

# Reserve Fund Monitor

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## **Social Security Reserve Fund Monitor**

2016

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The International Social Security Association (ISSA) is the world's leading international organization for social security institutions, government departments and agencies. The ISSA promotes excellence in social security administration through professional guidelines, expert knowledge, services and support to enable its members to develop dynamic social security systems and policy throughout the world.

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CEM Benchmarking Inc.  
Toronto



## Summary

- The results in this report are derived from survey responses to the CEM 2016 global survey, including those of participating ISSA member institution reserve funds.
- In 2016, the number of ISSA reserve funds participating in the survey was 18. Combined, the funds had aggregate assets of USD 3.2 trillion.
- The global survey participants consist of pension funds, sovereign wealth funds, and endowment funds from the United States, Canada, Europe, Asia and the Pacific, Africa, the Caribbean, Latin America and the Gulf region. Combined, the global participants include 313 funds representing USD 11.8 trillion in assets.
- The median net total fund return for participating ISSA member institution reserve funds in 2016 was 4.8 per cent and the average was 5.7 per cent. This compares with the global survey median of 7.6 per cent and the average of 7.7 per cent.
- Policy return is the return a fund could have earned passively by indexing its investments according to the fund's policy asset mix. The median policy return for participating ISSA member institution reserve funds for 2016 was 5.3 per cent and the average was 6.2 per cent. This compares with the global survey median of 7.5 per cent and the average of 7.6 per cent.
- Net value added shows how each fund has performed on an overall basis relative to benchmark alternatives. The median net value added for participating ISSA member institution reserve funds for 2016 was 0.0 per cent and the average was -0.5 per cent. This compares with the global survey median of 0.0 per cent and the average of 0.1 per cent.
- The median total investment cost for participating ISSA member institution reserve funds was 21.6 basis points (bps). This compares to the global survey median of 49.1 bps.
- Some factors leading to the lower cost for participating ISSA member institution reserve funds were that the ISSA funds use less fund of funds and manage more assets internally.

# 1. Characteristics of participating ISSA reserve funds

## 1.1. Which ISSA member institution reserve funds participated?

Funds participating in the ISSA Reserve Fund Monitor project for 2016:

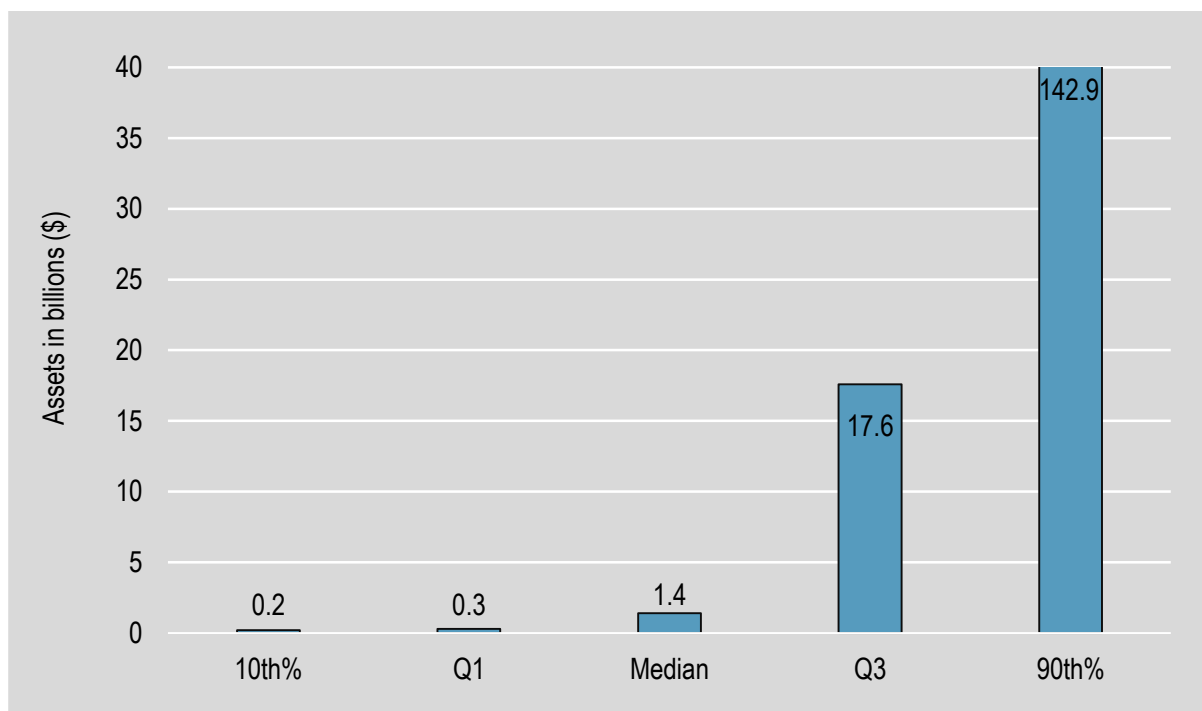
| Country                  | Fund  |
|--------------------------|---|
| British Virgin Islands   | Social Security Board   |
| Cameroon                 | National Social Insurance Fund (Caisse nationale de prévoyance sociale)   |
| Canada                   | Canada Pension Plan Investment Board                                      |
| Canada                   | Saskatchewan Workers Compensation Board                                   |
| Finland                  | Unemployment Insurance Fund (TVR)   |
| Mexico                   | Mexican Social Security Institute (Instituto Mexicano del Seguro Social)  |
| Morocco                  | Régime des pensions civiles   |
| Poland                   | Social Insurance Institution (ZUS)  |
| Portugal                 | Instituto de Gestão de Fundos de Capitalização da Segurança Social, I.P.  |
| Seychelles               | Seychelles Pension Fund   |
| Sint Maarten             | Social and Health Insurances (SZV)  |
| Switzerland              | Fonds de compensation (AVS/AI/APG)  |
| Tonga                    | Government of Tonga   |
| Turks and Caicos Islands | Turks and Caicos Islands National Insurance Board                         |
| Uganda                   | National Social Security Fund   |
| United States            | Social Security Administration  |
| Uruguay                  | Bank Employees' Pension Fund (Caja de Jubilaciones y Pensiones Bancarias) |

## 1.2. Aggregated data on participating ISSA reserve funds

In 2016, the total number of ISSA reserve funds participating in the survey was 18.

- Combined, the participating ISSA reserve funds had aggregate assets of USD 3.2 trillion.
- The participating ISSA reserve funds range in size between USD 7 million and USD 2,848 billion.
- The median size of the participating ISSA reserve funds was USD 1.4 billion (Figure 1.1).

