USD 1 billion.

Among the factors that influence investment performance, asset allocation decisions play an important role. Asset allocation choices depend on fund size, regulations and constraints, asset supply, the profile of liabilities and risk attitude, but also on assessments of future market trends and potential rates of return. The report analyses the rate of return of each portfolio against the percentage of assets placed in equity and fixed income, respectively. Although the relatively small sample size and the role of other factors can hinder such analysis, a degree of correlation between the proportion of the portfolio placed in equities and real returns in 2012 and 2013 is discernible (Figure 2.3). Nevertheless, before more general conclusions can be drawn in this regard, longer-term analysis with a greater sample size would be necessary.

**Figure 2.3**. Real returns in 2012 and 2013 plotted against the proportion of total assets in equities at 1 January 2012 and at 1 January 2013





*Note:* R<sup>2</sup> (or coefficient of determination) is a statistical measure of how close the data are to the fitted regression line; in other words, it is the percentage of the response variable variation that is explained by a linear model.

## 2.1.2. Five-year analysis

Eleven of the 25 social security organizations that provided data for this report also provided data for the inaugural *Social Security Reserve Fund Monitor* (2009–2011) report. Of these 11, ten provided rate of return figures for the years 2012–13. The average annualized nominal return for these ten reserve funds over the 5-year period (from 1 January 2009 to 31 December 2013) amounted to 7.52 per cent; and an average annualized real return of 5.07 per cent (Table 2.2; Table 2.3). Notably, leaving aside the year 2011, the average real returns achieved across 2009–2010 and 2012–13 lie between 6.35 per cent and 8.41 per cent for these ten reserve funds.

**Table 2.2.** Five year nominal returns for ten reserve funds (per cent)

	2009	2010	2011	2012	2013	5-year annual average
Reserve Fund 1	9.70	14.30	2.80	10.53	15.50	10.47
Reserve Fund 2	6.85	6.89	5.34	6.22	8.69	6.79
Reserve Fund 3	6.34	10.69	9.24	10.00	10.00	9.24
Reserve Fund 4	7.91	3.79	-0.65	4.82	4.72	4.08
Reserve Fund 5	14.03	12.07	-4.19	11.19	7.99	8.01
Reserve Fund 6	13.88	10.63	-2.89	8.22	8.33	7.48
Reserve Fund 7	18.03	12.08	-2.27	12.42	7.37	9.31
Reserve Fund 8	21.88	11.88	-3.07	8.83	8.91	9.39
Reserve Fund 9	6.25	0.08	-11.00	23.32	6.86	4.52
Reserve Fund 10	11.50	4.27	1.20	6.40	2.41	5.09
Average	11.64	8.67	-0.55	10.19	8.08	7.52

*Note*: Highlighted figures show above average performance in a particular period for a reserve fund. One of the 11 responding reserve funds did not provide information on rates of return, and therefore is not included.

**Table 2.3**. Five-year real returns for ten reserve funds (per cent)

	2009	2010	2011	2012	2013	5-year annual average
Reserve Fund 1	8.40	11.90	0.50	9.70	14.20	8.84
Reserve Fund 2	3.16	2.39	1.47	2.56	4.53	2.82
Reserve Fund 3	-19.25	13.41	6.47	2.59	5.18	1.02
Reserve Fund 4	7.91	2.19	-3.15	3.72	4.72	3.01
Reserve Fund 5	14.69	8.85	-6.86	8.63	6.29	6.07
Reserve Fund 6	14.54	7.45	-5.60	5.73	6.62	5.54
Reserve Fund 7	18.71	8.86	-5.00	9.84	5.68	7.34
Reserve Fund 8	18.98	9.18	-5.87	5.63	6.21	6.53
Reserve Fund 9	5.28	-2.08	-13.39	20.64	5.97	2.68
Reserve Fund 10	11.17	3.75	1.91	6.69	2.51	5.15
Average	8.36	6.59	-2.95	7.57	6.19	5.07

*Note*: Highlighted figures show above average performance in a particular period for a reserve fund. One of the 11 responding reserve funds did not provide information on rates of return, and therefore is not included.