**Figure 1.1.** *Distribution of participating ISSA reserve funds by assets size*



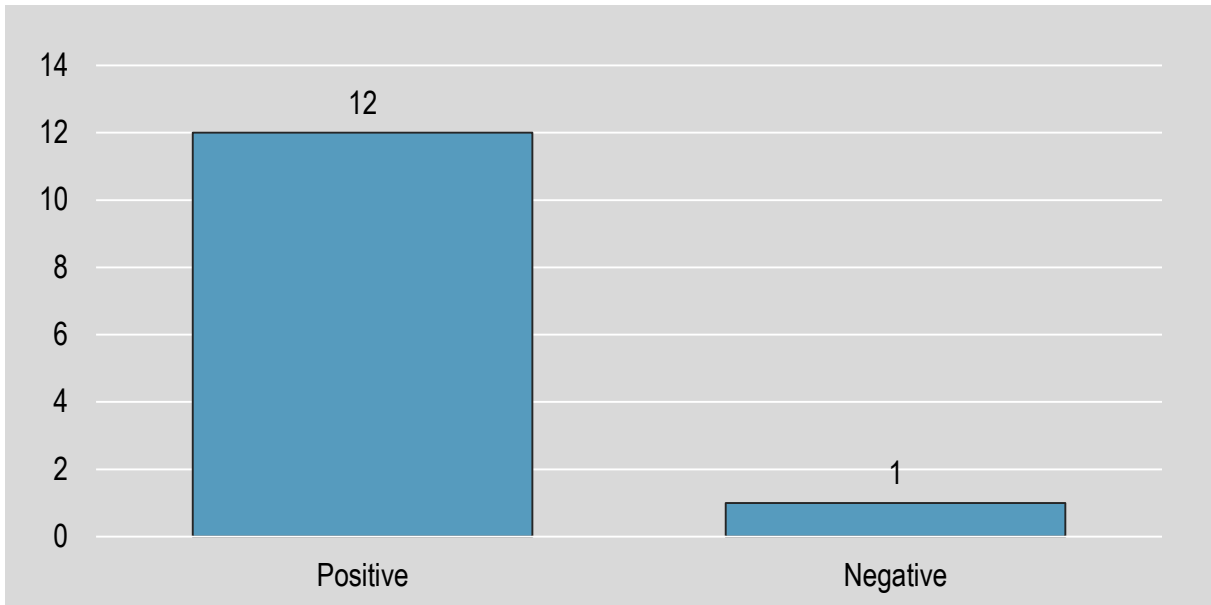
Note: Q1 is the 25th percentile and Q3 is the 75th percentile.

Source: CEM (2018).

### 1.3. Cash flow and Socially Responsible Investment policy of participating ISSA reserve funds

Of the 13 funds that reported cash flow data in 2016, 12 funds reported a positive cash flow position and one reported a negative cash flow position (Figure 1.2).

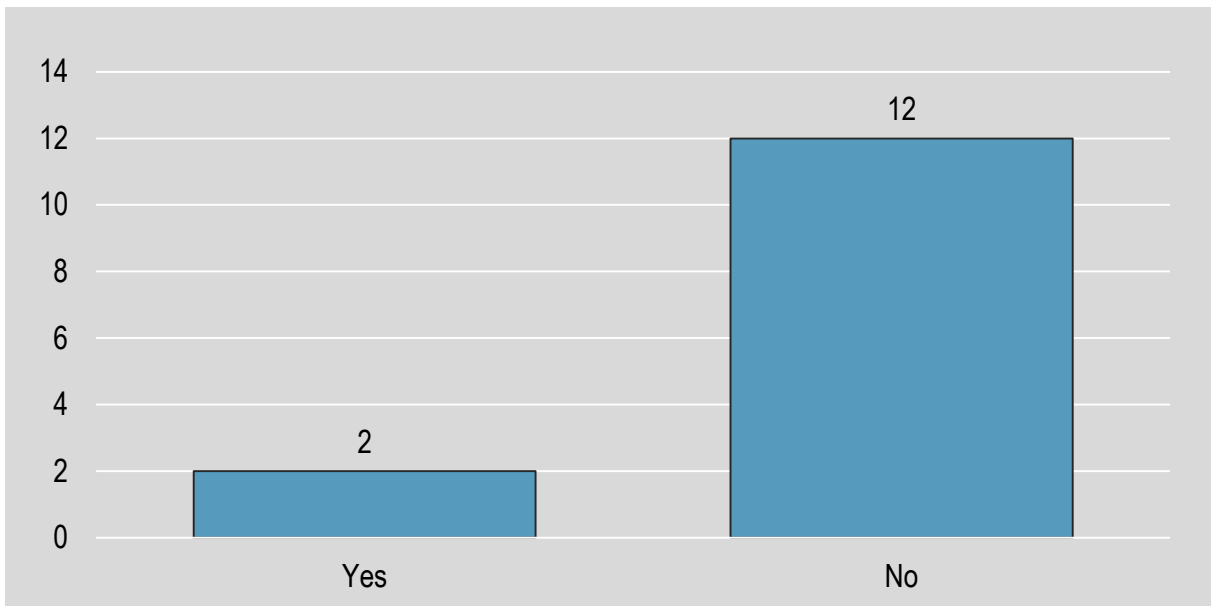
**Figure 1.2.** Cash flow position of participating ISSA reserve funds



Source: CEM (2018).

Of the 14 funds that responded to the question about Socially Responsible Investment (SRI) Policy, only 2 reported having such a policy in place (Figure 1.3).

**Figure 1.3.** SRI policy for participating ISSA reserve funds



Source: CEM (2018).

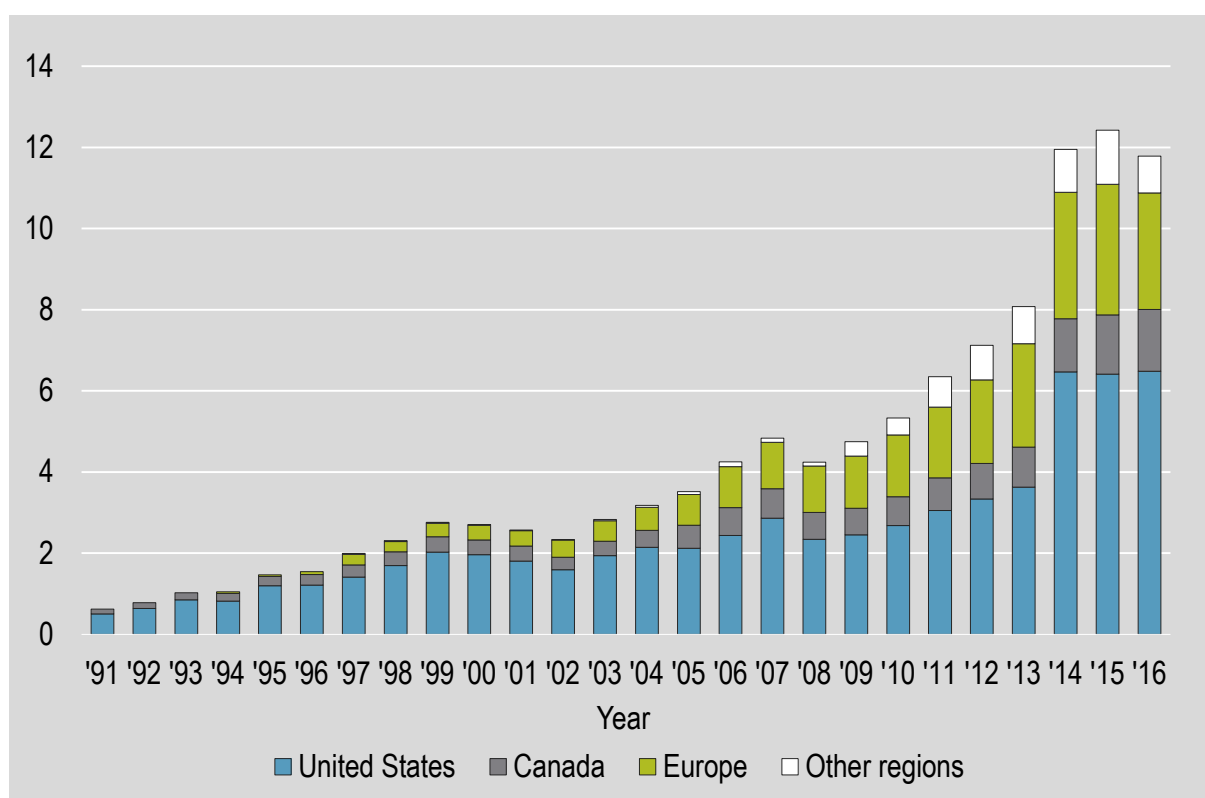
## 2. The benchmarking database

### 2.1. CEM's global benchmarking database

The 2016 survey participants include 313 funds representing USD 11.8 trillion in assets. The global survey participants consist of pension funds, sovereign wealth funds, and endowment funds (Figure 2.1). The breakdown by region is as follows:

- 171 United States pension funds with aggregate assets of USD 6.4 trillion.
- 80 Canadian pension funds with aggregate assets of USD 1.5 trillion.
- 43 European pension funds with aggregate assets of USD 3.2 trillion. Included are funds from Denmark, Finland, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom.
- 19 funds from Asia and the Pacific, Africa, the Caribbean, Latin America and the Gulf region with aggregate assets of USD 1 trillion.

**Figure 2.1.** Global CEM benchmarking database (USD trillion) at year end



Source: CEM (2018).



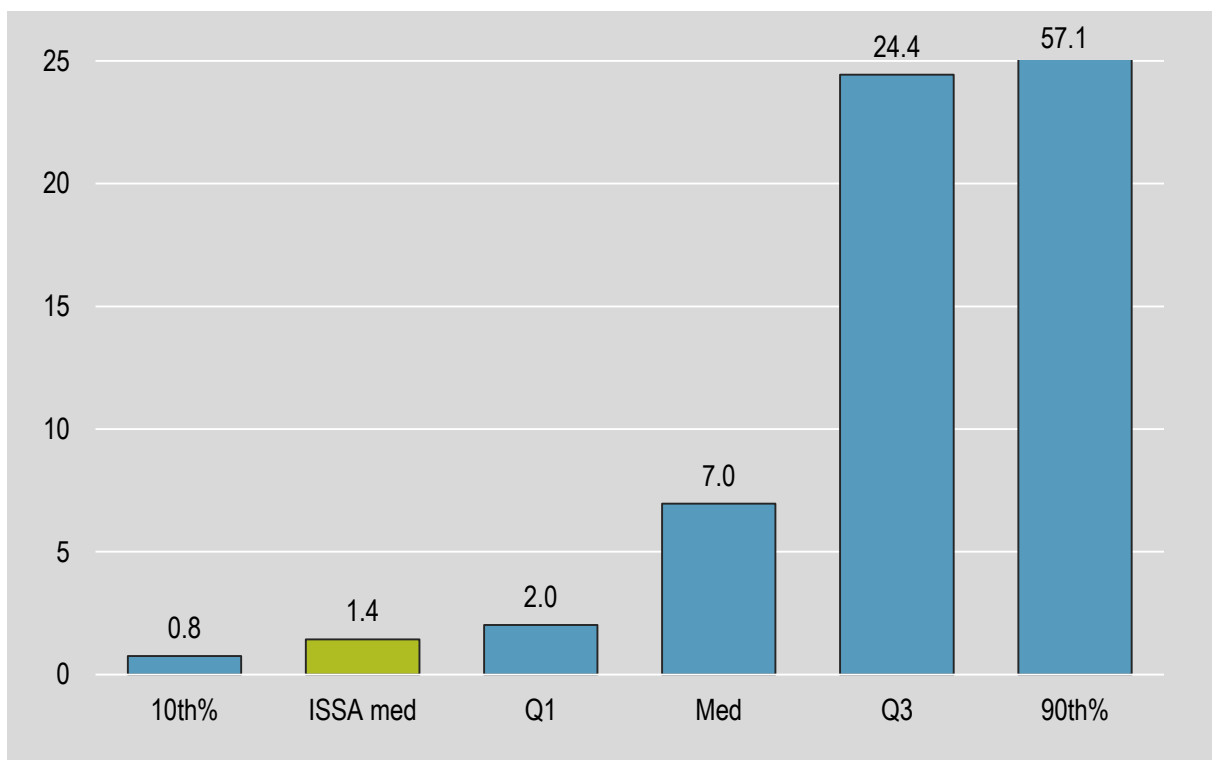
## 2.2. Characteristics of the global survey participants

The results in this report include both the 2016 global survey participants, as well as participating ISSA member institution reserve funds.

The global survey participants group (Figure 2.2) is comprised of 313 pension funds:

- Combined, the funds had aggregate assets of USD 11.8 trillion.
- The funds range in size between USD 7 million and USD 2,848 billion.
- Of the total participating funds, 144 are corporate, 123 are public funds and 46 are other.<sup>1,2</sup>
- The median size was USD 7.0 billion.
- The median size of the participating ISSA member institution reserve funds was USD 1.4 billion.

**Figure 2.2.** Global survey participants by assets (USD billion)



Note: Q1 is the 25th percentile and Q3 is the 75th percentile.

Source: CEM (2018).

<sup>1</sup> Other includes sovereign funds, endowment funds and pension union funds.

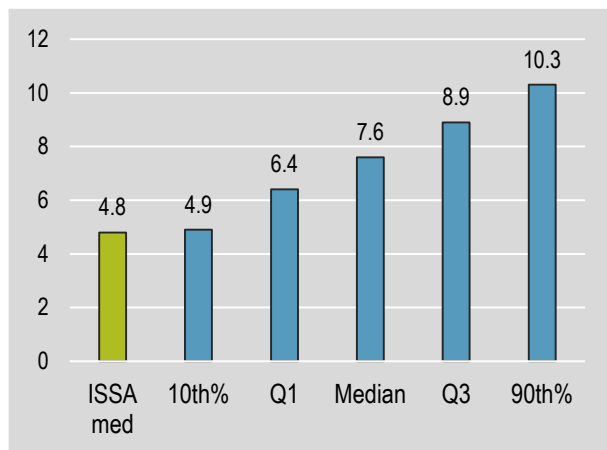
<sup>2</sup> Participating ISSA member institution reserve funds are included within the public funds.

### 3. Returns and value added

#### 3.1. Net returns, policy returns and net value added

The returns highlighted in this section are for the funds participating for the calendar year to December 2016.