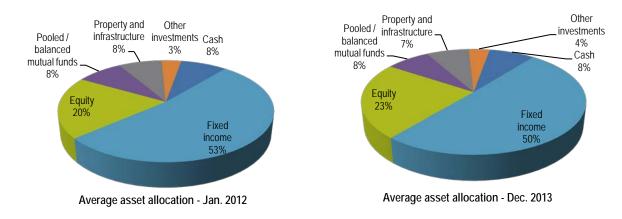
#### 2.2. Asset allocation

#### 2.2.1. Two-year analysis of trends in asset allocation

Asset allocation drives investment returns. However, asset allocation is itself influenced by a number of factors including asset availability, liabilities of the social security scheme, regulations, historic returns achieved on different asset classes, attitude to risk and assessments of future market trends.

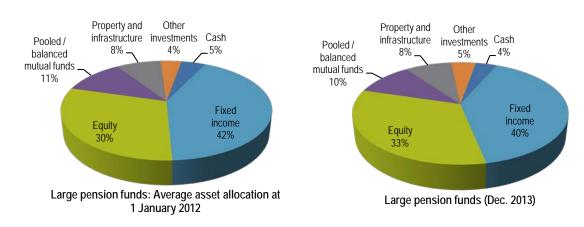
From 1 January 2012 to 31 December 2013, overall there was an increase (from 19.7 per cent to 23.3 per cent of total assets) of investment in equities (Figure 2.3). This phenomenon was more significant for the medium-sized and small reserve funds. In the main, however, these reserve funds have a significantly lower proportion of their investments placed in equities compared to the larger funds that participated in the survey. Indeed, in general, the smaller size of reserve fund the lower the proportion of assets invested in equities (Figures 2.4, 2.5 and 2.6).

Figure 2.3. Average asset allocation at 1 January 2012 and 31 December 2013 (of total investments)



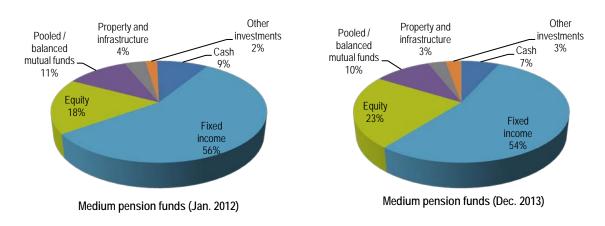
Note: Figures are rounded average asset allocations.

Figure 2.4. Asset allocation of large funds at 1 January 2012 and 31 December 2013 (of total investments)



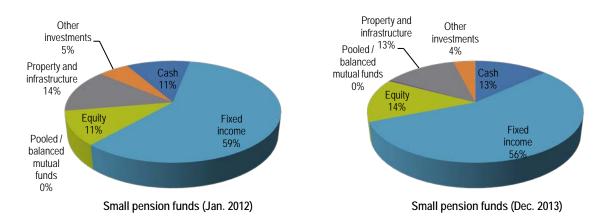
Note: Figures are rounded average asset allocations.

**Figure 2.5**. Asset allocation of medium-sized funds at 1 January 2012 and 31 December 2013 (of total investments)



Note: Figures are rounded average asset allocations.

**Figure 2.6.** Asset allocation of small funds at 1 January 2012 and 31 December 2013 (of total investments)



*Note*: Figures are rounded average asset allocations.

The collated data reveals changes in asset allocation. It is important to determine how this reallocation of assets occurred.

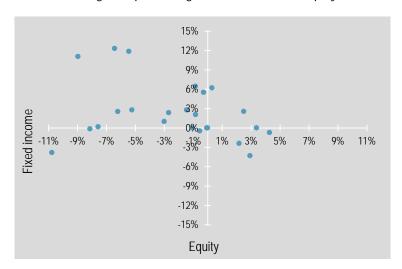
Considering the growth in the proportion of assets in equities, if there had been a uniform reduction in the other asset classes proportionate to the change in asset performance of each respective asset class over the period, this would indicate that much of the observed increase in the proportion of investment placed in equities could be ascribed to the underlying better performance of equities. Closer examination reveals that the changes in asset allocation were not uniform across all asset classes: there was a greater move from fixed income and cash (although for the former, this trend was not uniform) and little apparent re-allocation from property (Figure 2.7).

This would seem to indicate an explicit re-allocation of resources to equity investment for many funds over the period and for certain others a uniform re-allocation to property and equities.

Although overall average positions have evolved only slightly, the changes in portfolio composition are significant for some funds. For example, nine reserve funds reduced by more than 5 percentage points their fixed income portfolio and six funds increased their share in equities by more than 5 percentage points over the 2-year period, with three of these doing so by more than 10 per cent. Three other reserve funds reduced their cash placements by more than 4 percentage points.