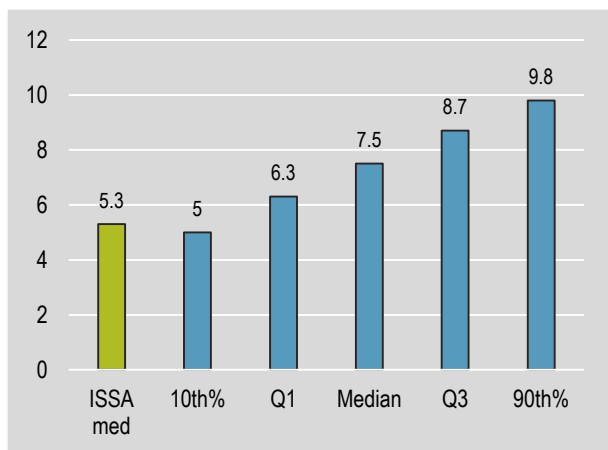
**Figure 3.1.** Net total fund return (percentage)



The median net total fund return (Figure 3.1) for participating ISSA member institution reserve funds in 2016 was 4.8% and the average was 5.7%. This compares with the global survey median of 7.6% and the average of 7.7%.

*Notes for the three figures:* Blue in the graphs is CEM's global universe and green is the ISSA universe. Q1 is the 25th percentile and Q3 is the 75th percentile.  
Source: CEM (2018).

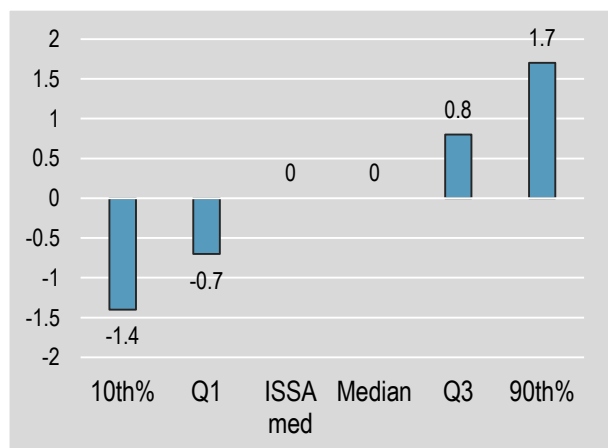
**Figure 3.2.** Policy return (percentage)



Policy return (Figure 3.2) is the return a fund could have earned passively by indexing its investments according to the fund's policy asset mix.

The median policy return for participating ISSA member institution reserve funds for 2016 was 5.3% and the average was 6.2%. This compares with the global survey median of 7.5% and the average of 7.6%.

**Figure 3.3.** Net value added (percentage)



Net value added (Figure 3.3) shows how each fund has performed on an overall basis relative to benchmark alternatives. Positive net value added indicates that, on average, a fund is outperforming benchmark indices after costs, whereas negative net value added indicates that a fund is underperforming.

The median net value added for participating ISSA member institution reserve funds for 2016 was 0.0% and the average was -0.5%. This compares with the global survey median of 0.0% and the average of 0.1%.

### 3.2. Policy and actual asset mix

Differences in policy return are caused by differences in policy asset mix (Table 3.1). The policy weights are usually established by an investment committee or board and are determined by long-term considerations, such as liability structure, risk tolerance and long-term capital market expectations.

**Table 3.1. Policy asset mix and actual asset mix (percentage)**

| Asset Class                 | Policy Mix     |                                 | Actual Mix     |                    |
|-----------------------------|----------------|---------------------------------|----------------|--------------------|
|                             | Global Average | ISSA Funds <sup>2</sup> Average | Global Average | ISSA Funds Average |
| <b>Equities</b>             |                |                                 |                |                    |
| Home Country <sup>1</sup>   | 0.3            | 4.9                             | 0.4            | 6.1                |
| US                          | 13.1           | 5.1                             | 14.1           | 4.4                |
| Europe, Asia, Far-East      | 5.3            | 2.5                             | 6.0            | 1.2                |
| Emerging                    | 2.5            | 0.2                             | 2.8            | 0.5                |
| Global                      | 12.0           | 9.4                             | 9.2            | 7.0                |
| Other                       | 7.3            | 1.8                             | 7.0            | 1.1                |
| Total (rounded)             | 40.5           | 24.0                            | 39.5           | 20.3               |
| <b>Fixed Income</b>         |                |                                 |                |                    |
| Home Country <sup>1</sup>   | 2.0            | 35.5                            | 2.3            | 40.6               |
| US                          | 7.1            | 5.3                             | 6.8            | 3.4                |
| Europe, Asia, Far-East      | 3.3            | 3.3                             | 3.5%           | 3.2                |
| Emerging                    | 1.0            | 0.3                             | 1.1            | 0.2                |
| Global                      | 2.6            | 4.0                             | 2.3            | 3.0                |
| Inflation Indexed           | 2.0            | 0.8                             | 1.9            | 1.0                |
| High Yield                  | 1.5            | 0.3                             | 1.4            | 0.4                |
| Mortgages                   | 0.5            | 0.8                             | 0.5            | 1.0                |
| Private Debt                | 0.8            | 4.0                             | 0.8            | 3.7                |
| Other                       | 20.5           | 1.9                             | 20.1           | 4.6                |
| Cash                        | 1.9            | 13.0                            | 2.8            | 8.5                |
| Fixed income & Cash - Total | 41.1           | 69.2                            | 41.2           | 69.7               |
| Commodities                 | 0.5            | 0.3                             | 0.4            | 0.2                |
| Infrastructure              | 1.7            | 0.0                             | 1.6            | 0.4                |
| Natural Resources           | 0.3            | 0.0                             | 0.4            | 0.1                |
| REITs                       | 0.5            | 0.3                             | 0.6            | 0.4                |
| Real Estate ex-REITs        | 5.5            | 4.1                             | 5.6            | 4.9                |
| Other Real Assets           | 0.4            | 0.9                             | 0.4            | 0.9                |
| Global TAA                  | 1.3            | 0.0                             | 1.3            | 0.2                |
| Diversified Private Equity  | 4.0            | 0.6                             | 3.4            | 0.6                |
| Venture Capital             | 0.2            | 0.0                             | 0.3            | 0.0                |
| LBO                         | 0.3            | 0.0                             | 0.6            | 0.6                |
| Other Private Equity        | 0.3            | 0.3                             | 0.4            | 0.5                |
| Total                       | 100            | 100                             | 100            | 100                |

Notes: <sup>1</sup> The Home Country asset class for equities and fixed income is for the ISSA participants in the survey. This was included to be able to more accurately determine value added of the ISSA group versus the global database of funds. This would mean funds in Europe, for example, would be listing their "home country" stock in that category rather than the "Europe" category. <sup>2</sup> In cases where the policy asset mix was not provided the actual mix was used as a proxy.

Source: CEM (2018).

### 3.3. Returns and value added by asset class

Table 3.2 compares ISSA fund's median net returns, benchmark returns and net value added by asset class compared to the global median.

**Table 3.2.** *Participating ISSA member institutions' funds (percentage)*

| Asset class                | Global median |                  |                 | ISSA median |                  |                 |
|----------------------------|---------------|------------------|-----------------|-------------|------------------|-----------------|
|                            | Net return    | Benchmark return | Net value added | Net return  | Benchmark return | Net value added |
| <b>Equities</b>            |               |                  |                 |             |                  |                 |
| Home Country               |               |                  |                 | 6.6         | 8.3              | 0.0             |
| US                         | 12.3          | 12.6             | -0.3            | 8.9         | 9.6              | -0.7            |
| Europe, Asia, Far-East     | 2.1           | 2.1              | 0.0             | 3.9         | 4.3              | -0.3            |
| Emerging                   | 10.8          | 11.2             | -0.1            | 12.5        | 19.3             | -2.6            |
| Global                     | 6.0           | 6.6              | -0.6            | 4.5         | 4.3              | 0.2             |
| <b>Fixed Income</b>        |               |                  |                 |             |                  |                 |
| Home Country               |               |                  |                 | 6.6         | 8.3              | 0.0             |
| Europe, Asia, Far-East     | 5.6           | 5.6              | 0.0             | 2.2         | 2.1              | 0.1             |
| Emerging                   | 11.6          | 10.2             | 0.7             | 11.2        | 7.3              | 3.9             |
| Global                     | 4.9           | 4.6              | 0.3             | 0.4         | 1.4              | -1.0            |
| Inflation Indexed          | 4.6           | 4.7              | 0.0             | 5.7         | 6.1              | -0.4            |
| High Yield                 | 12.7          | 16.7             | -2.4            | 4.6         | 10.2             | -5.7            |
| Private Debt               | 5.8           | 5.9              | -0.2            | 5.8         | 5.9              | -0.1            |
| Mortgages                  | 2.9           | 2.0              | 0.5             | 4.3         | 4.5              | 1.6             |
| Cash                       | 0.5           | 0.3              | 0.1             | 0.8         | 0.5              | 0.1             |
| Commodities                | 11.8          | 11.8             | 0.5             | 18.3        | 12.4             | 6.9             |
| Infrastructure             | 8.5           | 6.5              | 1.2             | 7.1         | 10.4             | -3.3            |
| Natural Resources          | 6.4           | 6.1              | 0.9             | 27.5        | 19.0             | 8.5             |
| REITs                      | 4.8           | 5.7              | -0.5            | 7.9         | 8.6              | 1.5             |
| Real Estate ex-REITs       | 7.7           | 8.0              | -0.4            | 5.7         | 7.0              | -1.4            |
| Other Real Assets          | 6.5           | 7.2              | -0.2            | 3.4         | 6.4              | -3.0            |
| Hedge Funds                | 1.8           | 3.0              | -0.7            | -3.5        | 1.4              | -4.9            |
| Global TAA                 | 7.9           | 6.0              | 1.1             | 3.9         | 3.3              | 0.6             |
| Diversified Private Equity | 8.7           | 6.7              | 1.4             | 7.9         | 5.9              | 0.4             |
| Venture Capital            | 3.0           | 6.3              | -3.5            | 3.3         | 7.4              | -4.1            |
| LBO                        | 9.9           | 7.1              | 0.0             | 14.8        | 9.0              | 5.8             |
| Other Private Equity       | 8.1           | 7.5              | 0.7             | 16.8        | 7.4              | 9.4             |

*Notes:*

1. Net return equals the asset-weighted average of internal passive, internal active, external passive and external active actual returns for each asset class.
2. Net value added equals net return minus benchmark return. Net returns are calculated as reported gross return minus management fees, internal costs and performance fees for public assets.
3. Median net value added figures cannot be derived by subtracting the median benchmark from the median net return. Medians are the mid-points of each of the data series. Averages can be added medians cannot.

Source: CEM (2018).

### 3.4. Multi-year data for participating ISSA member institution reserve funds

There is multi-year data for three of the participating ISSA member institution reserve funds in the survey. Table 3.3 shows seven years of annual returns for the funds and the 7-year annualized average figure.

The average annualized figure for these three funds for the past seven years was 6.17 per cent.

**Table 3.3.** Annual returns by participating ISSA member institution reserve funds (percentage)

|                | 2010 | 2011  | 2012 | 2013 | 2014 | 2015 | 2016 | 7-year average |
|----------------|------|-------|------|------|------|------|------|----------------|
| Reserve fund 1 | 6.9  | 5.3   | 6.2  | 8.7  | 5.1  | 4.8  | 5.9  | 6.1            |
| Reserve fund 2 | 10.7 | 9.2   | 10.0 | 10.0 | 13.4 | 4.7  | 9.0  | 9.6            |
| Reserve fund 3 | 0.1  | -11.0 | 23.3 | 6.9  | 14.7 | 3.6  | -0.6 | 5.3            |
| Average        | 5.9  | 1.2   | 13.2 | 8.5  | 11.1 | 4.3  | 4.8  | 7.0            |

Source: CEM (2018).

Changes in asset allocation can also be fairly dramatic depending on the sponsor. Table 3.4 shows the evolution of asset mix for the three funds from 2010 to 2016.

**Table 3.4.** Evolution of weights in major asset classes for participating ISSA member institution reserve funds (percentage)

|                | Cash evolution | Fixed income evolution | Equity evolution | Property evolution | Other invest. evolution |
|----------------|----------------|------------------------|------------------|--------------------|-------------------------|
| Reserve fund 1 | -1             | -17                    | 0                | 0                  | 18                      |
| Reserve fund 2 | -6             | -2                     | -4               | 7                  | 5                       |
| Reserve fund 3 | 15             | -3                     | -9               | -1                 | -2                      |

Note: Changes of greater than 10 per cent have been shaded.

Source: CEM (2018).

### 3.5. Summary of global survey participant funds' long-term performance in the CEM database

The region with the highest net value added was Europe.

Net value added shows how funds in each region have performed on an overall basis relative to benchmark alternatives and after deducting costs (Table 3.5).

**Table 3.5.** Value added by region<sup>1</sup> of global survey participants (period ending 31 December 2016)

|                                | All funds                      | US funds                     | Canadian funds               | European funds                              | Other regions                             |
|--------------------------------|--------------------------------|------------------------------|------------------------------|---|---|
|                                | 25-year average <sup>3,4</sup> | 25-year average <sup>3</sup> | 25-year average <sup>3</sup> | 22-year <sup>2,3</sup> average <sup>4</sup> | 16-year <sup>2</sup> average <sup>3</sup> |
| Total return                   | 9.37%                          | 9.50%                        | 9.17%                        | 8.10%                                       | 7.96%                                     |
| - Policy return                | 8.77%                          | 8.85%                        | 8.62%                        | 7.38%                                       | 7.59%                                     |
| - Costs                        | 0.43%                          | 0.48%                        | 0.38%                        | 0.31%                                       | 0.47%                                     |
| = Net value added              | 0.17%                          | 0.18%                        | 0.18%                        | 0.42%                                       | -0.10%                                    |
| No. of annual observations     | 8,050                          | 4,438                        | 2,444                        | 982   | 129                                       |
| Median fund size (USD billion) | 7                              | 8.0                          | 2.9                          | 31.8  | 40.0                                      |

Notes:

1. Only regions with more than four participating funds are separately disclosed. Funds from regions with fewer than four participating funds are included in Global/All funds.

2. The shorter time periods for European and Asia-Pacific funds reflect the dates that CEM started collecting data in those regions.