Figure 2.7. Changes in re-allocation of assets (1 January 2012 – 31 December 2103)

Panel A. changes in percentage of total assets in equity vs. in fixed income



Panel B. changes in percentage of total assets in equity vs. in cash



Panel C. changes in percentage of total assets in equity vs. in property



## 2.2.2. Five-year analysis of trends in asset allocation

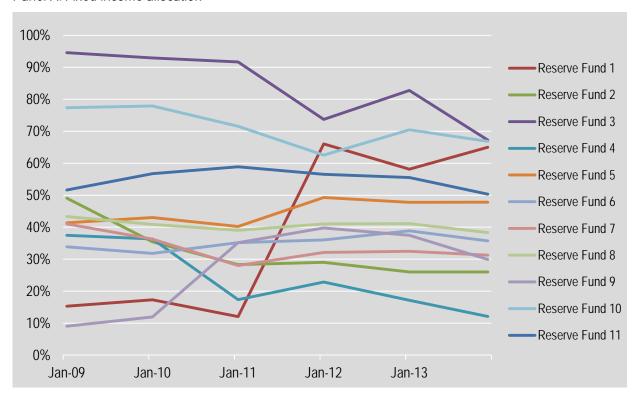
The changes in asset allocation over a longer time period can be seen in Table 2.4, and Figure 2.8 highlights the trends in asset allocation for the ten reserve funds that took part in both of the completed *Social Security Reserve Fund Monitor* exercises (2009–2011; 2012–13). The experiences varied by reserve funds, with seven of those that provided information on rates of return having increased the proportion of assets placed in equities and reduced fixed income investment and cash holdings over the period. Investment levels in property remained fairly constant over the period. Of the eleven, one reserve fund invested resources for the first time in fixed income, with another investing for the first time in equity. This could be explained by a reduction in the previous concentration of assets, a reassessment of risk management techniques, changes in the legislative framework or the removal of certain restrictions.

**Table 2.4.** Asset allocation changes over the period 1 January 2009 to 31 December 2013

Asset Class	Average proportion as at 1 January 2009 (per cent)	Average proportion as at 31 December 2013 (per cent)
Cash	18.7	14.1
Fixed income	44.9	42.8
Equities	22.6	29.7
Property	9.8	10.6
Other	4.0	4.0

**Figure 2.8**. Trends in asset allocation for selected reserve funds over the period 1 January 2009 to 31 December 2013

Panel A. Fixed income allocation



80% Reserve Fund 1 70% Reserve Fund 2 60% Reserve Fund 3 Reserve Fund 4 50% Reserve Fund 5 40% Reserve Fund 6 Reserve Fund 7 30% Reserve Fund 8 Reserve Fund 9 20% Reserve Fund 10 10% Reserve Fund 11 0%

Panel B. Equity allocation

Jan-10

Jan-11

Jan-09

For some reserve funds the change in asset allocation over the 5-year period has been significant. Table 2.5 highlights the change in position from 1 January to 31 December 2013 for the ten reserve funds that provided information.

Jan-12

Jan-13

**Table 2.5.** Reserve funds' changes in asset allocation from 1 January 2009 to 31 December 2013 (per cent)

Country	Cash evolution	Fixed income evolution	Equity evolution	Property evolution	Other investments evolution
Reserve Fund 1	-2.0	-23.1	23.3	1.7	0.0
Reserve Fund 2	11.4	-27.3	15.9	0.0	0.0
Reserve Fund 3	15.0	-25.4	-5.3	15.6	0.0
Reserve Fund 4	-4.2	6.5	6.2	-1.0	-7.5
Reserve Fund 5	-11.3	1.9	12.9	-1.1	-2.3
Reserve Fund 6	-0.6	-9.7	18.1	-1.4	-6.3
Reserve Fund 7	0.4	-5.0	6.7	-2.1	0.1
Reserve Fund 8	-16.0	20.9	-8.2	-1.0	4.3
Reserve Fund 9	14.4	-10.5	-1.0	-1.5	-1.4
Reserve Fund 10	-8.8	-1.3	-2.8	-0.2	13.1

*Note:* Highlighted figures show where there was a greater than 10 per cent change in asset allocation over the period. Figures may not add up to 100 per cent due to rounding.

## 2.3. Other results

A number of other quantitative and qualitative factors impacting investment can be assessed.