3. Averages are the arithmetic average of annual averages.

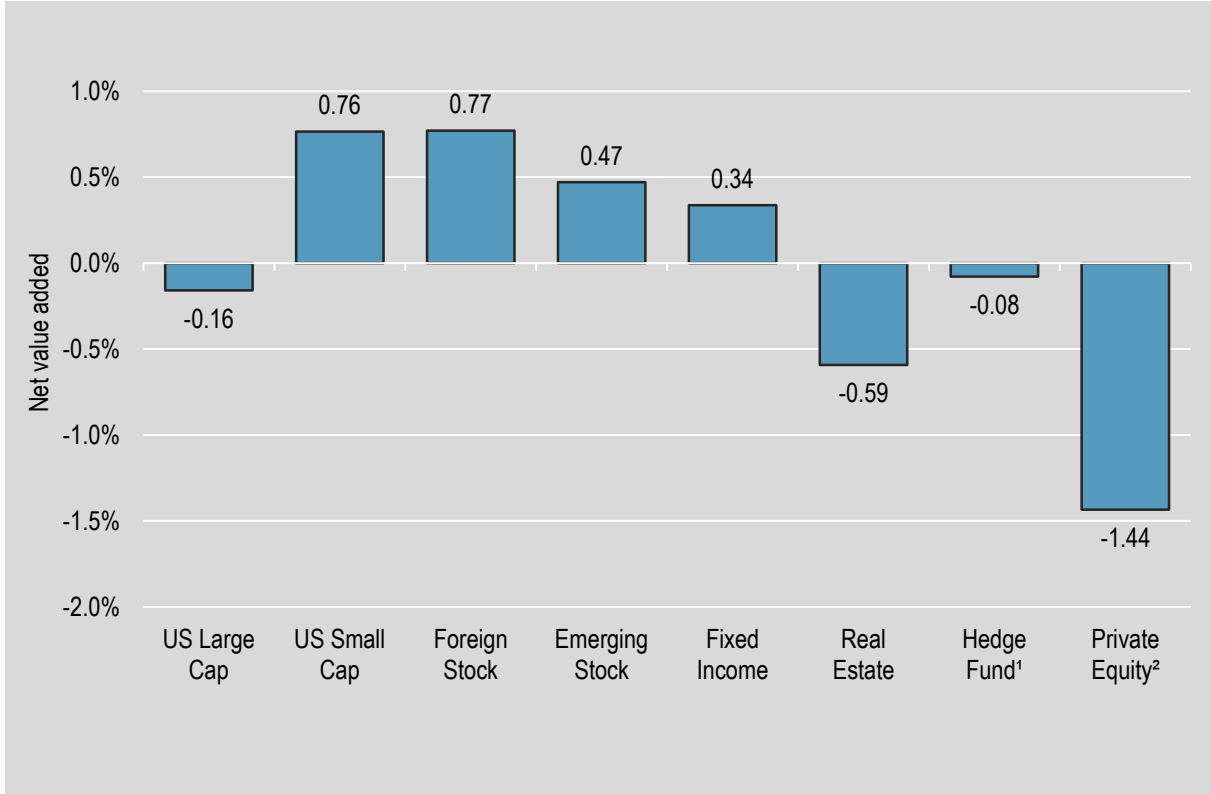
4. Costs include all costs related to the investment management and oversight of assets whether they are internal costs or external costs. This would include external base and performance fees for public market asset classes and hedge funds and base fees only for real estate, infrastructure and private equity. Pension and/or benefit administration type costs are excluded.

Source: CEM (2018).

### 3.6. Net value added by asset class for the US universe over the past 26 years

Figure 3.4 shows the net value added of the US universe for the period 1991 to 2016.

**Figure 3.4.** Net value added of the US universe\* (1991–2016)



**Notes:**

\* The U.S. universe is shown on this graph because it is difficult to combine all regions when looking at return data due to currency and other effects.

1. Hedge Fund gross value added performance reflect data for the 17-year period from 2000 to 2016.
2. The net value added calculation for private equity uses the average benchmark of all Global participants.
3. Value added analysis is from 4,438 annual fund performance observations from the CEM US universe for the 26-year period ending 2016. Value added reflects the asset weighted value added of all mandates in each asset category including indexed holdings. Averages shown above are the arithmetic average of the annual averages of all observations of funds with holdings in the asset category for each year.

Source: CEM (2018).

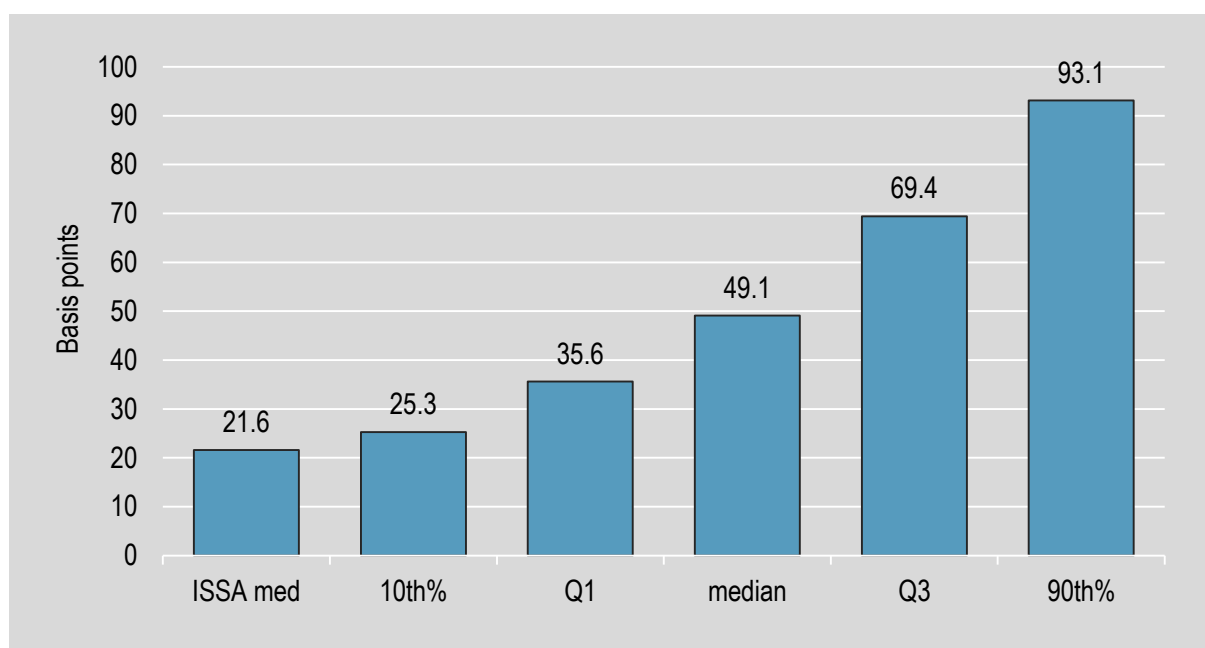
## 4. Cost and cost effectiveness

This section addresses total investment cost, implementation style, comparison of asset management costs by assets class, comparison of oversight, custodial and other investment costs, and cost effectiveness ranking.

### 4.1. Total investment cost

The median total investment cost for participating ISSA member institution reserve funds was 21.6 basis points (bps). This compares to the global survey median of 49.1 bps (Figure 4.1).

**Figure 4.1.** Total investment costs: Global participating funds



Source: CEM (2018).