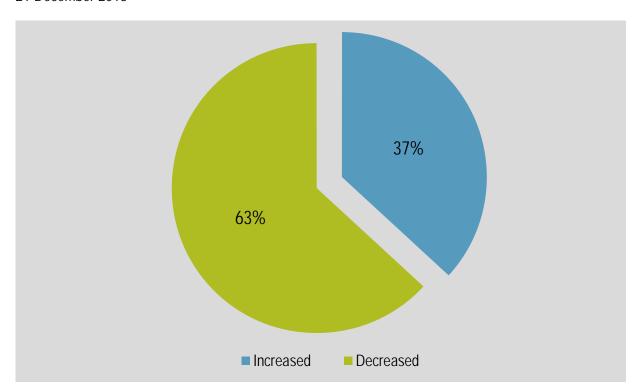
#### 2.3.1. Cash flow constraints

A key driver of performance and asset allocation choices made by reserve funds is the cash flow situation of their national social security scheme. Stagnation or a fall in employee and employer contributions in many systems and reducing income from certain assets (e.g. government bonds) that traditionally have been relied on to provide cash flow makes this issue increasingly important. If the net cash flow reduces, the investment strategy has to be adjusted, which impacts on investment choices and the returns achieved. For a significant number of funds that participated in the survey (37 per cent of funds in 2012 and 42 per cent of funds in 2013), contribution income was less than benefit and expense outflows. This, in turn, influences decisions on asset choices, in particular those related to the incomegenerating character of assets.

For many social security reserve funds, funding policy is often determined or defined in reference to cash flow rather than funding ratios. The importance of cash flow is thus twofold. It has a direct influence on funding policy and therefore asset choices and has a vital role in relation to meeting benefit obligations in full.

The data identifies these cash flow constraints and highlights a trend towards a worsening cash flow position (Figure 2.9), with nearly two-thirds of funds (63 per cent) seeing deterioration in net cash flow balances over the 2-year period.

**Figure 2.9**. Evolution of the ratio of contribution income to benefit payments from 1 January 2012 to 21 December 2013



Given that net cash flow is a key driver of decisions on asset allocation and therefore influences rates of return, this is an important consideration when judging investment performance.

## 2.3.2. Other key findings

Other key findings reflecting the investment and regulatory environment that impacts investment choices are:

- Two-thirds of participating reserve funds used external investment management companies, with 62 per cent of those using the services of three or more.
- Close to 90 per cent of participating reserve funds stated that their investment management was subject to a regulatory framework.
- Two-thirds of the participating reserve funds have a Socially Responsible Investment (SRI) policy. Such SRI policies, however, vary significantly in their scope.

## 3. Investment management

## 3.1. Internal constraints and external factors

A complementary aim of the Reserve Fund Monitor project is to encourage the exchange of experiences between social security reserve funds and to highlight some of the key underlying trends in respect of investment management. Direct comparison between reserve funds is not possible without consideration being given to the different internal constraints and external factors facing organizations.

#### Internal constraints include:

- Regulation (e.g. restrictions on investment).
- Investment management and governance capacity (resources and expertise within the organization).
- Structure of the investment function and decision-making processes.
- Liabilities of the social security system (The size, nature and timing of future cash flows, benefits and expenses).

#### External factors include:

- External investment management resources available (e.g. investment management, custodians, consultants, etc.).
- Domestic asset market, including assets available and their characteristics, and the size and liquidity of local capital markets and the strength and other characteristics (e.g. pegging) of the national currency.
- Macroeconomic context, including the interest rate environment as well as demographic trends and the size of the financial sector.
- Governance capacity of key stakeholders.

## Impact of the low interest rate environment on social security reserve funds

The historically low interest rates seen over the last five years have had a significant impact on social security reserve funds, national provident funds and supplementary pension systems. Although the fall in yields led to a jump in the market value of fixed-income assets already held, the relative attraction of government and investment-grade bonds led to an increase in their price and resulted in historically low yields. A number of reserve funds may have responded to this reality by making changes in asset allocation, but given the likelihood of investment restrictions and the lack of alternative investment choices, there may have been practical limits to this strategy.

Therefore, yields on government and corporate bonds remain a key factor in the financing and investment decisions for the majority of reserve funds. However, the situation remains volatile; for example, the yield on the 10-year German government bond rose to 0.67 per cent as at 12 May 2015, in April 2015 the yield had fallen to as low as 0.08 per cent.<sup>1</sup>

Table 3.1. Current yields on government bonds of selected countries

Country	01/01/2012 <sup>*</sup>	31/12/2013	01/06/2015 <sup>*</sup>	
Switzerland	0.67	1.09	-0.08	
Japan	0.99	0.74	0.40	
Germany	1.90	1.94	0.53	
Canada	1.99	2.77	1.63	
UK	2.03	3.03	1.85	
Italy	6.90	4.09	1.92	
Spain	5.13	4.14	1.97	
US	1.87	3.03	2.18	
Portugal	13.60	6.03	2.75	
China	3.50	4.63	3.63	
Mexico	6.47	6.45	6.04	
India	8.39	8.83	7.82	
South Africa	7.90	7.91	8.26	
Russia	8.69	7.71	10.72	
Greece	33.97	8.57	11.62	
Brazil	11.28	13.21	12.31	
Kenya	17.10	12.60	12.85	

*Note*: \* First trading day of the year.

Source: Investing.com.

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 $<sup>1.</sup> See < \underline{www.nytimes.com/2015/05/13/business/daily-stock-market-activity.html?\_r = 0} > (accessed \ 08.06.2015).$ 

Although the low interest rate environment impacts all holders of assets, national provident funds are particularly impacted given the requirement to credit a certain (minimum) return on beneficiaries' accounts every year. The implication for national provident funds is more complex asset management requirements concerning investment strategy, currency matching and risk and return considerations.

## 4. External trends and peer group performance

The performance of the reserve funds should be considered in the context of the performance of similar funds and of trends in the external investment environment.

This section highlights the performance of comparable pension funds (including reserve funds, public-sector funds and private-sector pension schemes) and the performance of different asset classes over the period under review.

## 4.1. Performance of peer group

Assets under management of the world's 300 largest pension funds<sup>2</sup> totalled USD 14,900 billion at 31 December 2013, having increased by 9.8 per cent in 2012 and 6.2 per cent in 2013. This compares with an increase of 3.76 per cent in 2012 and 2.52 per cent in 2013 for the reserve funds that participated in the *Social Security Reserve Fund Monitor:* 2012–13 survey. Excluding the data response provided by the largest fund in the survey, which significantly impacts the percentage change in total assets over the period, the increase in total reserve fund assets amounted to 13.5 per cent in 2012 and 9.4 per cent in 2013.

The Organisation for Economic Co-operation and Development (OECD) survey of public pension reserve funds (PPRFs)<sup>3</sup> recorded, for the 21 PPRF institutions participating in their survey, an average real rate of return of 8.3 per cent in 2012 and 10.1 per cent in 2013. These results are higher than the *Social Security Reserve Fund Monitor:* 2012–13 results for the same years (with average returns of 6.4 per cent and 5.3 per cent, respectively).

Supplementary pension plans provide another comparative reference when considering investment performance. Although their returns cannot be used as a benchmark due to different operating environments (e.g. different investment mandates, investment freedom and liability profiles), the trends in nominal returns over the last two years provide a useful indicator of external trends (Table 4.1).

3. See <a href="www.oecd.org/daf/fin/private-pensions/2014\_Large\_Pension\_Funds\_Survey.pdf">www.oecd.org/daf/fin/private-pensions/2014\_Large\_Pension\_Funds\_Survey.pdf</a> (accessed 08.06.2015).

<sup>2.</sup> See </www.towerswatson.com/en/Insights/IC-Types/Survey-Research-Results/2014/09/The-worlds-300-largest-pension-funds-year-end-2013> (accessed 08.06.2015).

**Table 4.1.** Defined benefit supplementary pension plans portfolio returns (nominal) in selected countries/regions (per cent)

Country	2012	2013	Average 2012–201	3 Average 2009–2013
Brazil	8.6	4.5	6.5	10.1
Canada	8.0	13.5	10.7	9.3
Euro Zone	14.5	12.5	13.5	9.4
_ Japan	16.3	33.3	24.5	9.5
Switzerland	10.0	7.7	8.8	6.0
United Kingdom	8.5	10.2	9.3	10.6
United States	11.5	17.2	14.3	12.4
Average	11.1	14.1	12.6	9.7

These results for supplementary pension plans provide an idea of the increase in asset values and returns over the 2-year period under review. In a holistic view of the development of the financial situation over the period, it is important to consider the evolution of underlying liabilities. However this information is rarely available or often difficult to assess for social security reserve funds. For the defined benefit funds featured in Table 4.1, the funding situation (value of assets compared to value of liabilities) improved in Brazil, Canada, Switzerland and the United States, remained stable in the United Kingdom and deteriorated in the Eurozone. However, only in Brazil and Switzerland was the funding ratio above 100 per cent, remaining below 80 per cent in the other countries and regions. Much of this is explained by the fact that returns on a number of asset classes have been relatively poor in the first decade of this millennium and 2012 and 2013 have acted more as a "catch up" period rather than the continuation of a long, unbroken period of healthy returns. As the examples in Table 4.2 show, despite excellent recent returns, over the most recent 15-year period, equity returns were considerably lower than in the last 35 years of the previous century.