In addition to looking at the total cost, CEM determines a benchmark cost for each participant using regression analysis on its entire database.  $R^2$  is a statistic that will give some information about the goodness of fit of a model. In regression, the  $R^2$  coefficient of determination is a statistical measure of how well the regression line approximates the real data points. An  $R^2$  of 1 indicates that the regression line perfectly fits the data. The  $R^2$  for the benchmark cost equation was 71 per cent. This means that fund size, asset mix and country of origin explain more than 71 per cent of the differences in investment cost (excluding transaction costs and private asset performance fees) between funds. This is good explanatory power, but not perfect. The benchmark cost is intended to be used only as an indicator and should not be interpreted too precisely.

The primary reasons why a fund's costs might be high (or low) compared to their benchmark cost are:

- **Using a higher (or lower) cost implementation style.** For example, passively indexing tends to be lower cost than active management. Similarly, internal management tends to be lower cost than using external managers, which in turn is lower cost than using fund of funds. Differences in implementation style are not taken into account in the benchmark equation, because they are considered to be within the control of sponsors.



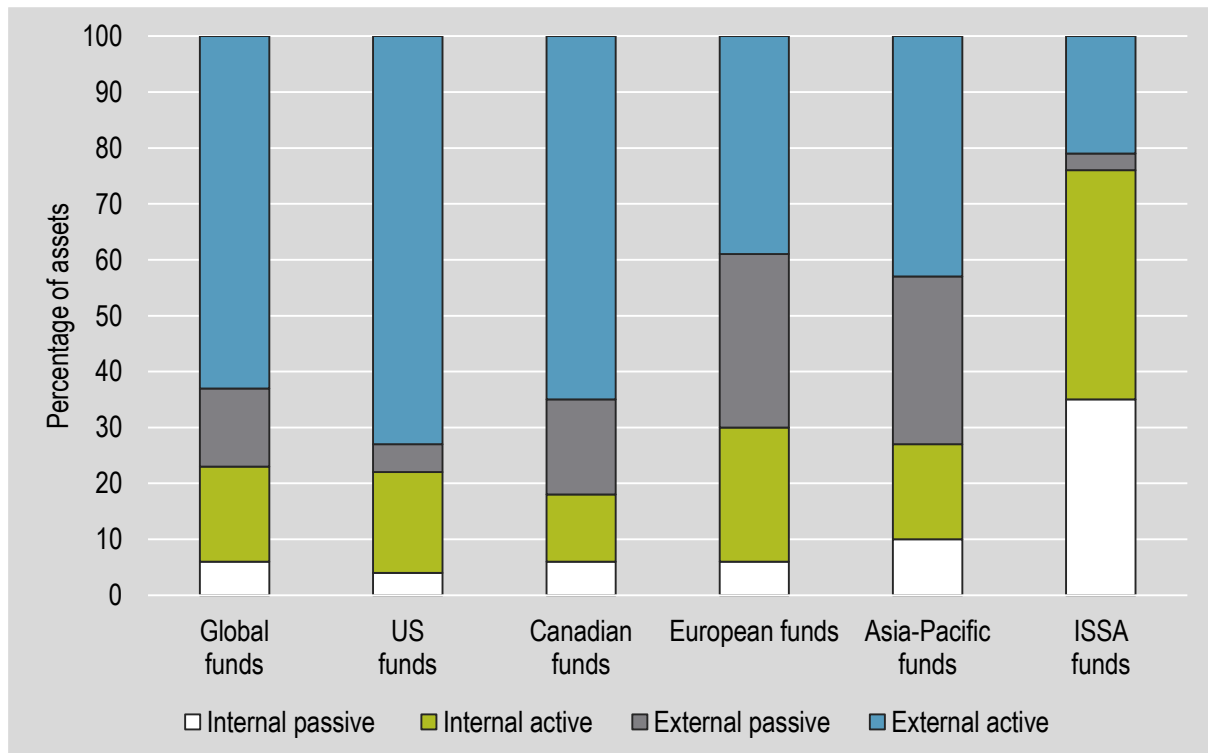
- **Paying more (or less) than similar size funds for same-style, same-asset-class investment management.** A second reason why costs are higher or lower than benchmark cost is paying higher or lower fees for third-party investment management than the global median for the same style by asset class.
- **Paying more (or less) than similar size funds for oversight, consulting, custodial and other costs.** Oversight of the fund includes staff salaries, direct expenses (travel, fees paid to directors, director’s insurance, etc.) and related unallocated overheads pertaining to overseeing the fund assets. If one fund uses more consultants and thus has higher costs here that can be another driver.

## 4.2. Implementation style

One reason why funds are high (or low) cost compared to their benchmark cost is differences in implementation style. Implementation style (Figure 4.2) is defined as the way in which a fund implements its asset allocation. It includes internal, external, active, passive and fund-of-funds styles:

- **Internal:** Asset allocation is managed by in-house investment managers.
- **External:** Asset allocation is managed by outside or external investment managers.
- **Passive:** Asset allocation is managed with the aim of replicating an index, immunizing or matching liabilities, etc.
- **Active:** Asset allocation is managed with the intention of outperforming an index.

Figure 4.2. Implementation style



Source: CEM (2018).

The greatest cost impact is usually caused by differences in the use of either:

- **External active management:** External active management tends to be much more expensive than either passive or internal management (Table 4.1).
- **Fund of funds usage:** Fund of funds tend to be the most expensive type of external active management because costs include the management fee of the fund of fund manager plus the management fees to the managers of each of the underlying funds invested in by the fund of fund manager (Table 4.1).

The benchmark cost analysis does not adjust for the cost impact of implementation style because this is considered to be a choice within the fund's control.

### 4.3. Comparison of asset management costs by asset class

Table 4.1. shows the asset management costs in basis points.