**Table 4.2.** Annualized return on equities over selected time periods (per cent)

Country	1965–2000	2000–2014
France	6.4	0.6
Germany	4.8	1.5
_Japan	6.0	0.1
United Kingdom	7.2	1.0
United States	4.5	2.4
Average	4.8	1.8

Source: Credit Suisse Global Investment Returns Yearbook 2015; author's calculations.

## 4.2. Asset allocation

The simple average portfolio for the PPRFs included in the OECD survey shows that 55.3 per cent of the total assets were invested in fixed income and cash, 30.0 per cent in listed equities, and 14.7 per cent in alternative/other investments as at 31 December 2013 (see footnote 3). This is broadly similar to the results of the *Social Security Reserve Fund Monitor* (2012–13) with 50.5 per cent of assets invested in fixed income and some 23.3 per cent in equities.

As expected, given the mandates and profiles of the reserve funds that participated in the *Social Security Reserve Fund Monitor:* 2012–13, these figures differ significantly from the average asset allocation of the 300 largest funds set out in the Towers Watson survey (see footnote 2). On average, 41 per cent of assets were invested in fixed income and 43 per cent in equities for the pension funds surveyed by Towers Watson.

#### 4.3. Other trends in investment

Although practices change continually, certain trends have strengthened over the last years and can be increasingly observed in the operations of social security reserve funds as well as of other large institutional investors. These include but are not limited to:

- A reassessment of the approaches to risk management.
- A move to avoid over complex assets, particularly for institutions with limited governance resources.
- The use of absolute benchmarks.
- A reduction in the concentration of assets.
- A move to liability-driven investment.
- Growing infrastructure investment and other "alternative" asset classes such as hedge funds, commodities and catastrophic risk.

## **Appendix**

## A.1. Methodology

For this *Social Security Reserve Fund Monitor* (2012–13) report, 22 social security organizations managing 25 reserve funds completed a questionnaire providing details of fund performance, asset allocation and other elements impacting investment management. The results presented are derived from the data provided by these social security organizations. The participating social security organizations are listed in section A.2.

## A.2. Participating organizations

Country	Organization
Andorra	Andorra Social Security Fund (Pension Fund)
Bahamas	The National Insurance Board
British Virgin Islands	Social Security Board (Basic State Social Security)
Cameroun	National Social Insurance Fund (Caisse nationale de prévoyance sociale)
Canada	Office of the Chief Actuary (Canada Pension Plan)
Canada	CSST (Commission de la santé et de la sécurité du travail)
Canada	Quebec Pensions Board (Régie des rentes du Québec)
Egypt	Government Sector Insurance Fund (Basic State Pension)
Ethiopia	Public Servants Social Security Agency (Public Servants Pension Scheme)
Finland	The Finnish Pension Alliance – Company and Industry Wide Funds
Finland	The Finnish Pension Alliance – Pension Insurance Companies
Finland	The Finnish Pension Alliance – Public Sector Pension Institutions
Guernsey	Social Security Department (Common Investment Fund)
Mexico	Mexican Social Security Institute (Instituto Mexicano del Seguro Social)
Morocco	Pension Fund of Morocco (Caisse marocaine des retraites)
Morocco	Pension Fund of Morocco (Caisse marocaine des retraites); complementary scheme
Morocco	Collective Scheme for Retirement Allowances (Régime collectif d'allocation de retraite)
Morocco	National Social Security Fund (Caisse nationale de sécurité sociale)
Poland	Social Insurance Institution (Pension Fund)
Portugal	Instituto de Gestão de Fundos
Saint Maarten	Social and Health Insurances (Basic State Pension)
Seychelles	Seychelles Pension Fund
Switzerland	Fonds de compensation AVS/AI/APG
United States	Social Security Administration (Old-Age and Survivors Insurance and Disability Insurance Trust Fund)
Uruguay	Bank Employees' Pension Fund (Caja de Jubilaciones y Pensiones Bancarias)



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