**Table 4.1. Asset management costs in basis points – 2016**

| 2016 Asset management costs in basis points       |               |        |          |        |       |                          |         |          |         |        |       |                  |
|---|---------------|--------|----------|--------|-------|--------------------------|---------|----------|---------|--------|-------|------------------|
| Asset class                                       | Global median |        |          |        |       | ISSA median <sup>3</sup> |         |          |         |        |       |                  |
|   | Internal      |        | External |        |       | Internal                 |         | External |         |        |       |                  |
|   | Passive       | Active | Passive  | Active | LP    | FoF <sup>1</sup>         | Passive | Active   | Passive | Active | LP    | FoF <sup>1</sup> |
| <b>Equities</b>                                   |               |        |          |        |       |                          |         |          |         |        |       |                  |
| Home Country                                      |               |        |          |        |       | 5.3                      | 1.7     | n/a      |         |        |       |                  |
| US  | 1.0           | 6.5    | 2.6      | 46.6   |       |                          |         | n/a      | 50.1    |        |       |                  |
| Europe, Asia, Far-East                            | 6.1           | 7.3    | 5.0      | 51.4   |       |                          | n/a     |          | n/a     |        |       |                  |
| ACWIxU.S.   | n/a           | n/a    | 6.2      | 50.9   |       |                          |         |          |         |        |       |                  |
| Emerging  | 2.8           | 12.8   | 12.6     | 70.6   |       |                          | n/a     |          | n/a     |        |       |                  |
| Global  | 7.7           | 10.8   | 5.4      | 48.8   |       |                          | n/a     | n/a      | 47.2    |        |       |                  |
| Other   | 4.5           | 11.9   | 3.2      | 30.9   |       | 2.1                      | n/a     | n/a      | 48.9    |        |       |                  |
| <b>Fixed Income</b>                               |               |        |          |        |       |                          |         |          |         |        |       |                  |
| Home Country                                      |               |        |          |        |       | 2.6                      | 2.6     |          | n/a     |        |       |                  |
| Europe, Asia, Far-East                            | 2.9           | 2.6    | 13.1     | 21.1   |       | n/a                      | 2.5     |          | n/a     |        |       |                  |
| Emerging  | n/a           | 10.8   | 8.9      | 52.2   |       |                          | n/a     |          | n/a     |        |       |                  |
| Global  | 2.8           | 4.3    | 7.1      | 30.6   |       |                          | n/a     |          | n/a     |        |       |                  |
| Inflation Indexed                                 | 1.3           | 2.0    | 3.4      | 14.0   |       |                          | n/a     |          | n/a     |        |       |                  |
| High Yield  | n/a           | 8.3    | 45.9     | 44.0   |       |                          | n/a     |          | n/a     |        |       |                  |
| Mortgages   | n/a           | 18.8   | 16.8     | 33.3   |       |                          | n/a     |          | n/a     |        |       |                  |
| Private Debt                                      | n/a           | 23.5   |          | 75.5   |       |                          |         | 23.5     | n/a     |        |       |                  |
| Other   | 1.1           | 4.0    | 5.2      | 19.4   |       | 1.6                      | 2.6     |          | 46.9    |        |       |                  |
| Commodities                                       | n/a           | 2.6    | 26.0     | 54.6   |       |                          |         |          | n/a     |        |       |                  |
| Infrastructure <sup>2,3</sup>                     |               | 31.3   |          | 92.8   | 120.8 | 173.6                    | n/a     |          | n/a     |        |       |                  |
| Natural resources <sup>2</sup>                    |               | 24.5   |          | 85.8   | 119.6 | n/a                      | n/a     |          | n/a     |        |       |                  |
| REITs   | 3.5           | 8.1    | 8.9      | 51.0   |       |                          | n/a     |          | n/a     |        |       |                  |
| Real Estate ex-REITs <sup>2</sup>                 |               | 25.4   |          | 77.8   | 114.8 | 166.7                    |         | 40.6     | n/a     |        | 106.4 |                  |
| Other Real Assets <sup>2</sup>                    |               | 9.6    |          | 82.8   |       |                          | n/a     |          | n/a     |        |       |                  |
| Hedge Funds Total <sup>4</sup>                    |               |        |          | 204.3  |       | 278.9                    | n/a     |          | n/a     |        |       |                  |
| • Base fees top layer                             |               |        |          | 144.3  |       | 69.8                     | n/a     |          | n/a     |        |       |                  |
| • Perf. fees top layer                            |               |        |          | 53.0   |       |                          | n/a     |          | n/a     |        |       |                  |
| • Underlying base & perf                          |               |        |          | n/a    |       | 196.7                    | n/a     |          | n/a     |        |       |                  |
| Global TAA  |               | 7.2    |          | 72.1   |       |                          | n/a     |          | n/a     |        |       |                  |
| Diversified Private Equity <sup>2</sup>           |               | 31.3   |          | 165.0  |       | 252.2                    |         | 32.6     | n/a     |        |       |                  |
| Venture Capital                                   |               | n/a    |          | 200.1  |       | 265.4                    | n/a     |          | n/a     |        |       |                  |
| LBO2  |               | n/a    |          | 167.3  |       | 233.3                    | n/a     |          | n/a     |        |       |                  |
| Other Private Equity <sup>2</sup>                 |               | 5.5    |          | 121.7  |       |                          | n/a     |          | n/a     |        |       |                  |
| Total before overlays                             |               |        |          |        |       | 43.8                     |         |          |         |        |       | 15.2             |
| Overlay management costs (as a % of total assets) |               |        |          |        |       | 0.0                      |         |          |         |        |       | 0.0              |
| Total direct investment management cost           |               |        |          |        |       | 43.8                     |         |          |         |        |       | 15.2             |

Notes: "n/a" indicates that there were not enough responses to provide meaningful comparisons. Where costs for ISSA funds were not provided, defaults were used from the CEM universe of survey participants.

1. FoF stands for Fund-of-Funds. Fund of funds costs include management fees paid to the fund of funds manager plus fees paid to the managers of each of the underlying funds selected by the fund of funds manager.

2. External performance fees are excluded from private asset costs. Costs are as a percentage of the amount fees are based on; usually the committed amount during the commitment period, and unreturned invested capital afterwards.

3. When not enough responses from the ISSA participants, n/a is showing. Also, whenever, cost data was not provided, defaults were applied based on CEM's median cost for the asset class and style.

4. Medians will not add to the total because the median fund is not the same for each part, and the internal cost of oversight and selection is not shown.

#### 4.4. Comparison of oversight, custodial and other investment costs

Table 4.2 summarizes the median costs for different investment related activities.

**Table 4.2.** *Comparison of oversight, custodial and other investment costs (basis points)*

| Oversight, custodial and other costs | Global median | ISSA median |
|--------------------------------------|---------------|-------------|
| Oversight                            | 1.8           | 1.9         |
| Custodial                            | 0.9           | 0.9         |
| Consulting, performance measurement  | 0.4           | 0.0         |
| Audit                                | 0.1           | 0.0         |
| Other                                | 0.1           | 0.0         |
| <b>Total</b>                         | <b>4.0</b>    | <b>3.0</b>  |

Source: CEM (2018).

#### 4.5. Cost effectiveness ranking

Being high or low cost is neither good nor bad (Figure 4.3). The more important question is, are funds receiving sufficient value costs that are coming in higher than their calculated benchmark cost? At the total fund level, we provide insight into this question by combining value added and actual cost relative to benchmark cost (what we call excess cost) to create a snapshot of each fund's cost effectiveness performance relative to that of the global funds.

In an ideal world, the more a fund pays above their benchmark cost, the greater the return a fund would expect to achieve in the form of higher net value added. If this were true, you would see an upward sloping trend in the scatter chart below. Clearly, this is not the case. CEM research over the past 25 years shows no consistent relationship between cost over the median and the net value added funds achieve.

Figure 4.3. Net value added versus excess cost – 2016



Source: CEM (2018).

## 5. Key takeaways

### 5.1. The participating ISSA member institution reserve funds

⇒ In 2016, the number of ISSA reserve funds participating in the survey was 18. Combined, the participating ISSA reserve funds had aggregate assets of USD 3.2 trillion.

### 5.2. Returns

⇒ The median net total fund return for participating ISSA member institution reserve funds in 2016 was 4.8 per cent and the average was 5.7 per cent. This compares to the global survey median of 7.6 per cent and the average of 7.7 per cent.

### 5.3. Policy return

⇒ The median policy return for participating ISSA member institution reserve funds for 2016 was 5.3 per cent and the average was 6.2 per cent. This compares to the global survey median of 7.5 per cent and the average of 7.6 per cent.

### 5.4. Value added

⇒ The median net value added for participating ISSA member institution reserve funds for 2016 was 0.0 per cent and the average was -0.5 per cent. This compares to the global survey median of 0.0 per cent and the average was 0.1 per cent.

### 5.5. Total cost

⇒ The median total investment cost for participating ISSA member institution reserve funds was 21.6 basis points (bps). This compares to the global survey median of 49.1 bps.

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